

*College of Graduate Studies
Office of the Dean*

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College of Graduate Studies Annual Report

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Transforming students from consumers of knowledge into producers of knowledge

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Executive Summary

The College of Graduate Studies continues on solid ground. Over the last year we have met our enrollment numbers and continue to increase the number of application that we receive. Currently, we have 136 students including 111 PhD students, 17 MD/PhD students and 8 MS students. These students are evenly split, 49% female and 51% male. We have also had a couple of staff changes and some restructuring of those staff. The most significant change is the hiring of a dedicated person to both run the Office of Postdoctoral Affairs and our newly created Office of Graduate Career Development. This has lead to an enhanced career development program that has been very well received by the students.

Last May we graduated 15 PhD students and 4 MS students. This year we could have as many as 43 graduates including 3 MD/PhD students. We also have 3 new faculty members in the College of Graduate Studies, all of which have been actively recruiting students into their labs.

Our last external review was by Middle States Commission on Higher Education. They accepted the institution's Periodic Review Report (PRR) and reaffirmed accreditation in 2014. They are expected to revisit campus in 2018-19 academic year. We have already started to assemble materials for the next accreditation.

As you will see by the report below, our overall activities are strongly aligned with all the themes of our strategic plan including: Integration, Community Impact, Innovation and Execution. Indeed we look forward to Tier 2 planning to fully align our plan with that of the University. Our last strategic plan was "Engaging Excellence" under President Smith and we are long due for a new one.

Our key initiatives for the coming year mainly revolve around admissions. We would like to continue to diversify our class and improve the quality of students we matriculate. Students are a key driver of research on campus and are critical for the continued productivity of the research mission. A recent calculation for ROI for graduate students indicated an 11:1 return. In other words, for every dollar we put in, we get 11 back in grant support. In addition, they build our prestige through publications, national and international meeting presentations and community service. Our average student graduates with 4.3 publications with 2.1 of them being first author. The size of the graduate school is strictly limited by the grant dollars on campus so I work closely with the VP of Research to help drive research productivity and grants received.

In the following report, I have indicated each of our areas of responsibility and the current status of that area, and various activities we participate in to provide and enhance the educational experience of our students.

Submitted by,
Mark E. Schmitt

OVERVIEW OF AREA AND RESPONSIBILITIES:

COGS: As Dean of the College of Graduate Studies (COGS) my main responsibility includes oversight and direction (from recruiting and admissions to graduation) of the six graduate programs in Biomedical Sciences on campus. These include MS and PhD programs in Biochemistry and Molecular Biology, Cell and Developmental Biology, Physiology, Pharmacology, Neuroscience and Microbiology and Immunology. This constitutes approximately 136 students and 95 graduate faculty members. Nearly all of the graduate faculty members have primary appointments in the College of Medicine. Currently we have funding to support 19 PhD students in their first year of graduate school. After the first year either the sponsoring lab or the home department supports the stipends.

Admissions: Admissions in the CGS is managed in close coordination with the University admissions office. This has worked extremely well. A recent consulting report on University Admissions recommended this model for the other three Colleges. The importance of strong admissions cannot be overstated. We need a large, diverse and strong pool of applicants and we need to meet our recruiting goal with quality students. We manage a broad range of recruiting mechanisms. Many of these include outreach into the community to attract diverse students. Over the last year we have developed or continued the following:

