



UPSTATE

MEDICAL UNIVERSITY

EDUCATION • HEALTHCARE • RESEARCH

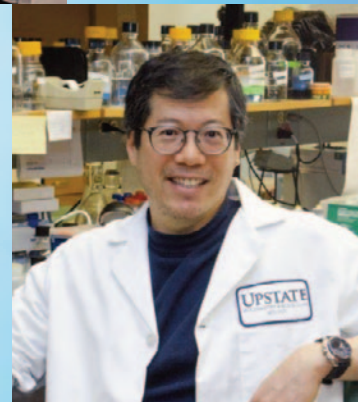


REPORT OF THE PRESIDENT

2021-2022

ACADEMIC YEAR

MANTOSH DEWAN, MD



SUNY Upstate Medical University

Report of the President: 2021-2022 Academic Year

Mantosh Dewan, MD

OVERVIEW AND PRESIDENT’S REMARKS

As the nation continues to recover from a global pandemic, its lasting effects challenge all healthcare and educational organizations with workforce shortages, increased costs and decreased funding. Despite these challenges, Upstate Medical University continues to excel in our mission to care for patients, educate students and professionals, and perform research — all while engaging with the community as the region’s only academic medical center, providing one-of-a-kind educational programs and clinical services across our 21-county footprint. As you read this report, you will see the dedication, innovation and passion from our staff, faculty and students that has led to one of Upstate’s best years:

- College of Medicine has 720 students (58% women; 61% authored a paper), 695 residents, 690 full time faculty — all the highest ever.
- College of Nursing launched a new BS-to-DNP program.
- Upstate offered the most micro-credentials and nanocourses ever.
- Upstate received \$42.5 million in research grants, a 10% increase and the most ever.
- Upstate received \$10 million in royalties from licenses, the most of any SUNY campus.
- Upstate introduced 14 robots to transport medications, food and supplies.
- Upstate received \$25 million to name the College of Medicine, our largest gift ever.

I’m proud to lead this amazing organization as we look to the future, embracing change as we do so, and developing new models for healthcare, learning and scientific discovery.

Education

Upstate’s four colleges — Graduate Studies, Health Professions, Medicine and Nursing — continue to grow, become more diverse, innovate and excel. The Norton College of Medicine, Upstate’s largest college, recorded its second highest number of applications, 5,404, with 174 students matriculating. The class is one of our strongest academically with a science GPA of 3.64 and average MCAT of 511. Growing in popularity is our Accelerated Scholars Program, where students apply early to our MD program and gain automatic acceptance if they fulfill specific requirements. The College of Nursing received two grants from the New York State High Needs Nursing Grant Fund to add faculty, support students and develop new programs in order to increase the number of people entering the nursing profession. The College of Health Professions, a transfer and graduate school, has strengthened and expanded partnerships with the finalization of 23 new affiliation agreements with other colleges. To foster interest in health care professions, the college launched a successful “Jump Into Healthcare” program with the Syracuse City School District that saw 12 high school students enroll in the month-long program. The College of Graduate Studies had 136 PhD students in nine programs of study, plus 18 MD/PhD students. On average, each PhD student’s research is published in 3.7 papers and each study is cited by 48.6 other papers. Predictably, these students are highly sought after for competitive positions upon graduation.

Research

The spotlight on our research enterprise has never been brighter. Research expenditures have grown for the past 5 years and were up 10 percent over the last fiscal year to a record-setting \$42.5 million.

The number of grants increased by 15 percent and the number of papers published grew by 44 percent. The research our faculty undertake provides significant benefit to the state, for a range of serious conditions, including COVID, for which Upstate's pooled testing remains one of New York's most critical assets. Another example is our relationship with START-UP NY company Quadrant Biosciences, which monitors wastewater in New York counties, thereby giving public health experts an early glimpse into potential community spread. Additionally, our CNY Biotech Accelerator has filled all licensable space, and clients are requesting more space. We are finding Central New York to be fertile ground for the burgeoning medical device and medical technologies field. Upstate finished the year with \$10M in royalties from licenses (before distributions to inventors), the highest amount in the SUNY system.

Patient Care

With some COVID restrictions still in place, Upstate's one-of-a-kind services (trauma, burns, transplant, poison control, children) continued to be in demand throughout the region. The need for Upstate services provides us with unparalleled opportunities to envision new ways of providing care. We unveiled our Hospital at Home program and further developed our Hospital of the Future initiative that addresses clinical automation, digital patient experience, virtual health and smart infrastructure. One innovative example is the deployment of TUG robots that roll through the hospital to decrease medication delivery times from the pharmacy and free up pharmacy staff from the drug delivery responsibilities. Drone test excursions for airborne drug deliveries are also underway. Nurses are the backbone of any hospital- and certainly here at Upstate- as they represent the largest professional group in our clinical system. Recent geographical area pay raises have made RN and LPN salaries competitive.

Upstate in the Community

No matter where one is in our community, Upstate is there too with a coordinated effort to improve the health of the communities we serve. Whether it's our successful She Matters program—a breast cancer education and screening initiative for underserved populations—or our Healthy Neighbors Partnership, Upstate continues its unyielding commitment to health. When we're not actively assisting with health screenings, we are actively involved, including walks and runs with local citizens, raising awareness and dollars for myriad health issues such as breast cancer, pediatric cancer, suicide, cardiac health and many others. Our educational programming extends far beyond our campus boundaries through our HealthLink and Oasis offerings, which successfully transitioned from online program due to COVID back to in-person programming. A long list of awards attests to our impressive service to the community.

A Bright Future, With Challenges

Upstate's educational programs, research and clinical care are in demand but we are challenged by workforce shortages. New initiatives have started to attract new employees and we were again named a national Best Large Employer by Forbes. Next year, we will also implement our new strategic plan which focuses on excellence and access across our campus. We eagerly anticipate the new 3-year medical curriculum, the world's first biological test for autism, a ground-breaking treatment for metastatic bone cancer, the State's first and only inpatient unit for children with both developmental and behavioral disorders, and many others.

With outstanding leadership provided by our superb academic deans, a transformative hospital CEO, our unique research enterprise and 11,000 of the best employees, Upstate is poised to continue its upward trajectory as it aims to become one of the nation's most prestigious academic medical centers.



Mantosh Dewan, MD
President and
SUNY Distinguished Service Professor



Upstate Medical University is the only academic medical university in Central New York and is built around a mission to improve the health of the people we serve through education, research, patient care and service. It is the largest employer in the region. Upstate is proud to be part of the State University of New York, educating the next generation of professionals. As a research enterprise, Upstate investigates some of the most critical diseases and all research is related to improving human health. As a medical enterprise, Upstate serves 1.8 million people, covering a service area that is one-third of NY state.

The following report highlights our 2021-22 academic year accomplishments, as well as future plans for growth and continued success at Upstate as we fulfill our mission.

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2. EDUCATION

ACADEMIC AFFAIRS

Lynn Cleary, MD – *Vice President for Academic Compliance & University Accreditation*

The Office of Academic Affairs provides support for academic programs to deans, educational program directors and faculty, including support for new program approval and major changes to curricula or the infrastructure supporting education. It supports educational innovation, assessment and evaluation, and promotes educational research and scholarship. The office serves as the primary academic liaison with SUNY, the Middle States Commission on Higher Education (MSCHE) and the Liaison Committee on Medical Education (LCME). It is responsible for Accreditation and Compliance; Evaluation, Assessment and Research; the Clinical Skills Center; Interprofessional Education; and the University Simulation Center. Members support or lead many faculty/student committees in curricula and assessment; develop and update policy and procedures; identify honorary degree recipients, distinguished professors, SUNY Chancellor's and Upstate President's Awards; and sponsor Fall Faculty Convocation. Academic Affairs produces the annual Academic Catalog and the University Calendar and supports the Faculty Council (university faculty governance). It also supports two student honor societies.

Accomplishments and notable activities

Academic Accreditation and Compliance

- **Supported work and submissions to the LCME, SUNY and the New York State Department of Education for the College of Medicine's curricular modification, including expanded health system science content, and creation of an accelerated 3-year pathway.** LCME and SUNY approval has been received, and work with faculty and committees on implementation continues for the first cohort of students to enroll in the fall of 2023.
- **Coordinated and submitted a 2022 LCME Status Report on career advising.**
- **Submitted annual accreditation updates** to MSCHE and LCME.
- **Provided continued oversight of the LCME-required continuous quality improvement plan in the College of Medicine,** monitoring 12 accreditation standards and 93 elements and preparing reports for review by the various committees to monitor progress, study effectiveness, and develop corrective actions when necessary.

Academic Affairs

- **Microcredentials:** Upstate is one of SUNY's 31 campuses to offer microcredentials. SUNY's microcredential program received the Business Council of New York State Workforce Innovation Award in the higher education category in April 2022. In 2021-22 Upstate's microcredential (MC) offerings continued to grow with six new MCs approved this year for students, faculty and staff: Basics of Behavioral Supports; Introduction to Biostatistics and Epidemiology; Medical Student Research; and three leadership MCs created by the Office of Professional Development.
- **Exceptional Moments in Teaching Initiative** in the College of Medicine. In 2021-22 there were 227 student submissions on how 151 teachers from 18 departments provided an exceptional educational experience. Themes included positive and supportive learning experiences, enthusiastic and compassionate teachers, valuable faculty and resident feedback, exceptional role modeling and mentorship, and gratitude for being made to feel part of the team.
- **Academic policies:** With deans and faculty governance committees, we reviewed existing and newly created university-wide academic policies for publication in Upstate's MCN database.
- **Administrative support to SUNY Faculty Senators and Upstate's Faculty Council** (faculty governance).

Evaluation, Assessment and Research

- **Student Learning Outcomes Committee (SLOC):** Continued to lead SLOC, which completed assessment portfolio reviews of two degree programs and added five new members.
- **Grew Upstate's Assessment Capabilities:** SLOC revised processes and documentation to account for substantial growth in assessment capabilities as reflected in program-level portfolios of student learning assessment.
- **Improved database quality:** Organized 10 years of retrospective student data and prepared an accurate, consistent data process for use in institutional research reporting required by Middle States, IPEDs, HRSA and other critical internal and external stakeholders. Process validation work will continue in '22-'23.
- **Student Opinion Survey:** Administered and analyzed the biennial Student Opinion Survey. The institutional-level report was disseminated in spring 2022 and college-level reports will be available in fall 2022.
- **Faculty Development:** Designed and delivered an invited talk on assessment.
- **Advanced efforts in diversity, equity, and inclusion** by serving on the National Understanding Grading Inequity Community of Practice which earned recognition from the American Medical Association as a "Bright Idea"; and supporting the analytics side of the national curricular bias checklist collaborative which earned a Macy Foundation Grant.
- **Contributed to MD program curricular renewal efforts** by participating on multiple task forces and presenting proposals on program evaluation and learner assessment strategies to curriculum leadership and several working groups.
- **Fostered scholarship and innovation among students through MD program electives** (*Curriculum Reform* and *Medical Education*) and MPH program independent study.
- **Supported student scholarship:** Worked with medical students and faculty mentors publishing a paper in a peer-reviewed journal (including student authors), a podcast available on Apple Podcasts and Spotify (*Body Talk 2.0 | A High-Yield Surgical Anatomy Review for the OR*), and two national conference presentations. Published a paper with MPH program graduate on her work during the independent study. Work on projects in Medical Student Research, the promotion of Radiation Oncology content in the MD curriculum, Medical Student perceptions of professionalism, and others are ongoing.
- **Fostered best practices, educational scholarship, and a culture of innovation:**
 - Worked with teams from Admissions and the MedPrep program to collate and publish initial findings from their program evaluation in a peer-reviewed journal. This project was also presented at the AAMC's Pathways and Bridges conference.
 - Published paper on the impact of peer-assessment in the small group context with Patients to Populations course directors and a recent graduate.
 - Partnered with Physical Therapy faculty on a study of the efficacy of communication skills assessments and their links to clinical performance. Manuscript forthcoming.
 - Partnered with faculty from Family Medicine and Psychiatry to study the impact of wellness interventions on medical students for presentation at the National Summit on Promoting Well-Being and Resilience in Healthcare Professionals.
- **Contributed to educational committees and task forces:** National-level committees (AAMC's CLASS project working group, Group on Information Resources), Institutional-level committees (SLOC, Simulation Advisory Board, Academy of Educators, Distance Learning), College-level curriculum/faculty academic governance committees (COGS, CON, COM), MD program sub-committees (Phase 1, Phase 2 Clinical Skills), and CON ANEW Grant Advisory Board.
- **Contributed to international conversations about best practices in teacher evaluation in health professions education** through feature on Harvard Macy Institute's podcast available at: <https://harvardmacy.podbean.com/e/hmi-podcast-s2-e8/>

University Simulation Center and the Clinical Skills Center

- Held first **Advanced Live Support in Obstetrics (ALSO) Continuing Medical Education course for Family Medicine** practitioners, hosting residents and providers from Upstate and St Elizabeth - Mohawk Valley Health System (Utica).
- **Provided the Center's first "Essentials of Point of Care Ultrasound" (POCUS) two-day workshop.**
- **Increased the operational capacity of the Center in support of expanding program needs** by adding two Simulation Technician positions in addition to work-study students.
- **Completed development and implementation of a custom data tracking system for Simulation Center** sessions and inventory usage management, as well as an innovative wayfinding system for visitors to Center, in collaboration with Upstate IMT team.
- **Advanced staff expertise:** Sim Tech achieved status as a Certified Healthcare Simulation Operations Specialist (CHSOS), a certification recognized by the Society for Simulation in Healthcare and the National Commission on Credentialing Agencies.

Clinical Skills Center/Standardized Patient Program

- **Resumed high volume standardized patient activities** as COVID-19 restrictions were lifted. Facilitated nearly 8,000 encounters for 12 Upstate and community-based clients as well as 40+ case trainings, 11 standardized patient interview sessions, and three feedback workshops.
- **Completed implementation of Laerdal's SIMCapture Enterprise Cloud platform** through ongoing needs articulation, monitoring, and testing to foster shared understanding across Upstate stakeholders and vendor regarding required functionality of software.
- **Supported Medicine Residency grant application** from the AAIM/ABIM/ACP (Internal Medicine related) to the Macy Foundation: "Building Trust Through Diversity, Health Care Equity, and Inclusion in Internal Medicine Training."
- **Created immersive human simulation sessions** for two groups in the Accelerated Scholars program to promote Upstate as a destination of choice for future study among students with undergraduate degrees in arts and humanities.
- **Worked to advance diversity in the standardized patient pool:** Continued exploration of alternative streams of recruitment as part of ongoing efforts.

Interprofessional Education

- **Supported numerous IPE offerings including virtual programs to increase accessibility and engage remote learners.**
- **Held an Upstate IPE retreat** engaging faculty and staff from across the University and Hospital to envision and form project teams around new IPE initiatives.
- **New faculty leadership:** Recruited and onboarded three new members to the IPE Leadership team to enhance engagement of each of the colleges at Upstate.
- **SUNY IPE Consortium:** Maintained leadership role and engagement in the Consortium which Upstate co-founded with 5 other SUNY institutions offering graduate healthcare programs.

Academic Affairs: Plans for the 2022-2023 Academic Year

Accreditation and Compliance

- Prepare mid-cycle MSCHE report for internal use on what needs to be done currently to further assess and ensure ongoing compliance.
- Resume work of the Committee on Institutional Effectiveness to support continuous quality improvement and to exceed MSCHE standards.
- Using the 2023-2024 LCME Data Collection Instrument (DCI), prepare a mid-cycle report for internal use on gaps and action plans to further assess and ensure ongoing compliance.
- Identify ways to assess data that has been removed from Graduate Questionnaire (GQ) data tables that will be collected from the Independent Student Analysis (ISA) and identify new ways to monitor for effectiveness and compliance.

Value and honor teaching

- Support expansion of the Exceptional Teacher Initiative to other colleges.
- Establish new awards for assessment and innovation in education.

Advance microcredentials

- Begin awarding digital badges through Credly, Inc. a web-based digital credential network that verifies the knowledge, skills, and abilities earned by Upstate microcredential recipients.
- Increase awareness of microcredential offerings through website development and media messaging utilizing SUNY's microcredential campaign kit and the resources of Upstate's Office of Educational Communications. Work with the Offices of the Registrar and Accounting to develop a fee structure and mechanisms for billing.

University Simulation Center

- Position center for accreditation by the Society for Simulation in Healthcare (the gold standard)
- Expand programming for both the hospital and University
- Increase curricular integration in the colleges through simulation
- Recruit and onboard for a new Director of Simulation Education, new Simulation Technicians

Interprofessional Education

- Support development of innovative IPE by interprofessional committees
- Re-envision and execute IPE strategic plan; advance new IPE sessions across the colleges
- Enhance the effectiveness of existing IPE programs based on learner and facilitator feedback
- Offer faculty development workshops on difficult conversations in interprofessional settings
- Consider practical expansion of SUNY IPE Consortium across New York State

Standardized Patient Program

- Grow and diversity the standardized patient pool
- Redesign webpages and update content in alignment with simulation
- Refine process to improve increased collaboration with Upstate Simulation Center to provide hybrid simulation learning opportunities for learners and creating seamless experience for clients
- Support implementation of "AMA Accelerating Change in Medical Education," AAIM/ABIM/ACP (Internal Medicine related), and Macy Foundation grants
- Increase awareness of Clinical Skills Center through approved signage as a secure training and testing environment for increased psychological safety of learners

Evaluation, Assessment, Research

- Continue to Lead the Student Learning Outcomes Committee (SLOC) and contribute to ongoing quality improvement in program-level student learning outcomes portfolios;
- Contribute to MD program curricular renewal efforts by presenting proposals on program evaluation and learner assessment strategies to curriculum leadership and working groups;
- Validate new institutional research dataset and processes for required reporting to Middle States, IPEDs, HRSA and other critical internal and external stakeholders;
- Advance efforts in DEI in the area of assessment at Upstate and nationally;
- Foster scholarship and innovation among students through MD program electives;
- Foster best practices, educational scholarship, & a culture of innovation among faculty and staff.

Institutional Research

- Strengthen institutional research in collaboration with IMT.
- Hire a new Director of Institutional Research and replace positions vacated by staff departure and retirement.
- Develop an academic data warehouse.

NORTON COLLEGE OF MEDICINE

Lawrence Chin, MD, FAANS, FACS – Dean, Norton College of Medicine

The Norton College of Medicine continues to pursue its mission of educating and training physicians for New York state. Our vision is to transform and improve healthcare for all by combining medical science inquiry, research and innovation, dedication to social justice, and compassionate care. This year we received a transformational naming gift of \$25M from Class of 1966 alumnus Alan Norton, MD, and his wife Marlene. This gift allows us to immediately endow aspects of the educational curriculum that will provide a lasting impact on how we educate our future medical students. We currently have 720 students enrolled at our medical campuses in Syracuse and Binghamton including the School of Public Health. There are 696 residents and fellows training in 52 accredited programs alongside 690 full-time faculty members. These numbers are the highest ever for our school.

Education Innovation

Our medical education capabilities have expanded as a result of adaptations due to COVID. Although we have resumed in-person teaching in all courses, we continue to offer all lectures for asynchronous viewing and increase our use of active learning and small group sessions. We successfully submitted our plan to the LCME and received approval in April 2022 for a new curriculum to begin in Fall 2023. Several work groups led by curriculum leaders and faculty have mapped out the new curriculum, which will complete the preclerkship work in 18 months or three semesters. This will allow students to take USMLE Step 1 and then enter the clerkship phase earlier and provide greater clinical experience. In addition, a new longitudinal clinical preceptorship will provide students with real patient contact from the start of medical school. The clinical preceptors will also introduce students to interprofessional education and serve as a critical first advisor and mentor. Another important feature of the new curriculum is the introduction of Health Systems Sciences in 7 distinct intersessions that include opportunities for community engagement. Existing basic science material will be converted into a single pass system that combines both normal and pathophysiology with reinforcement through case-based learning. We have also received approval for a three-year medical school program that allows students who are also accepted into a residency program at Upstate before matriculation to graduate a year early. These students will start integrating themselves into their residency program with a special course in between the first and second years of medical school.

In order to support our curricular innovations, the undergraduate education (UME) leadership will undergo some changes. Dr. Sri Narsipur, the former Chair of Medicine, was named Assistant Dean of UME and several new positions including co-Directors of the pre-clerkship program Drs. Rebecca Greenblatt and Rachel Hopkins. The Internal Medicine Chief Resident in Education, which is a new position at the GME level was created and funded through the Norton gift and will help integrate learners at the GME and UME level.

LCME Accreditation

The COM is fully accredited by the LCME and compliant in all twelve standards. Our most recent status report was submitted in August 2022 and we have only one standard (student advising) that requires monitoring. The next full site visit will be done during the 2027 academic year. Based on information from our last Graduate Questionnaire (GQ) we added more staff and attention to student counseling and advising. The Learning Communities (LCs) benefited from standardized scheduling and follow up to ensure that all students benefitted from both basic science and clinical advisors. The new GQ results showed that student satisfaction in these areas showed improvement.

Admissions

We had the second largest number of applications (5405) that formed an incoming class of 174 medical students with 58% women, which is the highest number and percentage ever. URiM students

represented 19% of the class, which was a decrease from the previous year but the upward trend remains. Rural students comprise 17% and 18% are out of state. The class is one of our strongest academically with a Science GPA of 3.64 and average MCAT 511. We are recruiting into 15 Upstate Accelerated Scholar (UAS) programs, which are BS+MD partnerships with new programs created at SUNY Binghamton and SU College of Engineering. These students are guaranteed future admission to Upstate if they fulfill certain requirements, but they do not have to take the MCAT. These special pathway students comprise approximately one third of the matriculating students and become integrated into the Upstate culture through summer programming that exposes them to the rigors of medical school and introduces them to current students and faculty. AMSNY has increased their support of several post-Baccalaureate pipelines including our MedTech Scholars. All of these pipeline programs are aimed at increasing URiM enrollment as a core part of their mission. As we increase enrollment, we are also strengthening our academic advising by adding staff and improving our knowledge of student outcomes with appropriate interventions.

Diversity, Equity, and Inclusion

The COM has identified department diversity advocates for each of the 26 departments who are tasked with creating individualized reports and plans to increase diverse faculty and resident hiring and training. Through the efforts of our advocates we have launched the first climate survey on the state of DEI at Upstate. The StandPoint survey with the support of AAMC will help guide our future programming as we champion an anti-racist approach at Upstate. We continue to support our students through student organizations and clubs such as SNMA and LMA and the annual Health Justice Conference, which was led by students Nadia Debick and Alan He.

Undergraduate to Graduate Medical Education Transition

We had 150 graduating medical students enter the Match this year with 97% matching regularly and the rest through the SOAP for a total of 100% graduating students receiving a residency program. This was an increase of 24 students in the graduating class from last year. 52% are entering a primary care specialty with nearly 50% staying in NYS, and 20% who stay at Upstate for their medical residency.

Faculty Development

We were able to return to an in-person faculty development course and had 35 participants in the Upstate Faculty Leadership Essentials for Academic Development, our annual leadership development course that spanned from October 2021 through June 2022. Using a blend of half-day group sessions, along with asynchronous lectures and homework assignments, the participants learned about project management, communication skills, leading meetings, creating a budget, understanding leadership styles, and receiving a DiSC assessment. For those who completed a capstone project, we awarded a micro credential. Other faculty development initiatives included a survey of faculty who were eligible but had not been promoted. This led to increased outreach and assistance with steps necessary for promotion.

Leadership Transitions

The new chairs named during AY 2022 included Dr. Bill Paolo (Emergency Medicine), Dr. Clyde Satterly (Family Medicine), and Dr. Stephen Thomas as the Frank E. Young Endowed Chair of Microbiology and Immunology. Current chair searches include Internal Medicine, Neurosurgery, and Pathology.

Alumni

In September we were able to hold the first Alumni reunion weekend in almost three years. A very strong turnout was seen with the largest class being the 50th year reunion class of 1972.

Research

The COM continued as the primary driver of research at Upstate accounting for over \$42M in total research expenditures during 2022, which represented a 10% increase over 2021 and marked a seventh consecutive year of increases. Among the many highlights was a grant to Dr. Sharon Brangman for an Alzheimer's Center of Excellence for \$2.35M over five years. Dr. Brangman also concluded a successful pilot that included hiring a research advocate who worked exclusively in medically underserved neighborhoods to increase diversity in clinical trial enrollment. This model was highly lauded and is making inroads in industry-sponsored research as well. Research recruitment was strong with new EIP scholars recruited in Ophthalmology and Psychiatry. The highly successful Center for Vision Research celebrated its 25th Anniversary with an event at the Everson Museum that included a keynote speech by former NYS Governor David Patterson.

Student research continues impressive gains as now 84% of medical students report performing a research project with a faculty member and 61% have authored a paper. We increased summer research scholarships from 13 to 16, and thanks to a gift from alumnus Dr. Mark Rogers we offered five partial tuition scholarships to students who would devote a portion of their MS-2 year to research. Through coordination by Assistant Dean for Student Research Dr. Dimitra Bourboulia, over 500 funded projects are available to students. A medical student micro credential is also available for students not enrolled in a dual degree program.

US News & World Report

The COM ranks #50 in Most Diverse, #67 in Most Graduates Practicing in Medically Underserved Areas, #87 in Research, #92 in Most Graduates Practicing in Primary Care Fields, #94-124 for Primary Care, and #118 in Public Health.

College of Medicine: Plans for the 2022-2023 Academic Year

- New curriculum will begin Fall 2023 with recruitment of clinical preceptors for every incoming student being the highest priority.
- Approval for the dual degree MD-MBA and three-year program will be submitted to NYSED (SUNY approval obtained).
- Clinical recruiting remains critical at the Cancer Center as a new division chief is sought in Hematology/Oncology.
- New research recruits in Pharmacology, Microbiology, Neuroscience, Cell Biology, and Ophthalmology.
- Research space planning as the next phase of research expansion to double Upstate research in the next 5-10 years.

COLLEGE OF NURSING

Tammy Austin-Ketch, PhD, FNP, FAANP – Dean, College of Nursing

The College of Nursing (CON) has continued to achieve its established mission, vision and values. These steps have been possible through the actualization of priorities under the strategic plan that was collaboratively developed in 2018 and subsequent internal objectives and plans to align with national standards. In AY21-22, the CON began to transition post-COVID with 264 students and 110 graduates. The CON offers the region's premier Doctor of Nursing Practice program, in addition to post-Master's certificate level programs preparing Family, Pediatric, Adult Geriatric and Psychiatric Nurse Practitioners, as well as an upper division, fully online Bachelor of Science program.

Program Updates

The College of Nursing has begun the formal transition from the traditional Master's level programs to the Doctor of Nursing Practice program as the standard for all Nurse Practitioner students. The Bachelor of Science-to-DNP program was also reinvigorated and updated to reflect current national standards, with the first cohort to begin in Fall 2022. A newly updated Adult Gerontological Nurse Practitioner program was approved by NYSED and SUNY to begin in Fall 2022. Microcredential programs are currently under development at the College of Nursing in the area of addiction prevention, treatment, and recovery.

Grant Activity

The College of Nursing was the recipient of two grants from the New York State High Needs Nursing Grant Fund supporting faculty line expansion, pipeline student support, and new program development. One of the grants represents a collaboration with Onondaga Community College to bolster graduation rates for Registered Nurses at the Associate degree level, as well as ongoing matriculation through the Bachelor of Science level at Upstate. The College of Nursing continues to work on multi-year HRSA-funded grants in opioid and substance use disorder as well as primary care. In addition, the CON continues to be a subawardee on a partnership with Bassett Hospital in their HRSA-funded Nurse Practitioner Residency program. Grant proposals have been submitted for multiple new programs, including a wellness and violence prevention program serving the City of Syracuse and beyond.

Scholarship

Multiple members of the College of Nursing faculty and staff have achieved dissemination opportunities at the national and international levels, including abstract, poster, and publications in well-recognized industry organizations.

Awards

College of Nursing DNP graduate Ingrid Martinez received the SUNY Chancellor's Award for Student Excellence in 2022 for her exceptional terminal degree project. College of Nursing Assistant Professor Mary Catherine Forgea, MSN, RN, proudly received the 2022 Upstate Distinguished Faculty Award for excellence in teaching and service. The College of Nursing also proudly nominated the esteemed Dr. Bernadette Melnyck, PhD, APRN-CNP, FAANP, FNAP, FAAN, who received an honorary degree at this year's commencement ceremony.

Personnel

Through grant funding, the College of Nursing expanded faculty and staff roles with an additional 13 positions to support ongoing plans to expand enrollment and support students.

Board Certification Rates

FNP and PNP program graduates, as well as Master's level FPMHNP program graduates achieved board certification pass rates above the national average.

Community Service

Students, faculty and staff of the CON were exceptionally active throughout the post-pandemic period in a variety of professional and community volunteer service activities, from working with the homeless population and conducting an annual gift drive to support local charities and the efforts of Team Upstate. Multiple members of the clinical faculty participated in peer support training.

College of Nursing: Plans for the 2022-2023 Academic Year

Grants: Complete the SUNY High Needs Nursing Grants awarded to the CON in June, 2022. Both grants aim to grow enrollments in innovative offerings, enhance faculty, and strengthen the RN-BS pipeline of students.

Metrics: Meet grant key performance indicators as established by grant program.

Scholarship: The CON will make a concerted effort to continue to grow and showcase the scholarly work at the CON. A newly created dual-appointment role with the hospital, Nurse Scientist, supports collaborative work in this area across the Upstate enterprise. The CON-sponsored faculty scholar program will provide additional support to research and scholarship endeavors.

Metrics: Two members of the CON faculty will present successfully accepted work at conferences throughout AY 22-23, while at least two other faculty will submit work for consideration. The Nurse Scientist will begin engagement with CON students and faculty through a dual appointment. The CON faculty scholar will be selected and the approved, supported project will commence and conclude in AY 22-23.

Accreditation: Complete the preparation of the CCNE self-study accreditation report for the BS, MS, and PMCT programs.

Metrics: Successfully prepare all sections of the self-study for the BS, MS, and PMCT programs to be delivered to SLOC for review in September 2023.

Faculty and Staff Recruitment: Maintain full complement of faculty, staff, and grant positions with qualified candidates.

Metrics: Successfully recruit against any vacancies as they occur in a timely fashion. Navigate changing landscape of employee recruitment through innovative methods supporting the needs of the CON.

Enrollment: Successfully phase out MS program admissions and deploy the BS-DNP program and post-master's AGNP programs, with first cohorts to commence in AY 22-23. Meet targets for first cohort enrollment in the BS-DNP program, maintain persistence to commencement in the MS and PMCT programs, and maintain or increase enrollment in the RN to BS program and pipeline agreement programs.

Metrics: Recruit, accept, deposit, and matriculate the first cohort of 30 students in the BS-DNP program to enter Fall, 2022. Increase number of successfully recruited, accepted, deposited, and matriculated applicants by 10% in the RN to BS program and identified pipeline agreement students for the upcoming academic year. Maintain a persistence to commencement rate of 90% in the existing MS and PMCT programs.

COLLEGE OF HEALTH PROFESSIONS

Katherine Beissner, PT, PhD – Dean, College of Health Professions

The College of Health Professions offers educational programs leading to professional licensure/certification in a range of allied health fields and biomedical research, and two post-baccalaureate medical college preparatory programs. In 2021-22, 135 undergraduate and 236 graduate students were enrolled in the College's 12 programs. With 43 full-time and 2 part-time core faculty, 22 adjunct faculty, and a host of clinical preceptors at our 300+ affiliates, students are well-supported in these educational programs.

