

Spring /Summer 2023

### **Congratulations to our graduates!**

As you will see in the pages to follow, we have restarted our Graduate Studies Newsletter. This will be the first issue since before COVID-19 took over our lives and changed us all for better or worse. Hence there are numerous topics to discuss, but none of them are as important as May 7th when we had 27 students graduate with their MS, PhD or MD/PhD. This is by far the largest class I have seen in 10 years as dean, and probably one of the largest ever in our 70 year history. Each and every one of these students deserves our congratulations, applause and big hugs. They have all accomplished a task, which at some point they all had doubts they could complete, but can now look back on with a large amount of satisfaction. These students, like all of you that have gone down this path, have developed an incredible amount of resiliency, tenacity, knowledge, wisdom and insight. They are all different people from when they matriculated years earlier. Personally, I look on every single one of them with pride. They are all incredible people accomplishing incredible things for the selfless betterment of society. I look forward to watching them continue to excel in their lives and careers over the next decade and beyond. Please join me to cheer on every one of them.



**Mark Schmitt, PhD, Dean  
College of Graduate Studies**

# College of Graduate Studies Team



Dr. Mark Schmitt  
Dean



Dr. Steven Taffett  
Assistant Dean



Cheryl Small  
Assistant to the Dean



Jennifer Brennan  
Executive Coordinator



John Gillies  
Coordinator of Curriculum,  
Assessment & Analytics



Shaunna Arnold  
Coordinator of  
Career Development & Special Events



Andrea Cifonelli  
Coordinator of Combined  
Programs & Special Initiatives

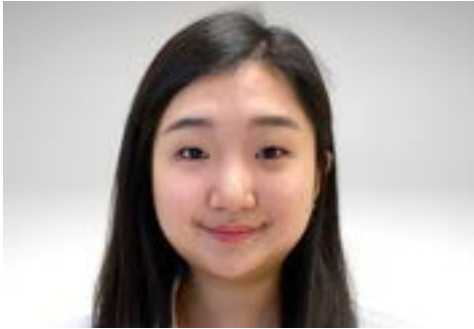


Amit Dhamoon, MD, PhD  
Director of the MD/PhD Program

# PRESENTATIONS



**3 Minute Thesis:** In November, students participated in the 3 Minute Thesis. The 3-Minute Thesis is a research communication competition that challenges students to communicate the significance of their projects without the use of props or industry jargon, in just three minutes. Award winners: From left to right: Emma Retlaff, Brittany Geiler, and Rafael Schulman



**Joy Park** presented a poster at the 2022 American College of Rheumatology Convergence



**Beyond the Doctorate:** The College of Graduate Studies Office of Postdoctoral Affairs and the Office of Graduate Medical Education invited the Upstate Community to celebrate the research accomplishments of SUNY Upstate's postdocs, residents, and fellows by participating in the Beyond the Doctorate Research Day (Postdocs, Residents, and Fellows).

This year's award winners are the best poster presentation: **Arunkumar Venkatesan** and the best oral presentation: **Xiotian Ji**.



**Jessica Hotaling** presented a poster "Using a caloric restriction diet to reduce post-radiotherapy bone fragility in a murine model" at the ORS 49th International Musculoskeletal Biology Workshop on Musculoskeletal Immunology and Mechanotransduction: Biology and Disease from Stem to Senescent Cells. The conference was in the Rocky Mountains in Snowbird, Utah July 23-27 2022.

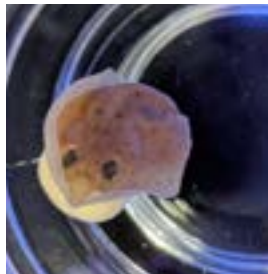


**Xiang Li**, Presented a poster titled "ABI1 Regulates STAT3 Transcription through a DNA Binding Activity" at the American Association of Cancer Research (AACR) annual meeting from April 15 - 18, 2023, in Orlando, FL.

