

# Neuroscience Graduate Program

Newsletter- 2020

Welcoming the largest incoming class in the program's history



(meet the students, PG 6)



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### SU(i)B

#### Student Updates – (in) Brief

Be sure to check out the SU(i)B callouts interspersed throughout this newsletter for blurbs and photos highlighting a plethora of noteworthy NGP student activities. Look for the **SU(i)B** boxes!

Cover Page Photograph: 2020 Incoming Class

Pictured left to right: Amy Bucklaew, Bryan Crum, Yanya Ding, Michael Giannetto, Jay Gonzalez-Amoretti, Dennisha King, Evan Newbold, Paige Nicklas, Tori Popov, Bryan Redmond, Abigail Sawicki, Ari Seldowitz, Maleelo Shamambo, Bingyu Sun





## Notes from Ania Majewska — NGP Director

Dear students, faculty, alumni and friends,

I don't think anyone could have predicted the upheaval this year has brought. Our world has changed and we have had to adapt quickly to the new and ever changing landscape. COVID-19 brought us to an abrupt standstill as we closed the majority of our labs and moved all of our education and scientific interactions onto virtual platforms. Racial injustice has brought into sharp focus our own inadequacies and precipitated many difficult and emotional discussions between our students, faculty and leadership. But despite the difficulties and the challenges we have encountered, there is so much to celebrate. Our scientific productivity, the training of our young scientists and our contribution to our local and global communities is going strong even if it may look different than it did a year ago. I look forward to celebrating our successes with all of you – even if it has to be through zoom.

Most importantly, COVID could not stop our entering class of 14 (yes – you read that correctly) first year students from arriving in Rochester and rolling up their sleeves to dive right into rotations and classwork. Our largest and most diverse first year class in history was welcomed through a three day student-run virtual bootcamp which included one socially-distanced picnic. The pandemic did not stop our senior students from graduating and finding great new opportunities. We said goodbye to Dr. Joshua Hinkle, who will be a postdoctoral fellow in Dr. Harvey's lab (a graduate of NGP!) at NIDA, Dr. Patrick Miller-Rhodes, who is working as a science marketing writer, Dr. Laura Owlett, who is back in medical school and Dr. Monique Mendes, who has started as a postdoctoral fellow in Dr. Schnitzer's lab at Stanford. Samantha Abbott graduated with her Masters, and is currently the Senior Manager at Lifetime Assistance, a center for developmentally disabled individuals. Late last year, Dr. Jessie Hogestyn also graduated and moved to Boston for a postdoctoral position at Sanofi. We have had some changes in leadership as well. Dr. Doug Portman has been tapped to head the Genetics, Development and Stem Cells Graduate Program and has passed the baton to Dr. Farran Briggs who will now chair our admissions committee. A big thank you to Doug for his many years of service.

I am also excited to report that our T32 application was funded, and this year we are supporting four of our students through this mechanism. The T32 is co-directed by myself and Dr. Liz Romanski and I want to thank Tori D'Agostino, Kathleen Jensen and Pam LaDuke for their invaluable help with the mammoth submission, as well as the many faculty offered to serve as training faculty for this grant. We also welcomed a great number of new faculty into the program this year (see page 12), thanks to the growth in neuroscience within the University of Rochester. As you can see NGP is thriving!

Our students and faculty have been very active in the on-going efforts to make the University of Rochester and NGP, specifically, a diverse environment where all trainees feel welcome. I want to thank all of our students who have stepped up to lead our diversity initiatives, either through the Neuroscience Diversity Commission, the Alliance for Diversity in Science and Engineering or the newly formed Student Solidarity Organization. We have a lot more work ahead of us, but it is encouraging to see the candid conversations and the commitment to this cause.

Looking ahead, I want to remind you about our student seminar series which is held on Mondays at 4pm. It is a great opportunity to learn about the exciting work being done in our community while supporting the development of our students. A huge thank you to Allison Murphy, Greg Reilly, Margot Mayer-Proschel and Ken Henry for keeping this series running smoothly. On a similar note, our retreat committee held a very successful virtual retreat in September, complete with an on-line poster session, internal talks and an external keynote address.

Lastly, you will find an alumni directory at the end of this newsletter. Please help us keep this directory current. We'd love to hear from you! In closing, I want to thank each and every member of our NGP community for everything you do for the program. It has been a difficult year but together we had made the most of it.