- Personalized one-on-one pre-advisements for students both in person and through webinar for students out of town or on the other side of the world.
- Seminar presentations on applying to graduate school by visits to local university or through Zoom webinar/meeting technology.
- Development of an automated electronic letter of recommendation system for admissions. This has streamlined receipt of LORs, been adapted by other programs at the institutions and has eliminate the need for dedicated personnel in the admissions office to open letters, scan them, and load them into the system.
- COGS partnership with *CNY Tech Sector*- Business-led component of Partners for Education and Business Career Spark Sector Strategy – focusing on high school students educational and workforce development.
- *Stem Career Day* – April 19th, 2016 – 200 area high school students welcomed to Upstate IHP and Biotech Accelerator for six workshop series in research and alternative health careers.
- *MedQuest* - Series of programming across the four colleges helping immerse local NY high school students in the health and alternative STEM careers.
- *Try on a Whitecoat* - Series of programming across the four colleges helping immerse underrepresented minority undergraduates in the health and alternative STEM careers
- *Visiting Lecture Series* - Within 300 mile radius of SUNY Upstate, our professors provide a lecture which includes a brief presentation on the biomedical graduate degree programs and student research offerings at SUNY Upstate. The undergraduate institutions visited by our faculty in 2016 were: SUNY Buffalo State University, Colgate University, Houghton College, Marist College, SUNY Alfred State College, SUNY Cobleskill, SUNY Geneseo, SUNY Oneonta, St Lawrence University
- Opened *COGS Referral Program* for outside faculty and alumni to refer applicants to our program.
- Use of *McNair's Scholar* list to recruit underrepresented minority students into the graduate school.
- Implemented new *COGS & MD/PhD Tour Guide program*.
- Continued to develop our *Global Ambassadors Program* to recruit high quality international students.

- Use of Articulation Agreements. The college has continued to use these to funnel the best students from other institutions into both our graduate program and our SURF program.
- Developed a recruiting video for the COGS. We are currently in final stages of editing.
<https://www.youtube.com/watch?v=Q4KpoYuQbC0>
- Hosted three recruiting days on campus for our accepted students.
- Participated in the *Graduate Open House* on Campus.
- Updated and revised our COGS recruiting brochure, including mailing them to nearly 5000 potential recruits.
- Offering an application waiver to students that show an interest in the College.
- Using the GRE search to identify potential recruits and to identify extremely high quality recruits for intensive recruiting.
- Science Fair Award at the Central New York Science and Engineering Fair (March 20, 2016). The award is given to an outstanding high school student whose project has demonstrated creativity, innovation and scientific excellence in the biological sciences. The recipient receives a \$500 award and a plaque. This year's recipient was Madison Sacco, a senior at Cato Meridian Senior High School. In addition to faculty from the College of Graduate Studies judging the Dean's Award, several students in the College of Graduate Studies participated in judging at the Fair.

Admissions Results:

We received 192 applications to the PhD program and 115 to the MD/PhD program (highest ever). We matriculated 19 students this last August into the PhD program and four into the MD/PhD program, matching our goal. For PhD students the average GRE score was 313 combined with an average undergraduate GPA of 3.37. For MD/PhD students the average MCAT score was 515 and the average GPA was 3.66.

MD/PhD Program: Currently there are 30 MD/PhD students with 13 of them in the MD years. We have made a number of changes with the MD/PhD program, most notably a new co-director, Dr. Lesek Kotula. Dr. Kotula and Dr. Perl have provided a strong and effective leadership to this program.

The MD/PhD students have also been extremely successful in achieving outside funding in the form of fellowships. These include three F30 grants from the National Institutes of Health and one from the Autism Speaks Foundation. All of these fellowships include tuition, providing income to the University.

One of the exceptional things we have done over the last couple of years is to have a Distinguished MD/PhD Alumni Day. This last year (April 13, 2016) we brought in Daryll Dykes a very impressive URM graduate of our program.

Over the last several months we have worked with Eric Smith to develop a robust budget plan for the MD/PhD program. This should provide a known budget to stick with and provide flexibility in planning over the coming years.

Postdoctoral Affairs: Another responsibility is the Office of Postdoctoral Affairs. We have a small population of postdocs, 24. The FLSA ruling and then the subsequent change in ruling has produced its share of consternation. One of the issues with postdocs, is the high cost. The FLSA has only made it worse. There is a SUNY wide group, of which I am a member, that has been working to develop a new

employee category that would have a reduced fringe rate to make postdocs more affordable and to provide a easier transition when postdocs do get awarded fellowships. This task force is planning to provide the RF Trustees a recommendation for their April meeting. It is hoped that the RF would be able to implement those recommendations by the end of 2017.