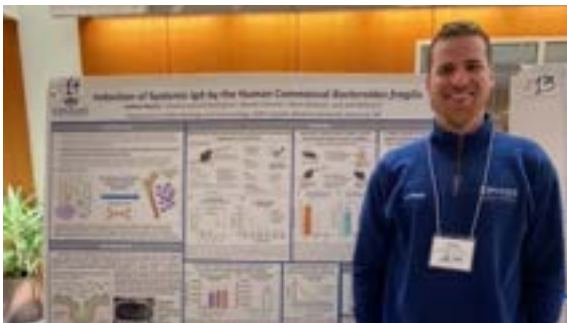
# PRESENTATIONS



**Anna Maria Hinman**, attended a 6-week intensive embryology course at the MBL. The course was very laid back and professional. Included is a picture of the whole course at the annual Embryology vs Physiology softball game (Anna Maria was able to design the shirt) and a skate embryo.



**Ikechukwu Jacob**, attended the 24th Annual Upstate New York Immunology Conference (October 17-20, 2022) in Cooperstown, NY, presenting a poster on "Mucosal Innate Immunity of Human Surfactant Protein A against SARS-COV-2 Infectivity"

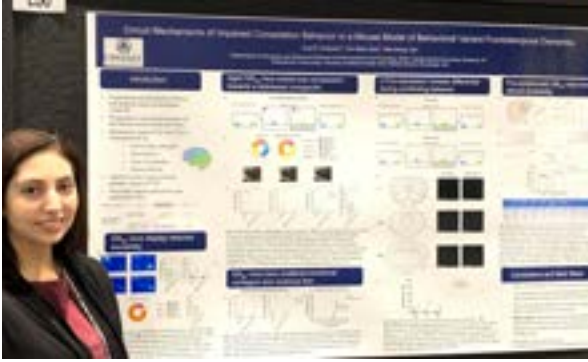


**Joshua Harris**, presented a poster on his research "*How microbiome influences immune system development, specifically how the human commensal Bacteroides fragilis induces the generation of systemic IgA which protects against peritoneal abscess formation*" at the Inaugural Finger Lakes Microbiome Symposium on April 21st at the University of Rochester Medical Center. Joshua won first place for the poster presentation.



**Gargi Mishra**, attended the APSA (American Physician Scientist Association) Northeast Regional Meeting (March 3, 2023). The title of her poster was: "Bioenergetics-Independent Stress Response to Mitochondrial Protein Import Clogging in the Heart"

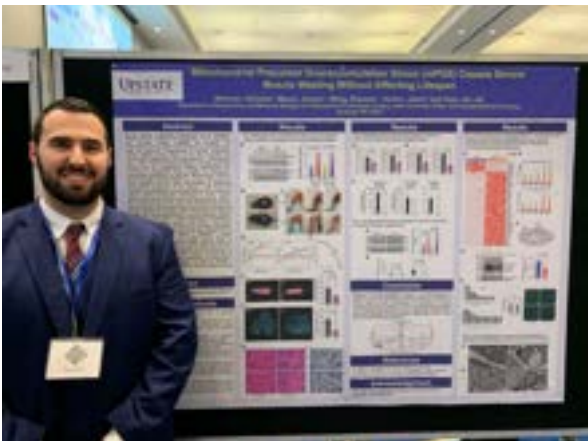
# PRESENTATIONS



**Aya Kobeissi**, presented a poster titled "Circuit Mechanisms of Impaired Consolation Behavior in a Mouse Model of Behavioral Variant Frontotemporal Dementia" at the the Society for Neuroscience Annual Conference in November 2022.



**Gargi Mishra**, attended the AHA (American Heart Association) Scientific Sessions in Chicago (Nov 5-7, 2022). The title of her poster was: "Mitochondrial Protein Import Clogging Modulates the Circadian Pathway in the Heart."



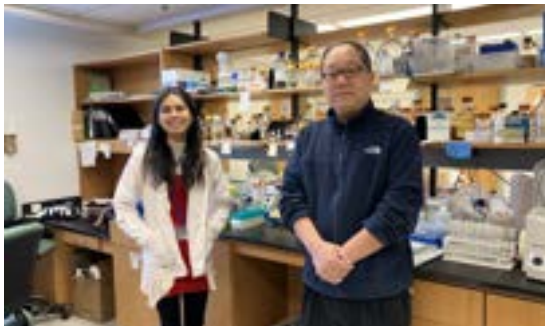
**Nicholas Brennan**, presented a poster titled: "Mitochondrial Precursor Overaccumulation Stress (mPOS) Causes Severe Muscle Wasting Without Affecting Lifespan," March 15 - 17, 2023 at the Advances in Skeletal Muscle Biology In Health and Disease Conference