In 2021-22 most coursework was conducted in person, though hybrid learning continued on an as needed basis. Student outcomes continue to be excellent with a five-year average graduation rate of 98%, first time credentialing exam pass rate of 94% and the total exam pass rate of 95.5%. Over the past 5 years 98.5% of graduates seeking employment found jobs within 12 months.

Other efforts were directed by the CHP strategic plan, with priority focus in the following areas:

Increase Faculty, Staff and Student Diversity

In 2021-22, 28.8% of the students in the CHP identified as non-White (12.4% Asian, 6.5% African American/Black, 6.2% Hispanic, 2.9% not reported), including 31.4% of graduate students and 23.4% of undergraduates. The College enrolls predominately NYS residents (92% of students) of traditional college age (58% aged under 25 years). The number of applications for CHP programs increased slightly for 2021-22, and the applicant pool is more diverse with 48.1% of identifying as under-represented minority. Efforts to attract and enroll a more diverse student body included institution of a holistic admissions process, increased articulation agreements with community colleges, and expansion of online programming by the Office of Admission.

There has been no change in the racial/ethnic diversity of the CHP faculty and staff.

Strengthen and Expand Partnerships

The CHP clinical partnership network was expanded with finalization of 23 new Affiliation Agreements. Work with the Syracuse City School District was strengthened with the development of the summer enrichment offering Jump Into Healthcare. Twelve high school students were enrolled in this 4.5 week problem-based program offered in the summer of 2022.

Other partnership growth draws from work with community colleges and transfer institutions. Faculty in the Clinical Laboratory Science department are working with Onondaga Community College faculty to define pathways and develop a new transfer program. The CHP Dean served on an external review board for a transfer A.S. program for SUNY Cobleskill, and continues outreach to other SUNY schools.

Grow Scholarship

In 2021-22 16 faculty in the College of Health Professions published 29 articles in peer-reviewed journals, representing sustained growth in scholarship for the college. Notably, two faculty members with no prior publications during their time at Upstate are among the authors, work facilitated by the College's Assistant Dean for Interprofessional Research, Dr. Hani Aiash.

Develop New and Enhance Existing Programs

Progress on microcredentials has been complicated by faculty turnover and low enrollment in the Post-acute Respiratory Care program. That program is now on hold, but we anticipate further progress on microcredentials in other areas in the next academic year. Work continues on new degree programs, including a new Applied Behavior Analysis program and a BPS in Medical Technology.

The partnership with Rochester Regional College of Health Careers to offer our Respiratory Therapy program on their campus commenced with a small cohort. The synchronous instructional delivery has

been challenged by instructional technology issues that have not been resolved despite substantial efforts by the institutional IT team. Efforts to find a sustainable solution continue.

Improve Efficiency, Accountability and Transparency

The Appointments, Promotion and Tenure policy was revised to better articulate pathways to faculty promotion. Eight faculty were promoted under the new criteria for Assistant Professor and an additional faculty member has submitted a portfolio for review.

Increase Faculty, Staff and Student Satisfaction

Based on 2020 Student Opinion Survey data it appears that overall student satisfaction in the CHP is high, and we look forward to updated data in this year's survey. The college does not have a recent data source for faculty and staff satisfaction, but with high staff turnover and 5 faculty retirements (including two department chairs) and two additional faculty resignations in the past two years there is substantial movement in the staff and faculty ranks. Three new department chairs (two interim) were appointed in the 2021-22 AY and with both Associate Deans having retired in the past year the need for leadership development is clear. Toward that end, five CHP faculty members participated in the Upstate Leadership Essentials for Academic Development program, and now each has increased leadership responsibilities. As a further effort to support faculty the Assistant Dean for Faculty Engagement, Michelle Dolphin (appointed in January 2021), has developed a faculty mentoring project geared toward individual needs as defined by the mentees.

College of Health Professions: Plans for the 2022-2023 Academic Year

Strengthen Partnerships

The college will continue to strengthen partnerships with transfer institutions, including a potential new relationship with Monroe Community College that is specifically geared toward growing our Respiratory Therapy program. Also planned is a relationship building with new leadership at Jefferson Community College and ongoing work with Onondaga Community College to solidify those pipelines.

Increase Diversity

The College goal of increasing diversity in the student body continues and is transitioning to include a focus on inclusion/belonging, coordinated with Upstate's institutional resources. The summer enrichment program offered in 2022 will continue as funding allows. Hiring a more diverse faculty and staff continues to be a priority with focused marketing and advertising in appropriate professional forums.

Faculty, Staff, and Student Satisfaction

The faculty mentoring program will be fully implemented in 2023-24, with 9 mentoring pairs matched according to interests and experience. To continue the work to ensure that all faculty see a path to promotion an Associate Dean will be appointed in Fall 2022, with primary focus on fully implementing and facilitating the promotion and tenure process.

Grow Scholarship

Efforts to incentivize increased scholarship will continue, to include establishing CHP faculty research awards and a forum for sharing scholarly work.

Optimize Facilities

Renovation work continues on Silverman Hall, home to multiple College departments. Final specialized equipment purchasing and planning will continue in 2022-23 in preparation for summer 2023 occupancy.

COLLEGE OF GRADUATE STUDIES

Lawrence Chin, MD – *Interim Dean, College of Graduate Studies*

Steven Taffet, PhD – *Interim Assistant Dean College of Graduate Studies*

There are 136 students enrolled in nine programs of study in the College of Graduate Studies, plus an additional 18 MD/PhD students currently enrolled in the College of Medicine. On average, each PhD student's research is published in 3.7 papers and each study is cited by 48.6 other papers on average; predictably, these students are highly sought after for competitive positions upon graduation.

The CoGS organizes the following events:

- Annual Biomedical Sciences Retreat
- Annual Beyond the Doctorate Day with the Office of Graduate Medical Education
- Annual Student Research Day
- Annual MD/PhD Alumni Distinguished Lecture
- Annual Graduate School Distinguished Alumni Talk

Last fall, the CoGS matriculated 21 students into the PhD program, one MS student and six MD/PhD students in 2021. We recently matriculated 28 PhD students for Fall 2022, two MS students and four MD/PhD students. GRE, GPA and MCAT scores for matriculated students continue to stay high. GRE's continue to be optional for admission, following many other schools in the face of the pandemic.

Research productivity remains high and continues to see record increases in Research Foundation expenditures largely driven by PhD students who are so important to our research mission. Classes and events have mostly returned to in-person gatherings with all students, faculty, and staff vaccinated. Indeed, the college is the first at Upstate to have 100% of its students vaccinated.

Summer Undergraduate Research Fellowship

Thirteen students participated in the SURF program over the summer. Students were housed in Upstate dormitories and because of vaccinations the program ran smoothly without any issues. We were able to add extra students with financial support from both LeMoyne College and Long Island University.

PREP Program

The Postbaccalaureate Research Education Program (PREP) continued this summer with four students in its second class. The goal of this year long program is to develop and prepare students from diverse backgrounds for PhD and MD/PhD programs by immersing them in biomedical research. We successfully matriculated one student from the inaugural class into the Biomedical Sciences PhD Program this fall. While participants devote most of their time to hands on bench research, approximately 25% of their time is devoted to skill development: taking courses; attending workshops and seminars; and other professional development activities.

Application Overhaul

Over the last year with the assistance of Student Affairs we completed a full overhaul of our online application system. This new system streamlines the process and provides a richer interface, no matter which platform the applicant is using. It also helps us better follow prospective students, answer questions, and respond to them more quickly.

Career Development Services

The appointment of a new Coordinator of Career Development has allowed the College to further expand career services. The College continues to feature a growing series of workshops supporting professional development – presenters and facilitators include graduate faculty, alumni, and external, invited speakers. In addition, the College now offers 1:1 career counseling and advisement for students and has begun establishing partnerships with local companies and recruiters. Most workshops are being held in person with the opportunity for hybrid events to accommodate traveling speakers.

NIH Grants

We continue to encourage graduate students to apply for F30 and F31 grants as part of their training and education. This year, four graduate students were awarded NIH grants – three MD/PhD students and one PhD student.

Nanocourses

We now have a total of 27 nanocourses in the graduate school. These half-credit courses have become very popular with faculty and students, covering a new or emerging topic or technique. Indeed, several courses focusing on science communication and social media, and coding in R have emerged in the last year. The college continues to make these courses more accessible to interested students.

Student Research Day

In Spring, the Student Research Day was held in-person for the first time since the onset of the pandemic in 2020. The event featured research abstracts from nearly 100 students across all four colleges at Upstate and was a vast success.

3-MT Competition

In July 2021, the college ran its first Three-Minute Thesis competition. Fifteen students gave a less than 3-minute presentation geared towards the lay public as to what their thesis project was about. It proved to be a great event and an incredible learning event for all the participants. The event will be held again in November 2022.

Recruitment

Over the 2021-22 academic year we added three new faculty and now have a total of 112, giving us a student to faculty ratio of 1.2.

Student Mental Health

This has been an extremely challenging year for student mental health. We continue to promote resources available to students including: student counseling; low-cost meals; food bank; online social events. We continue to ensure our offices are open and staffed during regular business hours to encourage students to visit when needed.

Staff Retention

The College of Graduate Studies did experience some turnover in the last year; however, this afforded us the opportunity to further refine job responsibilities playing to staff strengths. We are now fully staffed again and have a highly skilled team already working to improve our services. We have two staff members pursuing MS and PhD degrees in higher education which adds to the enrichment of the office.

College of Graduate Studies: Plans for the 2022-2023 Academic Year

- Continue adapting to evolving COVID regulations in educational delivery and student research.
- Continue to work on curriculum reform.
- Continue development of the PREP program and submission of R25 mechanism to the National Institutes of Health to support the program.
- Continue to build a strong cohesive team.
- Continue to streamline practices for all stakeholders (staff, faculty, students).
- Continue to move processes and forms online to reduce waste.
- Continue to build a more expansive network of alumni to serve as a resource for students.
- Continue to expand upon current offerings.

UPSTATE FACULTY COUNCIL

Kerry Green Donnelly, MBA, R.T. – Chair, Upstate Faculty Council

The mission of Upstate Medical University is “To improve the health of the communities we serve through education, biomedical research, and patient care.” Among the factors that lead to our success meeting our mission as an academic health center is a commitment to collaboration and engagement across the entire university. Reflective of that commitment is a decade-long effort to build a stronger and increasingly more effective system of shared governance on campus. We are proud of the accomplishments of this effort and submit this summary of accomplishment for the past academic year, and a forecast of future efforts.

Achievements of the Past Year

- The Chair of Faculty Council attended and actively participated in a majority of bi-weekly meetings of the University Executive Committee and the quarterly meetings of Upstate Council, the two main advisory boards convened by the President.
- The Chair of Faculty Council collaborated with the President to set the agenda for each monthly Faculty Council meeting.
- Faculty Council continued with refinements to its by-laws, which facilitated the engagement of professional staff into Faculty Council. Upstate Senators are now approximately 50% professional staff and 50% faculty, whereas they had previously been only faculty.
- The Chair of Faculty Council worked with Administrative liaisons to identify broadly representative faculty to sit on committees charged with identifying candidates for Honorary Degrees, Distinguished Professor ranks, and Chancellor’s and Presidents Awards.
- Faculty Council aided in the development of a standard syllabus template.
- Faculty Council expanded the charge of the Deferred Action for Childhood Arrivals (DACA) Task Force, and changed its name to reflect that expanded scope. The new “Task Force on Issues Facing Undocumented Members of the Upstate Community” now has the charge of working “to address the challenges faced by undocumented students and staff of Upstate Medical University. Undocumented status includes Deferred Action for Childhood Arrivals (DACA) status, Temporary Protected Status (TPS), and other statuses associated with a lack of social security number and/or work authorization (non-SSN). The Task Force will collaborate with students, faculty, and staff across the institution to build sustainable financial, legal, informational, and social supports for undocumented members of our Upstate community.”
- Faculty Council aided in the establishment of the inaugural Avers-Meguid Endowed Award for Excellence in Shared Governance, named for and endowed by two previous chairs of Faculty Governance, (Drs. Dale Avers and Victoria Meguid) to recognize and honor substantial individual contributions to faculty/shared governance at Upstate. This award will recognize a member of the Faculty or Professional Staff who has shown sustained service and outstanding leadership in shared governance to the University, and will be award will be presented by Faculty Council at the Annual Meeting of the Faculty.

Upstate Faculty Council: Plans for the 2022-2023 Academic Year

Faculty Council Executive Committee established several goals for the next academic year.

- Increased participation in Shared Governance is a primary goal. An evaluation of participation by department will inform Council of areas for improvement and opportunities for involvement. Faculty Council Executive Committee with the assistance of Upstate Affairs Committee will meet with departments to educate on the opportunities for participation at various levels within Upstate Medical University.
- As part of the increased participation goal, a focused outreach on the Binghamton Clinical Campus will take place. The use of virtual/hybrid meetings for all Faculty Council/Committee meetings will enable more widespread participation.
- The participation of professional staff in governance has increased in recent years. Faculty Council encourages this trend and supports further participation through the establishment of a Staff Senate. Faculty Council will continue conversations regarding this initiative and provide support.
- Student success is vital to the University. Faculty Council will research preserved barriers to student success at UMU, current resources and potential areas of improvement. Faculty, professional staff and the student perspective will inform the collection of information. Faculty Council will work closely with Student Affairs and the Student Government Association on this objective.

RESEARCH

David Amberg, PhD – Vice President for Research

Research expenditures continued to grow at an accelerating rate to 10% over the last fiscal year and 20% in the first quarter of this fiscal year. This last fiscal year we set a record for total research expenditures, breaking the \$40M mark to \$42.5M. Research growth is across all activities; establishment of new clinical trials has gone up several fold as have new IP disclosures and awarded patents. The number of grants increased by 15 percent and the number of papers published grew by 44 percent.

Upstate finished the year with \$10M in royalties from licenses (before distributions to inventors), the highest amount in the SUNY system. This is in larger part to our extraordinarily successful relationship with START-UP NY company Quadrant Biosciences who has commercialized our IP for the Clarify SARS-CoV2 test and IP jointly owned with SUNY ESF for wastewater monitoring of community spread of COVID-19. The Quadrant lab located in one of our research buildings has contracts to monitor wastewater in all New York State Counties. Just this fall, Quadrant launched their “As You Are” platform for Autism diagnosis and virtual care licensing Dr. Frank Middleton’s IP for the Clarify-ASD Autism diagnostic which can accurately predict a diagnosis of Autism as early as 18 months of age.

Dr. Middleton was also awarded one of five New York State contracts for SARS-CoV2 variant monitoring/sequencing and as such, Upstate remains one of the State’s most critical assets in the ongoing battle against COVID-19.

Despite the complexities of the COVID-19 pandemic, Upstate research continues to be a vibrant and growing enterprise. In fiscal year 21/22, research expenditure direct costs grew a record 10% and F&A recovery grew 11%, capping off eight years of continuous growth taking us to \$42.5M in total research expenditures. This year, 95 basic and translational research faculty and 153 clinical research faculty received 231 awards and submitted 271 grants for a total ask of over \$225 million (direct plus indirect costs) and 105 sponsored programs agreements were completed. A total of 75 clinical trial contracts were executed. Total currently awarded grant dollars total over \$201.5 million. Upstate faculty published 976 papers.

Upstate researchers have been active and productive

- Over the last eight years, research expenditures have grown ~40%.
- COVID-19 research continues to be a strength at Upstate.
- Currently we have over 583 open clinical trials — 4% growth over last year. Fifty-nine new clinical trials were opened this year.
- Faculty entrepreneurship is on the rise, over the last three years IP disclosures and newly awarded patents increased 3-fold.
- The Upstate/Quadrant Biosciences relationship continues to flourish realizing \$10M in licensing royalties (before distribution to inventors) to Upstate, the highest in the SUNY system for this year. The launch of Quadrant’s new spin-off company “As You Are,” a diagnosis and virtual health program that licenses Dr. Frank Middleton’s diagnostic for the early detection of Autism, as early as 18 months of age has great promise.

Implementation of a New Research Strategic Plan

In just one year, Upstate has made tremendous progress in addressing the nine cross-cutting initiatives of the Research Strategic Plan:

- Establish a research-dedicated Information Technology Core. This goal has been accomplished with the staffing of a three-person IT core dedicated to support research.
- Develop a positive incentive strategy for research protected time for clinical faculty. No progress on this goal, hope to focus on this in the coming year.

- Develop new core facilities in histopathology and electron microscopy. The SUNY Upstate Research Pathology Core has been established and is up and running. The TEM core is almost completed and will come online in the next couple of months.
- Expand the biobanking core in capacity and in capability to support data integration. An additional 0.5FTE technician has been added to the core increasing capacity and the biobanking software eSample has been implemented which increases efficiency and provides some level of data integration with the HER.
- Improve the research institutional profile. We have added a dedicated marketing and communications person to Research Administration 100% focused on creating content, publicity materials and communicating the accomplishments of the research arm of the University through various platforms including Twitter (@InnovateUpstate) and LinkedIn.
- Strengthen the postdoctoral fellows' program in numbers and prestige. To increase competitiveness, we have raised all post-doc salaries to 90% of the NIH guidelines. In addition, the enhanced research profile will positively impact post-doc recruiting efforts.
- Develop formal mentoring programs to support the success of our research faculty. This will be an area to focus on in the coming year.
- Develop pipeline and development programs to diversify our research workforce. We just finished our first year of the new Post-Baccalaureate Research and Education Program (PREP-UP). As a result, four students of diverse backgrounds have entered our PhD or MD/PhD programs. A PREP grant was submitted to the NIH for funding to expand the program, we are awaiting the funding decision.

RESEARCH ADMINISTRATION

2021/2022 Accomplishments of Research Administration:

- Tremendous progress implementing the new Research Strategic Plan.
- Expanded the Clinical Trials Office to four individuals to handle a rapidly increasing dock of new clinical trials.
- Initiated a project between the SUNY medical campuses to create a SUNY sub-network of TriNetX to aggregate our data, perform New York State specific research and attract multi-site trials to SUNY and New York.
- Implemented eSample biobanking software to the Biospecimen Core.
- Established a research MOU with Binghamton University's Thomas J. Watson School of Engineering to include collaborative pilot grants, a joint seminar series and joint development of intellectual property.
- Established a new Office of Industry-Research Engagement led by Dr. Chris Neville in Research Administration. Designed and launched a new outward facing website to attract industry collaboration, contract research agreements, core utilization and consulting relationships with our faculty (<https://innovateupstate.org>). The first edition of a new innovation newsletter to promote our industry innovation was completed in Fall 2022 with quarterly updates planned.
- Designed and printed "tear offs" for registration stations to educate our patients on participating in clinical trials.
- Submitted a Type 1 NSF Regional Innovations Engine proposal with 21 partner institutions; academic, government, K-12 educational, regional economic development agencies, and industry.

The Institute for Global Health and Translational Science

Director: Stephen Thomas, MD

The Institute for Global Health and Translational Science (IGHTS) had an extremely productive year across all its Centers. The Center for International Research (CIR) completed follow up of a Syracuse

based COVID cohort capturing 2+ years of post-exposure immune responses and symptoms of acute and long COVID. The CIR field site in Machala, Ecuador hosted the Ecuadorian Minister of Health, Dr. Jose Ruales, in July 2022. The Machala site also continued its surveillance for respiratory illnesses and completed a Merck sponsored dengue surveillance project. The Refugee Health group within the CIR secured a Cabrini Grant for Expanded Community-Clinic Partnership to expand refugee health navigator positions and community based participatory research. The group had 1 presentation and 4 posters at the North American Refugee Health conference. The group received a grant thru the AAIM/ABIM/ACP & MACY Foundation Building Trust through Diversity, Health Care Equity, and Inclusion in Internal Medicine Training to expand hiring and training of refugee health navigators to serve as standardized patients. Three residents and 1 medical student went in Kenya in May 2022 to conduct service learning and 2 Kenyan medical students arrived at Upstate as part of the exchange in October 2022. Monthly virtual case conference series between Maseno University and Upstate Pediatrics continued with numerous Upstate subspecialties participating. The Center for Training and Educational Programming (CTEP) graduated the first cohort of 4 students in the Global Health and Translational Science MPH concentration and enrolled 7 students in the Summer 2022 second cohort. The CTEP was awarded and successfully implemented two global health virtual conferences funded by the Steven's Initiative through the US Department of State. "Bridging Cultures to Defeat COVID-19" reached over 500 health and science trainees and faculty in the United States, Libya, and United Arab Emirates. We restarted the IGHTS educational exchange programs with 1 medical student and 3 pediatric residents participating in the Kenya clinical program and 2 medical students participating in the Ecuador research and Medical-Spanish immersion program. In collaboration with the Department of Pediatrics and the Department of Emergency Medicine, a Global Health Fellowship Curriculum was created to support clinical service and educational exchange in Kenya. The CTEP continued to support refugee health through the Community-Clinical Partnership with Catholic Charities. Finally, through an ongoing partnership with the Trudeau Institute, a research summit entitled, "Flaviviruses: Epidemiology, Pathogenesis, Immunology, and Countermeasure Development," was completed in May 2022 bringing together 50 basic scientists, epidemiologists, modelers, clinical researchers, immunologists, and product developers. The CTEP and Refugee Health group published 4 manuscripts and had 4 presentations. The Center for Vector Borne Diseases (CVBD) had a banner year working on numerous NIH grants including, "Tick determinants of Powassan virus transmission," "Safety and immunogenicity of a novel Rift Valley fever candidate vaccine, RVax-1," and "Role of human surfactant collecting variants in the susceptibility of COVID-19." Sponsored research efforts included, "Testing ticks to assess tick-borne encephalitis virus circulation in the United States," and "In-vivo efficacy of novel vaccine candidates against Borrelia sp." Finally, the CVBD completed a CDC project entitled: "Establishment of a tick surveillance program in Texas, Oklahoma, New Mexico, and Arkansas." The program also continued its highly successful Citizen Science Program testing thousands of ticks for more than 15 pathogens which affect human health. The CVBD published 9 manuscripts, 1 book chapter, and made 11 presentations. The Center for Clinical Research (CCR) had more than 20 active studies during the year accounting for 1120 volunteers and 2480 research visits. The CCR worked on vaccine and drug trials and helped to develop diagnostic tests. The CCR worked across numerous diseases such as COVID, dengue, yellow fever, Lyme disease, HIV, and influenza. We continued as an anchor site for the Pfizer / BioNTech COVID-19 pivotal phase efficacy trial exploring testing of Omicron vaccine formulations. CCR activities produced 21 manuscripts. Administratively, the IGHTS grew its staff to 48 members. We assisted in the negotiation of more than 45 agreements to include clinical trial agreements, sponsored research agreements, contracts, and subcontracts, and cooperative research and development agreements. We functioned as the regulatory sponsor for 1 clinical trial. Total expenditures were up over 25% from the year prior and exceeded \$6M. Finally, the IGHTS received an unscheduled audit from the FDA for the Pfizer COVID vaccine trial and had no written findings, an amazing success.

Upstate Sepsis Interdisciplinary Research Center (SIRC)

Director: Robert Cooney MD; Co-Director: Juntao Luo, PhD

- **SIRC New grants in 2021-2022:** One MIRA (Wilmore), one R21 (Wang), one R01 (Li), two SBIR awards (Kollisch), one NIH-NIAID Contract award (Pawar), one SUNY RF TAF award (Luo)
- **Total on-going grants:** 19 on-going extramural and intramural grants including Five R01, one R21 and two DoD awards
- **Publications:** 27 publications from seven SIRC labs
- **Abstract/presentations:** 40 poster abstracts and 14 invited talks
- **National Services:** Two Faculty members (Wang, Luo) serve multiple times in Study sections for NIH and DOD. Prof. Gary Nieman serve as chief guest editor and associate editor for Frontiers of Respiratory Physiology and Pathophysiology

The Center for Vision Research

Director: William Brunken, PhD

Despite the lingering effects of the COVID pandemic – research at the Center for Vision Research (CVR) and in the Department of Ophthalmology & Visual Sciences (OVS) continue to move forward at a great pace. In the last year, our research and clinical faculty have published 28 papers ranging from tissue engineering of ocular tissues to epidemiology of shaken baby syndrome. And our research portfolio of grants from the federal, state, and philanthropic is over 3 million dollars annually and growing. Some particularly noteworthy funding successes have been the award of his first NIH grant to Dr Herberg; the successful renewal of the NIH grants by Drs Solessio and Bernstein; the award of a new grant to Dr Viczian; the award of a collaborative grant with Columbia University to Professor Brunken, Director of the CVR; last and by no means least is Dr Audrey Bernstein's recipient of the first VA Merit grant to an ophthalmology faculty member.

We have successfully recruited Dr. William Spencer as the first of two Empire Innovation Program faculty members. Dr Spencer joined OVS and the CVR on September 1, 2022. Dr Spencer comes to us from the research staff of Duke University where he completed his doctoral and post-doctoral studies in the laboratory of Dr. Vadim Arshavsky. Dr Spencer's seminal studies included the identification of a key gene that causes the vast majority of blinding diseases in dogs (PRCD); the same gene defect causes blindness in humans. In addition, another project of his, with Professor Arshavsky, solved a long-standing question in retinal cell biology. Vision is dependent on the capture of the energy in light by a specialized structure called the outer segment. The outer segments are made by photoreceptors and are large stacks of membranous disks, packed with light absorbing molecules. How the disks form and are precisely stacked remained a mystery until Dr Spencer state of the art work showed the process with high resolution microscopy and creative use of genetic manipulation. The results of his studies on these two topics were published in the Proceedings of the National Academy of Sciences USA, a leading scientific journal. In addition, he published ten papers in similarly prestigious journals including Journal of Cell Biology, Nature Communications and eLife. His work at Upstate Medical University will be focused on the process of outer segment formation in several forms of retinal degeneration. He is particularly interested in how membrane malformation triggers autoimmune responses leading to neural degeneration.

The Center for Vision Research celebrated its 25th Anniversary with a Symposium on October 21, 2022. The Symposium featured an all-star lineup of speakers, including David Paterson, the former Governor of the State of New York and Dr Michael Chiang, Director of the National Eye Institute, one of the 26 component institutions of the National Institutes of Health. More information can be obtained on the CVR's web site (www.upstate.edu/cvr).

The Central New York Biotech Accelerator

Director: Kathi Durdon

The two staff at CNY Biotech Accelerator, Executive Director Kathi Durdon and Stephanie Carbone, Office Coordinator, have been remarkably busy with all licensable space completely full. The Department of Pathology licenses second-floor space housing 15 employees. The 10 Start-Up companies, licensing wet and dry lab space while developing their biotech-related product/service, employ over 100 individuals working within CNYBAC. What once was an empty parking lot is now full. Five companies which have expanded — Quadrant Biosciences, Zetagen Therapeutics, Repair Biotechnologies, Acumen Detection and Triton Bio — have all requested additional space. CNYBAC Executive Director has been working with CenterState CEO representative, David Mankiewicz, to help determine where alternate opportunities exist, and Upstate leadership has brought in several groups to tour the facility and understand the economic impacts generated by clients. However, alternate wet lab infrastructure is not available. Several initiatives are in play to gain the estimated \$80M funding to construct another 52,000 SF facility next to the CNYBAC. This will not meet immediate needs. Clients have been working with Upstate CORE facilities and faculty, have submitted collaborative grants, placed student interns, and hired graduates. The CNYBAC model has proven successful and as biotech-related innovation continues to grow, the expectation is that another building would quickly fill. Dr. David Amberg has requested CNYBAC institute a new equity share program for newly accepted clients when space becomes available. An equity share policy is in process. This year CNYBAC received five applications from Upstate faculty and students to participate in the 2022 Medical Device Innovation Challenge. They all participated in SUNY's Start-up Summer program and are receiving support from The Research Foundation for SUNY. Expansion space and seed funding (from the equity share program) will need to be made available to support these and other biotech-related early-stage innovators.

2022 Milestones

- CNYBAC licensable space is fully occupied: 10 onsite clients/13 virtual. This includes 4 new clients in 2022: 3 Virtual and 1 Creation Garage. License fees bring in \$36,205 monthly (October 2022).
- Client Annual Empire State Development Impact Report – Total Economic Impact of \$87,190,767
 - \$5,109,000 Total federal grants acquired
 - \$3,649,689 Total non-government funding
 - \$76,852,078 Total increased company revenues
 - \$660,000 Total cost savings
 - \$920,000 Total capital expenditures
- Revamped CNYBAC website to include video: www.cnybac.com
- Submitted 2022 SUNY Upstate START-UP NY Campus Plan to include additional space at the Institute for Human Performance and CNYBAC 4th Floor for Quadrant Biosciences
- Clients participated in several CNYBAC supported programs including:
 - CNYBAC, Quadrant Biosciences, DUB Biologics, Repair Biotechnologies presented to Syracuse University bioengineering students, September 2022
 - JelikaLite: NYS Tech MeetUp, September 2022
 - Quadrant Biosciences: KSP Conference Cross Border Pitch Competition, June 2022
 - CathBuddy and Repair Biotechnologies, Upstate Capital Association, INVESTHealth, March 2022
 - JelikaLite and Rubitection, Pitch Event Winners, CNYBAC hosted Event, January 2022
- Purchased 3 new Sterling Ultracold -80° freezers for shared equipment use.
- CNYBAC hosted 14 Concept to Commercialization Virtual Series presentations to date, 2022.
- CNYBAC Event Space promoted to try to bring revenue back to pre-pandemic rates.
- Operations continue on par with prior year. Masking requirement back in place.

Kingston Syracuse Pathway

- CNYBAC participates in monthly meetings to coordinate collaborative interests.
- KSP was awarded Gold Rank from International Economic Development Council, Sept 2022.
- Attended first KSP Conference held in Kingston, Ontario, June 2022.

Medical Device Innovation Challenge:

- 6th Annual Medical Device Innovation Challenge – supported in part through ESD Certified Business Incubator Grant. Program received a renewal of award for another 5 years and has graduated 28 teams to-date.
 - MDIC Review Committee selected 4 teams; an additional team from SUNY Upstate invited into program upon completion of SUNY Start-Up Summer School. Innovation Law Center commercialization research-initiated August; mentor meetings began September 2022.
 - MDIC Graduate Milestones continue to exceed expectations, the most recent include: SimplerLinks – an Upstate nursing duo – executed licensing agreement with Buffalo manufacturer; Assistance in Motion awarded SBIR Phase 1 for product development; Vita Innovations advances to top round of Stanford’s top accelerator program, StartX.

Executive Director Positions Held:

- Board Member/Secretary, Business Incubator Association of NYS (BIANYS)
- Board Member, MedTech
- FDA GCP Certification Instructor, Society of Clinical Research Associates (SOCRA)

Grants/Awards:

- Submitted Economic Development Agency (EDA) Venture Challenge Scale Grant, “SUNY Upstate Medical University Life Science Innovation and Entrepreneurship Program,” \$146M
- Awarded \$625,000 5-Year Empire State Development Certified Business Incubator Grant
- Awarded \$20,000 Hot Spot Funding through ESD/The Tech Garden
- Awarded \$50,000 FuzeHub Jeff Lawrence Manufacturing Grant in partnership with client CathBuddy
- Executive Director received Economic Achievement Award, MedTech Annual Awards

Research Goals: Plans for the 2022-2023 Academic Year

- Successfully fill the remaining, approved Empire Innovation Scholar positions: one in Alzheimer’s, one in vision research, and one in addiction research.
- Implement a strategy to meet the new data sharing requirements of the NIH.
- Develop a strategy to meet the data storage and high-performance computing needs of the research faculty.
- Actualize the Transmissions Electron Microscope (TEM) core facility.
- Continue to invest in new technology within our research cores.
- Hold the Kingston-Syracuse cross-border summit in Syracuse.
- Develop the strategy to develop and fund a new Center in Regenerative Medicine as a re-imagining of the Cord Blood Center.
- Expand the Research Development Office by two FTE.
- Develop a database of research faculty expertise.
- Develop a new business plan for the CNYBAC that includes an equity interest in return for subsidized rent.