Regards,

Ania Majewska, PhD





## Notes from Doug Portman — NGP Admissions Committee Chair

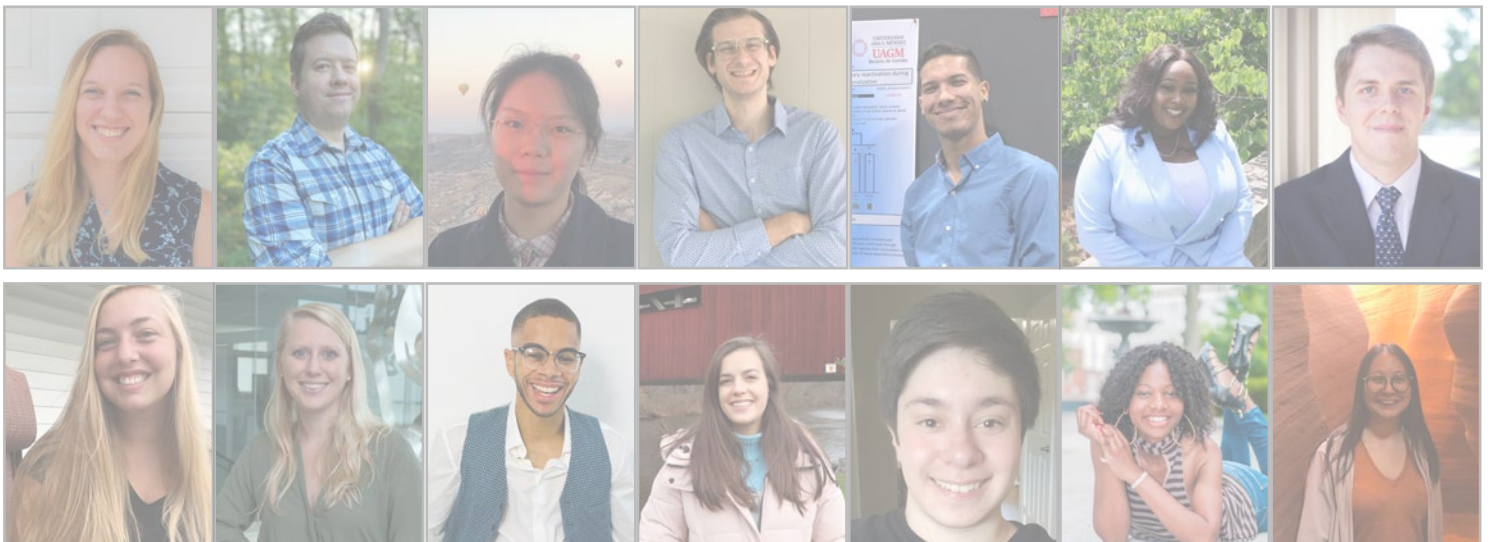
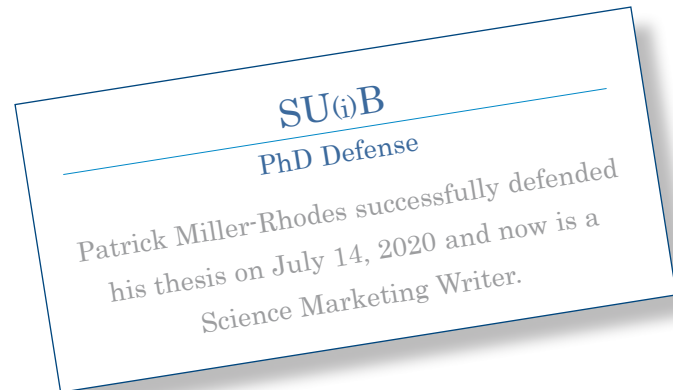
The 2020 admissions season was again a big success. In total, we considered 138 applications, a surplus of more than twenty applications than last year. During two very full interview weekends, as well as several Skype sessions, we interviewed 38 candidates. Our faculty and students made the interview weekends successful with their hard work and support. The time and effort of all NGP faculty, as well as their thoughtful evaluations of the applicants, is essential to recruiting a strong class. Current NGP students also play a vital role, getting to know the applicants, helping to make their visits informative and engaging, and conveying the sense of community that our program fosters. Ultimately, we were able to recruit thirteen very talented new first-year students to the program as well as a fourteenth student who has joined NGP as an MD/PhD student.

Special thanks goes to Tori D'Agostino and Alex Reynolds, who coordinated the many interviews and events leading to successful interview weekends. Thanks also to the faculty members of the NGP admissions committee, Farran Briggs, Gail Johnson, Ania Majewska, John Olschowka, Liz Romanski, and Pat White, each of whom carefully screened dozens of applications and interviewed many candidates. Finally, the admissions committee's student members, Kate Andersh, Emily Crosier, Michael DuHain, Greg Reilly, and Neil Shah worked tirelessly to organize interview weekend events, introduce applicants to the NGP community, and attract the best ones to UR. The admissions committee is beginning to work on the 2021 admissions season that is only a few months away. Please reach out to us with any suggestions to make this upcoming admissions season even better.

Doug Portman

Chair, NGP Admissions Committee

We thank Pat White and Doug Portman for their years of service on the admissions committee. We welcome Farran Briggs as the new NGP Admissions Chair along with Chris Holt, Marissa Sobolewski, and Adam Snyder as new admissions committee members.



## Notes from John Foxe — Director, Del Monte Institute for Neuroscience Chair, Neuroscience Department



It has been a season of adapting. Like labs across the nation, we have undertaken the complex efforts to ramp-down research and work from home, and then to ramp back up again and safely return to the lab. Change is never easy, but being a part of a team that has embraced the challenges presented by the global COVID-19 pandemic is a source of pride, a feeling that has only strengthened in recent months. Yet despite all this change, students graduated on time, research was published, and grants were awarded.

On that last point, the Del Monte Institute for Neuroscience received monumental news this month. URMIC has been designated an Intellectual and Developmental Disabilities Research Center (IDDRC) by the National Institute of Child Health and Human Development (NICHD). This designation puts URMIC among an elite group of institutions advancing IDD research and will enable us to build upon our rich history of scientific innovation in this field and help transform how we provide care to families and patients with these conditions. We will share more about this effort in a future edition of NeURoscience.

Building on the theme of responding to the

challenges of our times- in June the Del Monte Institute for Neuroscience Diversity Commission was established and brought together a diverse group of Neuroscience students and faculty, University leadership, and community leaders. The commission is working on initiatives aimed at addressing issues related to diversity, access, and inclusion in the Neuroscience field.

Since the last issue we have continued to expand our community of neuroscientists. Dr. Julian Meeks, from UT Southwestern, has joined the Neuroscience Department and holds a joint position in the Department of Pediatrics. In addition, Dr. Benjamin Suarez-Jimenez, from Columbia University, and Dr. Ian Fiebelkorn, from Princeton University, have joined the department. We plan on welcoming at least two additional faculty next year.