Other things we do for postdocs include a breakfast during National Postdoctoral Affairs Week; travel awards for meetings, career development workshops and a research day specifically for them and residents called "Beyond the Doctorate Day".

SURF Program: My office is responsible for the Summer Undergraduate Research Fellowship (SURF) Program. This program brings in 8-12 undergraduate students over the summer to work hands on doing biomedical research. This last year we had 193 applications for that program and hosted 10 students (average GPA above 3.9, three of which were URMs) in various labs across the campus. The SURF Program continues to be an excellent source of great students for Upstate's graduate programs. Two students entering our doctoral program in Fall 2016 were former SURF students. Dr. Michael Cosgrove, Associate Professor of Biochemistry & Molecular Biology, is the Director of the SURF Program.

Research Events: My office is responsible for a number of research events. These include the Charles R Ross Memorial Student Research Day, the Biomedical Sciences Retreat, the Beyond the Doctorate Day, and the Distinguished Alumni Day.

The *Student Research Day* was held April 8, 2016. This annual event highlights the research conducted by students in all four colleges at SUNY Upstate Medical University: Graduate Studies, Health Professions, Medicine and Nursing. The Student Research Day has become a tradition at Upstate and has developed into a well-respected event that includes a keynote address, student talks and a poster session with a reception. This year's keynote address was given by Michael Caligiuri, MD, Professor of Internal Medicine, Division of Hematology, and head of their Cancer Hospital at Ohio State University.
<http://upstate.edu/grad/students/celebration.php>

The *Biomedical Sciences Retreat* was held September 15, 2016 at the Welch Allyn Lodge in Skaneateles. The College of Graduate Studies sponsored this day-long program of research talks and posters. This provides Upstate's faculty, postdocs and students the great opportunity to catch up on the research happening all around campus and to meet the new faculty and incoming class of graduate students for whom we have a white coat ceremony.

Keynote speakers this year were:

- John D. Scott, FRS, Professor of Cell Signaling and Cancer Biology, Department of Pharmacology, University of Washington, School of Medicine
- Charles D. Gilbert, MD, PhD, Arthur and Janet Ross Professor, Laboratory of Neurobiology, Rockefeller University

Alumni Speaker:

- Margaret M.P. Pearce, PhD, Assistant Professor, Department of Biological Sciences, University of the Sciences, Philadelphia, Pennsylvania

The *Beyond the Doctorate Day* was held on March 11, 2016. Our Office of Postdoctoral Affairs and the Office of Graduate Medical Education hosted the 5th annual Beyond the Doctorate Research Day to celebrate the research accomplishments of our postdocs, residents and fellows. The day included a keynote address, oral platform presentations and a poster session presented by postdocs, residents and fellows. The keynote address, "From Red Cells to Prostate Cancer," was presented by Leszek Kotula, MD, PhD, Co-Director, MD/PhD Program, Department of Urology, SUNY Upstate Medical University.

We hosted two *Distinguished Alumni Days*. One for MD/PhD students described above, and a second for PhD students held on February 24, 2016. In an on-going effort to provide career development to students in the College of Graduate Studies, the Distinguished Alumni Lecture was created. This day-long event includes a one-hour seminar to help mentor our graduate students in the area of career development, lunch with graduate students, and several meetings with our faculty. This year's Distinguished Alumni Lecture, titled "Opportunities Taken and Made" was given by Mary Fowkes, MD, PhD, Director of Neuropathology, and Autopsy Service, Associate Professor, Department of Pathology, Icahn School of Medicine at Mount Sinai. Dr. Fowkes earned her PhD from the Anatomy & Cell Biology Program in 1999. Her dissertation sponsor was Dr. David Mitchell.

Mentoring and Career Development:

With our new Office of Career Development, we have managed to provide a robust schedule of development workshops for our students. These include a required program specifically for our incoming students called "Six Steps to Success" and a more extensive program for all of our students. Typically we will have 25-50% of our students at any given workshop.