# SPOTLIGHT



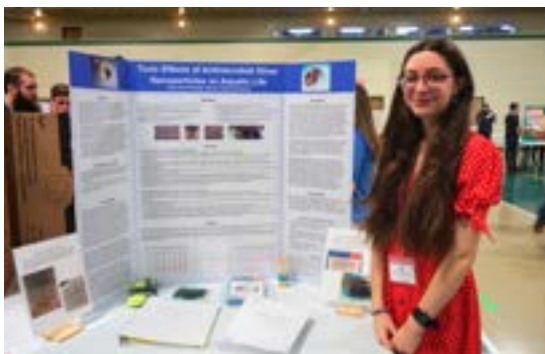
Congratulations to **Joy Park**, she was awarded the 2022 Gina M. Finzi Memorial Student Summer Fellowship Award by The Lupus Foundation of America



Congratulations to **Gargi Mishra** for receiving a American Heart Association Predoctoral Fellowship (2023-25)



Congratulations to **Akshay Patel**. Akshay was awarded a NIH F30 predoctoral fellowship.



On Sunday, June 11, 2023 at the Milton J. Rubenstein Museum of Science & Technology (MOST), **Anna John** and **Brandon Wyman** took the opportunity to help judge at a STEM program for our local schools. As judges, they had the opportunity to award a student the Upstate's Dean's Award in Biological Sciences.

**Winner in photo:** Alexa Rose Battaglia, from Manlius Pebble Hill.



**Alana Belkevich**, in Bruce Knutson's lab., has been honored with the 2023 Chancellor's Award for Student Excellence in recognition of her academic excellence and leadership. Featured with Chancellor King and President Dewan.

## Jacquelyn Schulman, PhD, 2018 Alumna

Jacquelyn Schulman works at Bristol Myers Squibb (BMS) in Summit, NJ and was recently promoted to Senior Scientist. Jacquelyn works in the Cell Line Development group and focuses on the development of mammalian cell lines in the production of monoclonal antibodies and other types of recombinant projects including bi-specific antibodies, fusion proteins, and antibody drug conjugates, for clinical and commercial manufacturing. Jacquelyn started at BMS almost four years ago, and has quickly worked her way up to scientist and now a senior scientist position.



## Stacey Ward, PhD, 2007 Alumna

Stacey changed jobs/companies in late 2022, and is now a Senior Principal Scientist at iPfizer in St. Louis, MO, working in their Cell Line Development group. She works with a team of scientists developing monoclonal antibody producing lines, as well as mRNA and gene therapy modalities. Previously, Stacey was a Senior R&D Manager at Millipore Sigma, managing a team of scientists using gene editing techniques such as CRISPR to make fit-for-purpose cell models.



Stacey & Jeff Ward (MD/PhD 2010 Micro/Immuno with Ed Barker [2008]), sons Ben (age 9) and Zack (age 3). They live in St. Louis, MO.

## Disharee Nath, PhD, 2018 Alumna

Disharee is changing jobs/companies and is now starting a new position as Medical Director at Science Branding Communications. Science Branding Communications was founded in 2009 by CEO Dr. Edward Perper, with a simple premise: to articulate and visualize medical science so that is more easily understood. They transform complex disease and drug science into concise, smooth flowing and beautifully visualized stories that audiences will appreciate and more importantly, want to understand.



# RECENT CAREER EVENTS

The College of Graduate Studies holds a number of different events & programs to provide Career Development and meet up with fellow colleagues.



**October 26, 2022**

**Adam Waickman, PhD Workshop:** Postdoc Opportunities with the Federal Government



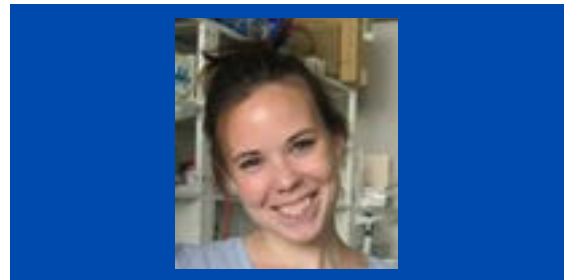
**December 2, 2022**

**Eain Murphy, PhD Workshop:** Careers in Academia and Industry



**February 22, 2023**

**Kelsey Moody, PhD, CEO of Ichor Life Sciences Workshop:** It's always a great opportunity when employers come on campus to meet with our students