Over the past year we have congratulated 5 newly-minted PhD's from our graduate program. As of August, we have welcomed the largest-ever incoming class of fourteen students to the Neuroscience Graduate Program. Of the fourteen students, thirteen are on track to get their PhD's and one to get their MD/PhD. In addition, another current student has received an NIH Fellowship award.

We look forward to what will come of the Neuroscience Graduate Program over the next year.

In Science,

A handwritten signature in black ink that reads "John Foxe".

John Foxe, PhD

Kilian J. and Caroline F. Schmitt Chair in Neuroscience

Director, The Ernest J. Del Monte Institute for Neuroscience

Professor & Chair, Department of Neuroscience

## Incoming Class of 2020 NGP Student Admissions

**Introducing the class of 2020** — What a class! Our admissions includes 13 PhD students and 1 MD/PhD student. Below is a little information about each of them. If you see them in person over Zoom don't forget to welcome them!



**Amy Bucklaew** — Amy Bucklaew recently graduated from Canisius College with B.S.s in both Biology and Animal Behavior, Ecology, and Conservation (ABEC), with a minor in Neuroscience. During her time in undergrad, she conducted research primarily under Dr. Susan Margulis, investigating facial recognition and processing in Western lowland gorillas and cortisol fluctuation in regards to behavioral modification in Plains zebra. She also spent some time at North Dakota State University with Dr. Ned Dochtermann investigating predator experience effects on behavioral syndromes in *Gryllobates sigillatus*. At Rochester, she hopes to further explore her interest in sensory processing, behavioral circuits, and neuroplasticity.



**Bryan Crum** — Bryan Crum graduated from Brigham Young University in 2018 with an M.S. in Neuroscience focusing on Alzheimer's disease research. After graduating, Bryan worked at the University of Utah in the Department of Psychiatry as a Clinical Research Coordinator for two different PIs. One lab was focused on social reward and the effects of oxytocin on subjects with substance use disorder. The other lab focused on treatment resistant depression in older adults and used a computerized treatment plan to strengthen executive functioning. At URMC, Bryan is planning on continuing to research Alzheimer's disease while still determining which path that will ultimately lead me down.



**Yanya Ding** — Yanya Ding graduated from the University of Wisconsin-Madison with a B.S in Psychology, a B.S in neurobiology, and an honor certificate in Biology Core Curriculum. She conducted her undergraduate research with Dr. Craig Berridge, examining neuromodulation effects of Corticotrophin Releasing Factor (CRF) on working memory and sustained attention in rats model of Attention Deficit Hyperactivity Disorder (ADHD). At Rochester, Yanya plans to explore neural circuits and underlying mechanisms of neurological and psychiatric diseases, using electrophysiology and optogenetics.

### SU@B PhD Defense & Making History

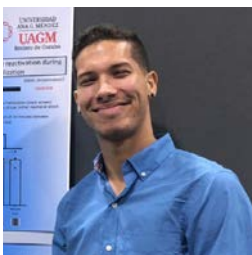
Monique Mendes successfully defended her thesis on July 31, 2020 and now is a Post-Doctoral Fellow in Dr. Mark Schnitzer's lab at Stanford University. Monique is the first Black woman to graduate from NGP with a PhD in Neuroscience.

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## Incoming Class of 2020 (continued)



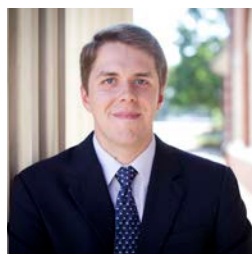
**Michael Giannetto** — Michael Giannetto graduated from the Rochester Institute of Technology in 2017 with a B.S. in Biotechnology and Molecular Bioscience. As an undergraduate he researched red blood cells (RBCs) under the direction of Dr. Jiandi Wan to determine mechanisms for RBC deformability under hypoxia. After graduating he conducted research under Dr. Maiken Nedergaard, studying how circadian rhythms regulate cerebrospinal fluid distribution. He is excited to explore the diverse research opportunities in glial biology, neural circuits, and neurodegeneration at URMC.



**Jay Gonzalez-Amoretti** — Jay Gonzalez-Amoretti graduated from Universidad Ana G. Mendez with a B.S. in Chemistry. At UAGM, Jay explored research areas from nanomaterials to analytical chemistry applied to neurochemistry, where Jay's interest for neuroscience arose. In the Cunci lab, Jay researched different electrochemical methods (FSCV and EIS) that can be developed to measure neurotransmitters using carbon fiber microelectrodes modified with aptamers which were fabricated in the lab. After working in a sleep lab during a summer internship with Dr. Sara Aton, Jay's interests in systems was strengthened. Jay looks forward to further explore neural circuits and sensory systems at URMC.



**Dennisha King** — Dennisha King graduated from Agnes Scott College in 2019 with a B.S. in Neuroscience and a B.S. in Public Health. During undergrad, she completed a summer internship in the lab of Dr. Jenny Yang developing computational and biochemical approaches to identify calcium binding proteins and visualize calcium signaling pathways, to dissect key determinants for metal affinity, selectivity, and regulation. After graduating, she conducted research in the lab of Dr. Vivek Unni as a post baccalaureate scholar at Oregon Health & Science University. There, she developed protocols to visualize how the protein alpha-synuclein binds to DNA in order to better understand the normal function of alpha-synuclein in the nucleus. In her graduate work, she hopes to further explore her interests in the pathologic and genetic predispositions of diseases that afflict the nervous system.