The Six Steps to Success discussion series is designed to help incoming students get off to a strong start. The 2016 series topics and discussion leaders were:

- "Introduction to Bioethics" Dr. Robert Olick, Associate Professor of Bioethics and Humanities
- "Selecting a Research Topic and Mentor" Dr. Francesca Pignoni, Associate Professor of Ophthalmology, Biochemistry & Molecular Biology, Neuroscience & Physiology
- "Critical Reading Skills, Critical Study Skills, and Your Rotation" Dr. Gary Chan, Associate Professor, Microbiology & Immunology
- "Overview of Student Affairs and Students Resources" Student Counseling Services and Academic Support Services
- "How to Get the Most Out of Your Advisor and Your Committee" Dr. Stewart Loh, Professor of Biochemistry & Molecular Biology
- "Writing a Research Report" Dr. Jennifer Moffat, Associate Professor of Microbiology & Immunology

The following were the workshop topics and presenters for 2016:

- "Keeping Professional Boundaries on the Web"
Ann Botash, MD, Professor, Pediatrics
- "Research Without a Bench: Pursuing a Career in Patent Law"
Blaine Bettinger, PhD, JD, Patent Attorney, Bond, Schoeneck & King
- "Preparing for a Professional Career"
Randall Ribaldo, PhD, Founder, SciPhD.com
- "Landing Your First Faculty Position"
Meg Stratton, PhD, Assistant Professor, University of Massachusetts, Amherst
- "Writing a Scientific Paper"
Patricia Kane, PhD, Professor and Chair, Biochemistry and Molecular Biology
- "Show Me the Data: Presenting Your Results Visually"
Aileen Kenneson-Adams, PhD, Epidemiologist, Center for Global Health and Translational Science
- "An Introduction to the CNYBAC & Tour of the Facility"
Kathi Durdon, MA, CCRP, Director of Operations, CNY Biotech Accelerator

- "Maintaining an Academic CV & IDP"
Mark Schmitt, PhD, Dean, College of Graduate Studies, Career Development
- "Introduction To Adobe Illustrator & Photoshop For Scientists"
Mark E. Schmitt, PhD, Dean, College of Graduate Studies, SUNY Upstate Medical University
- "Beyond The PhD: Career Opportunities In Pathology"
Antony Shrimpton, PhD, Associate Professor of Pathology, SUNY Upstate Medical University
Constance Stein, PhD, Professor of Pathology, SUNY Upstate Medical University
Kazim Chohan, PhD, Professor of Pathology, SUNY Upstate Medical University
Scott Riddell, PhD, Assistant Professor of Pathology, SUNY Upstate Medical University
- "Negotiating Your Way In Graduate School"
Yaihara Fortis-Santiago, Program Manager, Science Alliance, New York Academy of Sciences
- "Engaging A Diverse Audience: Telling A Scientific Story"
Itai Cohen, Associate Professor of Physics, Cornell University
Linda Glaser, Writer & Publicist for Faculty, Cornell University
- "How To Select A Postdoc Advisor"
Michael Cosgrove, PhD, Associate Professor of Biochemistry and Molecular Biology, SUNY Upstate Medical University
- "International Professionals In Science: Navigating OPT, J1, H1 & More!"
Jennifer Abbott, International Student Advisor, SUNY Upstate Medical University
Patty Brecht, Human Resources, SUNY Upstate Medical University
Mary Jo Dinuzzo and Sue Henderson-Kendrick, Graduate Medical Education, SUNY Upstate Medical University

The College also sponsored workshops for our students, outside of Career Development:

- "QPR/Suicide Training for Graduate Students"
Sipho Mbuqe, Student Counseling Services
- "SAFE: Security Awareness for Everyone"
Paul Waltz, Chief of Police, University Police Department

Peer Mentoring Program

Our Senior Students are matched with incoming students to provide an additional source of mentoring and advice. With assistance from the graduate student government, students were matched on commonality. This is done for PhD, MD/PhD and MS students.

1000 GIRLS, 1000 FUTURES

Several of our female graduate students are mentoring girls from around the globe as part of the "1000 Girls, 1000 Futures" program. The 1000 Girls, 1000 Futures program is sponsored by the Global STEM Alliance, an international initiative of the New York Academy of Sciences (NYAS).