4.

UPSTATE UNIVERSITY HOSPITAL

Robert Corona, DO, CPE, MBA, FCAP, FASCP – CEO, Upstate University Hospital

The Upstate University Hospital system consists of University Hospital (Downtown), Upstate Community Hospital, Upstate Golisano Children's Hospital, and Upstate ambulatory services. It is led by a superb team including the CEO Dr. Robert Corona, CFO Stuart Wright, CMO Dr. Amy Tucker, CNO Scott Jessie, CAO Nancy Daoust, CSO Susan Furtney, CIO Mark Zeman, and COO Marilyn Galimi. Together, they have focused on the strategic pillars of quality, patient and employee satisfaction, technology/innovation, and sustainability/growth.

Quality of Care

- Established the Connect Care Clinic
 - Connect Care is a huge quality initiative on many levels; it offers immediate continuity of care and follow up for many inpatients and outpatients, it is part of clinical pathways (Triage, Monkeypox, Chest Pain, Dalvance) that allow a safe and effective shift of some of the hospital care to the outpatient settings leading to better and safer care for these patients, ensures safe transition of care from the inpatient/Emergency Department settings to the outpatient settings. It also provides rapid access to ambulatory care for employees with minor acute medical needs.
- Data Governance
 - Developed and proposed a structure for data governance and project/report intake that will largely eliminate overlapping reporting efforts and ensure there is a single, curated source of truth for all hospital-related data elements. This governance initiative, branded as the Upstate Data Alliance, was supported by HOLT and a resource is now under recruitment.
- Moonshot
 - Moonshot, the data visualization team established to develop interactive decision support tools that provide unique insight to challenging problems, completed several projects this year including the Star Program (savings recently surpassed \$13M), Hip Hip Hooray for Ortho CoCare, The Golden Hour (Pediatric Sepsis), OR Smoothing, Clearing the Lines of Infusion - Enhancement Request for Cancer Center Chair Utilization, Taking Aim: Outpatient Quality Metrics, Ambulatory Catchment Dashboards, True Blood (Tubes), HR Training Compliance and others.
- Cancer Center
 - Successful recruitment of the first ever director of clinical operations to leverage management engineering process improvements.
- Ambulatory
 - Collaborated with UUMAS to launch Ambulatory Quality Governance Committee with a focused goal to improve AQA Vizient Star rating.
- CLABSI, UE, ADE, PI Improved Rates
 - In July of 2021 Upstate Golisano Children's Hospital recognized as the "Hospital of the Month" by Children's Hospitals' Solutions for Patient Safety for reducing harm through improved rates for Central Line Associated Blood Stream Infections (CLABSI) and Unplanned Extubations (UE) and sustained rate of zero for Adverse Drug Events (ADE) and Pressure Injuries (PI).

Upstate Experience

- Cancer Center
 - Provider Engagement Program has created and strengthened physician relationships and educated providers with monthly Primary Care Task Force Education sessions and quarterly Coffee with the CMO gatherings.
- Neurological Institute and PM&R
 - Focused on Neurological Institute Referrals Redesign improving patient access through several initiatives, improving Neurological Institute access and growth in internal Upstate and external referrals through Provider education, network meetings and increased OP clinic efficiency with 75% increase in referrals for Neurosurgery and 37% increase for Neurology in PB clinics for June 2022 compared to Jan 2022.
- Ambulatory
 - Referral Optimization and Access Task Force has made improvements in processes and communication to streamline the referral process to better serve our referring providers and patients.

Innovation / Technology

- Consultative Services
 - Provided strategic and analytical support to executive and senior leadership at UMU, UUH and UUMAS on local, regional and national market data to inform strategic initiatives, regional growth, expansion strategies and business planning efforts. Launched initial pilot creating customized interactive dashboards for two of Upstate's priority service lines (cancer and primary care). Facilitated strategic discussions with service line physician and administrative leaders regarding the regional landscape that allowed them to make informed decisions regarding patient access and services.
- Hospital of the Future
 - In Fall/Winter 2021, advanced the CEO's Hospital of the Future initiative by engaging multi-disciplinary stakeholders across the health system in six focus groups to gain feedback on key domains (virtual health, digital patient experience, clinical automation, smart infrastructure, operational efficiency, redefined care delivery). In January 2022, presented findings and recommendations to CEO and hospital officers based on in-depth research and identified gaps, readiness and opportunities gathered from the focus groups.
- Implementation of Laboratory Automation
 - Expect automation in the Core Lab to result in:
 - Elimination of 65 steps in the Core Laboratory workflow, which is an 82% reduction in steps
 - A 13-minute decrease in result turnaround times, on average
 - A 50% decrease in add on testing turnaround times, on average
 - Re-allocation of 2 FTEs, allowing an expansion of the reference laboratory footprint
 - Two additional clients will be sending reference lab samples to the Core lab-increasing our test volume. This was only achievable post-automation. We expect to expand our outreach volume and achieve higher throughput through automation.
- Advanced Technologies
 - Established new department, Autonomous Machines, to focus exclusively on the development and exploitation of drones and robots in healthcare. Significant progress has been made establishing ourselves in the industry and becoming one of the recognized leaders in healthcare for exploring the application of drones in healthcare operations. Recently, we have begun developing a complimentary robotics program for transporting drugs, lab specimens and

materials in the hospital with over \$1M dollars in seed capital funding. As the program evolves, we intend to develop the capabilities needed to provide a seamless handoff between drones and robots in order to automate the entire delivery continuum.

- Use of Robots for Timely Medication Delivery to Upstate Cancer Center
 - The Upstate Pharmacy successfully deployed the TUG robot decreasing pharmacy staff medication delivery time to the Upstate Cancer Center
- Cancer Center
 - Development of Radionuclide Program, working to schedule first patient.
- Ambulatory
 - Successfully opened Upstate Hospital at Home program with 15 admissions.
- Policy Change Agents
 - Successfully managed changes to processes created by the enforcement of 37 Executive Orders and 153 NYSDOH HERDS advisories impacting over 2400 policies
- Implementation of Technology
 - Capsule Technology in ICU to connect ventilators to EPIC
 - Kicked off project for EPIC Rover and EPIC MyChart Bedside
 - Kicked off Glucomander implementation project
 - Hired newly created Nursing informatics Director

Sustainability and Growth

- General Financial Services
 - Through disciplined strategic measures, we increased the Hospital's cash balance by \$122 million to \$355 million in FY22 while repaying \$66 million in Medicare Advance COVID relief loans. This is one of the highest cash reserve levels the hospital has ever experienced and has positioned us well to weather this year's staffing and cost increase challenges.
- Outpatient Pharmacy
 - Achieved retail pharmacy sales of \$129 million which represented an increase of 58% from prior year. Profit margin from the retail program spiked to over \$45 million which represents an increase of 77%.
- CDI
 - Engaged Vizient to assist CDI, UM and coding departments to improve performance and quality metrics. Based on implementation of several process changes and redesign efforts, we achieved improvements which yielded additional annual margins of \$8.7 million. Quality and mortality results also saw favorable impacts as a result of this initiative.
- Crouse Acquisition
 - Provided strategic oversight for the creation and submission of the Certificate of Need (April 14, 2022) and Certificate of Public Advantage (July 13, 2022) applications to the New York State Department of Health. Facilitated the development of the preliminary integration plan for the COPA in coordination with external advisors (legal, financial and strategic) and internal leaders along with the execution of the definitive agreement in July 2022.
- Neurological Institute and PM&R
 - Outpatient Visits Revenue Up 72% for UHCC Neurology and 32% for Neurosurgery Hospital Clinics from last year. 10% volumes growth for Neurology and 2% for Neurosurgery clinics in FY22 compared to last year.
- Ambulatory
 - Organizational approval and initiation of the Primary Care team-based model of care.
 - Transplant Program increased visits by 28%, new additions to the wait list by 54%, increased organ transplants by 50%, and live donor transplants by 78%.
- Supply Chain Work Flow

- Managed over 200 product substitutions and effectively delivered a supply chain work flow which avoided any out of stock supplies
- Pay and Salary Adjustments
 - All PEF RNs and CSEA LPNs
 - Multiple UUP Nursing roles
 - \$22 million annual increase
- Magnet 2025 Redesignation Process
 - Successful Bidding/Contracting for Magnet Redesignation
 - Titpon Consultants are the new consulting agency for our 2025 redesignation process
 - Hired new Magnet Program Manager

University Hospital: Plans for the 2022-2023 Academic Year

- New Nappi pharmacy location to expand outpatient pharmacy operations allowing our clinic-based patients to obtain their medications prior to leaving appointments.
- DME pharmacy accreditation for diabetic supplies out of the UH location with future growth to Nappi for the Joslin Center patients.
- The pharmacy is looking to capture the 340B opportunity for prescriptions that are generated by a referral from an Upstate provider.
- Continue to provide strategic oversight for follow-up questions and requests for information from the NYSDOH, NYSAG and FTC regarding the CON and COPA to support regulatory approvals of the transaction.
- By February 2023, conduct a feasibility assessment of micro-hospitals, including the identification and recommendation of an experienced consultant to support the initiative. Analyze the current regional landscape in advance of consultant engagement to enable agile, strategic decision-making.
- By March 2023, partner with the COO to establish a pilot program with Microsoft to support key Physical Plant workforce and operations initiatives (using Hololens mixed-reality platform). The goal of this project is to increase workforce capacity by allowing leaders to manage facility design, construction and maintenance activity across the campus while further strengthening our relationship with Microsoft.
- MOONSHOT -TECH & INNOV : Begin leveraging Moonshot team AI and Machine Learning expertise on projects where there is a clear and measurable benefit. Currently, Machine Learning is being added to the OR Smoothing Dashboard to more accurately predict Length Of Stay by considering numerous data elements including surgeon, procedure and patient's comorbidities.
- Upstate Cancer Center at Verona scheduled to open June 2023.
- Growth development plans of expansion of PM&R outpatient care at Carling Road, Liverpool North Syracuse comprehensive PM&R Therapy and Medical clinic. Upstate's Institute for Human Performance PM&R outpatient Therapy expansion.
- Nappi Wellness Institute opens March 2023.
- BEAKER - QUALITY & EXP : Staff up and plan for implementation. Since this involves replacing the existing lab system, Sunquest, it will likely be a multi-year project.
- TELEHEALTH - QUALITY & EXP : Support telehealth through improved digital experiences. Provide a more robust telehealth platform for engaging our patients, attracting new patients and optimizing the delivery of services. This would include implementing an integrated video solution in Epic and working with Ambulatory to better leverage MyChart's patient-facing capabilities.

- **MOBILE SOLUTIONS FOR NSG STAFF - QUALITY & EXP :** As the push to mobile apps intensifies, clinical systems vendors such as Epic are developing smart phone apps to further mobilize clinical staff and leverage their expertise and familiarity with these devices. One such app is Rover which is designed to help nursing staff with clinical documentation. While the move to smart phone technology is laudable, it presents a dilemma in that asking nurses to carry a work phone in addition to their own phone is likely a nonstarter. Unless work apps can be run securely on personal phones and users are willing to allow their phones to be used for this purpose, it will be challenging to implement a sustainable technology solution than is seen as a net benefit for staff. Our goal is to develop and operationalize such a solution.
- Assimilate staff, integrate networks and assess and plan their conversion to Epic.

5.

FACULTY PRACTICE PLAN (UUMAS)

Luis Mejico, MD – Chair, UUMAS

Upstate University Medical Associates at Syracuse, Inc. (UUMAS) is a 501(c)3 university faculty practice corporation, which serves as the umbrella organization of the 19 clinical departmental practices – known as Medical Service Groups (MSGs) – within the College of Medicine (COM). All together the Faculty Practice Plan's (FPP) total revenue was \$438.6 million. The mission of the UUMAS and the MSGs is to sustain and grow the clinical and academic enterprise by maximizing clinical revenue to support faculty salaries, practice expenses and educational and research costs assumed by the clinical departments. Focus on efficient clinical operations for those practices run by the MSG or UUMAS and providing patient access are also key objectives.

Each MSG practice includes providers of the clinical specialty and sub-specialties of the respective COM department. UUMAS includes physicians and advanced practitioners who provide patient care in coordination with academic and research responsibilities.

UUMAS leadership, supported by a central office, works closely with MSG chairs and medical directors, as well as business, practice and billing managers providing centralized services and coordination of distributed responsibilities.

Overall Statistics: 6/30/20-7/01/21:

Clinical receipts: \$341.4M; FY 20/21: \$332.7M; **Increase: 3%;** FY 19/20: \$293.5M

Total revenue: \$465.9M; FY 21/22: \$438.6M; **Increase: 6%;** FY 19/20: \$405.3M

(Note: all MSGs were forgiven and approved for their Paycheck Protection Program funds received last year.)

Total Providers: 999 of which 234 are Advanced Practice Practitioners;

541 faculty participated in the annual fall Governing Board representative elections and are included in the total provider count.

Total O/P Visits: 1,129,278; FY 20/21: 1,110,648; **Increase: 1.7%;** FY 19/20: 979,254

Telemed: 112,083; FY 20/21: 200,127; FY 19/20: 70,905

In Person: 1,017,195; FY 20/21: 910,521; FY 19/20: 908,349

Key Points and Accomplishments: (*2021/2022 Plans)

- **Funds Flow*:** UUMAS and the Dean's Office have led the effort toward modeling a Funds Flow approach that would provide appropriate financial support of the faculty and clinical departments/MSGs as well as assure accountability based on benchmarking. Two principle intended outcomes are to better quantify the needed hospital support for the faculty physicians to provide necessary clinical services to the UMS Health Care System, and with University Legal, develop a mechanism to more efficiently transfer funds from the hospital to the MSGs and the COM. Identifying appropriate targets for productivity and effort is key to instituting an accepted Funds Flow model. We are currently (fall 2022) in Stage 2 during which a possible approach has been initially decided upon and examples with two departments/MSGs is being developed.
- **Contracting processes and structures to facilitate funding across entities*:** Efforts continue but no significant progress has been made in changing the standard method or improving the effectiveness of the existing process. However, with University Legal, UUMAS, UH and MSGs did complete a Heart Institute Block grant which transferred needed funds to Surgery and Medicine covering 2021 for the amount of \$10.9 M.
- **Expansion of clinical services*:** Family Medicine at Township-5: In spite of efforts to hire physicians, the practice has not been able to replace one of the Fam Med doctors who left in summer 2022. The Department of Family Medicine has placed three providers, each one day/week at the T-5 practice;

two are newly hired out of residency and one is an experienced physician. However, two excellent Nurse Practitioners have joined the practice in summer 2022, and together with the bridge providers have stabilized the practice and enabled some new patient growth available. UUMAS works closely with Fam Med to recruit physicians. Some efforts have begun toward initiating team-based care practice, but until we can recruit the necessary providers, the process has been put on hold.

- The Cancer Center at Verona is tentatively scheduled to open in the summer 2023. UUMAS, involved MSGs and UH are working on assuring the necessary financial arrangements to enable physicians to practice at the new Center.
- **A major concern is that clinical revenues have been slow to recover and grow.** The Hospital staffing shortage resulting in closed beds and reduced OR availability has significantly limited activity and revenue, particularly for our surgical departments. The Hospital CNO predicts that it will take 2-3 years before we can hope to have full staffing therefore this restriction to revenue generating clinical activity will continue to limit revenue. In order to retain and continue recruitment of our faculty, more support from the Hospital will be needed. However, the Hospital is experiencing the same revenue shortages and therefore more restrictive in their support. The annual UH budget process for MSG requests was suspended by the CFO due to the revenue reductions. UUMAS is working on a better joint planning process with UH for next year's budget cycle.
- Financial reviews of struggling departments/MSG: Radiology has undergone several reviews and key people from the Dean's Office, UUMAS and UH have collaborated to assist the troubled department/MSG. A consultant has been engaged to evaluate the current effort and value of the department/MSG to provide a basis for future hospital and institutional support.
- Quality Program Development: UUMAS under the leadership of our Director of Quality and Practice Operations, Laura Cuff and UUMAS Quality Officer, Dr. Scott Schurman, UUMAS and UH created a collaborative Ambulatory Quality Governance Committee co-chaired by Drs. Schurman and Glidden, UH Interim CQO. Coordinated efforts are in place to focus on improvement of historically low Vizient Ambulatory Quality scores to improve UH score from 2 stars out of 5. However, due to the lack of UH funds, the PARS/CORS contract and implementation was suspended until UH recovers from its financial shortfall.
- Risk Management and Med Malpractice: Laura Cuff and Dr. Schurman created and filled the position of UUMAS Nurse Risk Manager. Two-year funding for the position comes from the broker for our malpractice coverage policy. Periodic reviews of new claims and cases are thoroughly discussed between UUMAS Quality Officer, Nurse Risk Manager, Administrative Director, and Director of Quality Programs with the lead attorneys from Coverys, our med malpractice carrier. Timely communication of current claims and incidents is sent to each Chair, and when appropriate, analysis is requested.
- Third Party Payer Health Insurance – Negotiations: UUMAS was successful after 9 month's effort to push back a United Health Care Community Plan (Managed Medicaid) policy that required referrals for all specialty visits, without which payment is denied. The policy created a barrier to follow up care post hospital discharge as well as needed specialty care. This obstructive policy was suspended for UUMAS physicians which enabled care to our Medicaid patients covered by United.
- Faculty Practice Plan Compliance: Significant changes to CPT outpatient evaluation and management (E&M) documentation guidelines in 2021 and planned changes to inpatient, observation, emergency department and other E&M services in 2023 require education and guidance to all MSGs. These changes have potential to cut down the amount of documentation required of physicians but comfort levels with shorter notes and full adoption will take time. CMS changes to split or shared service reporting have proven difficult for providers to implement and compliance has assisted with education and guidance. Audits were completed for use of modifier 25 and modifier 59, both high risk areas for professional coding and billing errors and results were good. The compliance office worked with practice management on professional billing audit planning and completion along with

other requirements of our compliance plan. Efforts in 2022 will include additional education and guidance on 2023 CPT E&M changes, corrective action plans tied to Office of Medicaid Inspector General (OMIG) 3rd party liability audits and a Department of Justice (DOJ) investigation.

- Staff retention and recruitment salary adjustments – market survey salary adjustments: MedBest distributed results of a market survey engagement and worked closely with business managers and others to enable MSGs and UH to adjust personnel salaries to assure retention, and improve recruitment. State RNs and LPNs received significant GEO bonuses and therefore it was important to develop similar bonus or compensation considerations for our faculty practice plan personnel.
- Staff retention and recruitment educational reimbursement benefit: MedBest adopted a policy to provide reimbursement up to the IRS non-taxable level for approved educational courses for employees.

UUMAS: Plans for 2022-2023 Academic Year / FY 2023

- Funds Flow: Working collaboratively with the Dean's Office COM, Campus and University Hospital, we will continue to help lead the development of an appropriate methodology and approach to institutional funds flow. During this next period, we will have completed the modelling of a new approach for each of the departments/MSGs and the required additional hospital support. The challenge will be in getting acceptance by the various Departments/MSGs and for University Legal to successfully create a mechanism acceptable to Albany (OSC and AG) that would actually enable funds to flow without having to create hundreds of separate contracts.
- Ambulatory Quality and Risk Management Programs: The collaborative Ambulatory Quality Committee will continue to develop and focus on increasing the Vizient Ambulatory Quality Program Ratings. To facilitate this, the hospital and UUMAS have agreed to each fund one of two positions for quality data management. UUMAS Quality Officer and Nurse Risk Manager will further develop regular communication to Chairs of any malpractice complaints and claims. Review by the respective Chair will be ask for significant claims. The Nurse Risk Manager will reach out to work with individual departments, divisions, faculty to preform Root Causes Analysis and aid in rectifying and/or improving operational, behavioral and clinical concerns.
- NYS Health Care Workers' Bonus program: The Principal Financial Officer, UUMAS Central Office is coordinating with RF HR and MedBest HR to assure that all RF and MedBest personnel who qualify for the HCW Bonus program receive the maximum approved funds. This is very complicated and the Program had not been fully developed by DOH when it was rolled out. Since UUMAS holds most of the staff leasing for the hospital, contractual issues are also involved.
- CHALLENGING FINANCIAL SITUATION: Addressing the MSG revenue restrictions due to closed beds and limited OR time based on UH staffing shortages will be paramount to assuring the continued recruitment and retention of faculty. Costs of practice and staff salaries have increased to compete within the healthcare marketplace.
- Clinical growth and new programs: work will continue in collaboration with UH to support the opening of the Nappi Wellness Institute in February 2023, and to open our Upstate Cancer Center at Verona and to recruit more providers for our Fam Medicine practice at Township 5.

6.

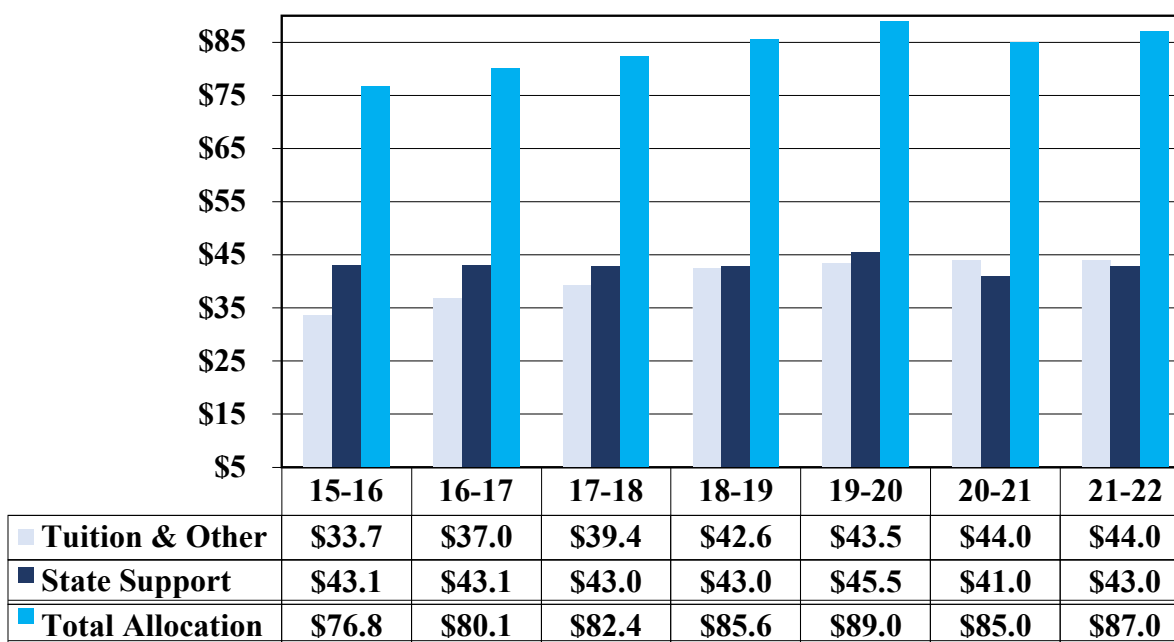
CAMPUS FINANCES

Eric Smith, CPA, MBA – *Senior VP for Finance and Administration*

Campus Budget: The revenues generated in support of Campus operations in 21-22 was comprised of state tuition and interest revenues generated by its four colleges (\$44M), State support (\$43M), the Research Foundation (\$41M), and the CAO Fund (Dean's tax from the Clinical Practice Plan) (\$17M). Collectively, total revenues exceeded the budgeted financial plan for FY22 due to a restoration of state support cut of \$2M, expense reduction actions, increased royalty revenues, and continued disciplined budget practices. In comparison with the prior year, tuition revenue remained flat, while state support, sponsored research, royalty income, and CAO revenues increased and investment income decreased.

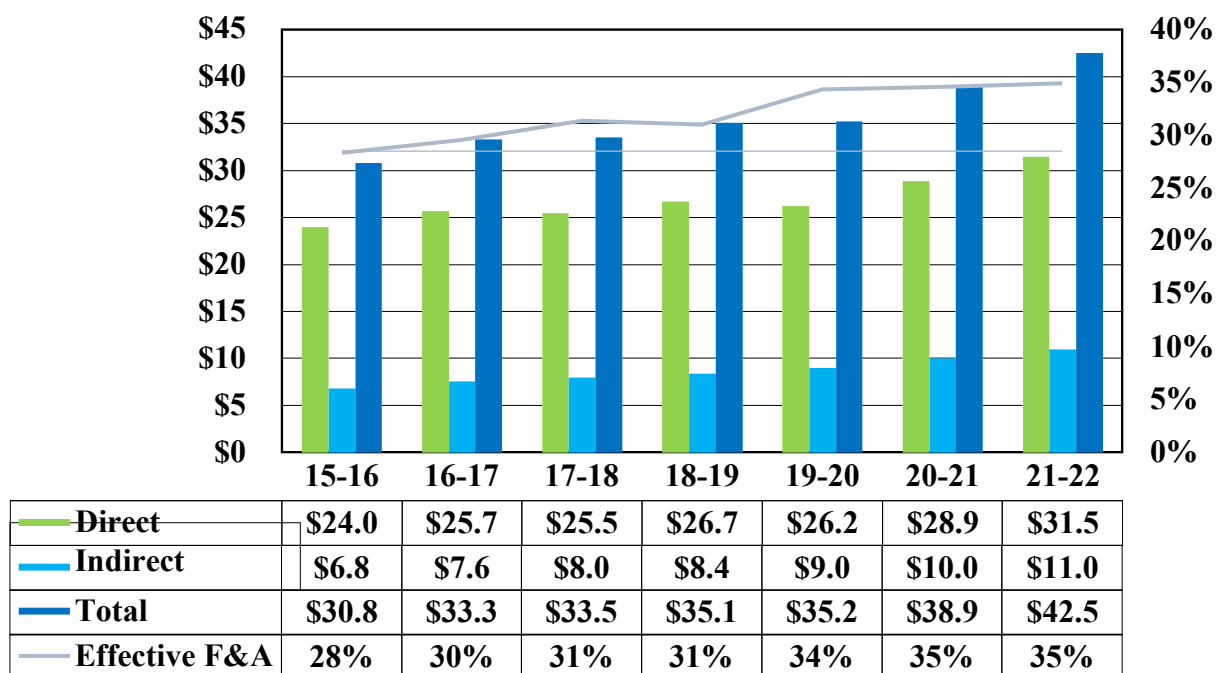
A summary of tuition revenue and state support trends in Chart 1 shows an increase of \$10M (30%) in tuition over the last six years but flat state support, on average, during this time:

Chart 1 – Tuition Revenue and State Support, 2016-2022 (in millions \$)



A summary of sponsored research activities in Chart 2 shows an increase of \$11.7M (38%) over the last 6 years, \$4.2M of which was an increase in the recovery of indirect expenditure reimbursement (F&A) (a 62% increase over the last 6 years), in addition to an increase in the effective F&A rate during this time (from 28% to 35%):

Chart 2 – Sponsored Research Revenue, 2016-2022, (in millions \$)

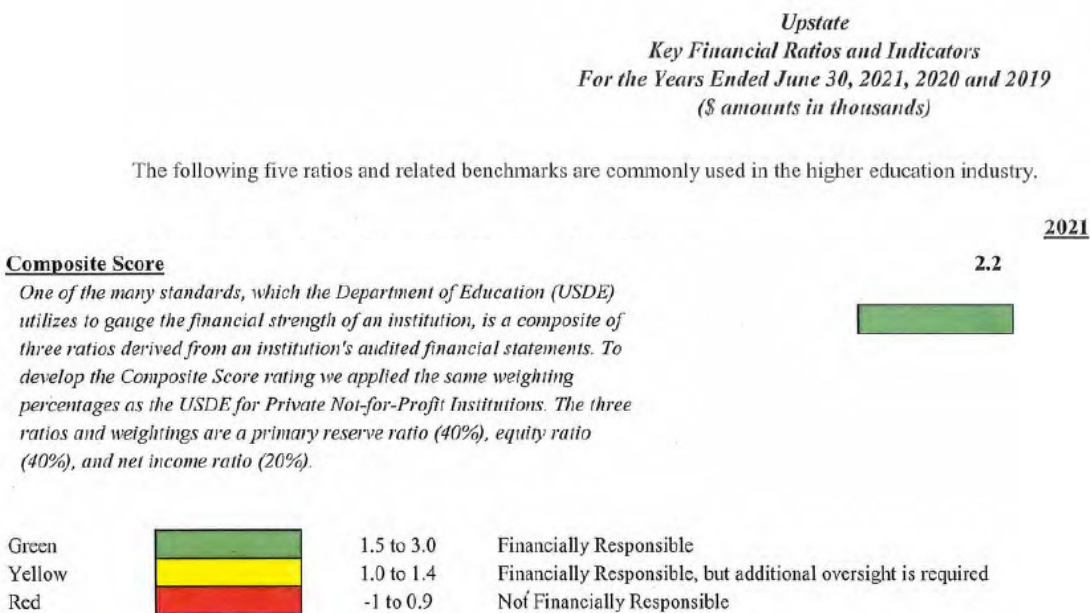


The revenue growth, combined with expense management strategies, was sufficient to fund operating cost needs while also allocating funding for strategic initiatives, including key academic/research specific recruitment needs, investments in facilities and equipment, and funding for mandatory cost increases, including state negotiated and Research Foundation salary increases. Additionally, not included in the above graph is additional income generated by Upstate through the RF in FY22. Specifically, net royalty revenues increased from \$2M to \$6M, offset by a decline in investment income distributed from \$6M in the prior year to \$0 in the most recent year.

In addition, one-time funds have been generated annually from a combination of attrition and disciplined budget processes which have been used to establish cash reserves for operations and to support future faculty and chair recruitment needs in a variety of areas. Furthermore, multi-year budget discipline has also resulted in increases in cash balances held in State and non-state funds producing sufficient reserves for Campus operating purposes and financial uncertainties that may occur in the future. State cash balances were at or above the 25% of operating expense targets set by SUNY throughout FYE 21-22 demonstrating a healthy financial position for Upstate.

Lastly, based on recent financial metrics provided by SUNY as of FY21 (Figure 1), the most recent information available from System, Upstate is considered to be in “Financially Responsible” as a result of multi-year financial improvements in financial position noted above.

Figure 1 – Financial Risk Accountability Ratings, 2021



Also, based on similar institutional monitoring reports provided by the Research Foundation for SUNY (Financial Risk Accountability Ratings Report) during FYE 22, Upstate was noted as being stable/strong financially by scoring 2.7 out of a possible 3.0, ranking 5th among all SUNY campuses. The ranking would have been in the top 2, but pending State contracts due to certain MSG's from University Hospital caused delays in funding agency accounts and resulting in large temporary deficit balances and a lower scoring as a result.