**Evan Newbold** — Evan Newbold graduated from Lafayette College in 2015 with a major in neuroscience and minor in aging studies. While there, Evan studied cortical heterotopia and seizure development in the lab of Dr. Lisa Gabel. Following graduation, Evan joined a startup biopharma company called Cavion working on the clinical development of T-type calcium channel inhibitors for the treatment of movement disorders and other diseases. Evan hopes to continue to studying disease pathology in neuroscience while here at UR.

**SU<sup>(i)</sup>B**  
PhD Defense  
Laura Owlett successfully defended her dissertation on September 3, 2020 and has since returned to UR Medical School to finish her MD degree.

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## Incoming Class of 2020 (continued)



**Paige Nicklas** — Paige Nicklas graduated in December 2019 from Edinboro University of Pennsylvania with a B.S. in Psychology. At Edinboro, she worked in the lab of Dr. Peter McLaughlin investigating behavioral psychopharmacology with rat operant models. Paige studied the role of the 5HT1A receptor in impulsive and anxious behaviors, the effects of St. John's wort in a rat model of chronic mild stress, as well as the involvement of different muscarinic receptors on a divided attention task. She also worked with humans using eye-tracking software in a study looking at the influence of informational primes in the context of neuroscience on social decision making. In her graduate work, she hopes to explore the relationship of neurophysiology and psychology regarding cognitive and behavioral symptomologies after brain injury and/or disease onset.



**Victoria Popov** — Victoria Popov graduated from Rochester Institute of Technology in 2017 with a B.S. in Biomedical Sciences and in 2019 with a M.S. in Professional Studies, with concentrations in Biomedical Sciences and Psychology. She was also a Rochester Bridges to the Doctorate scholar during her M.S. studies where she worked with Dr. David Dodell-Feder at the University of Rochester utilizing MRI techniques. She assessed the quality of how psychotic-like experiences (i.e. auditory hallucinations) affect neural networks and social functioning in deaf individuals with schizophrenia spectrum disorders (SSDs). More recently, she was a PREP scholar at the University of Rochester from 2019 to 2020 where she conducted research under Drs. John Foxe and Ed Freedman. She created and established a project that utilizes high-density EEG based Mobile Brain/Body Imaging (MoBI) to characterize cognitive-motor interactions in individuals with SSDs. Victoria aspires to better understand the underlying neurophysiological processes that contribute to healthy and disordered cognitive and social functioning in individuals with and without neurocognitive disorders, particularly SSDs, and the effects of deafness.



**Bryan Redmond** — Bryan Redmond graduated from Xavier University of Louisiana in 2018 with a Bachelor of Science in Psychology and double minors in Chemistry and Biology. As an MD/PhD student, he joins the NGP having completed two years of medical school. Although Bryan has dabbled in synthetic organic chemistry, neurosurgery, and vocational psychology research, he hopes to focus his studies on the visual system. His current interest is in visual recovery techniques in cortically blind patients. Bryan looks forward to integrating his clinical skills into research.

**SU@B**  
Publications  
3rd year NGP student,  
Allison Murphy, has 2 publi-  
cations from summer 2020!

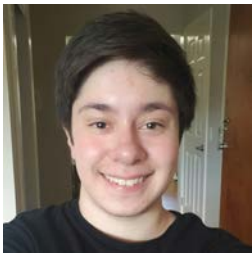
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## Incoming Class of 2020 (continued)



**Abigail Sawicki** — Abigail Sawicki graduated from Messiah University with a B.S. in Biology and a minor in Chemistry. She conducted her primary undergraduate research under Dr. Jennifer Ness-Myers in a neuroscience lab. Her research focused on determining the role of Lck, a Src-family kinase, in oligodendrocyte progenitor migration using cell culture and zebrafish models. She is excited to explore different labs and opportunities at URMC.



**Ari Seldowitz** — Ari Seldowitz recently graduated from James Madison University with a B.S. in Biology with a neuroscience concentration. He conducted his undergraduate research in the lab of Dr. Corey Cleland, where he studied the simplification of movement strategies for complex musculature by the central nervous system, focusing on the nociceptive withdrawal reflex in rats. He looks forward to exploring his interest in sensory systems at Rochester.



**Maleelo Shamambo** — Maleelo (Lelo) Shamambo graduated from Rhodes College in 2020 with a B.S. in Neuroscience and a minor in French and Francophone Studies. She was a research fellow at St. Jude Children's Hospital, working on projects in hearing loss research in Dr. Jian Zuo's lab and cerebellar granule neuron migration in Dr. David Solecki's lab. Her research interests center around mechanisms of neurodevelopment and neurodegeneration, and she hopes to explore these more at URMC.



**Bingyu Sun** — Bingyu Sun graduated from McGill University in 2017 with a B.S. in Biology and a minor in neuroscience. She conducted her undergraduate honors thesis in Dr. Sarah C. Woolley's lab, investigating the developmental influences on auditory memory using female zebra finches. She recently graduated from Columbia University with a M.S. in Biostatistics. At Columbia, she worked with Dr. R. Todd Ogden and Dr. Francesca Zanderigo examining nonlinear mixed-effects models for arterial input function in positron emission tomography studies. She also worked with Dr. Caleb H. Miles on a causal mediation analysis project. At Rochester, she is looking forward to integrating her computational skills with research.

**SU@B**  
**Publications**  
Dr. Doug Portman, NGP faculty and NGP Admissions Director, identified a genetic switch in brain cells that can toggle between sex-specific states when necessary, findings that question the idea of sex as a fixed property. More on this study can be found in the journal of Current Biology.