<http://blogs.upstate.edu/withdistinction/2016/04/18/graduate-students-mentor-teens-in-1000-girls-1000-futures/>

LinkedIn

The College of Graduate Studies maintains a LinkedIn Group, "SUNY Upstate Medical University, College of Graduate Studies." This group was created for our students and alumni to keep abreast of our Career Development events and announcements. It is a communication tool for providing job leads & referrals. This is also a way for our students to identify alumni that are in a field of interest and to help make contacts for finding a postdoctoral position.

NYAS Membership

The College is a partner of Science Alliance, enabling our graduate students and postdocs to receive a free membership to the New York Academy of Sciences in support of professional and career development. As an Academy Member, postdocs and students benefit from free or discounted admission to cutting-edge scientific events and webinars, as well as free digital access to Academy publications. They can also participate in workshops and networking events to enhance professional skills and career prospects offered by Science Alliance, the professional development branch of the Academy. Are students often travel to NYC to attend these events and the NYAS comes to us once a year to provide a career development workshop.

Travel Awards:

The College provided numerous travel awards to students presenting their research at scientific meetings. Last year we were able to support more than 30 students.

Student Accomplishments

Upstate Grad Update

In an effort to better communicate what is happening in the College of Graduate Studies in a timely fashion (and to also brag about the achievements of our students), the College created a monthly newsletter, "Upstate Grad Update." This newsletter includes recent publications, grant awards, events in the College, alumni news and meetings that students attend. The newsletter is distributed to administration, faculty, students, postdocs, staff and alumni. Copies of it can be found at <http://upstate.edu/grad/about/upstate-grad-update.php>

Facebook

Our Facebook page also highlights the accomplishments of our research faculty, students and postdocs: <https://www.facebook.com/UpstateGradStudies>

Commencement

The College of Graduate Studies held its own separate and unique Commencement Ceremony on May 22, 2012. The ceremony included the hooding of PhD and MS graduates, conferral of degrees, a student speaker, and distribution of awards. In 2016, 15 PhD students and 4 MS students graduated from the College of Graduate Studies.

Alumni Survey & Exit Survey

In our efforts to better assess the success of our graduate program, two surveys were created. In the Fall, the annual alumni survey is sent to alumni from the current academic year (January, May and August grads), and to alumni who graduate four years and eight years ago. The online exit survey is completed by students upon finalizing the degree requirements. This provides great benchmarking as we move forward and allows us to follow our students as their careers progress.

Afternoon Tea

The College holds "Afternoon Tea" every Wednesday at 3:00 pm. This is a brief break in the day for our students and postdocs to de-stress with fellow classmates. It is also a great way to get a weekly pulse on what is going on in the College of Graduate Studies.

New Courses

GS647 Nanocourse has been approved by the Curriculum Committee and Graduate Council to be taught in the Spring 2017. Nanocourses are short course that will typically address a new or evolving area that is

not covered by the standard graduate curriculum. A complete description can be found at <http://www.upstate.edu/grad/curriculum/nanocourses.php>

Biostatistics. Starting this year our first-year students in the College of Graduate take the MPH course, Principles of Biostatistics, taught by Donald Cibula, Associate Professor of Public Health and Preventive Medicine. This has proven to be an excellent course for our students and allows for great collaboration between colleges and students in different colleges.

Graduate Faculty:

Most of the graduate faculty members are also members of the College of Medicine. We have three new faculty members this year all of which have active research programs. I have attached a list of our current faculty in the appendix.

Administrative Structure of the College of Graduate Studies.

We have rearranged the staff in the College and started a new Office of Career Development. The rearrangements have worked quite well. An updated organizational chart is attached in the appendix.

Graduate Committee Reorganization

In the last year we have reorganized the committee structure in the College of Graduate Studies. The goal was to reduce time wasted and unnecessary meetings. We have gone from six committees down three, and feedback from faculty has been very positive. Our current list and membership of the committees in the college is attached in the appendix.