Other Finance Specific Accomplishments in FY22 (State, RF and Related Entities):

- Initiated university-wide facility master plan project, in partnership with SUCF, expected to be completed in 2023
- Settlement of long-standing property litigation resulting the control of 8-acres of land for future development and initiated acquisition of adjacent property
- Initiated funds flow redesign efforts with UH and UUMAS leadership
- Continued support of UH clinical acquisition initiatives and due diligence efforts
- Continued partnership with Quadrant Biosciences, SUNY, and the RF to respond to SUNY-wide COVID testing needs (pooled saliva testing) and with others in the community.
- Coordination of COVID specific funding (CAREs Act) to the Campus.
- Improvement in Geneva Tower finances as a result of debt refinancing, investment in the infrastructure, and improved occupancy and retention.
- Positive financial statement audit results for UMU and its related entities – UPD, FSA, Upstate Foundation, FSA, CAO Fund, Clinical Practice Plan, etc...
- Continued coordinated budget and planning efforts between UH, Campus, and UUMAS (and SUNY) in proposing and implementing a number of funds flow initiatives to settle pending clinical obligations, including funds flow redesign efforts.

- Other Finance and Administration Accomplishments:
 - Human Resources and Payroll Services
 - Recruitment of new VP for HR and CHRO, including the roll out of a new HR plan to “re-imagine” delivery of HR services, including new positions, systems, and reorganization of functions.
 - Coordinated efforts and response to various State mandates, including vaccines and religious exemptions, and many COVID-related workforce issues relating to retention and compensation and implementation of telecommuting management system
 - Ongoing transition from the loss of 12 positions (22%) in HR and 5 positions (30%) in Payroll due to mandate and retirements
 - Implemented multiple, unprecedented salary packages throughout the year.
 - Automation of ALR and Shift Diff data with SUNY & OSC and implementation of extra service management application.
 - Leading efforts to relocate administrative support services to off-campus sites, freeing up on-campus space for clinical needs.
 - Accounts Payable, Contracts and Purchasing
 - Support of significant increase in hospital staffing and traveler contracts and monthly payment requirements (over 600 invoices weekly)
 - E-invoicing process development within AP for tracking payment for MSG invoices in partnership w/ UUMAS.
 - Ongoing transition from the loss of 4 positions in AP (25%) due to mandate and retirements
 - University Police
 - Focused increase in the number of active shooter trainings (ASK)
 - Updated facility access and risk assessments and improvements, including UH lobby, ED, Weiskotten Hall, and leased properties
 - Assessing implementation of weapon detection systems at main entry points
 - Physical Plant / Environmental Services / Parking
 - Successful management of physical environment of Hospital and Campus space to ensure the safety of patients, staff, students and visitors during COVID
 - Appointment of new AVP for Facilities and new Director for Physical Plant, and reorganization to merge Physical Plant operations at Community Campus with Downtown operations.
 - Consolidation of linen operations between Downtown and Community campuses (previously managed by materials management for Downtown).
 - Secured new leased parking lot arrangements to increase parking capacity
 - Planning, Design and Construction
 - Ongoing construction of Nappi Wellness Institute, start of renovation of Silverman Hall, and major infrastructure projects at Weiskotten Hall.

Daryll Dykes, PhD, MD, JD – Chief Diversity Officer

The 2021-2022 academic year was the first full year of diversity, equity, and inclusion since we reorganized our Office of Diversity into separate but coordinated, offices of Institutional Equity (OIE) and Diversity, Equity, and Inclusion (ODEI). Since the last president's report, activities of these offices have remained priorities at SUNY Upstate Medical University and connect with policies including:

- Expanding Diversity, Equity, and Inclusion Governor's Call to Action: A SUNY Diversity Update Report of August 15, 2018;
- The Electronic & Information Technology Accessibility Policy, unanimously adopted by SUNY Trustees on June 11, 2019, which is now in effect for all campuses;
- The "Upstate Strategic Diversity Plan, 2017-2022"; and
- The "One University Roadmap — OUR Upstate Strategic Plan".

Collectively, these policies direct us to continually increase diversity, equity, access, and inclusion; improve our culture of trust; and improve workforce satisfaction.

Reorganization of the Office of Diversity and Inclusion (ODI)

Recently, the reorganization of ODI created OIE and ODEI. OIE is responsible for overseeing all investigations of discrimination, harassment, and Title IX complaints, as well as conducting campus-wide anti-discrimination and antiharassment training. In addition to investigations and training and investigations, this office ensures compliance to SUNY policies.

Office of Institutional Equity (OIE)

The Office of Institutional Equity is directed by Institutional Equity Officer Katherine King, J.D. Ms. King now reports directly to the Office of the President and maintains close working relationships with the office of the general counsel and ODEI. For OIE report, see Office of Institutional Equity of this document

Office of Diversity, Equity, and Inclusion (ODEI)

ODEI is directed by Daryll C. Dykes, PhD, MD, JD, who reports directly to the Office of the President and works with the SUNY Office of Diversity, Equity, and Inclusion in Albany. The functions of ODEI include administration of the Minority and Women Business Enterprise (MWBE) program, recruitment and retention, affirmative action activities, and ongoing assessment of the campus diversity climate, diversity programs, and community-based diversity initiatives.

Building on the work of a 2020 diversity task force and 2021 diversity, equity, and inclusion "Implementation and Oversight Tiger Teams" (IOTTs), ODEI made progress toward our goals to close racial equity gaps and eliminate cultural and institutional racial discrimination at Upstate. Highlights of these effort include:

- Full integration of Carl Thomas, MBA as Deputy Chief Diversity, Equity, and Inclusion Officer;
- Realignment of key personnel doing DEI work across various departments and colleges within the university to a more efficient, equitable, and accountable centralized structure within ODEI;
- Completion of a modular evidence-based curriculum for delivery of DEI training for faculty, staff, and students;
- Completion of phase one of a multifaceted BELONGING campaign to promote DEI, including the redesign of physical and virtual spaces, and enhanced cultural programs;
- Leading efforts with public health officials to mitigate the disparate effects of effects of COVID-19 infection, treatment, testing, and vaccination within our institution and in the Central New York Community; and
- In furtherance of our 2021-2022 goals outlined in the last president's report, ODEI competed for outside philanthropic funding to advance two priorities identified by our diversity task force and Implementation and Oversight Tiger Teams. KeyBank Foundation awarded Upstate a \$150,000

seed grant to support workforce development and STEM pipeline programs to expose, recruit, and retain low-income and underrepresented minority community members.

Office of Diversity and Inclusion: Plans for the 2022-2023 Academic Year

ODEI will continue efforts to reach our \$1 million target for philanthropic support of diversity, equity, and inclusion programming, including the currently underway workforce and STEM pipeline programs, and initiation of efforts to expand health equity research and programs. Building on seed grant from KeyBank Foundation, ODEI will:

- provide comprehensive job readiness, employment, and career development programs for Central New Yorkers from low income and underrepresented minority communities. Participants will be employed across the spectrum of Upstate's administrative, clerical, service, technical, and STEM/healthcare opportunities, and through mentoring and links to educational resources, will move from poverty to independence and economic empowerment; and
- expand existing STEM pipeline programs and create new programs in collaboration with local grade schools, high schools, and community organizations, as well as local and remote higher-educational institutions to provide shadowing, mentoring, and academic success programs to introduce students to high-demand and rewarding careers in healthcare and related STEM;

Operational priorities for ODEI during the 2022-2023 academic year include:

- Further realignment and recruitment of ODEI staff to prioritize efforts for recruitment and retention of underrepresented minority faculty, staff, and students; and
- Launch, evaluation, and refinement of the newly developed diversity, equity, and inclusion training resources.

8.

OFFICE OF INSTITUTIONAL EQUITY

Katie King, MAT, JD – *Institutional Equity Officer and Title IX Coordinator*

SUNY Upstate's Office of Institutional Equity (OIE) is tasked with administering the University's policies pertaining to non-discrimination and harassment prevention. Taken together, these policies prohibit all forms of discrimination and harassment based on race, color, national origin, religion, age, disability, sex, gender, pregnancy, gender identity, gender expression, sexual orientation, transgender status, predisposing genetic characteristics, marital status, familial status, veteran status, military status, domestic violence victim status, criminal conviction record, or any other category protected under state, federal, or local law ("protected class").

OIE is available as a resource for all members of the Upstate Community, including but not limited to faculty, medical providers, supervisors, managers, staff, students, trainees, applicants for employment or for admission to an academic program, volunteers, vendors, patients, visitors, guests, and all other individuals present on Upstate's campus or participating in Upstate's programs or activities.

Policy Updates

During the 2021-2022 academic year, OIE assisted the University in making significant revisions to the following policies and procedures relating to protected class discrimination and harassment:

- Equal Opportunity and Non-Discrimination Policy, UW E-01
- Harassment Prevention Policy, UW H-01
- Title IX Policy, UW T-05
- Consensual Relationships Policy, UW C-05

Training

OIE provides training for members of the Upstate Community in the areas of sexual and gender-based harassment and violence prevention, bystander intervention, and the prevention of protected class discrimination and harassment. OIE offers training in multiple formats, to include annual training via BlackBoard, live Zoom trainings, as well as in-person training.

OIE provides mandatory sexual harassment prevention training to all employees on an annual (calendar year) basis. In 2021, over 8,000 employees completed this mandatory training.

OIE also provides sexual harassment prevention training to students as required by New York State's Enough is Enough law, through SUNY SPARC (Sexual and interpersonal violence Prevention and Response Course) training.

In 2021 OIE, in conjunction with the Office of General Counsel (OGC), and with the support of the Office of the President, implemented live training directed at supervisors and managers. This training aims to ensure that supervisors/managers know how to recognize and handle claims of discrimination and harassment in the workplace. During the 2021-2022 academic year, OIE and OGC trained over 270 supervisors and managers.

OIE also offers individualized training to departments upon request, and trained multiple departments during the 2021-2022 academic year.

Inquiries and Investigations

OIE supports the Upstate Community through consultation on issues related to protected class discrimination and harassment, as well as through conducting formal investigations into such activity when requested or required. An inquiry is made when OIE is approached with questions, requests for information or supportive measures, requests for training, or reports of alleged policy violations. A formal investigation occurs when a Complainant makes a formal verbal or written request that OIE investigate alleged violations of Upstate policies.

In 2021, OIE implemented the use of case tracking software which allows for online complaint filing, and internal tracking and case management. This software has increased efficiency and organization.

Office of Institutional Equity: Plans for the 2022-2023 Academic Year

- In the coming year, OIE will continue to engage in University-Wide training opportunities, with a goal to expanding the training opportunities offered. OIE endeavors to partner with other departments to implement in-house bystander awareness and intervention training.
- OIE has also recently implemented an informal resolution option for those who raise complaints of protected class discrimination and harassment, and will utilize case tracking software over the course of the academic year to gauge the success of this opportunity.
- OIE will continue to foster a sense of belonging through prompt and impartial response to inquiries and requests for investigation.

OFFICE OF EXTERNAL RELATIONS

Linda Veit, MPH – *Interim Chief of Staff & Assistant VP of Community Relations*

External Relations continues to be led by Linda Veit and encompasses Community Relations (Linda Veit), Government Relations (Jonathan Archey), Public and Media Relations (Darryl Geddes) and Marketing and University Communications (Leah Caldwell).

External Relations, under the President's Office aligns Upstate's mission with the larger outside community, engaging the public in health programming, health education, and general awareness of Upstate resources to the community; overseeing strategic communication and marketing; and strengthening state and federal government relations for the University system.

COMMUNITY RELATIONS

Linda Veit, MPH – *Interim Chief of Staff & Assistant VP of Community Relations*

Community Relations at Upstate serves a vital role in the relationship building between the University and the community. Acting as a liaison, the staff in community relations, assist community members and leaders in promoting the services of Upstate and also identifying needs and helping to fill those needs to create a mutually beneficial relationship and foster goodwill.

The Community Outreach teams at Upstate have developed health programming and educational sessions for the community including a focus on the underserved that address the many health disparities that exist. As a trusted partner, Upstate has a responsibility to improve the health of all and has done so through such programs as **She Matters** for breast cancer education and screening, **We Matter** for colon and lung cancer, **Stroke Awareness, Healthy Hearts, Healthy Neighbors Partnership with public housing residents, COVID education and vaccine clinics**, as well as **Mobile Mammography Van** outreach and screening to the rural and urban populations.

A new focus this year is the **U Matter program** at Upstate which is a grass roots program to help guide and mentor under-represented youth from our community to attend one of Upstate's four Colleges for healthcare degrees leading to rewarding careers.

Project ECHO (Extension for Community Healthcare Outcomes) is part of Upstate External Relations division under Community Relations. Project ECHO is a teleconferencing, case-based platform for primary care providers to increase knowledge and expand treatment and management skill to allow patients to be treated in their areas by their own providers. Over 1,900 participants in 72 zip codes attended 82 various health related ECHO sessions this past year.

The Violence Education Prevention and Outreach Program (VEPOP) goal is to reduce the rate of repeated violent trauma in the community by connecting victims of street or gun violence with resources that can help victims and families lead nonviolent lives. A designated VEPOP Social Worker is on site in the emergency room to provide a comprehensive screen and assessment to patients identified to be a victim of a non-accidental trauma. This "teachable moment" provides an opportunity to capitalize on this time to interrupt the cycle by assessing, intervening and offering alternatives with other community agencies and organizations to offer post discharge follow up, support and resources. Approximately 50 patients a month are screened for VEPOP.

HealthLink and Oasis are our community education forums that connect the general public to reputable health content and health engagement and are part of the Office of Marketing & University Communications. The Office also oversees additional consumer health initiatives to bring a range of Upstate-generated advice and health guidance to Central New York and beyond. The HealthLink seminar series offers health information sessions led by our experts. This year (July 2021 to June 2022) HealthLink had 1,233 registrants for 26 different events. There were an additional 400 viewers for the recorded events. This year our podcast and radio show, *The Informed Patient*, featured 185 Upstate

experts delivering 170 distinct topics through streaming, podcast apps and 14 NPR stations. Full transcripts make it easier for people to find expert healthcare insights, and another 60,000 people receive *Upstate Health* and *Upstate Cancer Care* magazines for unique health content. HealthLink also has a web resource channel, specific to diabetes education, complementing a live event for school nurses each fall. To keep adults age 50+ active and aging well in our community, the Upstate Oasis program resumed in-person classes in the arts, humanities, fitness and technology. We have 11,819 Oasis members, with 380 new in 2021, and offered 400 local classes this year. In addition to classes, through Oasis we have 54 tutors in the Syracuse City, Marcellus, Liverpool and Central Square districts, serving upwards of 150 kids on a weekly basis. Oasis services also includes the peer-led Chronic Disease Self-Management Program, with versions for chronic pain and diabetes care, and Tai Chi for arthritis, which had a total of 1,732 participation units. We also resumed some in person events to share health information at popular public venues, such as sports events, civic venues and festivals.

Team Upstate promotes participation in our own sponsored activities, as well as those in our Greater Syracuse community. Our employees and students give their time and talents to support causes to promote our quality of life and maintain Upstate Medical University's mission, vision, and values among our constituents. Upstate employees are encouraged yearly to nominate a local non-profit organization whose mission is in line with the mission of Upstate. Each year, Team Upstate chooses a "Your Cause" organization and that organization receives support for events, outreach, hands-on work, and education. Our employees and students helped with serving food, clean-up days, painting, gardening and many other projects throughout the year.

The United Way Community Giving Campaign continues to be the major fundraising campaign for the community. Upstate Medical University employees and retirees raised \$571,231.42 for the United Way/State Employees Federated Appeal campaign, referred to as the Community Giving Campaign. We were able to provide support for hundreds of local non-profits in our local community and beyond, to help with issues of poverty, addiction, homelessness and food insecurity.

The many community awards that Upstate received are listed in the [Appendix A](#).

Community Relations: Plans for the 2022-2023 Academic Year

- Build new and maintain existing relationships to connect Upstate to our external community.
- Develop partnerships with community groups to encourage healthcare education and expanded health programming.
- Continue to engage employees in community through volunteerism and fundraising.

GOVERNMENT RELATIONS

Jonathan Archey, MA – *Assistant Vice President of Government Relations*

NY State

In concert with SUNY Administration, the Healthcare Association of New York State (HANYS), Downstate, Stony Brook and other partners, we:

- Obtained, for the three SUNY Academic Medical Centers, a one-year reprieve from having to shoulder the costs of capital debt service on behalf of New York State.
- Prevented a proposed cut to Medicaid reimbursement rates for health care services.
- Secured in the state budget the full state match funding for offsetting SUNY hospitals' costs of providing care to the indigent and uninsured (DSH program). Impact: About \$150M to reimburse such care provided at Upstate.
- Secured capital spending authority. Impact: \$50M in spending authority.
- Secured critical maintenance of Upstate facilities. Impact: About \$4M for Upstate.
- Delayed the implementation of a provision enacted in the 2020 NYS Budget which would drastically reduce cost savings Upstate and other hospitals realize from the federal 340B Drug Rebate Program.
- Successfully lobbied to extend various Executive Orders related to the COVID-19 pandemic affecting hospital operations, pandemic response, medical education, telehealth, and clinical interventions.

US Federal

In concert with hospital, research and higher education advocates nationwide, we:

- Successfully lobbied Congress for various COVID relief legislative packages, and for HHS to distribute COVID Provider Relief Funds in multiple tranches to hospitals. To date, Upstate has received approximately \$120M in Provider Relief Funding.
- Delayed scheduled cuts to the Medicaid Disproportionate Share Hospital (DSH) program scheduled to take effect in FFY2021, preserving \$56M in DSH reimbursement for Upstate until at least FFY2024.
- Delayed the scheduled 2% "sequestration" and 4% "PAYGO" cuts to Medicare hospital reimbursement.

Central New York

In concert with business, community, local government and other advocates in the region, we:

- Expanded testing by the "Air Upstate" consortium to continue Upstate's national leadership of medical drone technology advancement.
- Participated in local initiatives aimed at (to highlight a few): increasing the number of ethnic minority workers in the construction trades, planning for the replacement of the aging I-81 corridor to successfully reunite Syracuse neighborhoods that have been cut off from one another, and expand the region's capacity for biomedical innovation and production.

Government Relations: Priorities for the 2022-2023 Academic Year

NY State

In concert with SUNY Administration, the Healthcare Association of New York State (HANYS), and other partners:

- Secure state budget line-item and grant funding for Upstate's various strategic clinical, research, and academic priorities.
- Defeat proposed policies that would catastrophically increase Upstate/s costs, decrease its reimbursement, or otherwise disadvantage it relative to other institutions and entities. care services.
- Secure in the state budget greater parity between Upstate and SUNY's non-academic medical centers in regard to state support.

US Federal

In concert with hospital, research and higher education advocates nationwide:

- Protect/increase funding for training, reimbursement, opportunities and support services for Upstate's personnel and students, including biomedical researchers, faculty, medical residents, nurses, physicians, and other health professionals.
- Secure legislation to protect Upstate from scheduled catastrophic cuts to its Medicaid Disproportionate Share Hospital (DSH) funding.

CNY Local/Regional

- Support public health, employment, access, and economic development initiatives in coordination with local officials and stakeholders.

Perennial Priorities

- Continue building and maintaining strong, pro-active relationships with government officials and staff.
- Continue cultivating ongoing advocacy partnerships with our fellow SUNY entities, trade and professional societies, and coalitions.

MEDIA AND PUBLIC RELATIONS

Darryl Geddes – *Assistant Vice President for Public and Media Relations*

Upstate Medical University continues to work with media, social media outlets and other communications methods to help tell its story to the wider community. Below are some of the stories that attracted media attention and helped build awareness and support for the university. In total, these tell the story of an engaged institution on the forefront of research, teaching and patient care with prominent award-winning faculty and staff eager to share their expertise with the broader community.

Three from Upstate honored as champions of humanistic care for work during the pandemic

Three Upstate Medical University employees were honored by the Arnold P. Gold Foundation as Champions of Humanistic Care for going above and beyond during the COVID-19 pandemic. The Upstate honorees are: Elizabeth Asiago-Reddy, MD, MS, division chief of infectious disease and medical director of inclusive health services; Diane Nanno, MS, CNS, RN, CCTM, NE-BC, director of nursing for Upstate Transitional Care Services; and Crystal Marshall, MSN, RN, RN-BC, assistant nurse manager of a COVID-19 floor at the Downtown hospital.

Upstate faculty member named as a Pew Scholar in Biomedical Sciences

Alaji Bah, PhD, assistant professor in the Department of Biochemistry and Molecular Biology at Upstate Medical University has been named as a 2021 Pew Scholar in the Biomedical Sciences, the Pew Charitable Trusts announced. Bah was one of only 22 individuals out of 198 nominations submitted by leading U.S. academic and research institutions to receive four years of funding to invest in exploratory research.

Upstate researcher lands grant from NIMH for new method to study the brain and psychiatric disease

An Upstate Medical University researcher has been awarded a grant from the National Institute of Mental Health for a novel approach to studying how biological changes in the brain contribute to psychiatric disease. Jonathan Hess, PhD., has spent three years developing BrainGENIE, which stands for Brain Gene Expression and Network Imputation Engine. Hess applied for the NIMH grant last fall and learned he was awarded the \$445,500 NIMH R-series funding this week.

State Office of Mental Health and Upstate Medical University announce expansion of services for children with developmental disabilities and mental health issues

The NYS Office of Mental Health (OMH) and SUNY Upstate Medical University have announced an expansion of services for children who have a developmental disability as well as behavioral health needs. Under the expansion, Upstate will develop a specialized inpatient unit for children who are dually-diagnosed and will expand the current child and adolescent inpatient bed capacity at OMH's Hutchings Psychiatric Center. The new specialized dual diagnosis unit — the first and only unit in the State — will serve children and youth from 12 to 17 years old who are at risk of being separated from their families. Upstate's new program will allow for the total capacity to increase from 23 to 29 beds.

Brain Injury Association of New York State recognizes head of Upstate Concussion Center for ongoing advocacy

The director of the Upstate Concussion Center has been given an award from the Brain Injury Association of New York State for his ongoing work advocating for concussion awareness and improved care for those suffering from the injury.

Upstate lab tapped to assist state in identifying COVID-19 variants

Gov. Andrew M. Cuomo announced the selection of five laboratories—including one at Upstate Medical University—to bolster state efforts in identifying COVID-19 variants. The New York State Department of Health is partnering with these laboratories to expand the genetic sequencing of specimens positive for SARS-CoV-2, the virus that causes COVID-19. The selected laboratories have sequencing expertise and experience, as well as capacity and access to SARS-CoV-2 positive specimens from large multi-county areas in New York State, outside of New York City.

Upstate Foundation awards \$50,000 for brain cancer research

The Upstate Foundation has invested in brain cancer research at Upstate Medical University with an award of \$50,000 to a project led by Mariano Viapiano, PhD, associate professor of neuroscience and neurosurgery and director of the Brain Tumor Laboratory and Biorepository. The award is the result of a competitive application and evaluation process overseen by David Amberg, PhD, vice president for research at Upstate.

Upstate receives three awards for exceptional care from American Heart Association/American Stroke Association

The American Heart Association/American Stroke Association has presented Upstate University Hospital with three new awards in recognition of its outstanding care for the treatment of stroke, heart failure and resuscitation of adults. Upstate has received the Gold Plus with Target Diabetes and Target: Heart Failure Honor Rolls Get With the Guidelines Award; the Gold (Adult) Resuscitation Get With The Guidelines Award; and the Gold Plus with Target: Diabetes and Target: stroke Elite Plus Honor Rolls Get With the Guidelines Award. All three awards are for 2020 data.

Upstate to break ground on new Upstate Cancer Center in Verona Oct. 20

Upstate Medical University will break ground on a new Upstate Cancer Center in Verona Oct. 20. The ceremony will mark the beginning of construction on a gleaming new 30,000 square foot facility that will bring comprehensive cancer care closer to home for residents of Madison and Oneida counties.

Upstate professor named one of the world's top scholars for writings on mental disorders

An Upstate Medical University professor has been named a “world expert,” for being one of the world’s top scholars writing about mental disorders. Distinguished Professor and Vice Chair of Research of Psychiatry and Behavioral Sciences Stephen Faraone, PhD, received the honor from ExpertScape, which places him in the top 0.1 percentage of scholars writing about mental disorders in the last decade.

Upstate Medical University announces naming gift for the College of Medicine

Upstate Medical University has announced a \$25 million estate gift—its largest in history—to benefit the university’s College of Medicine. In recognition of the gift, the College of Medicine will be named the Alan and Marlene Norton College of Medicine at Upstate Medical University. Alan Norton is a 1966 alumnus of the Upstate College of Medicine.

Upstate, SCHC develop urban family medicine residency program

The Syracuse Community Health Center (SCHC) has announced it will partner with Upstate Medical University to develop an Urban Family Medicine Residency Program. The new residency program aims to increase the number of primary care providers trained to support the needs of urban patients and to attract diverse residents, especially those in traditionally underrepresented groups. The SCHC, a state-licensed Diagnostic and Treatment Center serving more than 30,000 patients in the Greater Syracuse area, received a grant from the federal Health Resources and Services Administration (HRSA) that is making the collaborative program possible.

Upstate's Dr. Stephen Thomas earns Liberty Medal from New York State Senate

Stephen Thomas, MD, a virologist and vaccinologist who currently serves as an Upstate Medical University professor of medicine, microbiology & immunology and is director of its Institute for Global Health and Translational Science, has been recognized with the Liberty Medal — the highest civilian honor awarded by the New York State Senate—for his work related to the COVID-19 pandemic.

Upstate training National Guard to be certified as EMTs

Upstate Medical University is training more than 30 members of the National Guard with the skills needed to be a certified emergency medical technician. They join more than 400 other guard members across the state going through similar training. It's all an attempt by the state, in partnership with the guard and medical centers like Upstate, to increase the number of certified EMTs who can—if needed—be deployed at health care facilities across the state.

Discoveries by Upstate researchers could impact breast cancer treatments

A team of researchers and doctors at Upstate Medical University, led by Leszek Kotula, MD/PhD, have published ground-breaking findings in breast cancer research. The translational study, titled “ABI1 based expression signature predicts breast cancer metastasis and survival” was published in the prestigious journal Molecular Oncology in December.

Grant awarded to Upstate Foundation will fund program to aid area primary care physicians in diagnosis and treatment of mental health issues in patients

The Upstate Foundation has been awarded a \$100,000 grant to improve mental health services in central New York. The support comes from the Patrick P. Lee Foundation, a private, Buffalo-based foundation focused on mental health and education. The Lee Foundation provided similar grants to improve access to mental health services to Horizon Health Services and Rochester Institute of Technology (RIT).

Novel epigenetic saliva test for autism developed in part at Upstate receives patent

A novel epigenetic saliva test for autism developed through groundbreaking research by Upstate Medical University, Quadrant Biosciences and Penn State College of Medicine has been awarded a patent. The United States Patent and Trademark Office (USPTO) has issued the patent to Quadrant Biosciences its partners, the SUNY Research Foundation and Penn State Research Foundation. The patent covers the scientific foundation for the development of a saliva-based, multiomic autism diagnostic aid, that can differentiate individuals with autism from individuals with typical development or developmental delays by measuring microRNA (miRNA) and microbiome levels in saliva.

Two Upstate neurologists among authors of new guideline for stroke prevention

Two Upstate Medical University doctors are among a team of doctors nationwide that are authors of a new practice advisory for the American Academy of Neurology. Upstate professors of neurology Antonio Culebras, MD, and Julius Latorre, MD, MPH, are among 19 professionals who researched and wrote the new guideline, which was recently published in the AAN Journal (<https://n.neurology.org/content/98/12/486>)

Upstate report says occupational disease in New York is an ‘epidemic in plain sight’

A new report from Upstate reveals an “epidemic hidden in plain sight” of death and injury in the workplace in New York State. According to the report, Occupational Disease in New York State: An Update, an estimated 7,016 deaths annually in New York are due to occupational disease. Additionally, 13 percent of diseases prevalent in the adult working population are attributable to occupational disease, with millions of workers in New York State exposed to hazardous conditions on the job.

Upstate Medical University seeks approval to acquire Crouse Health

Crouse Health and SUNY Upstate Medical University jointly announced today their intention to bring the two healthcare systems together to enhance care delivery to Central New Yorkers. Under the proposed combination, Upstate Medical University will acquire the operations of Crouse Hospital, which will become part of the Upstate Medical University Health System.

Upstate Medical nurses to receive GEO pay raises

Upstate Medical University will offer pay increases to RNs and, for the first time, to LPNs. In all, 1,481 RNs and 125 LPNs will receive the geographical area pay differential (GEO). GEO raises will allow Upstate to be more competitive with nursing salaries. The raises will be paid to eligible nursing staff in addition to their base pay, and are calculated based on years of service, experience and education. This is Upstate's third RN GEO adjustment in the last four years. Previously, RNs received a GEO raise in 2019 and 2021.

Upstate Medical, Syracuse University partner for MD/MBA program

SUNY Upstate Medical University and Syracuse University's Martin J. Whitman School of Management are launching a joint MD/MBA, which allows students to earn two valuable degrees in a coordinated five-year program. Applicants for this new joint program at Upstate Medical University/Syracuse University apply through the American Medical Common Application System (AMCAS) portal for the MD/MBA program application. For the joint program, following acceptance to Upstate's Alan and Marlene Norton College of Medicine, applicants will then be reviewed by the MBA program at Syracuse University's Whitman School of Management.

Upstate College of Nursing awarded SUNY Nursing Emergency Training Fund grant

In a move designed to increase the number of nurses statewide, the Upstate Medical University College of Nursing has been awarded \$440,000 aimed at increasing enrollment by supporting new faculty positions and student support staff in addition to strengthening clinical experiences for students. The funding comes from a SUNY Nursing Emergency Training Fund, which is designed to support colleges in the hiring of additional faculty, expand training space and purchase equipment and technology.

Upstate receives \$780,000 grant to study genetic risks for brain disorders

An Upstate Medical University professor has been awarded a grant from the National Institutes of Health to study population differences in genetic risks for brain disorders. Chunyu Liu, PhD, who runs the Laboratory of Behavioral and Psychiatric Genetics at Upstate, received \$786,432 for a study titled *Gene Expression Regulation in Brains of East Asian, African, and European Descent Explains Schizophrenia GWAS in Diverse Populations*. Liu, a professor of psychiatry and behavioral sciences as well as neuroscience and physiology at Upstate, says there is a limited amount of brain tissue available for research and most of it is from Caucasians. This study will include East Asian, African, and European brain tissue samples.

THE UPSTATE FOUNDATION

Eileen Pezzi, MPA – *Vice President for Development*

Founded in 1976 as a 501(c)3 not-for-profit corporation, the Upstate Foundation is a public charity designed to receive and administer gifts and bequests exclusively for charitable purposes with a focus on (1) the provision of patient health care, (2) the education of health care providers, (3) scientific research, and (4) community health and well-being. The Upstate Foundation also is the primary vehicle for receiving and distributing philanthropic gifts for Upstate Medical University.

The Foundation has 26 full- and part-time staff members, who, with a 44-member board of directors, manage more than 1,100 funds; conduct multi-year, million-dollar endowment campaigns; capital campaigns; administer alumni associations for the Upstate Colleges of Nursing and Health Professions; implement named giving and planned giving programs; provide Donor Advised Funds, run annual campaigns for Upstate University Hospital, Upstate Golisano Children's Hospital and the Upstate Cancer Center; and sponsor several major fundraising events, and many third-party events annually. In addition, the Foundation is home to the local chapter of the Children's Miracle Network Hospitals. The Foundation is largely self-supporting.

2021 Accomplishments

- \$15,073,111 in contributions, most of which benefit Upstate Medical University.
- \$8,167,806 awards given out benefiting Upstate Medical University.
- \$6.5M campaign for the Golisano Center for Special Needs concluded early and above goal.
- 4th in overall fundraising for SUNY College and University foundations, continuing a long-standing pattern of being 4th, 5th or 6th every year, superseded only by Buffalo, Stony Brook and Cornell Statutory.
- Opened five Donor Advised Funds, including ones to assist the Faculty Student Association and UUMAS.
- Upstate Foundation received the Impact Award from the Central New York Business Journal for its COVID-19 relief efforts, convened on March 24, 2021.
- Continue to be a Platinum rated charity on Guidestar.