## 2020 Neuroscience Retreat

This year's Neuroscience Retreat was planned to be held at the Memorial Art Gallery on April 9, 2020. Due to the COVID-19 pandemic the retreat was postponed until September 4, 2020 and held virtually over Zoom. This year's keynote lecturer was Cristina Alberini, PhD, who is a Professor of Neural Science at New York University.



*Keynote Speaker:*  
*Cristina Alberini, PhD*



*Faculty Speaker:*  
*Jennifer Hunter, PhD*



*Post-Doctoral Speaker:*  
*Melissa Polonenko, PhD*



*Graduate Student Speakers:*  
*Monique Mendes, PhD (L) & Holly Beaulac, MS (R)*

Many thanks to the Retreat Committee  
Krishnan Padmanabhan, PhD, Ally McHale, Yunpeng (YP) Pang, Kate Andersh, Jingyi Yang, Brendan Whitelaw, Mark Stoessel and Tori D'Agostino.

Website & registration credit: Mark Diltz



*Congratulations to:*  
*(L) The Peter Shrager Award Recipient: Tania Pasternak, PhD*  
*(R) Doty Award Recipient: Rianne Stowell, PhD*



Can't wait for the next Retreat?  
We are in the works of planning the next retreat. Hopefully it will be held at the Memorial Art Gallery but potentially over Zoom.  
Stay tuned!

## Training Grant

Drs. Ania Majewska and Liz Romanski are the PIs for our new training grant through The Jointly Sponsored Institutional Predoctoral Training Program in the Neurosciences, (T32, NINDS). This training grant offers support for 4 students per year in the University of Rochester School of Medicine Neuroscience Graduate Program and promotes broad and fundamental training in the neurosciences in the first 2 years of graduate school. It encourages programs to offer education in the tools, technologies, and methods used in contemporary neuroscience research, which the NGP fulfills through our rotation requirement. In addition, the T32 mandates that candidates will be trained and offered coursework in rigorous experimental design, proper use of statistics, and an understanding of quantitative issues. To address these skills, the T32 allowed us to create two new classes including "Introduction to Programming" and "Introduction to Computational Neuroscience" which are directed by Dr. Krishnan Padmanabhan (special shout out to Doug Schwarz for teaching the programming course last Spring!) in order to develop quantitative skills in our students. We also require our students to participate in a series of workshops directed by Dr. Majewska, which will address rigor and reproducibility as well as ethics in scientific research, with a new first year required course in this sphere being developed for next year. Importantly, the T32 encourages students to gain an understanding of the neurobiological basis of disease, which NGP supports through our elective coursework and research in the many neuroscience laboratories at UR.

We have appointed 4 students to the competitive T32 slots. The choices for this year are: first year students Dennisha King and Victoria Popov; second year students Makenna Cealie and Michael Duhain. Congratulations!

## NGP Faculty Spotlight



Julian Meeks, PhD joined the NGP after establishing his laboratory in the Departments of Neuroscience and Pediatrics at URM in May 2020. Dr. Meeks moved to Rochester from Dallas, Texas, where he was an (Assistant/Associate) Professor at University of Texas Southwestern Medical Center from 2012-2020. Dr. Meeks is the Principal Investigator of the Chemosensation and Social Learning Laboratory, which investigates how animals utilize social odors (including pheromones) to guide their physiology and behavior. Recent studies in the lab have identified specific interneurons in the mouse accessory olfactory bulb that rapidly adapt their intrinsic physiology after brief social encounters, suggesting a role for these neurons in social behavior adaptation. Other recent studies identified new candidate pheromones in mouse feces and receptors for those molecules – digestive steroids called bile acids – in the nose. The laboratory specializes in electrophysiology and calcium imaging, including the use of light sheet microscopes for live neuronal calcium imaging and whole tissue morphological analysis. The lab is NIH-funded through at least 2024, and has openings for up to 3 students.

On the personal side, Dr. Meeks is excited to be in Rochester because he misses midwestern winters and the weight of wet snow in a shovel. He is also relentlessly sarcastic (in a nice way, he thinks). His

amazing spouse, Regina Rowe MD, PhD (Dept. of Pediatrics) and their 6-year-old twins are already preparing to host sledding competitions for NGP members at their home in Pittsford (once COVID is behind us, of course). Until then, he will continue to enjoy entertaining Zoom meeting participants by doing his best impression of a living cartoon. In

seriousness, Dr. Meeks is excited to be joining the NGP at a time when radical improvements in equity and human kindness are possible. He is honored to be able to serve NGP students through teaching, scientific advising, and sharing life.

We thank Dr. Meeks for getting involved in NGP so quickly after his arrival and agreeing to facilitate on section of our NSC 592 Fall journal club and oversee our new efforts at building a program Instagram page.

SU@B  
PhD Defense  
Joshua Hinkle successfully defended his thesis on July 16, 2020 and now is now a postdoctoral fellow in Dr. Harvey's lab at NIDA.

## URWINS (University of Rochester Women+ in the Neurosciences)

URWINS (University of Rochester Women+ in the Neurosciences)

Our mission is to amplify voices of women from various identity groups and career stages, and to promote women's representations in leadership roles in Neuroscience and affiliated fields. We strive to provide opportunities for networking, training, and discussion among our members. We offer programs throughout the year on relevant topics including research practices, research funding, jobs, and academic and professional development.