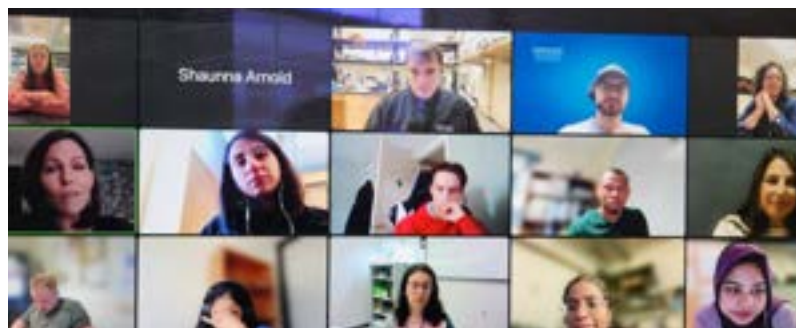
**March 8, 2023**

**Margot Riggi, PhD, Workshop:** shared her experience as a researcher/illustrator in Janet Iwasa lab at the University of Utah Health



**April 5, 2023**

**Michael Hausladen, PhD, General Manager, LOTTE Biologics Workshop:** The new company that acquired the old Bristol Meyers facility in Syracuse, NY came on campus to speak to students about many new opportunities.



**April 12, 2023**

**RegenxBio with Tracy Merrell** and alumna **Danielle Sliter** shared their career experience, applying for a biotech job, and general advice



# EVENTS



**Annual Holiday Party at Dinosaur Bar B-Que**  
We were all so happy to be together again.



## **Wednesday afternoon Tea**

Every Wednesday afternoon at 3 p.m. we hold tea and cookies. It's a great chance to chat with each other and grab a little snack.



# STUDENT RESEARCH DAY



**Aya Kobeissi**, "*Neural Mechanisms of Lost Disinhibition and Compassion in a Mouse Model of Behavioral Variant Frontotemporal Dementia*"



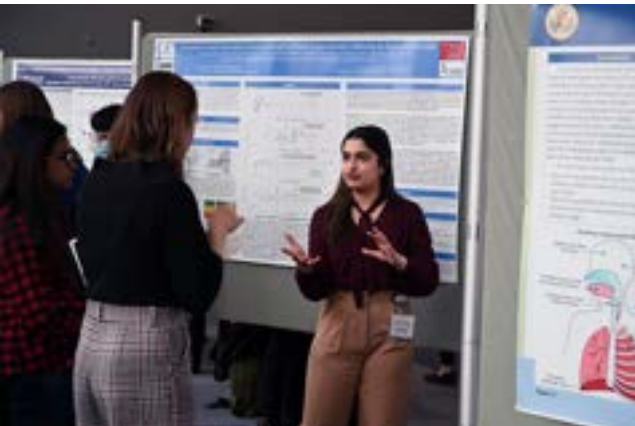
**Yetunde Kayode**, "*Hypoxic Adaptation Induces a Glycolytic Dependence of HIV-1 Latency Reversal*"



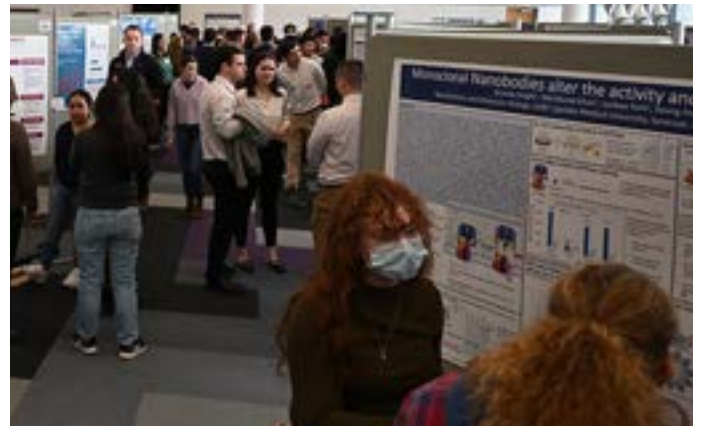
**Arnav Rana**, "*Cardiac Functional Changes Associated with Bioenergetic Independent Stress Signaling*"



**Dr. Samuel Mackenzie**, 2015 alumnus and keynote speaker



**Veronica Singh**, presented research on "*Incidence and Prevalence of Spontaneous Epileptiform discharges in LQT2 Mutant Rabbits*"