Top 6 Goals / Focus Projects for 2022

Goal #1 - Branding the Upstate Foundation, ongoing

The Upstate Foundation Board of Directors identified building brand awareness of the Upstate Foundation as a key strategic initiative. A board committee was formed and includes both internal and external marketing and communication professionals. The committee meets twice a year.

Due to the potential for donor growth among Upstate's 11,500 employees — people who care deeply about this institution—it was determined that the first focus should be on the internal audience. In 2021, we continued our external awareness and branding campaign with funding of \$100,000 from the Foundation and matched nearly dollar-for-dollar by media used to distribute the campaign.

The campaign promoted the Foundation's mission via TV, radio, billboards, print advertising and social media. Featuring real donors in many cases, the subjects addressed in the campaign included:

- General awareness
- Nappi Wellness Institute
- Golisano Center for Special Needs
- Upstate Golisano Children's Hospital
- Planned giving
- Corporate engagement
- Awareness "mini-campaign" in Binghamton

Additionally (and in keeping with marketing best practices), each element of the campaign shared a unified, recognizable "look," music bed, narrator, and all-new slogan -- that concurrently explains the Foundation's mission, stakes out and expands the organization's geography and identifies the community's role in fulfilling that mission:

Where your gift impacts the health of the entire region

2021/2022 Initiatives

Impact Map (see [Appendix B](#)). The Foundation developed and distributed widely throughout the year a multi- page "Impact Map" that tallies and quite literally shows the Foundation's influence across the Upstate Medical University ecosystem throughout the decades, including all notable capital projects, programming, research and education initiatives.

Overview

- 4 mini-campaigns to market four elements of a PG to Upstate Foundation
- Approximately two-week window between each component of the campaign
- Utilize multiple outlets: print, postcard, social media, radio, billboards, etc.
- Use four different stories --one tied to each campaign
- Include call to action in each piece:
- In-hospital advertising -- shuttle clings, TVs, bubble boards
- Feature Legacy Society opportunity
- PAC advertising opportunities to be included
- Include all regions in media, print, electronic placements: Watertown, Rome/Utica mirroring Upstate marketing

2022 Goals

- Donor Recognition and Open House at the Golisano Center for Special Needs
- FDN new employee video completed and in use at Upstate Orientation
- Child and Adolescent Mental Health Campaign

Goal #2 - Golisano Center for Special Needs - Goal Met and Exceeded

Improving the care of children with intellectual/developmental disabilities through innovation and teamwork. The Upstate Foundation had a 3-year goal to raise \$6.4M, \$6M to go directly to program needs. The campaign finished early in December 2021 at over \$6.5M. Patients are being seen without long delays. Eight new staff have been added and wait times for service has been significantly reduced. The renovated space has improved the patient/family experience as well as provided a better work environment for staff.

New Goal for 2022 - 2025: Child and Adolescent Mental Health Campaign (\$3M)

Overview

Children and Families in Crisis

The mental health of our children and adolescents has become so concerning that the American Academy of Pediatrics, American Academy of Child and Adolescent Psychiatry, and the Children's Hospital Association recently declared a national emergency. The US Surgeon General has called for growth of community-level mental health teams for children. Children and families are in crisis in our community, and mental health service providers simply cannot keep up with the need. The demand is simply too great.

Campaign Goals

The Upstate Foundation, in conjunction with Upstate Medical University, Upstate Golisano Children's Hospital, Upstate Department of Psychiatry and Elmcrest Children's Center, is embarking on an important, collaborative response to this national and local emergency to increase clinical capacity and improve access to critical services. The initiative will be focused on engaging stakeholders at all levels including hospitals, local government, community organizations, schools and community members to implement necessary and sustainable improvements. A development plan to engage funders and philanthropic investment is underway, and we welcome your partnership as we move forward to address this urgent need in our community.

Background

It is highly regrettable that the availability of mental health services, especially for children and adolescents, has never equaled the demand. In the years leading up to the COVID-19 pandemic, workforce shortages, particularly in areas where services were most needed, left many families with few options for mental health care. Stigma reduced accessibility further, and limited insurance coverages contributed to a declining capacity to deliver services to those in need, leaving children in jeopardy and families in states of desperation. The COVID-19 pandemic only worsened the situation, highlighting the glaring limitations of the current system while simultaneously increasing the mental health needs of an already underserved population.

In Central New York, this crisis is seen in schools where children continue to adapt to new norms, trying to rebound from the many months of isolation. The crisis is seen in soaring calls and referrals to Upstate Golisano Children's Hospital and Upstate's Child and Adolescent Psychiatric Clinic from parents desperate to find care for their children, as well as from service providers seeking guidance on how to cope with the needs of this population during this challenging time. Alarming rates of depression, anxiety and suicidal ideation have been reported in pediatric patients, and staff at Upstate Golisano Children's Hospital are responding to calls for mental health consults in record numbers, from 1,952 calls in 2019 to 2,685 in 2021. Young people facing a mental health crisis are flooding hospitals, making it harder to treat patients with physical illnesses and injuries. Limited referral options hinder the continuation of care, and as a result, some high-risk patients are housed at the Children's Hospital for extended periods of time because needed programs do not exist in the Central New York community or have reached capacity.

2022-2023 Goals

- Internal outreach to establish strong relationships with the health care providers and determine what the immediate needs are.
- Establish relationships with external like-minded organizations/individuals.
- Recruit a campaign cabinet to assist in making connections that can assist with fundraising.
- Set campaign goals and budget.
- Set timetable for public phase.
- Develop campaign materials and naming opportunities.
- Educate front line fundraisers.
- Submit grant proposals to foundations for support.

Goal #3 - Brain Health. Major Targeted Campaign

This initiative is expected to take five to seven years or more, with a \$10 to \$25 million fundraising goal.

Like the rest of the country, and perhaps even more, the Central New York population is aging as more and more baby boomers turn 65 every day. Alzheimer's disease is the fifth leading cause of death among Americans 65 and older.

Upstate Medical University is well positioned to lead our community's fight against this frightening disease, with 30 years as the region's primary provider of dementia services, a nationally recognized geriatrician at the helm and a robust research enterprise.

Local couple, Sam and Carol Nappi made a tangible commitment to this effort with their \$8 million gift toward a longevity institute to expand services related to "brain health" or neurosciences, including a focus on Alzheimer's disease.

Mr. Nappi, with the assistance of the Upstate Foundation, has further committed to raising an additional \$10 to \$25 million over five to seven years or more for the Nappi Wellness Institute. The 2017 Upstate Gala and the Upstate Open started this effort by raising a half million dollars toward the project.

The primary focus of activities in 2019-2020 was the development of campaign collateral and other materials, development of a campaign plan and the beginning of the quiet phase of the campaign. Sustained focus on this project will be key to its success.

In March of 2020 the campaign was put on hold due to COVID, per the Nappi's.

The Upstate Foundation assisted with a ground-breaking ceremony for the Nappi Wellness Institute.

Focused marketing support can open pathways in the community that lead to opportunities for development asks. Without that support and community wide awareness, the possibilities will be limited. In 2020, the Foundation included the Nappi Wellness Institute in its Marketing and Branding and Awareness Campaign.

Plans for 2021/2022

- Mr. Nappi agreed to work with Ms. Pezzi in 2021 to approach local, regional and national major gift prospects for lead gifts to the campaign.
- Ms. Pezzi will continue to work closely with Mr. and Mrs. Nappi on building design/size changes hoping to retain their full support.
- Ms. Pezzi will serve on the Nappi Wellness Institute Steering Committee

Goal #4 - Planned Giving Program

While still in the developmental stages, the planned giving program at the Foundation recognized more new legacy donors over prior years as result of increased staff training, focused processes and additional marketing to highlight the impact of legacy giving.

2021 Highlights

- Created 2021 annual planned giving marketing plan, featuring 3 donor stories/planned giving vehicles. All responses will be tracked & reported as comprehensive campaign includes foundation website, social media, radio, television, local magazine publications, eblasts, post cards, Upstate Today & Tomorrow, planned giving survey, etc. Campaign was run in regional service areas as well.
- February 2022 a will survey was sent out yielding several promising responses.
- Developed new legacy brochures: 1) internal staff; 2) OASIS; 3) Paige's Butterfly Run.
- Grew the Professional Advisory Council by adding 3 more professionals representing our service regions: Utica/Rome, Watertown and north and Binghamton/Southern Tier. Added 4 members.
- Spring 2022 mailed internal version of legacy brochure to faculty
- The Annual Legacy Society luncheon was held virtually in October.
- Expanded relationship with Chris Arnold at Paige's Butterfly Run, a separate 501©3 that raises money for Upstate.

2022 Goals

- Continue to grow the Legacy Advisory Council and add more diversity and regionality to the membership.
- Create a presence in the 2 hospitals for national estate planning awareness week (October) to promote responsible estate planning among employees. Provide resources. Recruit volunteers from the Legacy Advisory Committee to attend to answer questions.
- Continue to place donor stories in local publications to increase awareness for our programs.
- We anticipate a 3% annual growth in Donor Advised Funds.
- The Professional Advisory Council will meet twice in 2022. The first meeting was held at the Upstate Simulation Center and was the first in-person meeting in 2 years.

Goal #5 - Grateful Patient & Family Program

The well-established Grateful Patient & Family Program continues to thrive with careful and deliberate review of key performance indicators and acting on these areas of need or opportunities. The individual pioneering this program retired in early 2021. The current development officer began in January 2022, slowing down the goal process somewhat, but the program still reached its fundraising goals for 2021.

Expanding Donor Options

- Expanding options for donors to engage in our mission is an opportunity for growth. Pre and post emails have been added to traditional direct mail outreach. This consistent messaging across platforms aligns with the changing ways our donors seek and act on information.
- Physician Philanthropic and Upstate Philanthropic Councils continue to be a successful endeavor to engaging our colleagues in the Grateful Patient and Family Program. To build on this initial success, the annual fund department will launch an enhanced Grateful Patient & Family Program in a specific department. Cardiology has been selected as the first site because of its constantly high Press Ganey & HCAHP patient satisfaction scoring and high benchmarking to comparative departments in our area. These efforts will focus on building stronger relationships with all cardiology department staff through active listening and hands on training on their role as a connector to storytelling and the power of healing through gratitude.

- Data integrity will continue to be a priority for effective communications. This will require meetings with all hospital departments and outpatient clinics to encourage collection of e- mail addresses and updated contact information from patients.
- Targeted Department Engagement in Grateful Patient & Family Program.
- In addition, annual fund staff will work closely with the Patient Experience team to recognize and record in-patient gratitude during bedside rounding.

Process & Procedures for Program Consistency

- To build a strong foundation for future growth of the program, processes and procedures have been formally created to insure program consistency. One such process is the stewardship grids created for all annual fund programs to engage donors throughout the year beyond the gift. Grids include publications, personal calls, and organizational updates. The second process is the creation of monthly giving societies for the Grateful Patient & Family Program. These societies will recognize donor's loyalty and commitment to our mission and how they have help achieve sustainable support for departments and programs across Upstate.

Support for the Program

- This program is an ongoing and board-funded strategic initiative for the Upstate Foundation. The Upstate Foundation Board of Directors has approved investing in this initiative by providing funding for the program, including salaries, from Foundation resources. Support will also be needed from University leadership, hospital leadership and clinical department chairs to encourage faculty and staff to participate in this program.

2022 Goals

- New Director will:
 - meet with targeted area chairs, program directors and staff to establish relationship for meeting prospective donor needs.
 - establish relationships with existing donors in her major gift portfolio.
 - identify stories to use in quarterly solicitation mailings.
 - coordinate Doctor's Day.
 - revitalize Physician Philanthropic Council and Upstate Philanthropic Council that have been on hold due to COVID.

Goal #6 - Succession Planning, Ongoing

Planning began in 2016, implementation began in January of 2017.

2021 Update and 2022 Goals Brief Description

In 2016, the Upstate Foundation recognized that there was a need for structured succession planning. Through a robust recognition and retention plan, the Foundation has retained many staff members beyond the normal national averages for the development profession, a point of pride for Upstate Foundation leadership. Staff longevity has a direct correlation to the Foundation's overall success over the last few decades. It is no secret in fundraising circles that "people give to people." These long-term development staff have been able to build long- standing relationships with our donors, which in turn often leads to more and bigger gifts. New positions will be phased in with current valued employees to ensure a smooth transition and trusted process with donors.

Progress

The Upstate Foundation touches the institution across all departments and programs. Continuation of the Foundation's 46-year history of excellence and financial integrity is of the utmost importance. A strong succession plan will ensure the Foundation's stability for years to come.

UPSTATE MEDICAL ALUMNI FOUNDATION

Paul Norcross - *Executive Director Medical Alumni Foundation*

The Upstate Medical Alumni Foundation's (MAF) mission is to promote the interests and improve the effectiveness of the Norton College of Medicine at Upstate Medical University, to foster fellowship among our alumni, to assist in the recruitment of students, and to provide opportunities to network for both students and alumni.

What began as a “band of brothers” in the early 1950’s is now a professional 501(c) 3 organization that manages over 150 funds which primarily support educational programs for students in the Norton College of Medicine. The MAF provides medical students with over \$800,000 annually in scholarship aid, and funds many other student-centered initiatives such as providing textbooks, white coats, reimbursement for educational travel expenses, career mentoring and other student priorities identified by the college. The MAF also serves the needs of our Alumni by holding Reunions, regional receptions and keeping them connected through publications such as the Alumni Journal and through the MAF’s on-line Alumni directory.

Today the Upstate Medical Alumni Foundation has an ongoing plan to engage its alumni in seeking their philanthropic support. The MAF consists of 4 full-time and 2 part-time staff members who along with a 37-member board of directors manage over \$31 million in assets, run annual and membership campaigns; oversee major gifts, named giving and planned giving program; and administer the student scholarships and awards program.

We remain committed to the success of our students and alumni/ae.

Upstate Medical Alumni Foundation Fundraising Year 2022 At a Glance: October 1, 2021 through September 30, 2022

Gifts and Pledges

- Total gifts and pledges = \$4,847,955
- Number of gifts = 2,086
- Number of donors = 1,564

Breakdown of Fundraising Initiatives

- Scholarship support = \$1,056,180
- Endowment (*excluding scholarships*) = \$161,135
- Operating funds (*Alumni Annual Fund, Parent Annual Fund and Membership Program*) = \$623,470
- Restricted giving = \$3,007,170
 - *Norton College of Medicine* = \$3,000,000
 - *Miscellaneous programs* = \$7,170

Upstate Medical Alumni Foundation Programs 2022

Student Services and Programs

- **Scholarship Support:** In 2022 the Medical Alumni will provide \$791,846 to 91 students.
- **Textbook/Reference Guides Program:**
 - *Netters Atlas of Human Anatomy* books given to all first-year students
 - *First Aid for the USMLE* books given to all second-year students
 - White Coat Clipboards given to all third-year students

- **White Coat Program:** The initial white coat is provided to all first year-students at the White Coat Ceremony and then a new white coat is provided to all third-year students to begin their medical rotations.
- **Student Reimbursement for Travel to Medical Conferences:** The MAF assists medical and MPH students with expenses incurred by attending or presenting at medical seminars, conferences, mission trips or other medical or academically related events. Each student is eligible for reimbursement up to \$300 per calendar year.
- **Career Advisory Event and Network:** Virtual in 2022, the Career Advisory brought together 125 students and mentors, giving students the opportunity to explore their interests in various specialties or residency programs and gather advice from those with first-hand experience in that field.
- **Fellowships:** The MAF supports the Susan and Gustave L. Davis, MD '63 Summer Fellowship for Pathology, the Ellen Cook Jacobsen, MD '50 Fellowship in Psychiatry, and the Pediatric Residents Endowment for International Studies. In 2022 the MAF had \$20,900 available in support for these fellowship programs.
- **RMED:** The Department of Family Medicine began offering the rural medicine elective “RMED” in 1989. The “Rural Medical Scholars Program” (RMSP) was created in 2007 with the expressed goal of increasing the number of students interested in a future rural practice. The MAF was asked to support the program in 2021 and budgeted \$16,000 to enhance the program. The Board has been impressed with the results of the RMSP and has again assisted in funding in 2022 at \$20,000.

Alumni Services and Programs

- **Alumni Events:** Due to COVID restrictions all Regional Alumni Receptions were cancelled. Reunion was held in person on Sept. 16 and 17, 2022 with 177 Alumni and friends in attendance, following two years of postponements due to COVID.
- **Alumni Journal:** The Alumni Journal showcasing alumni accomplishments and campus news is provided to all alumni, parents, students and the campus community three time per year.

Lectureships

The MAF supports honorarium and expense related funds for the following lectures: The Lawrence Pickett, MD Endowed Lectureship in Pediatric Surgery, The Welton M. Gersony Pediatric Lectureship, Robert V.P. Hutter, MD '54 and Ruth L. Hutter Endowed Lectureship and The Donald and Mary Elizabeth King Endowed Lectureship. In 2022 the MAF had \$23,400 available in support for these lectures.

Chairs and Professorships

The MAF supported the following Named Department Chairs and Professorships in 2022:

- \$96,400 to the Stanley A. August, MD Endowed Professorship in Pediatrics
- \$76,300 to Medical Alumni Endowed Professorship in Bioethics
- \$45,400 to Lloyd S. Rogers Endowed Professorship in Surgery
- \$86,700 to The Patricia J. Numann, MD '65, Chair of Surgery

Generation to Generation: Excellence in Medicine Campaign

Our \$15 million campaign for student scholarships is now in its second year. This campaign provides the opportunity for alumni to create a legacy at Upstate Medical College while lessening student debt for future physicians.

According to the Association of American Medical Colleges, the average cost of a four-year medical education from a public institution now tops \$250,000. The result is an average debt burden of more than \$220,000 for today's Norton College of Medicine graduates.

At the same time, the United States is facing a growing shortage of primary care physicians. The shortages are particularly acute in rural areas. Upstate has a legacy of addressing this need through its Rural Medicine program but the reality of loan debt is an obstacle for many students. For today's graduates, pursuing higher-paying specialties may not be a choice of passion or prestige but one of necessity.

To help combat these issues, the Upstate Medical Alumni Foundation launched this campaign to help College of Medicine alumni support Norton College of Medicine students. Aiming to raise at least \$15 million for student scholarships by 2025, the goal is to reduce student debt and simultaneously address the primary care shortage by providing our graduates with the freedom to pursue the specialty of their choice.

Our Alumni's response to the campaign has been tremendous thus far, raising our totals from \$7.3 million a year ago to \$10.8 million as of Sept. 30, 2022. With three years remaining in the Campaign, we are very hopeful our Alumni will continue their generous support helping us to surpass our goal of \$15 million.

The College of Medicine Naming: Without a doubt, the most significant news of the Generation to Generation Campaign is the naming of the College of Medicine. Alan, MD '66 and Marlene Norton chose to make a most impactful gift of \$25 million to the Upstate Medical Alumni Foundation. In recognition of this gift, the SUNY Board of Trustees and Upstate Medical University have chosen to pay tribute to the Nortons by naming the College of Medicine in their honor. For evermore the Upstate College of Medicine will be known as the **Alan and Marlene Norton College of Medicine**.

Upstate Medical Alumni Foundation Plans for the 2022-2023 Academic Year

- Continue focus on Generation to Generation, Excellence in Medicine Campaign.
- Add bequest participation aspect to Campaign.
- Resume Alumni Events: Planning events in Boston, MA, W. Palm Beach, Naples, Sarasota, FL and NYC
- Increase attendance for the 48th Alumni Reunion.

APPENDICES

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APPENDIX A: AWARDS, RECOGNITIONS, & ACHIEVEMENTS

AWARDS, RECOGNITIONS, & ACCREDITATIONS

UPSTATE MEDICAL UNIVERSITY

- **Upstate Golisano Children’s Hospital recognized for patient safety excellence**
Upstate Golisano Children’s Hospital has been recognized as a Children’s Hospital Solutions for Patient Safety Hospital of the Month. The honor for July recognizes the excellent work Upstate Golisano Children’s Hospital has achieved in significantly reducing hospital acquired conditions (HAC). A hospital acquired condition is a preventable, adverse medical condition or complication that patients develop during their hospital stay. Upstate Golisano Children’s Hospital was recognized in part for meeting performance targets for reducing: Significantly decreasing infections for Central Line Associated Blood Stream infections (CLABSI); Decreasing Unplanned Extubations (UE); Maintaining a sustained rate of zero for Adverse Drug Events (ADE) and Pressure Injuries (PI).
- **Upstate recognized by AMA as Joy in Medicine Organization for 2021-2023**
Upstate Medical University is one of only 44 institutions in the country to be a recipient of the 2021 Joy In Medicine Health System Recognition Program. The accolade from the American Medical Association recognizes Upstate for its “demonstrated commitment to preserving the well-being of health care team members by engaging in proven efforts to combat work-related stress and burnout.” Candidates for the Joy in Medicine Health System Recognition Program were evaluated according to their documented efforts to reduce work-related burnout through system-level drivers. Scoring criteria was based on demonstrated competencies in commitment, assessment, leadership, efficiency of practice.
- **Upstate New York Poison Center celebrates 65 years of service**
In 2022 the Upstate New York Poison Center is celebrating 65 years of service. The poison center began in 1957 as the Central New York Poison Center. In the last 65 years it has expanded from a 14-county service area to now serving 54 of the 62 counties in New York state under the direction of the New York State Department of Health. The center has graciously been housed at Upstate Medical University for its entire existence. The Upstate New York Poison Center assists healthcare providers, 911 operators, hospitals, industry, schools, and the general public with poison emergencies by providing state-of-the-art management expertise. It strives to provide the most current toxicology management and prevention information to both the general public and healthcare community with the goal of reducing the number, the cost, and the severity of poison exposures. Poison center staff provide telephone triage and case management for poison exposures, 24 hours, 7 days a week, 365 days a year, to 125 hospitals with a population base of 7.3 million people. The clinical and education staff is committed to being the definitive toxicology resource within these communities.
- **Upstate earns honors as ‘Most Wired’ institution**
Upstate University Hospital has earned the 2021 CHIME Digital Health Most Wired recognition as a certified level 9 for ambulatory. Seventy-one health care institutions received this recognition. The CHIME Digital Health Most Wired program conducts an annual survey to assess how effectively healthcare organizations integrate core and advanced technologies into their clinical and business programs to improve health and care in their communities. The Ambulatory-level ranking means the institution has leveraged its technology to improve patient care, the patient experience and provide greater access to health care services. More than 36,000 organizations were represented in the 2020 Digital Health Most Wired program, which

this year included four separate surveys: domestic, ambulatory, long-term care and international. The surveys assessed the adoption, integration and impact of technologies in healthcare organizations at all stages of development, from early development to industry leading. Upstate has received Most Wired designations annually since 2016.

- **Upstate earns honors as a top Epic performer**

Upstate also received honors from Epic System, the electronic medical record company. Upstate achieve Cum Laude on the Epic Version 5 Honor Roll Grant Program, reflecting Upstate's drive to continuously improve and strive for excellence in its Epic implementation. The honor comes with a \$300,000 grant from Epic. Only 17 hospitals out of more than 400 have achieved this designation from Epic, landing Upstate in the top 5 percent of performers.

- **Upstate recognized by Excellus's Quality Improvement Program**

Upstate University Hospital is among six hospitals in Central New York that shared a combined \$6.4 million in quality improvement incentive payments last year from Excellus BlueCross BlueShield as part of the health insurer's Hospital Performance Incentive Program. The quality improvement program is a collaboration between the health insurer and each participating hospital. It uses nationally recognized standards and guidelines to address specific areas for improvement. Incentive payments are tied to improvements in health outcomes and patient safety. In addition to meeting required clinical and patient safety measures in 2021, other nationally endorsed measures and target outcomes were jointly agreed upon by each hospital and the health insurer using benchmarks established by the Centers for Medicare & Medicaid Services, the Institute for Healthcare Improvement, and others. Areas targeted for improvement in 2021 included:

- Clinical Processes of Care— Focused on improvements in follow up after hospitalization, diabetes, chronic obstructive pulmonary disease (COPD), surgical care, and other measures unique to each participating hospital
- Patient Safety—Centered on reductions in hospital-acquired infections, readmissions, and other adverse events or errors that affect patient care
- Patient Satisfaction—Used the Hospital Consumer Assessment of Healthcare Providers and Systems survey, which is a national, standardized, publicly reported survey of patients' perspectives of hospital care.

- **Upstate receives three awards for exceptional care from American Heart Association/American Stroke Association**

The American Heart Association/American Stroke Association has presented Upstate University Hospital with three new awards in recognition of its outstanding care for the treatment of stroke, heart failure and resuscitation of adults. All three awards are for 2020 data. Upstate has received:

1. the Gold Plus with Target Diabetes and Target: Heart Failure Honor Rolls Get With the Guidelines Award;
 - Upstate has been honored previously by the American Heart Association/American Stroke Association for its Heart Failure program. The 2021 award for heart failure applies to both hospital campuses.
2. the Gold (Adult) Resuscitation Get With The Guidelines Award;
 - Upstate's Resuscitation Team has earned bronze, then silver and now gold recognition from AHA during the last three consecutive years. The 2021 award for resuscitation is specific to Upstate University Hospital.
3. the Gold Plus with Target: Diabetes and Target: stroke Elite Plus Honor Rolls Get With the Guidelines Award.

- Upstate's stroke care has been honored previously by the American Heart Association/American Stroke Association. Upstate is the region's first Comprehensive Stroke Center as designated by DNV Healthcare, a national hospital accrediting body. The 2021 award for stroke is specific to Upstate University Hospital.
- **Upstate Cancer Center receives grant from American Cancer Society to support patient transportation needs**
 Cancer patients undergoing treatment frequently require assistance getting to and from facilities, often creating a financial and logistical burden. That's why the American Cancer Society has awarded a \$10,000 transportation grant to the Upstate Cancer Center. These funds will be used to address the transportation needs of cancer patients in Central New York. To help patients get the critical care they need, American Cancer Society community transportation grants are awarded at a local level to health systems, treatment centers and community organizations. These grants are available in select communities through an application process and focus on addressing unmet transportation needs of cancer patients, particularly vulnerable populations experiencing an unequal burden of cancer.
- **Upstate awarded \$2M to upgrade, support its telehealth infrastructure**
 Upstate Medical University has been awarded \$2 million from the Federal Communications Commission (FCC) to help upgrade and support its telehealth infrastructure with a focus on video consults and remote patient monitoring as part of its electronic medical record (EMR) system. The upgraded telehealth platform will be deployed across the institution connecting dozens of Upstate clinics and physical sites. The funding will help strengthen and streamline telehealth options for Upstate and patients many of whom come from miles away to access Upstate's singular medical services.
- **Upstate Foundation awards \$50,000 for brain cancer research**
 The Upstate Foundation has invested in brain cancer research at Upstate Medical University with an award of \$50,000 to a project led by Mariano Viapiano, PhD, associate professor of neuroscience and neurosurgery and director of the Brain Tumor Laboratory and Biorepository. The award is the result of a competitive application and evaluation process overseen by David Amberg, PhD, vice president for research at Upstate. Dr. Viapiano currently directs a research program to develop novel treatments for patients with malignant gliomas, the most aggressive form of brain cancer. In his latest project, he and his team plan to target a rare change in tumor cells that makes these cells able to avoid the immune system. For the past two decades, the Viapiano Lab has studied how tumor cells change the proteins that coat the cell surface and how those mutated proteins promote tumor growth. In the past two years the team has identified a type of protein alteration that tumor cells use to avoid immune surveillance, but that has remained entirely ignored in the field of brain cancer. Their project will identify which proteins carry this alteration in brain cancer cells and will use small fragments of those proteins to force the immune system to recognize and attack the tumor cells. This project, which has received a university research award, is already in its initial phase and has identified a number of potential protein candidates that can be used to boost the immune system against brain cancer. The team's overarching goal is to identify the mutated proteins in each patient's tumor biopsy and formulate a personalized "immuno-boosting" cocktail for each patient. To this end, the project includes not only the resources of the Brain Tumor Lab but also the expertise of collaborators in neuroscience, immunology and biochemistry at Upstate Medical University. This funding will support a wide range of investigators and technological development at the University.

- **Grant awarded to Upstate Foundation will fund program to aid area primary care physicians in diagnosis and treatment of mental health issues in patients**

The Upstate Foundation has been awarded a \$100,000 grant to improve mental health services in central New York. The support comes from the Patrick P. Lee Foundation, a private, Buffalo-based foundation focused on mental health and education. The Lee Foundation provided similar grants to improve access to mental health services to Horizon Health Services and Rochester Institute of Technology (RIT). Upstate Medical University will utilize intensive workshops and the Project ECHO platform to increase the capacity of primary and family medicine providers in the eight counties of central New York to systematically screen, identify, treat, and appropriately refer patients suffering from mental health disorders. In Project ECHO, which uses video technology, Upstate experts function as the “hub” to deliver education, knowledge and best practices to the primary care clinicians in the region. The goal is for primary providers to enhance their competencies in the treatment of mild to moderate mental health disorders and provide much needed mental health care in a timely and appropriate manner. Upstate will also provide information about appropriate referrals, particularly with complex situations, encourage comfort in a consultation model and enable the development of a collaborative care pathway between the providers and psychiatrists.

- **Upstate Foundation receives \$150,000 grant from KeyBank Foundation for new community initiative**

The Upstate Foundation received a \$150,000 seed grant from KeyBank Foundation to fund an educational pipeline and employment advancement programs that will expose participants to desirable health care careers and offer a steady stream of entry-level positions at Upstate, which could subsequently provide further career and educational opportunities to participants. The announcement was made by Eileen Pezzi, vice president for development at Upstate Medical University. This transformative grant is part of KeyBank’s \$40 billion National Community Benefits Plan and is symbolic of the bank’s longstanding commitment to diversity, equity and inclusion. Additionally, Upstate will collaborate with established and trusted community partners to provide comprehensive job readiness, employment, and career development programs, leveraging KeyBank Foundation’s generous support and other philanthropic resources to build skills of participants who will obtain and retain gainful employment at Upstate, thereby moving them from poverty to sustainability.

- **Upstate Marketing & University Communications received six awards from the 38th Annual HealthCare Advertising Awards — the largest and most widely respected award in healthcare advertising.**

Selected from more than 4,400 entries nationwide, Upstate earned:

- Three silver awards for our COVID response communications package which included a special issue of Upstate Health; signage featuring our new mascot; and HealthLink OnAir podcasts.
- Also, Silver awards for individual HealthLink podcasts and for the patient handbook, “Thriving Onward: A Sickle Cell Disease Transition Toolkit,” with many thanks to the amazing pediatric sickle cell staff for their collaboration.
- A bronze award for the College of Medicine Dean’s Annual Report.
- Two merit awards for Upstate Health, our consumer health magazine, and for our television advertising produced with 325.

- **CenterState CEO recognizes SUNY Upstate Medical University as a 2021 Economic Champion**
CenterState CEO recognizes the region’s outstanding businesses and organizations as Economic Champions for driving the region’s economy forward in the past year. It recognizes contributions

to the growth of the Central New York economy, including new jobs, new businesses, company milestones, business expansions and investments, and more. Business or organizations have been nominated for recognition this year by CenterState CEO and the Greater Oswego-Fulton Chamber of Commerce, the Upstate Minority Economic Alliance, the Downtown Committee of Syracuse, or colleagues and peers in the business community.