**Faculty Committee Members:** Farran Briggs, Chigusa Kurumada, Krystal Huxlin, Ania Majewska, Liz Romanski

**Post-Doc Committee Member:** Juliette McGregor

**Student Committee Members:** Kate Andersh, Holly Beulac, Ally McHale, Emily (Warner) Crosier, Allison Murphy, Shraddha Shah, Jingyi Yang, Jo Fritzingler, Wednesday Bushog(BCS), Shanna Coop (BCS)

## New NGP Faculty



Eric Anson, PhD

Otolaryngology



Erika Augustine, MD

Neurology



David Dodell-Feder, PhD

Psychology;  
Neuroscience



Dragony Fu, PhD

Biology



Manny Gomez-Ramirez,  
PhD

Brain and Cognitive  
Sciences



Todd Jusko, PhD

Environmental  
Medicine



Julian Meeks, PhD

Neuroscience;  
Pediatrics



Jong-Hoon Nam, PhD

Biomedical  
Engineering



Tom O'Connor, PhD

Psychiatry



Michele Rucci, PhD

Brain and Cognitive  
Sciences



Giovanni Schifitto, MD

Neurology



Andrew Wojtovich, PhD

Anesthesiology;  
Pharmacology &  
Physiology

## Student & Alumni Publications

**Whitelaw BS**, Matei EK, Majewska AK (2020 Oct 16). Phosphoinositide 3-kinase  $\gamma$  is not a predominant regulator of ATP-dependent directed microglial process motility or experience-dependent ocular dominance plasticity. *eNeuro*.

Simpkins AN, Busl KM, Amorim E, Barnett-Tapia C, Cervenka MC, Dhakar MB, Etherton MR, Fung C, Griggs R, Holloway RG, Kelly AG, Khan IR, Lizarraga KJ, Madagan HG, Onweni CL, **Mestre H**, Rabinstein AA, Rubinos C, **Dionisio-Santos DA**, Youn TS, Merck LH, Maciel CB (2020 Sept 21). Proceedings from the Neurotherapeutics Symposium on Neurological Emergencies: Shaping the Future of Neurocritical Care. *Neurocritical care*.

**Miller-Rhodes P**, Gelbard HA, Terrando N (2020 Sep 17). This Is Your Brain on (Low) Glucose. *Trends in neurosciences*.

Norris SA, **Morris AE**, Campbell MC, Karimi M, Babatunde A, Paniello RC, Snyder AZ, Petersen SE, Mink JW, Perlmutter JS (2020 Sep 10). Regional, not global, functional connectivity contributes to isolated focal dystonia. *Neurology*.

**Mai N**, Prifti V, Lim K, O'Reilly MA, Kim M, Halterman MW (2020 Sep). Lung SOD3 limits neurovascular reperfusion injury and systemic immune activation following transient global cerebral ischemia. *Journal of stroke and cerebrovascular diseases: the official Journal of National Stroke Association*; Vol 29(9).

Rangroo Thrane V, Hynnekleiv L, **Wang X**, Thrane AS, Krohn J, Nedergaard M (2020 Jul 24). Twists and turns of ocular glymphatic clearance - new study reveals surprising findings in glaucoma. *Acta ophthalmologica*.

**Murphy AJ**, Hasse JM, Briggs F (2020 Jul 15). Physiological characterization of a rare sub-population of doublet-spiking neurons in the ferret lateral geniculate nucleus. *Journal of neurophysiology*.

**Miller-Rhodes K** (2020 Jul 08). Adaptive Immune Cells Link Microbial Metabolites to Stroke Recovery. *The Journal of neuroscience: the official Journal of the Society for Neuroscience*; Vol 40(28).

**Murphy AJ**, **Shaw L**, Hasse JM, Goris RLT, Briggs F (2020 Jul 06). Optogenetic activation of corticogeniculate feedback stabilizes response gain and increases information coding in LGN neurons.

*Journal of computational neuroscience*.

**Lockwood CT**, Duffy CJ (2020 Jun 17). Hyperexcitability in Aging Is Lost in Alzheimer's: What Is All the Excitement About? *Cerebral cortex* (New York, N.Y. : 1991).

**Mai N**, Prifti V, Kim M, Halterman MW (2020 May 20). Characterization of neutrophil-neuronal co-cultures to investigate mechanisms of post-ischemic immune-mediated neurotoxicity. *Journal of neuroscience methods*.

**Mestre H**, Mori Y, Nedergaard M (2020 May 15). The Brain's Glymphatic System: Current Controversies. *Trends in neurosciences*.

Rasmussen R, **O'Donnell J**, Ding F, Nedergaard M (2020 May 12). Interstitial ions: A key regulator of state-dependent neural activity? *Progress in neurobiology*.

**Shaw LH**, Freedman EG, Crosse MJ, Nicholas E, Chen AM, Braiman MS, Molholm S, Foxe JJ (2020 Apr 20). Operating in a multisensory context: Assessing the interplay between multisensory reaction time facilitation and inter-sensory task-switching effects. *Neuroscience*.

**Wang X**, Lou N, Eberhardt A, Yang Y, Kusk P, Xu Q, Förstera B, Peng S, Shi M, Ladrón-de-Guevara A, Delle C, Sigurdsson B, Xavier ALR, Ertürk A, Libby RT, Chen L, Thrane AS, Nedergaard M (2020 Mar 25). An ocular glymphatic clearance system removes  $\beta$ -amyloid from the rodent eye. *Science translational medicine*; Vol 12(536).

### SU@B

#### Award



Dr. Rianne Stowell received the Wallave O. Fenn Thesis Award for her work in Dr. Majewska's lab. She is now a postdoctoral fellow in Dr. Kuan Hong Wang's lab.