**Kassidy Knight**, presented research on "*Monoclonal Nanobodies Alter the Activity and Assembly of Vacuolar ATPases*"



**Mark Schmitt, PhD**, Dean, College of Graduate Studies

To see more Student Research Day photos visit:  
<https://flic.kr/s/aHBqjAyxpb>

# BEYOND THE DOCTORATE RESEARCH DAY



**Kentaro Takahasi, PhD**, (Postdoc, Pharmacology) "*Obesity Dysregulates Chromatin Response to Hypoxia that Governs Metabolic Programming and Dying Cell Clearance in Macrophages*"



**Xiaotian Ji, PhD** (Postdoc; Pharmacology) "*Functionalized Nanogel Scavenger for Immune Modulation Therapy in Sepsis*"



**Rebecca Sager, MD/PhD**, (Resident, Urology) "*Regulation of Protein Phosphatase 5 (PP5) Activity and Substrate Release by Phosphorylation and SUMOylation*"



**Kathryn B. Anderson, MD/PhD CTrop Med**  
Commissioner of Health, Onondaga County, Keynote Speaker



**Arunkumar Venkatesan**, presenting his research on "*Loxi1 Protein Aggregation and Impaired Mitochondrial Bioenergetics in Exglottation Glaucoma*"

To see more Beyond the Doctorate Research Day photos visit:

<https://flic.kr/s/aHBqjAysU5>

# GRADUATION 2023



**Back row (left - right):** Alan Blaney, Nicholas Zehrbach, Morgan Pimm, Ryan Mokhlan, Xiang Li, Fanghui Hua, Xiaokong Gao, Brittany Geiler, Leonardo Garcia, Dettori, Andrew Brawner, Nicole Maurici; **Second row (left - right)** Liam Coyne, Kyle Alpha, Connie Mitra; **First row (left - right)** Lauren Szczesniak, Ronald Miller, Xiguang Yang, Haiyan Li, Jiahui Hou, Alana Belkevich, Nathan Munoff, Elham Ahanin

**Congratulations  
Class of 2023**



**Left to right:** Brittany Geiler, Leonardo Garcia Dettori, Nathan Munoff, Andrew Brawner, Alana Belkevich, Elham Ahanin



**Left to right:** Xiaokong Gao, Nicole Maurici, Connie Mitra, Andrew Brawner



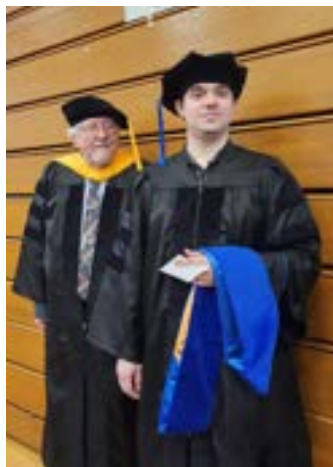
**Left to right:** Xiaokong Gao, Xiang Li, Fanghui Hua, Haiyan Li, Jiahui Hou, Xiguang Yang



**Left to right:** Nathan Munoff, Elham Ahanin, Alana Belkevich



**Left to right:** Ryan Mokhtari, Connie Mitra



**Left to right:** R. Reid Zehrbach and Nicholas Zehrbach



**Left to right:** Nicole Maurici, Connie Mitra



**Left to right:** Morgan Pimm, Alana Belkevich

**To see more commencement photos visit:**

<https://flic.kr/s/aHBqjAD36t>

# DEAN'S RECEPTION 2023



**Back row (left to right):** Dr. Mark Schmitt, Xiaokong Gao, Xiguang Yang, Leonardo Garcia Dettori, Andrew Brawner, Morgan Pimm, Alana Belkevich. **Bottom row (left to right):** Nicole Maurici, Yunting Zhu, Connie Mitra, Elham Ahanin, Jiahul Hou, Lauren Szczesniak, Brittany Geiler, Dr. Steven Taffet.