- **Upstate University Hospital has made the Women's Choice Award Best Hospitals List for 2022**

Upstate University Hospital has made the Women's Choice Award Best Hospitals List for 2022, meeting or exceeding requirements for one or more service line awards. The Women's Choice Award identifies America's Best Hospitals across our nation to help women make smart healthcare choices.

- **Upstate's Adult Cystic Fibrosis Program has been selected for the Cystic Fibrosis Foundation's 2021 Outstanding Care Center Partnership Award**

The SUNY Upstate Medical University - Adult Program was nominated by the Central New York Chapter in recognition of its collaborative contributions and ongoing commitment to furthering engagement within the CF community. The annual Outstanding Partnership Award was established to recognize the care centers and their teams that have gone above and beyond in collaborating with their local CF Foundation chapters to help serve the CF community.

Recipients of the award are selected based on a variety of criteria including:

- Local collaboration efforts to engage community members
- Level of care team engagement with local chapter programs and events
- Care team involvement of chapter staff in center-directed initiatives
- Positive and collaborative relationship with local CF Foundation chapter

Award winners will be acknowledged at the virtual 2021 North American Cystic Fibrosis Conference in early November 2021.

- **Upstate's newest Outpatient Pharmacy facility near Community Hospital receives national accreditation**

Upstate's newest Outpatient Pharmacy facility recently received a highly sought-after accreditation certificate that only a select number of pharmacies nationwide receive. The SUNY Upstate Outpatient Pharmacy, which opened in July at 5000 W. Seneca Turnpike across from Upstate Community Hospital, has received national accreditation for specialty pharmacy from Utilization Review Accreditation Commission (URAC). Of 67,000 pharmacies across the country, less than 500 are dually accredited specialty pharmacies, Balotin said. The downtown location is dually accredited, and the newest pharmacy location is awaiting that second accreditation from the Accreditation Commission for Health Care, Inc., (ACHC). ACHC's review of the new pharmacy found zero deficiencies during its site visit in late August 2021.

- **Upstate's Doctor of Nursing Practice program earns 10-year reaccreditation**

The Doctor of Nursing Practice (DNP) program at the State University of New York Upstate Medical University College of Nursing is accredited by the Commission on Collegiate Nursing Education (CCNE) (<http://www.ccneaccreditation.org>). The Board determined that the Doctorate of Nursing Practice (DNP) program met all four accreditation standards. The program has been renewed through Dec. 31, 2030. This is a reaccreditation of the DNP program, which was first offered by the College of Nursing in 2013. The Doctor of Nursing Practice (DNP) is the nursing profession's highest clinical doctorate, designed for individuals working in clinical practice and in areas that support clinical practice, such as administration, organizational management, leadership and policy.

- **Upstate is awarded \$50,000 grant from St. Baldrick's Foundation to support clinical trials for children with cancer**

Melanie Comito, MD, division chief of hematology and oncology at Upstate Golisano Children's Hospital, has been awarded a \$50,000 infrastructure grant by the St. Baldrick's Foundation. These one-year grant provides Upstate the staffing to open, coordinate, and treat more children on clinical trials, making it possible for more children to access these trials close to home. Upstate was one of 24 institutions to receive an infrastructure grant, totaling more than \$1.1 million. The award supports the work at the Dr William J. Waters Center for Children's Cancer and Blood Disorders at Upstate Golisano Children's Hospital, which provides oncology care to children, adolescents, and young adults.

- **Upstate Foundation receives \$25,000 grant from AstraZeneca for Upstate Cancer Center's She Matters program**

Selected as one of just 30 recipients from a field of 1400 applicants nationally, the Upstate Foundation was awarded a \$25,000 grant from AstraZeneca's inaugural ACT on Health Equity: Community Solutions Challenge for the Upstate Cancer Center's She Matters program. This award stems from AstraZeneca's commitment to advance health equity through collaboration with non-profit organizations positively impacting the health of underserved populations through regional and local community-based programming. The grant will be used to expand She Matters into additional Syracuse Housing Authority residential communities to increase access to breast cancer education, screening and navigation services. She Matters is a peer-to-peer community outreach program of the Upstate Cancer Center to reduce breast cancer disparities in low income, primarily Black and Latinx women living in public housing in Syracuse. Working in partnership with the Syracuse Housing Authority, residents are recruited to serve as community health workers (CHWs). CHWs receive training and ongoing support from the Upstate Cancer Center while working as peer health advocates. CHWs provide breast health education, offer support from navigation to screening mammography, and improve access to necessary diagnostic and treatment services. The goal is to eliminate health care barriers, change behavior and make annual breast cancer screening a priority.

- **Upstate recognized by American Heart Association for workplace health, wellness programming**

Upstate Medical University has achieved Silver Level recognition by the American Heart Association for taking significant steps to build a culture of health in the workplace. This recognition is based on the results of association's 2021 Workplace Health Achievement Index. Under the direction of Wellness Coordinator Suzanne Brisk, Upstate offers a range of health and wellness programming, much of for the last two years has been available online as a precaution against COVID-19. Programs over the years have included Wellness Walkers, Monday Mile, a Diabetes Education and Weight Management Series as well as a website full of self-care tips. Brisk has also included more than a dozen highlighted walks, or wellness trails, to take indoors and around campus that can burn calories and increase the heart rate. Food service is one area that has offered employees and patients healthier menu choices, with more meatless and gluten free entrée choices, in addition to decreasing the amount of sugary beverage choices. A major wellness offering is Upstate's smoking cessation program for employees, students and volunteers. The free programming includes smoking cessation classes and nicotine replacement products. In 2005, Upstate became the first SUNY campus to become smoke-free, banning all smoking and tobacco use. Since the ban was put in place and Upstate began offering smoking cessation products and classes, the rate of smoking among Upstate employees has dropped. Upstate also has increased access to mental health programs for staff, programs that have been increasingly important during the pandemic, and appointed a chief wellness officer, Leslie

Kohman, MD, who has helped guide programming for medical staff. The Silver honor from the AHA also considers the many wellness offerings Upstate supports through its Health Link and Oasis programming and through various community wellness and education programs offered by Upstate's Trauma team, Comprehensive Stroke Center and Poison Center. The American Heart Association Workplace Health Achievement Workplace Index was with its CEO Roundtable, a leadership collaborative of more than 40 CEOs from some of America's largest companies who are committed to applying evidence-based approaches to improve their employees' overall health. The Index uses science-based best practices to evaluate the overall quality and comprehensiveness of their workplace health programs. Studies show that worksites with a culture of health with comprehensive, evidence-based policies and programs, and senior leadership support are more likely to have engaged employees and a healthier, more productive workforce. A unique feature of the Index is that it calculates an average heart health score for employees of participating companies that securely submit aggregate health data. Companies receive benchmarking reports, which allow them to identify potential areas of improvement so that they can advance their annual performance and recognition.

- **Upstate's Nurse Residency Program earns reaccreditation**

The Upstate University Hospital Nurse Residency Program has been awarded reaccreditation from the American Nurses Credentialing Center's Practice Transition Accrediting Program (PTAP) as an Industry Recognized Apprenticeship Program (IRAP) in recognition of its excellence in transitioning newly hired registered nurses into clinical practice. The accreditation validates hospital residency or fellowship programs that transition registered nurses into new practice settings that meet rigorous, evidence-based standards for quality and excellence. Nurses in accredited transition programs like the one at Upstate experience curricula that promote the acquisition of knowledge, skills and professional behaviors necessary to deliver safe, high-quality care. The review process included a voluminous self-study that outlined the 12-month professional development program along with various programming and structures that support the transition to practice for new RNs. Appraisers said that they were pleased with key aspects of the program, including the strength of the executive nursing leadership support for the program; the return of former residents to the program in the facilitator role; and the planned collaboration with Upstate's College of Nursing to deliver evidenced-based practice content to the Residency Program. Upstate's Nurse Residency Program accepts over 400 new-to-practice nurses each year. The program features expert guest speakers, educators and direct care staff nurses to provide resources, support and real-life learning opportunities for residents. It also incorporates open and small group discussions; didactic clinical content with experts; hands-on experience including the use of our simulation lab; and professional development exercises. The year of Nurse Residency concludes with a celebration and an evidence-based practice project. The residency program accreditation comprises a variety of Upstate location, including the Downtown campus, Upstate Community Hospital, Upstate Golisano Children's Hospital, Joslin Diabetes Center and Upstate Ophthalmology and Visual Sciences. The formal nomenclature of organization's action will appear as: "Upstate Medical University Nurse Residency Program at Upstate Medical University is recognized by the ANCC Practice Transition Accreditation Program® (PTAP) as an Industry-Recognized Apprenticeship Programs (IRAP)."

- **SUNY Upstate Medical University has been accepted as a supporter of the CHARM-Arnold P. Gold Foundation Charter for Physician Well-being.**

The Charter on Physician Well-Being, a project supported by a grant from the Arnold P. Gold Foundation, was created by the Collaborative for Healing and Renewal in Medicine (CHARM), a group of leading medical centers and organizations that includes the AMA. By signing the CHARM charter, an organization has agreed to share a responsibility to support health systems,

organizations, and individuals advance and promote physician well-being. As a supporter, an organization will be publicly listed on the AMA website as a CHARM charter supporter. Additionally, an organization will receive updates regarding the CHARM program and opportunities to participate in other physician well-being initiatives.

- **Upstate Community Hospital earns Baby-Friendly designation**

Upstate University Hospital's Community campus has earned the prestigious Baby-Friendly designation from Baby Friendly, USA, joining a growing list of more than 20,000 Baby-Friendly hospitals and birth centers throughout the world, 588 of which are in the United States. These facilities provide an environment that supports breastfeeding while respecting every woman's right to make the best decision for herself and her family. The Baby Friendly Designation means Upstate's Family Birth Center is committed to providing the support, education and resources moms need to successfully initiate breastfeeding and continue breastfeeding when they leave the hospital. These standards are built on the "Ten Steps to Successful Breastfeeding," a set of evidence-based practices recommended by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) for optimal infant feeding support in the first days of a newborn's life. Earning the designation is a rigorous, multi-step process. The Birth Center's current goal is for more than 65 percent of babies born there to breastfeed exclusively while in the hospital. However, Bennett said they recognize that not all mothers will choose to or be able to successfully breastfeed. The newly renovated Upstate Family Birth Center opened at Upstate Community Hospital in 2018.

- **Upstate awarded grant to improve access to patient visit notes**

Upstate Medical University is one of 16 hospitals statewide to receive a grant from the New York State Health Foundation (NYSHealth) to enhance patient note-sharing. Upstate will receive \$50,000 through the program called "From Good to Great: Improving Access to and Use of Patient Visit Notes." Shared visit notes, often referred to as open notes, are an important way to help consumers become active participants in their own care. Established in 2010, OpenNotes is a national effort to give patients access to the visit notes written by their doctors, nurses, or other clinicians. The 21st Century Cures Act, which went into effect last year, included a federal mandate that requires health care providers that maintain electronic medical records to make clinical notes available to patients electronically and at no charge. These NYSHealth awards will provide hospitals with funding, technical assistance, and peer-learning opportunities to help them to comply with the new federal mandate but also to use open notes to spark a culture change and more meaningfully engage patients. NYSHealth is awarding nearly \$800,000 towards this effort. According to Opennotes.org, patients who read notes report that they have a better understanding of their health and medical conditions, they recall their care plan more accurately and are better prepared for their visits. Overall, they feel more in control of their care, take better care of themselves, and have stronger relationships and better conversations with their doctors. Another component of the project will be to work with providers on how to simplify jargon and abbreviations in their notes to make them more understandable to their patients.

- **Upstate Cancer Center receives grant from American Cancer Society to support patient transportation needs**

The Upstate Cancer Center has received a \$10,000 grant from the American Cancer Society (ACS) aimed at addressing the transportation needs of cancer patients in Central New York. Frequent treatments for cancer patients require much support for families, not only in time commitments, but also the cost of transportation. To help patients get the critical care they need, ACS awards community transportation grants to health systems, treatment centers and community organizations. These grants are available in select communities through an

application process and focus on addressing unmet transportation needs of cancer patients, particularly vulnerable populations experiencing an unequal burden of cancer. This year's grant marks the second year Upstate Cancer Center has received a transportation grant.

- **Upstate College of Nursing awarded SUNY Nursing Emergency Training Fund grant**

In a move designed to increase the number of nurses statewide, the Upstate Medical University College of Nursing has been awarded \$440,000 aimed at increasing enrollment by supporting new faculty positions and student support staff in addition to strengthening clinical experiences for students. The funding comes from a SUNY Nursing Emergency Training Fund, which is designed to support colleges in the hiring of additional faculty, expand training space and purchase equipment and technology. A key portion of the funding—\$250,000—is earmarked to support Upstate's RN to BS program with Onondaga Community College (OCC). The dual admission program allows students who receive their RN at OCC to easily transfer into Upstate's bachelor's degree program in nursing. In addition to funding new faculty positions and student support services and personnel at both schools, the funds also will address the teaching of various issues including rural health, telehealth and addictions. Officials say these additions to the curriculums will ensure students have a higher quality experience, addressing the current trend and issues in nursing. The funding will also provide for program's enhanced use of Upstate's simulation center, an 8,600 square foot facility that allows for recreation of various medical settings with low and high-fidelity task trainers and manikins to simulate various medical conditions, injuries. The remainder of the funding—\$190,000—also earmarked for faculty and student support, will help foster growth in Upstate's own College of Nursing degree programs, from bachelor's to numerous graduate nursing degree programs, such as nurse practitioner programs and doctor of nursing practice degree. One program that will especially benefit from the funding will be the Adult and Geriatric Nurse Practitioner (AGNP) program, which aims to bring more specially trained nurse practitioners to the workforce to care for the state's aging population. The college already offers nurse practitioner programs for Family Nurse, Family Psychiatric Mental Health and Pediatrics. Additionally, in response to student focus groups, the college will develop and deploy a modular RN to BS curriculum with seven week semesters and three start dates to facilitate rapid deployment and flexibility of offerings. The funding will also enhance and expand existing and new pipeline agreements to include rural/underserved communities with target of a fully online asynchronous programs and develop a partnership with Upstate University Hospital's Nurse Residency Program. Upstate and OCC are among 17 SUNY schools to receive this special SUNY funding. Across the nation, the U.S. Bureau of Labor Statistics projected that 11 million additional nurses are needed to avoid further shortages in the healthcare industry, and employment opportunities for nurses are projected to grow at a rate of 15 percent—faster than all other occupations through 2026. According to the American Journal of Medical Quality, there will be a shortage of more than 39,000 registered nurses in New York State by 2030. Upstate's College of Nursing is the only nursing program in the region that is part of an academic medical center. It offers a variety of courses and programs online and in hybrid formats for great flexibility for a variety of learners.

- **Upstate receives national certification for life-saving heart and lung treatment program**

Upstate Medical University is now only the second hospital in the country to earn one of the nation's top certifications for its Extracorporeal Life Support program (ECLS). The certification, from DNV GL Healthcare, the nation's fastest growing accreditation organization, means that Upstate's life-saving program meets more than 50 standards and operates at the highest levels of coordination between interdisciplinary teams. ECLS is the use of external machines to provide prolonged cardiac and respiratory support to patients whose heart and lungs are not

able to function. The ECLS or ECMO (Extracorporeal Membrane Oxygenation) machine handles oxygen delivery to the patient's body, allowing a person's lungs and heart to rest and heal. Patients can rely on an ECLS machine for a few hours or weeks at a time. Most hospitals offer ECLS but not all have full programs and infrastructure to support their use. Upstate has done ECLS for years but it wasn't until 2017 when Tanski decided to expand individual usage of the machines into a fully supported program. Before that, Upstate could put patients on ECLS, but then those patients most often had to get transferred to other hospitals to complete their treatment. Patients on ECLS need 24-hour monitoring by a specialist. Now most of the patients in the ECLS program stay at Upstate for the duration of their treatment. From 2017 through 2021, Upstate has treated more than 100 patients with ECLS, including 22 so far with COVID-19. Patients who need ECLS support for either their heart or lungs or both are often the sickest in the hospital. The hospital has seven ECLS machines and can have patients on four of them simultaneously, including pediatric patients. In 2020, a team from Upstate completed work with ECLS experts across the country to develop an exam to award an official ECLS Specialist certification from the American Society of Extracorporeal Technology. The certification exam creation process was published in *The Journal of ExtraCorporeal Technology*. The 100-question test covers more than 700 skills, abilities, and knowledge points. To earn the DNV certification, Upstate had to meet more than 50 standards covering program quality, program and staffing management, infection control, program service delivery and multidisciplinary approach. Tanski said that while the process was a lot of work, Upstate was already incorporating most of the measures in the standards, since it has such a robust program. The process was completed with a two-day survey of staff, equipment, and procedures by DNV.

- **State Health Department redesignates Upstate as Center of Excellence for Alzheimer's Disease**
 The Department of Geriatrics at Upstate Medical University has been redesignated as a New York State Department of Health Center of Excellence for Alzheimer's Disease. "We are thrilled that this 5-year, \$2.3 million award that will allow us to continue our work in providing high quality dementia care to the people of Central New York," said Distinguished Service Professor Sharon Brangman, MD, who also serves as chair of the Department of Geriatrics and director of the Center for Excellence for Alzheimer's Disease. The award also supports the education and training of students at Upstate, and has an active clinical trials program for evaluating emerging drugs for this disease. One such trial under way at CEAD is Phase 2/3 study, called T2 Protect AD, that is evaluating the investigational drug troiluzole (BHV-4157), which may have the potential to protect against, slow down, and even improve memory and thinking problems that increase as Alzheimer's disease progresses. The Upstate center consists of an interdisciplinary team of healthcare providers who served more than 4,500 people last year by providing diagnosis, management and support services for people with Alzheimer's disease and other dementias. The CEAD serves as a regional resource, serving 14 counties, providing coordinated delivery of services to patients and their families which is essential to allow these individuals to remain at home in their communities for as long as possible.
- **Upstate's Respiratory Therapy Program honored with credentialing success award**
 Upstate's Respiratory Care Program is among a select group of programs that will be recognized by the Commission on Accreditation for Respiratory Care (CoARC) to receive the Distinguished RRT Credentialing Success Award. This award is presented as part of the CoARC's continued efforts to value the RRT credential as a standard of professional achievement. From a program effectiveness perspective, the CoARC views the RRT credential as a measure of a program's success in inspiring its graduates to achieve their highest educational and professional aspirations. In selecting programs for this recognition, the CoARC Board used objective criteria based on key accreditation metrics documented in the 2021 Annual Report of Current Status

(RCS). These programs were required to: (1) have three or more years of outcomes data; (2) hold accreditation without a progress report at the end of the year; (3) document RRT credentialing success of 90% or above, and (4) meet or exceed established CoARC thresholds for TMC high cut score and retention.

- **Upstate graduates first class from family medicine residency program**

Upstate Medical University is helping combat the national shortage of primary care providers with its new Family Medicine Residency Program. The new program began in 2019 and was the first residency program for Upstate Family Medicine and the first residency program based at Upstate's Community Campus. On Saturday, the program's inaugural class, celebrated its graduation from the three-year program. Four of these new doctors will launch their careers here at Upstate. The inaugural graduates are Jorge Alvarenga-Montoya, MD; Bushra Atta Ur Rehman, MBBS; Rahila Iftikhar, MBBS; Akifa Nazim, MBBS; Krysten Wallace, MD, chief resident. All the graduates will remain in Central New York. Atta Ur Rehman, Wallace and Iftikhar will be joining the Family Residency program as faculty. Nazim will do a one-year fellowship in geriatrics at Upstate and Alvarenga-Montoya will be joining Family Care Medical Group in Camillus. With an aging baby boom population – which includes those retiring from medicine – as well as expanded health care coverage for many Americans, more people are seeking out primary care all the time. Recently, a report from the Association of American Medical Colleges (AAMC) predicts that it is estimated that there will be a primary care physician shortage up to 55,200 physicians by 2033. Upstate's program was one of 40 nationwide that launched in 2019. Its mission is to prepare exceptional family medicine trained physicians who will provide exemplary care to patients as well as foster a culture of academic inquiry, research and scholarship. Residents are advocates for policies that support community health, holistic approaches to health care and prevention. The residents receive a diversity of opportunities that train them to be excellent clinicians in urban, suburban, and rural practice, and prepare them for leadership and faculty positions in family medicine. Additionally, they are committed to meeting the physical, mental, social, and spiritual needs of their patients. They model the highest standards of patient care, teaching, and research. During the program, the residents worked in nearly all areas of the hospital including the emergency department, pediatrics and labor and delivery. One third of their rotations took place at the Veteran Administration Medical Center. In addition, the residents had 20 hours of electives to allow them to pursue their interests. They also had an opportunity to obtain a Certificate of Advanced Study in Public Health (CASPH), exposure to the VA's Whole Health For Life Program and to leverage Upstate's expertise in many sub-specialties. The program also emphasized wellness with sessions on mediation, reiki, work-life balance and integrative medicine as well as psychological and emotional support. And the program continues to grow. With 18 residents now in the three-year program, applicant pools for the six annual spots swelled to as many as 2,500. Six new faculty will be added to the program for the upcoming year and in 2023, two more resident slots will be added for a Rural Training track at Auburn Memorial Hospital.

UPSTATE FACULTY, STAFF, & STUDENTS

- **Upstate's Dr. Stephen Thomas earns Liberty Medal from New York State Senate**

Stephen Thomas, MD, a virologist and vaccinologist who currently serves as an Upstate Medical University professor of medicine, microbiology & immunology and is director of its Institute for Global Health and Translational Science, has been recognized with Liberty Medal—the highest civilian honor awarded by the New York State Senate—for his work related to the COVID-19 pandemic. Syracuse-area state Sen. John Mannion announced the honor from senate floor Jan. 13, 2022. In November 2020, Dr. Thomas was tapped as lead principal

investigator for the world-wide Pfizer/BioNTech vaccine trial. Thanks to Dr. Thomas and Upstate's Global Health team, Central New Yorkers had an opportunity to participate in making history as the area became one of the study's global phase 3 vaccine trial locations. Dr. Thomas also led the team coordinating the university's initial response to the pandemic in March 2020. Dr. Thomas also has become one of the nation's leading and most authoritative voices regarding the COVID-19 pandemic, offering his perspective of the pandemic in both local and national media, updating the public on vaccines, masking, treatments and clinical trials since the pandemic was declared a global outbreak in March 2020.

- **Brain Injury Association of New York State recognizes Brian Rieger, PhD, head of Upstate Concussion Center, for ongoing advocacy**

The director of the Upstate Concussion Center has been given an award from the Brain Injury Association of New York State (BIANYS) for his ongoing work advocating for concussion awareness and improved care for those suffering from the injury. In addition to his work with the Concussion Center, Brian Rieger, PhD, is chief psychologist in the department of Physical Medicine and Rehabilitation at Upstate. Rieger was recently awarded the Ted Weiss Consumer Advocacy Award from BIANYS, which is a statewide nonprofit that provides advocacy and support to people living with brain injuries. The Ted Weiss Consumer Advocacy Award "recognizes a fellow citizen whose actions have demonstrated unfailing commitment to the highest standards of truth, justice and accountability while striving to ensure the rights, safety and an improved quality of life for all people impacted by brain injury," according to BIANYS. The award was presented to Rieger on June 9, 2021 during the organization's annual meeting, which was held virtually for the second year in a row.

- **Upstate student commits to working in medically underserved community as part of prestigious scholarship**

An Upstate Medical University student has been awarded a prestigious scholarship that will pay for two years of medical school in exchange for her commitment to working as a doctor in a medically underserved community. Eunice Choe, a third-year student in the College of Medicine, learned recently that she has been awarded a National Health Service Corps (NHSC) scholarship. NHSC connects primary health care clinicians to people who have limited access to healthcare. They do that by offering medical school scholarships and paying off student debt in exchange for a two-year commitment by doctors to work in underserved areas. Choe has been committed to serving in a rural setting from the moment she started at Upstate. She is part of the Rural Medical Scholars Program, which offers classes for Upstate students that focus on rural health issues. She's also completing her third year of medical school at the Binghamton campus, which she said is helping her learn more about what it's like to work in a smaller hospital. A graduate of Brandeis University, Choe took two years off before starting medical school. One of those years was spent working at a behavioral health organization in her hometown of Plattsburgh as part of AmeriCorps VISTA, a national service organization. That experience, combined with her family's experience as Korean Americans living in rural Upstate New York, solidified her decision to commit to working in underserved areas.

- **NYSARH Board of Directors appointment for Dr. Tammy Austin-Ketch**

Dr. Tammy Austin-Ketch, Dean and Professor, has been appointed to serve on the Board of Directors of the New York State Association for Rural Health (NYSARH) <https://nysarh.org/>. In this role, she will serve a three-year term on the Board of Directors beginning September 2021. The New York State Association for Rural Health is a not-for-profit, non-partisan, grassroots membership organization working to preserve and improve health and human services in rural New York State. NYSARH is a member of the National Rural Health Association. NYSARH is

interested in representation from a wide variety of rural stakeholder groups including, but not limited to, healthcare providers/practitioners, hospitals, clinics, rural health networks, policy and advocacy organizations, academia (faculty, staff and students), government, agriculture, economic development, and all other groups who share an interest in advancing NYSARH's mission: Improving the Health and Well-Being of New York State's Rural People and Communities.

- **Two Upstate police officers honored for bravery and heroism**

Two members of the Upstate Police Department have been honored for their bravery and heroic work, shielding individuals from gunfire outside the Upstate University Hospital Emergency Department. Officer Brian Patterson and Office Lt. John Stefanko worked to shield individuals outside the Emergency Department when shots rang out in the early morning hours of July 5. Proclamations were presented to Patterson and Stefanko by New York State Assemblyman Al Stirpe Sept. 22 at an event, held at the Sheraton Syracuse University Hotel and Conference Center. Stirpe was joined by other dignitaries, including State Sen. Rachel May, State Sen. John Mannion, Onondaga County Executive Ryan McMahon, Syracuse Police Chief Kenton Buckner, and representatives of New York Gov. Kathy Hochul. Stirpe acknowledged the selfless actions on the part of the officers, who have more than 20 years of combined service in law enforcement. Additionally, both served in U.S. Armed Forces.

- **Upstate professor named one of the world's top scholars for writings on mental disorders**

Distinguished Professor and Vice Chair of Research of Psychiatry and Behavioral Sciences Stephen Faraone, PhD, received the honor from ExpertScape, which places him in the top 0.1 percentage of scholars writing about mental disorders in the last decade. Faraone is the author of more than 1,000 journal articles, editorials, chapters and books. From 1990 to 1999, he was the eighth highest producer of High Impact Papers in Psychiatry as determined by the Institute for Scientific Information (ISI). In 2005, ISI named him as the second highest cited author for Attention Deficit Hyperactivity Disorder. From 2014 to 2019 he was listed as a highly cited researcher by Thomson/Reuters/Clarivate Analytics. In 2013, he was cited as being the third most-cited psychologist or psychiatrist in the world and the top-cited psychologist or psychiatrist scholar in the United States, according to Microsoft Academic Search, a free academic search engine. In 2019, his citation metrics placed him in the top 0.01 percent of scientists across all fields. ExpertScape has previously cited him for being the top-rated expert in ADHD, worldwide. Faraone has made contributions to research in psychiatric genetics, psychopharmacology, diagnostic issues and methodology. He has been principal investigator on several National Institutes of Health funded grants that address ADHD in children and adults. His studies into ADHD have brought a greater understanding of the highly heritable nature of ADHD and have brought researchers closer to identifying specific genes that play a key role in increasing susceptibility of ADHD. In 2002, Faraone was inducted into the Children and Adults with Attention Deficit/Hyperactivity Disorder Hall of Fame and in 2003 he was elected to the Board of Directors of the International Society of Psychiatric Genetics. He is president of the World Federation for ADHD and a board member for the American Professional Society of ADHD and Related Disorders. Faraone was inducted into the CHADD Hall of Fame in 2002 in recognition of outstanding achievement in medicine and education research on attention disorders. In 2008, he received the SUNY Upstate President's Award for Excellence and Leadership in Research. In 2010 he received the Chancellor's Award for Excellence in Scholarship and Creative Activities from the State University of New York. In 2013, he was named a distinguished professor, a title conferred upon SUNY faculty having achieved national or international prominence and a distinguished reputation within the individual's chosen field. In 2018 he received the Lifetime Achievement Award from the

International Society of Psychiatric Genetics and in 2019 he received the Paul Hoch Award from the American Psychopathological Association.

- **Kathi Durdon, who heads Upstate's CNYBAC, named Economic Development Superstar of the year by Med Tech Association**

Kathi Durdon, executive director of Upstate's CNY Biotech Accelerator (CNYBAC), has been named as Economic Development Superstar of the year by the Med Tech Association, a Syracuse-based trade association for the bio/med industry. The award is given to an individual who has demonstrated an extraordinary ability to create positive change for New York's bio/med industry. The selection committee said it was impressed by Durdon's leadership and the impact the CNYBAC has had on incubating medical technology innovation in New York. Under Durdon's leadership of the CNYBAC, she has helped the region put its stamp on pharmaceutical, biologic and medical device innovation. Durdon has worked to create a business incubator that has proved successful for many biotech/biomed innovators.

- **Dr. David Auerbach's research of sudden unexpected death of epilepsy patients attracts attention**

Research by David Auerbach, PhD, a faculty member in the Department of Pharmacology, on Cardiac and Autonomic Pathological Markers for Arrhythmias and Sudden Unexpected Death in Epilepsy Patient (SUDEP) has attracted the attention of the family of young Disney Channel star who died from SUDEP in 2019 at the age of 20. The grant award released by CURE Epilepsy will now be known as the CURE Epilepsy Cameron Boyce Foundation SUDEP Award to honor Boyce. Dr. Auerbach's team is using analytical tools that are well accepted in the cardiac field, but new to the epilepsy and SUDEP field, to identify epilepsy patient populations at risk of cardiac arrhythmias. Additionally, his team will test whether these tools identify people with epilepsy who later died of SUDEP. The team's long-term goal is to develop a comprehensive SUDEP risk assessment tool based on markers for each of the proposed biological causes of SUDEP, including cardiac arrhythmias. Through funding the CURE Epilepsy Cameron Boyce SUDEP Research Award, the Cameron Boyce Foundation recognizes the promise of this work, and it reinforces its resolve to honor Boyce's legacy by supporting epilepsy research, awareness, and education. Epilepsy is the fourth most common neurological disorder behind migraine, stroke, and Alzheimer's disease but receives significantly less federal funding. CURE Epilepsy has helped fill that void, especially in the area of SUDEP research.

- **Lawrence Chin, MD, dean of Upstate's Alan and Marlene Norton College of Medicine, has been named to the administrative board of the Council of Deans for the Association of American Medical Colleges (AAMC)**

Lawrence Chin, MD, dean of Upstate's Alan and Marlene Norton College of Medicine, has been named to the administrative board of the Council of Deans for the Association of American Medical Colleges (AAMC). The Council of Deans (COD) is the only organization of its kind, convening deans of AAMC member medical schools in the U.S. and Canada to address issues affecting academic medicine and develop strategies to achieve excellence in medical education, research, and patient care. The 14-member administrative board oversees and manages the affairs of the council. Chin will serve on the board through 2024. The AAMC represents 172 accredited U.S. and Canadian medical schools.