Continued on next page

## Student & Alumni Publications (continued)

Wardlaw JM, Benveniste H, Nedergaard M, Zlokovic BV, **Mestre H**, Lee H, Doubal FN, Brown R, Ramirez J, MacIntosh BJ, Tannenbaum A, Ballerini L, Rungta RL, Boido D, Sweeney M, Montagne A, Charpak S, Joutel A, Smith KJ, Black SE (2020 Feb 24). Perivascular spaces in the brain: anatomy, physiology and pathology. *Nature reviews. Neurology*.

Coomey R, **Stowell R**, Majewska A, Tropea D (2020 Feb 21). The Role of Microglia in Neurodevelopmental Disorders and Their Therapeutics. *Current topics in medicinal chemistry*.

**Stowell RD**, Majewska AK (2020 Feb 17). Acute ethanol exposure rapidly alters cerebellar and cortical microglial physiology. *The European journal of neuroscience*.

**Wakim KM** (2020 Feb 13). Profiles of women in science: Marisela Morales, Chief of the Integrative Neuroscience Research Branch at the National Institute on Drug Abuse. *The European journal of neuroscience*.

**Mestre H**, Du T, Sweeney AM, Liu G, Samson AJ, Peng W, Mortensen KN, Stæger FF, Bork PAR, Bashford L, Toro ER, Tithof J, Kelley DH, Thomas JH, Hjorth PG, Martens EA, Mehta RI, Solis O, Blinder P, Kleinfeld D, Hirase H, Mori Y, Nedergaard M (2020 Jan 30). Cerebrospinal fluid influx drives acute ischemic tissue swelling. *Science (New York, N.Y.)*.

**Chockanathan U**, **Warner EJ**, Turpin L, O'Banion MK, Padmanabhan K (2020 Jan 23). Altered dorsal CA1 neuronal population coding in the APP/PS1 mouse model of Alzheimer's disease. *Scientific reports; Vol 10(1)*.

Reeves BC, Karimy JK, Kundishora AJ, **Mestre H**, Cerci HM, Matouk C, Alper SL, Lundgaard I, Nedergaard M, Kahle KT (2020 Jan 17). Glymphatic System Impairment in Alzheimer's Disease and Idiopathic Normal Pressure Hydrocephalus. *Trends in molecular medicine*.

Stevenson GW, Giuvelis D, Cormier J, Cone K, Atherton P, Krivitsky R, **Warner E**, St Laurent B, Dutra J, Bidlack JM, Szabò L, Polt R, Bilsky EJ (2020 Jan 07) Behavioral pharmacology of the mixed-action delta-selective opioid receptor agonist BBI-11008: studies on acute, inflammatory and neuropathic pain, respiration, and drug self-administration. *Psychopharmacology*.

**Dionisio-Santos DA**, Behrouzi A, Olschowka JA, O'Banion MK (2020). Evaluating the Effect of Interleukin-4 in the 3xTg Mouse Model of Alzheimer's Disease. *Frontiers in neuroscience; Vol 14*.

**Dawes RP**, Burke KA, Byun DK, Xu Z, Stastka P, Chan L, Brown EB, Madden KS (2020). Chronic Stress Exposure Suppresses Mammary Tumor Growth and Reduces Circulating Exosome TGF- $\beta$  Content via  $\beta$ -Adrenergic Receptor Signaling in MMTV-PyMT Mice. *Breast cancer : basic and clinical research; Vol 14*.

**Rudlong J**, Cheng A, Johnson GVW (2019 Dec 19). The role of transglutaminase 2 in mediating glial cell function and pathophysiology in the central nervous system. *Analytical biochemistry*.

**Warner EJ**, Padmanabhan K (2019 Dec 18). Sex Differences in Head-fixed Voluntary Running Behavior in C57BL/6J mice. *The European journal of neuroscience*.


**Sleezer BJ**, Hayden BY (2019 Dec 16). Neuroscience: Reevaluating the Role of Orbitofrontal Cortex. *Current biology: CB; Vol 29(24)*.

**Hinkle JJ**, Olschowka JA, Love TM, Williams JP, O'Banion MK (2019 Dec 11). Cranial irradiation mediated spine loss is sex-specific and complement receptor-3 dependent in male mice. *Scientific reports; Vol 9(1)*.

SU@B

Award

Dr. Dawling Dionisio-Santos was the recipient of the 2020 Vincent du Vigneaud Thesis Award. Dawling studied in Drs. Kerry O'Banion and John Olschowka's lab and has now returned to medical school at URMIC



Continued on next page

## Student & Alumni Publications (continued)

**Rivera-Escalera F, Pinney JJ, Owlett L, Ahmed H, Thakar J, Olschowka JA, Elliott MR, O'Banion MK (2019 Dec 10).** IL-1 $\beta$ -driven amyloid plaque clearance is associated with an expansion of transcriptionally reprogrammed microglia. *Journal of neuroinflammation*; Vol 16(1).

Yoon C, Qi Y, **Mestre H, Canavesi C, Marola OJ, Cogliati A, Nedergaard M, Libby RT, Rolland JP (2019 Dec 01).** Gabor domain optical coherence microscopy combined with laser scanning confocal fluorescence microscopy. *Biomedical optics express*; Vol 10(12).

**Stowell RD, Sipe GO, Dawes RP, Batchelor HN, Lordy KA, Whitelaw BS, Stoessel MB, Bidlack JM, Brown E, Sur M, Majewska AK (2019 Nov 27).** Author Correction: Noradrenergic signaling in the wakeful state inhibits microglial surveillance and synaptic plasticity in the mouse visual cortex. *Nature neuroscience*.