**Left to right:** Dr. Herberg, Jiahul Hou, Xiaokong Gao, Xiguang Yang and guest.



Brittany Geiler



**Left to right:** Dr. Schmitt, Alana Belkevich, Dr. Taffet



**Left to right:** Dr. Schmitt, Fiza Hashmi, Dr. Taffet



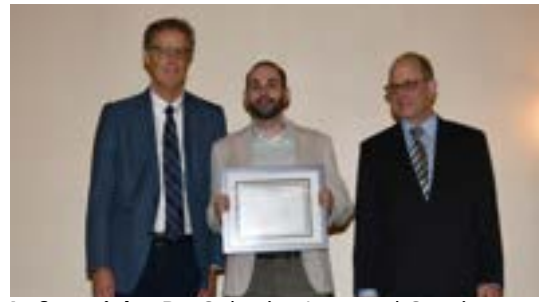
**Left to right:** Dr. Schmitt, Bridget Walker, Dr. Taffet



**Left to right:** Dr. Schmitt, Jeffrey Amack, Dr. Taffet



**Left to right:** Dr. Schmitt, Arnav Rana, Dr. Taffet



**Left to right:** Dr. Schmitt, Leonard Garcia Dettori, Dr. Taffet



Connie Mitra, Connie's guest, and Dr. Patricia Kane



**Left to right:** Dr. Schmitt, Yetunde Kayode, Dr. Taffet



**Left to right:** Dr. Schmitt, Jeffrey Amack, Dr. Taffet



**Left to right:** Cheryl Small, Dr. Schmitt, Gabriela Lozanova, Jennifer Brennan

To see more Dean's Reception photos visit:

<https://flic.kr/s/aHBqjADq2L>

- 1/30 Nicholas Zehrbach**, Anatomy & Cell Biology, Turner Lab, *"The Role of Paxillin in Regulating Rab5 through Modulating Microtubule Acetylation."*
- 1/30 Csaba Papp**, Biochemistry & Molecular Biology, Kuznetsov Lab, *"Computational and experimental approaches for the detection of G-quadruplexes."*
- 2/03 Farzana Tuli**, Biochemistry & Molecular Biology, Kane Lab, *"Isoform-specific regulation of the yeast V-ATPase a-subunit isoforms."*
- 3/02 Morgan Pimm**, Biochemistry & Molecular Biology, Henty-Ridilla Lab, *"Bridging the GAPS: Investigating molecular mechanisms that coordinate actin filament assembly."*
- 4/11 Gayathri Ganesh**, Physiology, Liu's Lab, *"Modeling Prenatal Stress in NPCs."*
- 4/17 Nicholas Brennan**, Biochemistry & Molecular Biology, Chen Lab, *"Combating Hyperinflammation and Pyroptosis in Sepsis Using Nanotherapeutics."*
- 4/20 Xiguang Yang**, Pharmacology, Luo's Lab, *"Therapeutic Hydrogel for Wound Healing Applications."*
- 4/25 Connie Mitra**, Biochemistry & Molecular Biology, Kane Lab, *"Phosphoinositide-specific Binding by Human V-ATPase A-Subunit Isoforms."*
- 4/28 Adam Wegman**, Microbiology & Immunology, Waikman Lab, *"Monomeric IgA Contributes Protective and Non-pathologic Function During Antibody Dependent Enhancement of DENV Infection"*
- 5/03 Akshay Patel**, Biochemistry & Molecular Biology, Perl Lab, *"Rab4A Control of Liver Dysfunction in a Mouse Model of Systemic Lupus Erythematosus."*
- 5/05 Elham Ahanin**, Biochemistry & Molecular Biology, Mollapour Lab, *"Pharmacological Inhibition of Protein Phosphatase-5 and Induction of the Extrinsic Apoptotic Pathway in Kidney Cancer."*
- 5/05 Alana Belkevich**, Biochemistry & Molecular Biology, Knutson Lab, *"Distinct Interaction Modes for the Eukaryotic RNA Polymerase Alpha-like Subunits and Implications for Disease Modeling."*
- 5/11 Leonardo Garcia Dettori**, Biochemistry & Molecular Biology, Bah Lab, *"DISORDER IN THE LOOP: Identification of a Role for Intrinsic Disorder and Liquid-Liquid Phase Separation in R-Loop Biology"*
- 5/18 Yu Liu**, Neuroscience, Hu Lab, *"Exploring the Roles of the Connecting Cilium in Photoreceptor Health"*
- 5/18 Nathan Munoff**, Biochemistry, Knutson Lab, *"Specific Structural Features of the RNA Polymerase I Core Promoter Element Targeted by Core Factor"*
- 5/25 Yunting Zhu**, Neuroscience, Weikart Lab, *"The Neuroinflammatory Basis of Schizophrenia and Bipolar Disorder: Spotlight on Brain Macrophages, Cytokines and the Blood-brain Barrier"*.
- 5/25 Ishita Joshi**, Biochemistry & Molecular Biology, Feng Lab, *"Unraveling Differential Origin Firing and Replication Stress Mediated Genome Instability Using S. Cerevisiae as a Model Organism"*
- 6/01 Jing Li**, Biochemistry & Molecular Biology, Feng lab, *"Investigating the Mechanism of Interaction of R-loops and the Fragile X Protein, FMRP: An Entanglement of Disordered Tails and Multivalency"*
- 6/16 Xiang Li**, Biochemistry & Molecular Biology, Kotula Lab, *"Defining the Mechanism of STAT3 Regulation by ABI1 in Prostate Cancer"*
- 6/22 Nicole Maurici**, Biochemistry & Molecular Biology, Bah Lab, *"Uncovering A New Phase: the Interactions that Mediate MBD2 and MBD3 LLPS"*
- 6/30 Andre Grageda**, Biochemistry & Molecular Biology, Kuznetsov Lab, *"Understanding Tumorigenic R-loops with Birth-Death Process Models"*