- **Upstate Distinguished Professor Stephen V. Faraone elected to Norwegian Academy of Science and Letters**

Stephen V. Faraone, PhD, Distinguished Professor at Upstate Medical University, has been elected as a foreign member of the Norwegian Academy of Science and Letters. Founded in

1857, The Norwegian Academy of Science and Letters is a non-governmental, nationwide, and interdisciplinary body which embraces all fields of learning. The main purpose of the academy is the advancement of science and scholarship in Norway. It provides a national forum of communication within and between the various learned disciplines, and it represents Norwegian science vis-à-vis foreign academies and international organizations. International honors have been bestowed on Faraone before. In 2019, he was elected president of the World Federation of ADHD. The federation, based in Zurich, Switzerland, is an international professional association of clinicians, scientists, and other healthcare professionals who are interested in ADHD and all psychiatric syndromes in which ADHD may be a feature. Dr. Faraone's research on attention deficit hyperactivity disorder has brought greater clarity to the heritable nature of the disorder, and he has received numerous national and international awards, honoring his lifetime of influential research in brain sciences and genetics. Honors for Dr. Faraone and his work at numerous. He is the recipient of the Paul Hoch Award from the American Psychopathological Association, which honors a distinguished and currently active investigator who has produced significant, generative research, and the Ming Tsuang Lifetime Achievement Award from the International Society of Psychiatric Genetics for his significant and sustained contributions to the advancement of the field of psychiatric genetics. He is also a member of the Children and Adults with Attention Deficit/Hyperactivity Disorder Hall of Fame in recognition of outstanding achievement in medicine and education research on attention disorders. He has received the SUNY Upstate President's Award for Excellence and Leadership in Research and the Chancellor's Award for Excellence in Scholarship and Creative Activities from the State University of New York. Last year, Dr. Faraone was named a "world expert," for being one of the world's top scholars writing about mental disorders. He received the designation from ExpertScape, which places him in the top 0.1 percentage of scholars writing about mental disorders in the last decade. Dr. Faraone is Distinguished Professor of Psychiatry and Professor of Neuroscience and Physiology and vice chair for research in Upstate's Department of Psychiatry and Behavioral Sciences. He also holds appointments as senior scientific advisor to the Research Program Pediatric Psychopharmacology at Massachusetts General Hospital and as a lecturer at Harvard Medical School.

- **Upstate nurse to receive National Kidney Foundation honor**

Cheyenne Fasce, a registered nurse who has worked in acute and chronic adult and pediatric dialysis and has helped to develop and grow Upstate's Outpatient Pediatric Dialysis, will be honored with a top nursing award from National Kidney Foundation (NKF). Fasce has been named as the recipient of the Foundation's Council for Nephrology Nurses and Technicians' Carol Mattix Award. The annual award honors an individual who has made significant contributions to the care of dialysis patients.

Fasce will receive the award during the NKF's spring clinical meetings in April 2022. Fasce works closely with Child Life Specialists as well as other departments at Upstate to obtain grants and funding for materials, games, and activities to keep her patients entertained and distracted during long treatments and training appointments; as well as securement devices for catheters to promote safety and positive body image, free of charge to the patient. She is currently pursuing her master of science degree in nursing. Fasce's goals after finishing her degree are to continue as an APRN in Pediatric Nephrology/Adult Nephrology with an aim to increase access to home dialysis access and resources for rural and underserved/financially limited patients.

- **Upstate Professor Auerbach receives International CURE Epilepsy award**

David Auerbach, PhD, Assistant Professor of Pharmacology, has been honored with a two-year CURE Epilepsy award, which seeks to push the envelope and accelerate promising research

leading to disease-modifying breakthroughs for people living with epilepsy. People with epilepsy are at a high risk of sudden death unexpected death (e.g., SUDEP). Current SUDEP risk factors are not linked to the proposed biological causes for SUDEP. There is a higher prevalence of cardiac electrical abnormalities in people with epilepsy, and arrhythmias or irregular heart rhythms are reported to precede cases of SUDEP. Dr. Auerbach's team will use analytical tools that are well accepted in the cardiac field, but new to the epilepsy and SUDEP field, to identify epilepsy patient populations at risk of cardiac arrhythmias. Additionally, his team will test whether these tools identify people with epilepsy who later died of SUDEP. The team's long-term goal is to develop a comprehensive SUDEP risk assessment tool based on markers for each of the proposed biological causes of SUDEP, including cardiac arrhythmias. CURE Epilepsy has funded more than 270 cutting-edge research projects in 17 countries around the world.

- **Three from Upstate earn top honors from Onondaga County Medical Society for work on COVID-19 and community service**

Three from Upstate Medical University, a physician-scientist who served as lead investigator of COVID-19 vaccine clinical trials, and a physician who has made a commitment to bringing healthcare to the homeless, and a student who has dedicated her academic career to community service, have been honored by the Onondaga County Medical Society with its most significant awards. The Onondaga County Medical Society presented the awards at its annual meeting Nov. 16, 2021.

- **David Lehmann, MD, PharmD, SUNY Distinguished Service Professor, received the Distinguished Service Award.**

Dr. Lehmann and Mia Ruiz-Salvador created Housecalls for the Homeless in 2018. This street medicine program provides medical, psychiatric, and addiction care services for men and women experiencing homelessness in Syracuse and Onondaga County. Street medicine aims to create relationships with individuals on the streets and sleeping at shelters to help them live healthier lives. The ability for vulnerable populations to access medical care through street medicine a healthier lifestyle for homeless individuals by diagnosing and treating acute and chronic diseases, women's health, mental health, and disease prevention.

- **Stephen J. Thomas, MD, received the Onondaga County Medical Society's Adeline Fagan MD Physician Service to the Community Award.**

At Upstate, Dr. Thomas is the interim chair of microbiology and immunology and director of the Institute for Global and Translational Science. Thomas is one the nation's leading and most authoritative voices regarding the COVID-19 pandemic. Dr. Thomas has been offering his perspective of the pandemic in both local and national media, updating the public on vaccines, masking, treatments and clinical trials since the pandemic was declared a global outbreak in March 2020. A crowning achievement for Dr. Thomas that reflects his leadership in the international scientific and medical communities was his selection in November 2020 as the coordinating principal investigator for the world-wide Pfizer/BioNTech COVID-19 vaccine trial. Thanks to Dr. Thomas and the Global Health team, Central New Yorkers had an opportunity to participate in making history as Central New York became one of the study's global phase 3 vaccine trial locations. Over the past five years, Dr. Thomas and his team have significantly expanded the number of clinical trials Upstate offers aimed at addressing significant and relevant health problems from COVID to sepsis to opioid addiction.

- **Elana Sitnik, a second-year medical student, received the Jerry Hoffman Advocacy Award.**
Sitnik was honored in part for her work on Upstate's mobile vaccine clinic for which Sitnik served as mobile vaccine clinic coordinator. The mobile vaccine clinics offered COVID-19 vaccines to the Syracuse community members, who might otherwise have trouble accessing the shot. The team of medical students, mentored Upstate physician Sunny Aslam, MD, associate professor of psychiatry and behavioral sciences, approached homeless people, visited shelters and went door-to-door in some of the city's poorest and most vulnerable neighborhoods. From May until mid-August, the mobile vaccine clinic staff spent every Tuesday canvassing the community for willing recipients. During that time, they administered the vaccine to 164 people. The majority received the one-dose Johnson & Johnson vaccine. The team also visited shut-ins and elderly community members in suburban and rural parts of the county and answered questions about the vaccine as part of an outreach initiative at the downtown farmer's market.
- **Five from UPD honored for bravery, heroism and commitment to public safety**
Five members of the Upstate Medical University Police Department have been honored by SUNY for their bravery, heroism and professional commitment to public safety.
 - While on duty, University Police Officer Dylan Lyons was alerted to a rash of gunfire at nearby Dablon Court. Upon his investigation, he found one victim with a wound to his left leg and abdomen. Lyons immediately rendered first aid and waited with the victim for EMS to arrive. Lyons then escorted the group to Upstate's emergency room. EMS said the officer's quick action helped save the victim's life.
 - Officer Brian Patterson and Lt. John Stefanko received SUNY honors for their securing of Upstate's Emergency Department due to multiple shooting victims arriving for treatment from an incident in the city. While standing in front of the entry doors to the Emergency Department, Patterson, a combat war veteran, felt and heard what he knew was potential gunfire. Without hesitation the two officers selflessly put themselves in harm's way to protect the public, aiding a gunshot victim and others outside the Emergency Department to safety.
 - Lt. Michael Jorgensen and Officer David Woodward also were recognized by SUNY for their police work. Jorgensen and Woodward encountered an individual acting suspiciously on Almond Street. In their discussion with the individual, they found he had a loaded gun hanging around his neck. Upon further investigation, they found a BB gun taped to his body and narcotics and needless in his backpack. They were able to get to the Emergency Department for evaluation and create a peaceful resolution to this incident.
- **Upstate professor awarded grant to expand work on addressing bias in health care education**
Upstate physician Amy Caruso Brown has been awarded a grant to expand her work on addressing biases in healthcare education to advance health equity. The \$25,000 President's Grant from the Josiah Macy Jr. Foundation will allow Caruso Brown to promote her Upstate Bias Checklist and further the work of the Bias Checklist Collaborative she created by funding the development of a website that will support users of the checklist. The checklist is designed to promote self-reflection, educator development and quality improvement in education, while preventing the harm that comes when biased content reaches learners—harm that not only impacts the learners but also impacts their future patients. Dr. Caruso Brown was hired by Upstate in 2014 to develop social justice and advocacy programming for Upstate medical students. She directs Patients to Populations, a required course for first-year medical students, that addresses health equity issues. When colleagues and students began coming to her with

questions about biases they were seeing, she was tasked with creating a handout for faculty to address the issue. Knowing the issue was far too complex for a one-page hand out, she developed the checklist. Rather than make a list of bullet points for faculty to remember, she made an interactive list of questions they can ask themselves to assess their own materials. The categories addressed by the checklist are: race and ethnicity; sex and gender; sexuality, sexual behavior and sexual orientation; disability; mental health and substance abuse; weight; immigration status, nationality, language and culture; poverty and socioeconomic status; age; religion and faith tradition; carceral status; rural residence; and interprofessional communication. All of these indicators are associated with marginalization and inequity in healthcare, access to care and health outcomes. Now use of the checklist required for professors in the MD program in the College of Medicine and it is used on an optional basis in the other Upstate colleges. The checklist was also designed to take the onus off students to recognize and call attention to these biases. Dr. Caruso Brown, along with Lauren Germain, of director of Evaluation, Assessment, and Research at Upstate, will work to build a website that will include workshops and lectures, before and after examples of curricular change and other tools to provide users with more help to implement changes. Currently, more than 25 schools utilize her checklist. Dr. Caruso Brown's goal is to improve medical and health profession education and to graduate students who are better equipped to address health equity than their predecessors.

- **First-ever Upstate Council awards honor 15 for exemplary service**

First-ever Upstate Council awards honor 15 for exemplary service

Fifteen members of the Upstate Medical University community will be honored with the inaugural Award for Exemplary Service presented by the Upstate Medical University Council. The awards will be presented at the conclusion of the President's State of the University Address Wednesday, April 20, 2022 in Medical Alumni Auditorium. As the highest local honor bestowed on campus, the Exemplary Service Award recognizes those who have provided extraordinary service to or on behalf of Upstate Medical University "beyond the usual boundaries of excellence, in support of the Upstate mission to improve health within the region it serves and beyond, through education, patient care and biomedical research". This year marks the first time the awards are being presented by the Council, the statutory oversight and advisory board to the Upstate President and senior leadership. Receiving the Award for Exemplary Service are:

- David Amberg, PhD, Vice President for Research
- Tammy Austin-Ketch, PhD, FNP,FAANP, Dean of the College of Nursing
- Katherine Beissner, DPT, PhD, Dean of the College of Health Professions
- Lynn Cleary, MD, Vice President for Academic Affairs
- Larry Chin, MD, FAANS, FACS, Dean of the Norton College of Medicine and Robert B. and Molly G. King Endowed Professor of Neurosurgery
- Robert Corona, DO, MBA, FACP, FACSCP, Chief Executive Officer, Upstate University Hospital
- Rajesh Dave, MD, MBA, Dean of the Binghamton Clinical Campus
- Mantosh Dewan, MD, President, Upstate Medical University
- Nancy Page, MS, RN, NEA-BC, Chief Nursing Officer, Emeritus
- Eileen Pezzi, MPA, Vice President for Development
- Mark Schmitt, PhD, Dean of the College of Graduate Studies, VP for Research
- Eric Smith, CPA, MBA, Senior Vice President for Finance and Administration
- Amy Tucker, MD, MS Chief Medical Officer, Associate Dean of the College of Medicine
- Stuart Wright, CPA, MBA, Chief Financial Officer, University Hospital
- Mark Zeman, Chief Information Officer

- **Dr. Sharon Brangman honored with the 2022 Edward Henderson Award for her research and clinical achievements by the American Geriatrics Society**

The American Geriatrics Society (AGS) celebrates Sharon A. Brangman, MD, FACP, AGSF as recipient of the 2022 Edward Henderson Award for her research and clinical achievements in geriatrics, particularly for her work in Alzheimer's disease, hospice and palliative medicine, depression, and end of life care. Dr. Brangman delivered the Society's Henderson State-of-the-Art Lecture at the AGS 2022 Annual Scientific Meeting (#AGS22) in Orlando this week. Dr. Brangman is a SUNY Distinguished Service Professor and chair of the Department of Geriatrics at Upstate Medical University, and serves as director of the Upstate Center of Excellence for Alzheimer's Disease. Like the geriatrician for whom her award is named, Dr. Brangman has selflessly shared her talent and energy with the American Geriatrics Society (AGS). She was a member of the Board of Directors of the American Geriatrics Society for ten years and completed terms as Society President and Board Chair. She is also a past President of the Association of Directors of Geriatrics Academic Programs (ADGAP). Dr. Brangman currently serves as a member of the board of the Health in Aging Foundation.

- **Two from Upstate win SUNY Chancellor's Award for Student Excellence**

Two Upstate Medical University students have been honored with the SUNY Chancellor's Award for Student Excellence. Ingrid Martinez, a graduate of the Doctor of Nursing Practice Program in the College of Nursing, and Matthew Norris, a graduate of the Doctor of Physical Therapy Program in the College of Health Professions, received the awards in a Saratoga Springs ceremony last month.

The Chancellor's Award for Student Excellence acknowledges students who have received recognition for distinguished achievements. It is the highest honor bestowed upon a student by the University. This year, 180 students from 61 campuses received this award.

- Ingrid Martinez, DNP, FNP-C is a full-time family nurse practitioner at Upstate University Hospital Inclusive Health Services Clinic, specializing in the prevention and treatment of HIV. She is an alumnus of the Upstate Medical University College of Nursing's Doctor of Nursing Practice and master's degree in Family Nurse Practitioner as of 2014. As a native of Honduras, Martinez has a distinct understanding of healthcare disparities experienced by marginalized populations and brings this important cultural sensitivity to her current work with her patients.
- Matthew Norris, DPT, graduated in May with a Doctor of Physical Therapy degree. While enrolled at Upstate, Norris served as class president and had been highly involved in areas of leadership, community service, and campus involvement. He was awarded the Kevin Reistrom Memorial Scholarship and the Sue Miller Scholarship Award during his tenure at Upstate. He graduated from SUNY Cortland in 2019 with a BS in exercise science.

- **Upstate's Department of Public Health and Preventive Medicine and its chair, Christopher Morley, honored for work on COVID.**

Upstate Medical University's Department of Public Health and Preventive Medicine and its chair, Christopher P. Morley, PhD, have been honored with an award for Outstanding Leadership in Public Health in New York State. The award comes from the four different organizations: The New York State Public Health Association, New York State Association of County Health Officials, the New York State Association for Rural Health and the New York State Conference on Environmental Health Directors. Upstate's Department of Public Health and Preventive Medicine was honored for its quick work in monitoring the COVID-19 pandemic, interpreting, mapping and communicating the pandemic data in 'real time' to county, state and SUNY officials, to health care providers and to the public. The department also built statistical models

that predict timelines for the spread, growth and decline of the virus and developed and disseminated COVID policies and procedures for institutional use. This work continues today. The department's work has helped to elevate the public's understanding and appreciation of the role Public Health has played in disease prevention and population health. The award was accepted by Dr. Morley, on behalf of the department. The award was presented during the 2022 Public Health Partnership Conference, held in Niagara Falls in April 2022.

- **Upstate researcher honored as a 2022 Minority and Minority-Serving Institution Faculty Scholar**

Upstate Medical University's Mariano Viapiano, PhD, has been named a 2022 Minority and Minority-Serving Institution Faculty Scholar by the American Association for Cancer Research. The AACR honors a selection of researchers every year with the goal of increasing "the number of underrepresented minorities participating as competitive NCI/ NIH-funded cancer researchers" with a grant from the Center to Reduce Cancer Health Disparities. Dr. Viapiano is one of just over two dozen researchers from across the country to receive this honor in 2022. An Empire Scholar, Dr. Viapiano is an associate professor of neuroscience and physiology. He received his PhD from the University of Argentina, Buenos Aires. Dr. Viapiano currently serves as the Director of the Brain Tumor Laboratory and Biorepository at Upstate Medical University. He joined Upstate in 2016.

COVID RESPONSE

RESOURCES

- **Upstate's Project ECHO serves up special covid sessions to more than 2000 area health care providers**

In total more than 2,000 participants joined a session some aspect of COVID since 2020. One of the earliest COVID-focused sessions occurred in mid- March shortly after many of the businesses and other institutions shut down. It featured Stephen Thomas, MD, Upstate's division chief of infectious disease and was attended by at about 100 medical professionals from across 10 New York state counties and beyond. They included staff from multiple county health departments, general physicians and pediatricians, emergency room personnel, social workers and others including an EMT and a flight nurse. Thomas provided a 40-minute presentation about COVID-19 followed by questions from attendees. Other sessions followed rapidly and covered COVID-related issues such as COVID epidemiology, transmissibility and protocols, adult and pediatric mental health (fear and anxiety, quarantine, burnout) the disease impact on older adults, cleaning, rapid implementation of telemedicine, returning to school and vaccine and vaccinations. Clinicians of all kinds participated in the Project ECHO sessions from more than two dozen counties across the state. The largest gathering of participants was 267 for a session on COVID vaccines.

- **Upstate New York Hospitals Are Overwhelmed as COVID Cases Surge**

A surge in COVID cases and a shortage of health care workers is filling hospitals and nursing homes past their capacity in upstate New York, creating a growing crisis in the health care system even before the Omicron variant is known to have spread through the area, according to hospital executives from Buffalo to Albany. COVID hospitalizations in the region have more than tripled since August when the Delta wave began to sweep through the state, Gov. Kathy Hochul said this week. At the same time, tens of thousands of health care workers have left their health care jobs, for reasons ranging from pandemic burnout to a refusal to get vaccinated in spite of the state's strict mandate for health care workers, and some systems

have posted hundreds of available job openings. In Syracuse, Upstate University Hospital recently closed nearly 20 percent of its beds and stopped doing elective surgeries because it has about 400 vacant nursing positions, a spokesman said. More than 100 staff members left rather than comply with the vaccine mandate. “The most pressing issue for Upstate at this time is staffing,” said Darryl Geddes, the spokesman. The hospital has raised overtime pay and is “pursuing aggressive advertising for new staff” in an effort to find more people to work. *NY Times Article:* <https://www.nytimes.com/2021/12/03/nyregion/covid-cases-surge-upstate-ny.html>

- **Katko urges Biden to look at Upstate’s success with pandemic research, testing to guide nation’s response to omicron**

Amid a nationwide surge in omicron cases, U.S. Rep. John Katko urged President Biden to use the research and technology developed by academic medical centers in Central New York, like SUNY Upstate Medical University, to guide the nation’s public health response and improve testing. In a letter to President Biden, Katko highlighted Upstate’s efforts to develop cutting-edge COVID-19 antibody testing and urged Biden to integrate this technology into the administration’s national testing strategy. Innovative antibody tests developed by Upstate use saliva, instead of a blood draw, to detect trace amounts of COVID-19 antibodies following vaccination or an infection. With Upstate’s technology, public health officials can produce better informed protocols and guidance regarding vaccination timing, isolation instructions, and other public health measures. The saliva-based diagnostic COVID test was developed by researchers at Upstate and Quadrant Biosciences, a Start Up NY company based in the CNY Biotech Accelerator granted emergency use authorization by the U.S. Food and Drug Administration in September 2020.

- **INTERVIEW: Dr. Chris Morley answers questions about COVID-19**

Jeff Kulikowsky and Christie Casciano question Upstate Medical University’s Chair of Public Health and Preventive Medicine Dr. Chris Morley about COVID-19 in Central New York. <https://www.localsyr.com/health/coronavirus/interview-dr-chris-morley-answers-questions-about-covid-19/>

TESTING

- **Upstate lab tapped to assist state in identifying COVID-19 variants**

Gov. Andrew M. Cuomo announced the selection of five laboratories—including one at Upstate Medical University—to bolster state efforts in identifying COVID-19 variants. The New York State Department of Health is partnering with these laboratories to expand the genetic sequencing of specimens positive for SARS-CoV-2, the virus that causes COVID-19. The selected laboratories have sequencing expertise and experience, as well as capacity and access to SARS-CoV-2 positive specimens from large multi-county areas in New York State, outside of New York City.

- **NewsChannel 9 goes inside lab at Upstate, where every coronavirus positive is tested for omicron variant**

NewsChannel 9 was given rare access into the testing labs at Upstate Medical University where researchers are hunting for local detections of the Omicron variant of coronavirus. This year alone, nearly two million people have gotten their coronavirus test results from the labs at Upstate. Positive cases aren’t just reported back to the patient, they go on to be studied for virus mutations. Upstate is one of four labs in Upstate New York approved by the State Department of Health to look for virus variants, including Omicron. Professor Frank Middleton explains that as each human as a unique DNA, so does the virus their body replicates. The find

differences between viruses, the genetic package of each sample is taken apart chemically. Computers compare the results to less-evolved strains and visually highlight the mutant components. Over time, regular mutations become the next named variant. All tests through Upstate were still showing Delta as the only variant, but Omicron is expected in the lab any day. Professor Middleton puts local results into an international database, where labs in other countries have already registered the genetic blueprint of Omicron. Looking at the research, Middleton admits his concern that the “S Gene,” the spike protein of the virus, targeted by the vaccine’s antibodies, shows 30 more mutations. “An alarming difference,” says Middleton. Professor Middleton and his team, in partnership with Quadrant Biosciences, developed a saliva-based test approved by the FDA last summer.

NewsChannel 9: <https://www.localsyr.com/health/coronavirus/newschannel-9-goes-inside-lab-at-upstate-where-every-coronavirus-positive-is-tested-for-omicron-variant/>

VACCINE

- **Led by students, Upstate mobile vaccine clinic offered COVID-19 doses to area’s most vulnerable**

Over the course of several rainy, muggy summer months in Syracuse, a team from Upstate Medical University trekked across the city offering COVID-19 vaccines to people who might otherwise have trouble accessing the shot. The team of medical students, mentored by self-described Upstate “street doctor” Sunny Aslam, MD, approached homeless people, visited shelters and went door-to-door in some of the city’s poorest and most vulnerable neighborhoods. From May 2021 until mid-August 2021, the mobile vaccine clinic staff of Aslam and four students – armed with a cooler of vaccines and little else – spent every Tuesday canvassing the community for willing recipients. During that time, they administered the vaccine to 164 people. The majority received the one-dose Johnson & Johnson vaccine, Sitnik said, with some opting for the Pfizer vaccine at the end of the summer.

INNOVATION

- **Upstate start-up wins top award from SUNY Startup Summer School to fund small business proposal in emerging technologies fields**

Upstate Medical University urology faculty are among the winners of the SUNY Startup Summer School, winning a \$10,000 grant to aid their start up business Taurus Diagnostics pursue a new imaging technology to aid in the detection of prostate cancer. Gennady Bratslavsky, MD, the Phillip Capozzi Professor of Urology and chair of the Department of Urology, and Thomas Sanford, MD, assistant professor of urology, will receive a \$10,000 S4 Technology Accelerator Fund Catalyst Investment grant. Additionally, they will receive support from SUNY Research Foundation venture advisers on matters related to business development.

- **Novel epigenetic saliva test for autism developed in part at Upstate receives patent**

A novel epigenetic saliva test for autism developed through groundbreaking research by Upstate Medical University, Quadrant Biosciences and Penn State College of Medicine has been awarded a patent. The United States Patent and Trademark Office (USPTO) has issued the patent to Quadrant Biosciences its partners, the SUNY Research Foundation and Penn State Research Foundation. The patent covers the scientific foundation for the development of a saliva-based, multiomic autism diagnostic aid, that can differentiate individuals with autism from individuals with typical development or developmental delays by measuring microRNA (miRNA) and microbiome levels in saliva. Quadrant Biosciences, a Life Science company based in the Central New York Biotech Accelerator in Syracuse, leverages next-generation sequencing and AI to develop RNA-based molecular diagnostics for a range of medical conditions.

- **Upstate introduces GammaTile to deliver radiation after brain tumor surgery**

Patients with some types of cancerous brain tumors require radiation treatment after they have the tumor removed, to destroy any remaining cancer cells. Now there's the option to have the tumor removed and replaced by postage stamp-sized radiation sources, in the same operation. It's called GammaTile Therapy. "We place the radiation sources inside the brain at the site of the surgery, so the radiation begins right at the moment after surgery," explains Harish Babu, MD, PhD, co-director of the brain tumor program at Upstate and director of minimally invasive neurosurgery. He says the bioabsorbable collagen tiles, which look similar to flattened Lego pieces, hold their shape as their radiation is delivered. About 50% of the therapeutic dose is delivered in the first 10 days after surgery, with about 95% delivered in six weeks. Over time, the body naturally absorbs the collagen tile. GammaTile's radiation source, cesium-131, has a dramatically shorter half-life than iodine-125, which has been used in earlier types of brachytherapy, Dr. Babu says. Brachytherapy is a general term for the implantation of radioactive sources adjacent to tissues that may contain cancer cells. The shorter half-life means patients receive the same amount of radiation in a shorter period of time. Traditional, or external beam, radiation after brain surgery requires almost daily medical visits over a period of several weeks. Side effects can include headaches, hair loss, nausea and vomiting, fatigue, skin and scalp discoloration, and memory or cognitive problems. GammaTile produces fewer side effects and is designed to allow patients to get on with their lives during treatment.

- **New kid on the block at Upstate: The transport robot**

Soon a small fleet of robots will ferry everything from medicine to meals around Upstate University Hospital. The hospital has invested in a fleet of 14 TUG robots manufactured by Aethon, whose products specialize in material delivery in hospitals, manufacturing and hotels. A TUG is an autonomous mobile hauling robot designed specifically for hospitals. More than a year ago, Upstate determined that given the state of the technology and the challenges that COVID presented to its supply chain, along with staff shortages on the horizon, that it would invest in robotic transport technology. Robots have long been used at Upstate to perform minimally invasive surgeries, including brain surgery, and now will serve another role by helping alleviate staff shortages brought on by COVID. The use of the TUGS will free up critical time for staff to focus on patient care. Hospitals across the country are turning to robots to help with staff and nursing shortages and the medical robot market is projected to grow into a \$43 billion industry in the next 5 years. Currently, 37 VA Hospitals use the same TUGS made by Aethon, as does Stanford Hospital and University of California San Francisco Medical Center. On average, TUGS are traveling 370 miles a week around hospitals, delivering thousands of pharmacy orders, linens and meals, among other things. Beginning with the transport of critical drugs from the pharmacy within the hospital to the cancer center, Upstate plans to use the new fleet of transport robots to also transport medical supplies, drugs, linen, meals, and, potentially, even clinical equipment. Though the TUG robot, which stands about four feet high and two feet wide, looks like nothing more than a giant storage cart, it's the technology behind it that makes it impressive. The robot uses lidar, laser, sonar, and infrared sensors to navigate. It can get on and off the elevator. When it arrives at its destination it can let itself in. And each of its seven drawers can only be unlocked at the destination it was programmed for and by the person the delivery is for. To get the robots up and running, the whole hospital had to be mapped so that the robots can navigate, and all the elevators needed an upgrade so that the robot server and the elevator server could communicate. The fleet of 14 TUGS are all about 4 feet tall and can travel at a rate of 30 inches per second. Three robots, also called TUG Drawers, have a set of secure drawers and can carry up to 500 pounds. The drawers can be used for anything, such as medicine, samples, or food. Roberts said one will be stationed at the main reception area to bring patient belongings up to nursing stations. The rest, TUG T3s, feature a flat bed with a

lifting mechanism and can carry up to 1,000 pounds. These can drop off and pick up carts of food trays or linens or refuse. The units will be used first in the hospital pharmacy, the 6I Nursing station, Food and Nutrition and Distribution. Eventually, Roberts said, the TUGS can deliver food and coffee to units as well. Another significant need will be supporting the Nappi Wellness Building, which is scheduled to open in Spring 2023. Upstate plans to meet the needs of this new facility, at least in part, by using the transport robot to move material in from the hospital.

- **Upstate launches Hospital at Home program**

Upstate University Hospital has launched a new initiative that will allow patients to receive medical care in the comfort of their own home. Upstate Hospital at Home allows for some patients who need inpatient care but are well enough to be home to safely finish their treatment in their own home. These patients receive two in-person nurse visits and one in-person or telemedicine visit from a provider daily, delivery of all necessary equipment, supplies and prescriptions, and 24/7 remote monitoring. So far, seven patients have been admitted to the program. Programs like this have been in development across the country over the past several years and require approval from the Center for Medicare and Medicaid (CMS) to start them. In the past, the application process was lengthy and the requirements for nursing care were high: a nurse had to be at the home 24/7. But the COVID-19 pandemic changed everything. Hospitals struggled to meet the demands of the patient surge and the federal government declared a Public Health Emergency. In conjunction, CMS issued a waiver approval for its Hospital Without Walls initiative. The waiver streamlined the process to apply and reduced the nursing requirement to two daily visits. Only a specific subset of patients and conditions are eligible for the Upstate program. It is only available to Medicare FFS (Fee for Service) patients who live in Onondaga County, and eligible conditions include pneumonia, COPD, cellulitis, cystitis and congestive heart failure. The home must be deemed safe and accessible. Patients can enter the program from an in-patient stay once they are deemed appropriate to continue their care at home and plans are underway to admit to home directly from the emergency department. Upstate is partnering with Nascentia to provide the nursing care. Upstate may broaden patient eligibility criteria after assessing the program's early results. Research shows that patients who can stay at home have better clinical outcomes. They have fewer hospital readmissions, emergency room visits or need for nursing home care. But the CMS waiver that allows Upstate and more than 200 other hospitals in the US to conduct these programs will only exist as long as the COVID-19 Public Health Emergency does. Originally declared in March 2020, the PHE has been extended nine times, and was recently renewed through July 16. To help secure the future of these programs, bipartisan legislation for the Inpatient Services Modernization Act has been introduced in both the house and the senate. This bill would extend the current waiver flexibilities for two years from the end of the PHE. Neither bill has been voted on yet.

COLLABORATIONS

- **State Office of Mental Health and Upstate Medical University announce expansion of services for children with developmental disabilities and mental health issues**

The NYS Office of Mental Health (OMH) and SUNY Upstate Medical University have announced an expansion of services for children who have a developmental disability as well as behavioral health needs. Under the expansion, Upstate will develop a specialized inpatient unit for children who are dually-diagnosed and will expand the current child and adolescent inpatient bed capacity at OMH's Hutchings Psychiatric Center. The new specialized dual diagnosis unit will serve children and youth from 12 to 17 years old who are at risk of being separated from

their families. Upstate's new program will allow for the total capacity to increase from 23 to 29 beds.