# 2023 PUBLICATIONS

**Eric Barnett, 2023.** 'Analysis of the Relationship of Attention-Deficit/Hyperactivity Disorder With Posttraumatic Stress Disorder Clarifies Relationship Directionality'. *Biol Psychiatry*, vol.93 number (4):e11-e12. PMID: 36653108.

**Ali Shervin Razavi et al, 2023.** 'Machine Learning and MRI-based Diagnostic Models for ADHD: Are We There Yet?' *J Atten Disord*, vol. 27 number (4):335-353. PMID: 36651494.

**Sarah Backe, Elham Ahanin et al 2023.** 'Impact of Co-chaperones and Posttranslational Modifications Toward Hsp90 Drug Sensitivity'. *Subcell Biochem*, **101**:319-350. PMID: 36520312.

**Hannah Phillips et al 2023.** 'Dorsomedial Prefrontal Hypoexcitability Underlies Lost Empathy in Frontotemporal Dementia'. *Neuron*. Epub ahead of print. PMID: 36638803.

**Fazana Tuli et al 2023.** 'Chimeric A-Subunit Isoforms Generate Functional Yeast V-ATPases with Altered Regulatory Properties in Vitro and in Vivo'. *Mol Biol Cell*, vol. 1; number 34(3):ar14. PMID: 36598799.

**Chiara Pedicone et al 2023.** 'Obesity Control by SHIP Inhibition Requires Pan-Paralog Inhibition and an Intact Eosinophil Compartment'. *iScience*, vol. 26 number (2):106071. PMID: 36818285; PMCID: PMC9929608.

Yoo H, **Singh A**, Li H, Strat AN, Bagué T, Ganapathy PS, Herberg S. 2023  
'Simvastatin Attenuates Glucocorticoid-induced Human Trabecular Meshwork Cell Dysfunction via YAP/TAZ Inactivation'. *Curr Eye Res*. pages 1-43. PMID: 37083467

Haarer BK, **Pimm ML**, de Jong EP, Amberg DC, Henty-Ridilla JL. 2023 'Purification of Human  $\beta$ - and  $\gamma$ -actin from Budding Yeast'. *J Cell Sci*. PMID: 37070275

**Zehrbach NM**, Dubois F, Turner CE. 2023 'Paxillin Regulates Rab5-mediated Vesicle Motility through Modulating Microtubule Acetylation'. *Mol Biol Cell*. PMID: 37043310

**Waldran MJ, Wegman AD, Bahr LE**, Roy NH, Currier JR, **Waickman AT**. 2023  
'Soluble NS1 Antagonizes IgG- and IgA-Mediated Monocytic Phagocytosis of DENV Infected Cells'. *J Infect Dis*. PMID: 37103221

**Papp C**, Mukundan VT, Jenjaroenpun P, Winnerdy FR, Ow GS, Phan AT, Kuznetsov VA 2023.  
'Stable Bulged G-Quadruplexes in the Human Genome: Identification, Experimental Validation and Functionalization'. *Nucleic Acids Res*. PMID: 37094040