- **Upstate welcomed 23 SUNY students to campus for first Pre-Med Opportunity Program**

Nearly two dozen State University of New York students spent four days on the Upstate Medical University campus immersed in a series of clinical experiences and hearing from experts on how to apply to and succeed in medical school. The program was created to solve for persistent income disparities among the nation's medical schools, with about two-thirds of students coming from families within the top two quintiles of family income. (\$78,870 to \$225,251.) The residential summer program includes clinical exposure through Upstate's simulation labs, as well as workshops, skill development and academic programming. Students will also receive remote instruction to prepare them for medical school prerequisite courses—organic chemistry and microbiology—that they will take in the fall 2021 semester. During his meeting with the 23 students in the inaugural Pre-Medical Opportunity Program at Upstate Medical University, SUNY Chancellor Jim Malatras announced that SUNY will double its investment in the special program to help more Educational Opportunity Program students get into SUNY's medical universities. The announcement was made July 20, 2021 at Upstate where Malatras and Upstate President Mantosh Dewan, MD, met with the first class of 23 pre-medical scholars from nine SUNY campuses who are a part of the Upstate Summer Residency. By increasing the investment, the program will be available next spring 2022 for up to 50 students pursuing medical careers. Malatras launched the new initiative in February 2021 to extend SUNY's long-standing and successful EOP, which ensures New York State's disadvantaged students from underserved communities gain access and succeed in undergraduate programs.

- **Upstate and Syracuse Community Health Center (SCHC) develop urban family medicine residency program**

The Syracuse Community Health Center (SCHC) announced it will partner with Upstate Medical University to develop an Urban Family Medicine Residency Program. The new residency program aims to increase the number of primary care providers trained to support the needs of urban patients and to attract diverse residents, especially those in traditionally underrepresented groups. The SCHC, a state-licensed Diagnostic and Treatment Center serving more than 30,000 patients in the Greater Syracuse area, received a grant from the federal Health Resources and Services Administration (HRSA) that is making the collaborative program possible. The program will be developed in conjunction with Upstate's Department of Family Medicine and the first class of residents will begin the program in July 2024. The development of the program will be achieved by obtaining ACGME accreditation, creating a comprehensive curriculum focused on urban medicine and matriculating four residents in July of 2024.

- **Upstate training National Guard to be certified as EMTs**

Upstate Medical University is training more than 30 members of the National Guard with the skills needed to be a certified emergency medical technician. They join more than 400 other guard members across the state going through similar training. It's all an attempt by the state, in partnership with the guard and medical centers like Upstate, to increase the number of certified EMTs who can—if needed—be deployed at health care facilities across the state. It's an especially timely move as staff shortages affect nursing homes and hospitals. And in a move to get these individuals certified quickly, Upstate has condensed its usual six-month program to four weeks. New York Gov. Hochul announced the EMT training partnership between the state Health Department and the New York National Guard late last year.

- Upstate Medical University and the Medical Faculty of Ludwig Maximilians-University in Munich, Germany, ink MOU to collaborate on educational programs and student exchange**
 Upstate Medical University and the Medical Faculty of Ludwig Maximilians-University (LUM) in Munich, Germany, have signed a Memorandum of Understanding, which extends through 2026, to foster international contact and a student exchange. The goals of the MOU are to promote global education and health and to further develop academic and cultural exchange for students, researchers, and staff of the two institutions. With the main focus lying on clinical, basic, and translational research, the internationalization of higher education and professional development are also part of the agreement. This university cooperation was initiated by Thomas G. Schulze, MD, professor of psychiatry and behavioral sciences at Upstate, and director of the Institute of Psychiatric Phenomics and Genomics at LMU's University Hospital. The MOU was signed by the two deans of the medical schools. In addition to the medical school, LMU's University Hospital is also part of the agreement, allowing for the establishment of joint programs or workshops. Initially, the exchange will be virtual, but in the future it will also take the form of face-to-face meetings. The latter, however, are dependent on the lifting of restrictions on travel by Europeans to the U.S. due to the COVID-19 pandemic. At the top of the list is the exchange of medical students in their last year of training, the "Practical Year (PJ)" in the German system and the "fourth year medical rotation" in the U.S. system. The virtual exchange will take place with the assistance of the SUNY COIL (Collaborative Online International Learning) program that assists with collaborations that connect students and faculty in different countries for collaborative projects and classroom discussions.
- Upstate updates Life Sciences exhibit at the MOST**
 With support from Upstate Medical University, the Milton J. Rubenstein Museum of Science and Technology (MOST) has refurbished and updated its permanent Life Sciences exhibit that bears the Upstate name. To reflect advancements in life science and medicine and changes in science curriculum standards and current events, the renovation to the Life Sciences exhibit refocuses the exhibit on the science of human biology, genetics, and the field of medicine. Through the introduction of new interactive pieces as well as updates to classic favorites, the goal of this refurbished exhibit is to engage all visitors in accessible learning about human anatomical and biological characteristics, genetic traits, and the health and healing of human bodies through medical practice. Major components of the renovation include: Updated text panels and graphics/images to reflect the current state of the field and new emphases; reorganized exhibit space/lighting/fixtures for improved accessibility and flow; new physical and digital/online interactives, including activity kiosks, digital games/experience spaces, and more; addition of "Current Issues in Medicine" and "Careers in Life Sciences & Medicine" features; and updates/maintenance of exhibit favorites (Human Heart, Brain).
- Upstate joins leading health care organizations in making commitment to physician well-being**
 Upstate Medical University is taking another step forward in its commitment to physician well-being by signing onto a new charter created by the Collaborative for Health and Renewal in Medicine (CHARM). Upstate joins more than 60 healthcare organizations and associations across the country that have committed to adopt the CHARM Charter principles, which are:
 - Patient care: Effective patient care promotes and requires physician well-being.
 - Well-being of all: Physician well-being is related with the well-being of all members of the health care team.
 - High-value care: Physician well-being is a quality marker.
 - Shared responsibility: Physician well-being requires collaboration between individual physicians and their organizations.

Some other organizations that have also adopted CHARM include the Mayo Clinic, Harvard Medical Faculty Physicians at Beth Israel Deaconess Medical Center, Roswell Park Comprehensive Cancer Center and the University of Rochester Medical Center.

- **Upstate Medical, Syracuse University partner for MD/MBA program**

SUNY Upstate Medical University and Syracuse University's Martin J. Whitman School of Management are launching a joint MD/MBA, which allows students to earn two valuable degrees in a coordinated five-year program. Applicants for this new joint program at Upstate Medical University/Syracuse University apply through the American Medical Common Application System (AMCAS) portal for the MD/MBA program application. For the joint program, following acceptance to Upstate's Alan and Marlene Norton College of Medicine, applicants will then be reviewed by the MBA program at Syracuse University's Whitman School of Management. Accepted students will spend the first year—the fall, spring and summer sessions—studying for their MBA. Medical training will begin the fall of the second year, with the summer between the first and second year of medical school, completing an MBA practicum designed to provide additional work experience at the intersection of business and health care. The MD/MBA has already accepted students into the pilot program for Fall 2022, with three students expected to join this joint program.

- **Clark Burn Center partners with Meals on Wheels to deliver fire prevention tips, safety items to older adults**

The Clark Burn Center at Upstate University Hospital is delivering burn prevention kits to older adults along with dinner from Meals on Wheels. Each year more than 486,00 individuals seek medical treatment for burn injuries across the country. Due to the increasing number of older adults with burn injuries, Upstate's prevention program will aim to reach individuals in 41 counties. The bags include fire/burn/scald prevention information-magnets with prevention reminders, potholders, water temperature testers and brochures. Meals on Wheels provides nutritious meals, a quick safety check and much-needed human connection to homebound seniors. Last week, it also distributed to 360 bags to recipients in Onondaga County. This week the Burn Unit worked with the Madison County Office on Aging and Meals on wheels to deliver 250 packets in Madison County. After that they will hand out about 500 more in Oneida County Cortland County and through the North Area Meals on Wheels. The project cost \$7,000 with Friends in Deed from the Upstate Foundation covering most of the cost, and the Clark Burn fund covering the rest. The funds and donations are vital to sustaining the prevention programs.

- **Upstate contingent seeks connections with Kingston, Ontario**

Experts from Upstate Medical University, government officials and economic development experts met in Kingston, Ont., recently to exchange ideas and information in an effort to stimulate growth and foster collaboration between sister cities. The first annual Kingston-Syracuse Pathway Cross Border Conference, held June 7, focused on the health innovation and life sciences sectors. The meeting was an outgrowth of years of medical collaborations and support between the two cities. Doctors and researchers from Upstate and Queens College in Kingston shared their knowledge on vaccines, global health, infectious diseases, health care systems, and the changes COVID-19 has put on the health care system. The cities of Kingston and Syracuse, about two hours apart, have many similarities including their size (both slightly under 150,000 population), economic development efforts and medical universities tied to their teaching hospitals. In addition to the medical universities, conference participants included Upstate's Biotech Accelerator and CenterState CEO from Central New York as well as the Kingston Health Science Center and Kingston Economic Development. Syracuse Mayor Ben Walsh and Kingston Mayor Bryan Paterson also met for a fireside chat. The cities of Kingston

and Syracuse are naturally connected—in proximity and through shared economic advantages and interests. Kingston, Syracuse, and their surrounding regions are both home to world-class academic and research institutions; innovation ecosystems in key market sectors, including health innovation, biotech, and advanced manufacturing; and enjoy close access to major economic hubs including Toronto, Montreal, and New York City. The Kingston-Syracuse Pathway results from long-standing collaboration between business, government, and academic leaders from both sides of the border. By facilitating cross-border collaboration on cutting-edge research and development; unlocking new global markets for entrepreneurs, startups, and SMEs; and improving connectivity between governments, the Kingston-Syracuse Pathway will maximize the competitive advantages of Eastern Ontario and Northern and Central New York State. The overall vision of the Kingston-Syracuse Pathway is to enhance connectivity and position our regions as collaborative leading global innovation ecosystems. Other presentations and speakers from Upstate included:

- Stephen Thomas, MD, director of the Institute for Global Health and Translational Science (IGHTS) and the principal investigator for the global clinical trial of the Pfizer COVID vaccine, who spoke on life with COVID-19 and global health; and
- Saravanan Thangamani, PhD, director of the SUNY Center for Vector-Borne Diseases and the Vector Biocontainment Laboratories at Upstate, who presented his Lyme disease research.

CLINICAL TRIALS & RESEARCH

- **National diabetes study featured investigators and patients from Upstate's Joslin Diabetes Center**

A national clinical study that included patients and investigators from Upstate's Joslin Diabetes Center has found that people with type 2 diabetes diagnosed during youth have a high risk of developing complications at early ages and have a greater chance of multiple complications within 15 years after diagnosis. The findings are the culmination of a first-of-its-kind trial funded largely by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), part of the National Institutes of Health. Within 15 years of a type 2 diabetes diagnosis, 60% of participants had at least one diabetes-related complication, and nearly a third of participants had two or more complications, according to results of the Treatment Options for Type 2 Diabetes in Adolescents and Youth (TODAY) follow-up study, called TODAY2. The findings were published in the *New England Journal of Medicine*. TODAY2 involved 500 original participants from the TODAY study, which began in 2004. TODAY was the first major comparative effectiveness trial for the treatment of type 2 diabetes in youth. The study compared three treatments for managing blood glucose: metformin alone, metformin plus rosiglitazone, and metformin plus an intensive lifestyle intervention. Metformin is the only oral medication approved by the U.S. Food and Drug Administration to treat type 2 diabetes in youth.

- **Upstate researcher awarded grant to study form of dementia**

Wei-Dong Yao, PhD, a professor at Upstate Medical University, has been awarded \$682,211 in federal funds to support research on a form of dementia. The announcement was made today by U.S. Rep John Katko. SUNY Upstate Medical University has a dedicated team of researchers working to advance treatments and cures for neurological disorders. The new funds SUNY Upstate received are available through the National Institute of Neurological Disorders and Stroke, a division of the National Institute of Health (NIH), and will allow SUNY Upstate to continue important research on neurological disorders. The new funding for SUNY Upstate will specifically support research by Wei-Dong Yao, Professor of Psychiatry and Behavioral Sciences and, Neuroscience and Physiology. Dr. Yao is researching frontotemporal dementia (FTD), the leading dementia most prevalent before age 65 and the most common form of dementia after

Alzheimer's disease. Dr. Yao's study represents the first attempt to investigate the role of a new disease gene in FTD pathogenesis. The proposed studies are fundamentally important and highly significant because they have the potential to uncover novel pathogenic mechanisms and treatment strategies for FTD and related neurodegenerative diseases.

- **Upstate researcher lands grant from NIMH for new method to study the brain and psychiatric disease**

An Upstate Medical University researcher has been awarded a grant from the National Institute of Mental Health for a novel approach to studying how biological changes in the brain contribute to psychiatric disease. Jonathan Hess, PhD., has spent three years developing BrainGENIE, which stands for Brain Gene Expression and Network Imputation Engine. Dr. Hess applied for the NIMH grant last fall and learned he was awarded the \$445,500 NIMH R-series funding this week. The method uses existing data on gene markers from brain tissue samples from deceased donors and compares it to new data on those same gene markers in blood samples from patients living with psychiatric disorders. Those illnesses could include schizophrenia, bipolar disorder and major depressive disorder as well as autism spectrum disorders and Alzheimer's disease. BrainGENIE is new and could be influential in the field of psychiatric genomics because studying living brain tissue in human subjects is notoriously difficult.

- **Upstate doctors offer report on hallucination in stroke patient**

Not all patients with vivid hallucinations need psychiatric care. Patients who have had certain kinds of strokes who describe hallucinations may have what's known as peduncular hallucinosis, according to members of Upstate University Hospital's stroke team. A French neurologist first described this form of hallucination in 1922. It's a rare form of visual hallucination that comprises colorful, non-threatening visions of people and animals. Researchers have tied most cases of peduncular hallucinosis to lesions in the thalamus, a small structure in the middle area of the brain. Members of Upstate's stroke team took care of a 75-year-old man who was transferred to Upstate University Hospital with symptoms of a suspected stroke. The left side of his face was drooping, and he had weakness in his upper and lower extremities. An imaging scan of his brain revealed damage in the right thalamus. While recovering in the hospital, the man described his wife sleeping on his hospital bed, his favorite book on the table where he left it at home, his dogs and a particular TV show on his room television while it was off. "He was easily redirectable, and the hallucinations resolved over two days without pharmacological intervention," they wrote in a case report for the BMJ, a journal published by the British Medical Association. Authors included Hesham Masoud, MD, an assistant professor in neurology, neurosurgery and radiology, and three resident physicians: Mohammad Shahab, MBBS, Rashid Ahmed, MD, and Navreet Kaur, MD. Their paper suggests physicians should inquire about hallucinations in patients who have stroke damage in areas of their midbrain. Also, "new onset hallucinations in a patient with no prior psychiatric history presenting with concerns for stroke should prompt physicians to strongly consider peduncular hallucinosis."

- **Discoveries by Upstate researchers could impact breast cancer treatments**

A team of researchers and doctors at Upstate Medical University, led by Leszek Kotula, MD/PhD, have published ground-breaking findings in breast cancer research. The translational study, titled "ABI1 based expression signature predicts breast cancer metastasis and survival" was published in the prestigious journal Molecular Oncology in December 2021. Breast cancer is the second most common cancer in women after skin cancer, and metastatic breast cancer is often incurable. While mammograms can detect tumors, there is currently no way to precisely

predict metastatic potential of a tumor, or the likelihood it will spread to another part of the body such as the bones, lungs, brain and liver. That's where this research can have an impact. Dr. Kotula's research centers on the role of seven genes in the development of metastatic breast cancer, and the ABI1 is the key gene in that expression signature. It one of the proteins of the WAVE complex, which is a multi-protein unit responsible for making cells invasive. Dr. Kotula, an associate professor of urology, biochemistry and molecular biology at Upstate, discovered the ABI1 gene in 1998. In 2001, he published the first study on the gene's role in prostate cancer. Subsequent work from his lab delineated mechanisms of prostate tumor progression associated with ABI1. In prostate cancer, the presence of the gene inhibits cancer growth, while low levels or the absence of it leads to prostate cancer. It's the opposite in breast cancer. High levels of ABI1, or an overexpression, corresponds with poor survival and shorter relapse time in patients with primary breast cancer tumors. In the breast cancer study, the team translated observations from a mouse model to genetic information of human breast cancer patients. Dr. Kotula's student Angelina Regua (who is now a postdoctoral fellow at the Wake Forest Cancer Center) confirmed the observation from breast cancer patients in the novel mouse model with breast cancer metastasis. Regua disrupted, or knocked out, the ABI1 gene in mice with breast cancer. When both copies of the gene were knocked out, there was almost no metastasis. When one copy of the gene was knocked out, tumor progression slowed. The mouse model established that ABI1 is the critical gene responsible for metastasis to the lungs. Then they analyzed human gene information using data provided by The Cancer Genome Atlas (or TCGA) and predicted there are seven genes that predict metastatic potential. Upstate's Vladimir Kuznetsov, PhD, a professor of urology, biochemistry and molecular biology, and his group of students in collaboration with Dr. Kotula's lab used advanced bioinformatic and novel biostatistics approaches to develop a 7-gene prognostic ABI1-based gene signature for breast cancer metastasis. The work was a collaborative effort between the Kotula and Kuznetsov Laboratories, Abirami Sivapiragasam, MD, from Upstate's Department of Medicine, and Isabelle Bichindaritz, MD from SUNY Oswego. The study, which began in 2015 and has cost about \$400,000 thus far, was mainly funded by the Carol M. Baldwin Breast Cancer Research Fund of CNY, the Upstate Cancer Center Pilot Grant (Connolly Fund), and the National Cancer Institute. The Upstate Foundation Dawn K. (Smith) Steber Endowment for Cancer Research also contributed to the study. Dr. Kotula says the paper generated potential for multiple future studies, including a Phase I Clinical trial, where researchers will do gene sequencing on tumors of breast cancer patients, follow them for metastasized tumors, looking for the role of the ABI1. The prognostic signature will help advance better drug targets and diagnosis, bringing science one step closer to a cure.

- **Upstate bioethicist explores questions surrounding medical treatment of survivors of traumatic brain injuries in new book**

In her new book, Upstate Medical University bioethicist L. Syd Johnson, Ph.D., explores ethical questions that surround the medical treatment of survivors of traumatic brain injuries. Disorders of consciousness include comas, vegetative states and states of diminished consciousness. Dr. Johnson is concerned that the so-called vegetative state is misdiagnosed about 40 percent of the time and that this widespread uncertainty should be appreciated as medical professionals and family members consider treatment options. Her new book, "The Ethics of Uncertainty: Entangled Ethical and Epistemic Risks in Disorders of Consciousness," (Oxford University Press, 2022), is a culmination and collection of her concerns that have developed in her years of work as a philosopher, bioethicist and neuroethicist.

- **Upstate expert Henry Roane, PhD part of major study on defining standard of care for people with autism**

An Upstate professor of pediatrics has been awarded a grant that could help define the standard of care across the country—and possibly the world—for behavior interventions for people with autism. Henry Roane, PhD, division chief of the Center for Development, Behavior and Genetics at Upstate and the executive director for the Golisano Center for Special Needs, is among a team of four experts that received a grant from Autism Speaks to work toward improving care for autistic people experiencing severe behavioral challenges. Currently, no large-scale studies have evaluated a clinical framework to assess and treat behavioral issues in autistic children and adults. Dr. Roane will work with Wayne Fisher, PhD, BCBA-D, from Robert Wood Johnson Medical School; Matthew Siegal, MD, Maine Behavioral Health Care; and Eric Butter, PhD, Nationwide Children’s Hospital. Dr. Roane said the award is a planning grant designed to synthesize current information in two ways. The first is to put together the current state of practices around challenging behavior, from what’s happening in schools to pediatrician offices to specialized clinics. The second goal is to analyze the literature, including outcome data, to determine the best course of treatment for these problem behaviors. Roane said there are many case studies involving individuals, but no one has looked at applying the best practices of scientific inquiry to determine what is most effective. Once those two aims are met, Roane said, the research group will have a solid basis for a follow up study with a large-scale randomized clinical trial, which has never been done with this population. Once this pathway to care is established, it could have wide-spread and meaningful applications. Roane said he and one of the other researchers have been working together with Autism Speaks for the past 18 months on these same issues and they put together a two-day virtual conference that brought together many different stakeholders. When Autism Speaks put out a call for research proposals, they jumped on it and won one of two grants totaling \$600,000 that the organization just awarded.

- **Upstate seeks volunteers for new clinical trial testing seasonal flu vaccine**

Upstate Medical University is seeking volunteers for a clinical trial involving a new flu vaccine similar to the Pfizer BioNTech COVID-19 vaccine, which could be more effective in combatting seasonal flu. Upstate is working with Pfizer to study a new mRNA-based flu vaccine, which is the same technology that was used in the Pfizer BioNTech COVID-19 vaccine. Upstate is seeking trial participants between the ages of 65 and 85, who are healthy and have no prior history of heart disease and have not yet received a flu shot yet this year.

- **Two Upstate neurologists among authors of new guideline for stroke prevention in some patients**

Two Upstate Medical University doctors are among a team of doctors nationwide that are authors of a new practice advisory for the American Academy of Neurology. Upstate professors of neurology Antonio Culebras, MD, and Julius Latorre, MD, MPH, are among 19 professionals who researched and wrote the new guideline, which was recently published in the AAN Journal (<https://n.neurology.org/content/98/12/486>) The guideline states that the use of medications to prevent blood clots, reduce blood pressure and cholesterol, along with safe levels of exercise, are as good as and may be more beneficial at preventing a second stroke in people with symptomatic intracranial atherosclerosis than placing a stent in the blood vessel or doing bypass surgery.

- **Upstate report says occupational disease in New York is an ‘epidemic in plain sight’**

A new report from Upstate reveals an “epidemic hidden in plain sight” of death and injury in the workplace in New York State. According to the report, Occupational Disease in New York

State: An Update, an estimated 7,016 deaths annually in New York are due to occupational disease. Additionally, 13 percent of diseases prevalent in the adult working population are attributable to occupational disease, with millions of workers in New York State exposed to hazardous conditions on the job. All this at a cost to the state of \$4 billion, most of which falls to the ill patient and taxpayers.

Occupational disease is any condition or disorder that is caused by work. It includes things like exposure to chemicals, ergonomic hazards, stress, and COVID-19. Michael Lax, MD, and Jeanette Zoeckler, PhD, who run Upstate's Occupational Health Clinic Center and authored the study, call this an epidemic in plain sight, and even worse, one that is completely preventable. Drs. Lax and Zoeckler cite employer attitudes and practices, declining unionization, discrimination, and government policies, along with the changing nature of the workplace, as all contributing to the problem. The study also includes a category called emergent occupational hazards, which include psychological stressors, substance abuse, obesity and COVID-19. Despite the high numbers of injured and ill workers, funding and clinical resources to treat these patients remains scarce. There are only 30 board-certified occupational medicine specialists accepting patients with workers' compensation insurance in the whole state. Based on current numbers, that means one specialist for every 66,666 patients. Upstate's clinic is a part of the New York State Occupational Health Clinic Network, which is publicly funded and administered by the New York State Department of Health. Dr. Zoeckler said the network of clinics has not received an increase in funding in 12 years. Their study is the first statewide look at the issue in 30 years. The findings elucidate the problems of low-wage workers and how workplace illness and death disproportionately impacts minority and female workers. Since the recession of 2007, there has been a proliferation of low paying jobs and a decrease in well-paying ones. In New York, 40 percent of all jobs are low wage jobs. In Syracuse, 38 to 42 percent people are making what is considered low wages, wages impossible to live on. The study also includes work-related stress, substance abuse, mental health issues and obesity, which aren't normally thought of in terms of occupational hazards but the report's authors assert that these need to be considered under the umbrella of work-related disease. Currently the Upstate clinic has been focusing on the mental health of teachers, health care workers and essential workers, who have had significant stressors placed on them throughout the pandemic. Dr. Zoeckler said mental health issues still carry a stigma in society but should be treated no differently than for example, an employee who needs time off for cancer treatments. Even though the state legislature funded the Occupational Health Clinic Network in 1988, resources to treat occupational disease remain scarce. Drs. Zoeckler and Lax hope their report ignites conversation about what constitutes workplace illness, and spurs action to increase funding and strengthen the infrastructure around occupational health to increase prevention and treatment options.

- **Upstate scientists collaborate on hydrocephalus research**

Two scientists at Upstate Medical University are combining efforts on hydrocephalus research. Neurosurgeon Satish Krishnamurthy, MD, and nationally renowned researcher Frank Middleton, PhD, want to determine why some people develop hydrocephalus following an intraventricular hemorrhage, or brain bleed, while others do not. Helping to fund their work is REaCH Organization, a support group that has been raising money for Dr. Krishnamurthy's Hydrocephalus Research Fund at the Upstate Foundation for many years. Hydrocephalus is a condition that results in abnormal accumulation of fluid in the brain following an intraventricular hemorrhage, which can damage the brain and cause cognitive and physical handicap. Yet only between 20 and 50 percent of patients who experience an intraventricular hemorrhage will develop hydrocephalus, and Dr. Krishnamurthy is exploring why and who may be more at risk. "The amount of blood that the brain has to clear makes a difference, as well as

cells in the brain that help remove the blood products like vacuum cleaners,” Dr. Krishnamurthy explained. “We’re exploring why some people have cells that function as efficiently as Dyson vacuum cleaners, and others have cells that operate like a generic brand vacuum cleaner.” The answer, Dr. Krishnamurthy said, lies in genes. This is where Dr. Middleton, a professor of neuroscience and physiology, comes in, and his lifelong study of genes. The collaboration with Dr. Middleton, which is in its early stages, is part of Dr. Krishnamurthy’s mission to find a cure for hydrocephalus that does not involve surgery, which is currently the only available solution to treat the condition. His goal is to develop a medication that will replace shunts as the primary means of treating hydrocephalus. This project will help in identifying people who are at risk for developing hydrocephalus. REaCH Organization was established in 2010 by Central New York families of people with hydrocephalus; the name is an acronym for Research, Education and Cure Hydrocephalus. Tom Clough is president.

- **Upstate physician awarded \$50,000 grant for sarcoidosis research**

Upstate Medical University physician Auyon Ghosh, MD, MPH, has been awarded a \$50,000 American Thoracic Society (ATS)/Foundation for Sarcoidosis Research Grant. The grant comes from the Foundation for Sarcoidosis Research (FSR), the leading international nonprofit organization dedicated to finding a cure and improving care for sarcoidosis patients. Sarcoidosis is an inflammatory disease that affects multiple organs in the body, but mostly the lungs and lymph glands. In people with sarcoidosis, abnormal masses or nodules (called granulomas) consisting of inflamed tissues form in certain organs of the body. These granulomas may alter the normal structure and possibly the function of the affected organ(s). FSR seeks partnership opportunities with organizations that share their passion for improving the lives of those impacted by sarcoidosis. FSR is proud to partner with the ATS to provide early career researchers the financial support to gather pilot data and pursue innovative research projects. This grant makes it possible for researchers to pursue early-stage research essential in establishing career independence and in obtaining larger grant funding in the future.

- **Upstate study examines factors behind increased risk of COVID-19 of older adults with dementia**

Upstate Medical University researchers have published a study examining factors behind the increased risk of COVID-19 among older adults with dementia. The study found that adults over 65 with dementia have a significantly higher risk for COVID-19 but not because they aren’t following protective measures such as masking and social distancing. The relationship between dementia and COVID-19 was primarily explained by functional impairment, income, and residential setting. The study, “Relationship between dementia, COVID-19 risk, and adherence to COVID-19 mitigation behaviors among older adults in the United States,” done by Roger Wong, PhD, MPH, MSW, and graduate student Margaret Anne Lovier, was published this month in the International Journal of Geriatric Psychiatry. The study analyzed 2019 and 2020 data from the National Health and Aging Trends Study, a national prospective cohort study of United States older adults aged 65 and older, looking for COVID-19 diagnoses and adherence to COVID-19 mitigation behaviors such as handwashing, mask-wearing, and social distancing. Wong, assistant professor of Public Health and Preventive Medicine, said the study looked at three research questions: Whether or not dementia increases risk for COVID-19, whether dementia is associated with adherence to protective measures and whether those protective behaviors mediate that risk. He added that there has not been a study yet that looked at whether older adults were following protective measures using a national sample. Dr. Wong and Lovier found that while dementia significantly increased the risk of COVID-19 by 129%, people in this group did adhere to mask-wearing and social distancing. Mask-wearing and

social distancing are often required and enforced in most public and private settings, whereas handwashing is a typically unmonitored behavior.

Key findings include:

- Older adults with dementia had lower household income contributing to increased COVID-19 risk. The researchers are not sure why, but it could be due to a variety of factors such as COVID exposure at work, unable to afford masks or hand sanitizers, or overcrowded households.
- Older adults with dementia may have an increased COVID-19 risk due to more functional limitations in activities of daily living (ADLs) such as difficulty in walking independently and feeding oneself. Due to this limited functional independence, this could limit their ability to engage in behaviors (e.g. social distance) to protect themselves from COVID-19.
- Most older adults with dementia were in residential care or nursing home, which increased COVID-19 risk due to a variety of reasons such as congregate settings and limited staff PPE during the early stages of the pandemic.

The study used data from the initial two waves of COVID-19, when access to testing was limited and before the availability of the vaccines. The study was funded and made possible by the College of Medicine's Summer Research Fellowship, led by Dimitra Bourboulia, PhD.

- **Upstate doses first patient in national clinical trial of regenerative human cell therapy for treatment of epilepsy**

Clinicians at Upstate Medical University have dosed the first patient in a national clinical trial—the first-ever regenerative human cell therapy, NRTX-1001, delivered as a single dose for the treatment of epilepsy. The clinical trial is sponsored by Neurona Therapeutics, a clinical-stage biotherapeutics company advancing regenerative neural cell therapies for the treatment of neurological disorders. The principal investigator of the study at Upstate is Robert Beach, MD, PhD, chief of epilepsy and professor of neurology, who likes what the future might hold for the trial. Upstate's Neurological Institute is one of several sites in the United States taking part in Neurona's clinical trial. The Upstate Neurological Institute brings together the departments of Neurosurgery and Neurology, creating multidisciplinary teams of experts to provide the best patient care and treatment options. The institute offer the region's only Level-4 epilepsy program, the recently expanded NeuroICU, newly created neuro-oncology program at the Cancer Center. The institute totals 58 faculty, including both clinical and research members. The neurology residency program has expanded to 9 positions per year, and neurosurgery residency program alternating one resident and two residents every other year, as well as the opportunities for fellowships. The institute's clinical research section conducts numerous clinical trials, such as the Neurona Therapeutics trial highlighted above. The institute belongs to the NIH StrokeNet and NeuroNEXT networks and has several NIH research grants as well as a DOD grant.

About Neurona's Clinical Trial of NRTX-1001 for Mesial Temporal Lobe Epilepsy (MTLE)
Neurona's multicenter, Phase 1/2 clinical trial is designed to evaluate the safety and signs of efficacy of a single administration of NRTX-1001 for drug-resistant MTLE. The first stage of the trial is an open-label dose-escalation study in up to 10 people with MTLE. Patients treated with a single infusion of NRTX-1001 cells will be monitored for safety, tolerability, neural cell viability, and effects on their epilepsy disease symptoms. Patient recruitment is underway at Upstate and other epilepsy centers across the United States. For more information, please visit www.clinicaltrials.gov (NCT05135091).

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