Ebitz RB, **Sleezer BJ, Jedema HP, Bradberry CW, Hayden BY (2019 Nov 08).** Tonic exploration governs both flexibility and lapses. *PLoS computational biology*; Vol 15(11).

**Miller-Rhodes P, Kong C, Baht GS, Saminathan P, Rodriguiz RM, Wetsel WC, Gelbard HA, Terrando N (2019 Oct 28).** The broad spectrum mixed-lineage kinase 3 inhibitor URM-099 prevents acute microgliosis and cognitive decline in a mouse model of perioperative neurocognitive disorders. *Journal of neuroinflammation*; Vol 16(1).

Trzeciak A, Lerman YV, Kim TH, Kim MR, **Mai N, Halterman MW, Kim M (2019 Oct 16).** Long-Term Microgliosis Driven by Acute Systemic Inflammation. *Journal of immunology (Baltimore, Md. : 1950)*.



## Convocation Awards 2020



Ania Majewska, PhD received the Outstanding Graduate Program Director Award



Maleelo (Lelo) Shamambo received the Irving L. Spar Fellowship



Michael Giannetto received the J. Newell Stannard Graduate Student Scholarship



Victoria (Tori) Popov received The Merritt & Marjorie Cleveland Fellowship



Paige Nicklas received the Graduate Alumni Fellowship

## Student Fellowships and Training Grant Support

**Katherine Andersh**, T32, NIH, Training in Vision Science, (7/1/2020-4/30/2021)

**MaKenna Cealie**, T32, NIH, Graduate Training in Neuroscience, (07/15/2020-07/14/2021)

**Michael DuHain**, T32, NIH, Graduate Training in Neuroscience, (07/15/2020-07/14/2021)

**Karl Foley**, F30, NIH, Protein Phosphatase 1 isoforms and human de novo mutations in synaptic plasticity, (2/1/2020-1/31/2024)

**Dennisha King**, T32, NIH, Graduate Training in Neuroscience, (07/15/2020-07/14/2021)

**Allison Murphy**, T32, NIH, Training in Vision Science, (7/1/2020-4/30/2021)

**Victoria Popov**, T32, NIH, Graduate Training in Neuroscience, (07/15/2020-07/14/2021)

**Keshov Sharma**, F30, NIH, An Amygdala to Ventrolateral Prefrontal Cortex Projection Implicated in Emotional Recognition, (3/1/2020-2/28/2020)

**Mark Stoessel**, F31, NIH, Dynamics and function of cerebellar microglia, (9/30/2020-9/29/2023)

**Brendan Whitelaw**, F30, NIH, The role of PI3Kg signaling in microglial dynamics and experience dependent synaptic plasticity, (08/01/2019-07/31/2023)

## Neuroscience Graduate Program Student Solidarity Organization (NGP SSO)

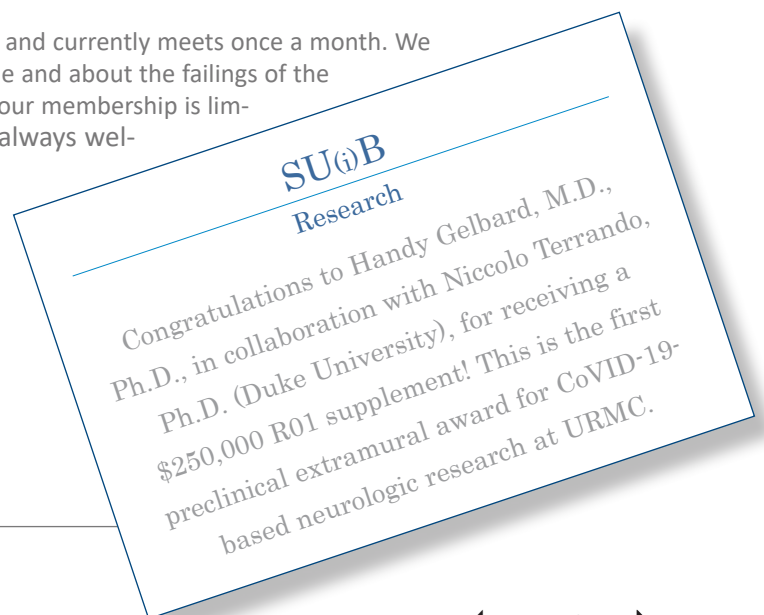
We, the students of the NGP, are excited to announce the formation of the Neuroscience Graduate Program Student Solidarity Organization (NGP SSO). We are a student run network that speaks for the students of the NGP on issues that concern us. We are in the process of building a long term organization to address, document, and advocate for student concerns, as well as create a unique space exclusively run by and for students.

In summary, the primary purpose of this group is to:

- Build a space to air concerns and address grievances.
- Submit concerns to administration in a united way.
- Recommend changes in the NGP.
- Join with other student groups in advocating for our fellow students for broad changes at the URM and the broader community.
- Host events and discussions related to relevant issues, current events, and personal experiences in a grad program.

The NGP SSO held its inaugural meeting on August 10, 2020 and currently meets once a month. We held a discussion addressing the police killing of Daniel Prude and about the failings of the mental health care system on September 10, 2020. Though our membership is limited to current NGP students and postdocs at the UR, we always welcome alumni input and support.

For more information you can:  
Join us!  
Email us at [ngpsolidarity@gmail.com](mailto:ngpsolidarity@gmail.com)





## Brain Awareness Campaigning

The University of Rochester's Brain Awareness Campaign (BAC) is a student run outreach initiative designed to engage youths in hands-on scientific experiments. Our planning committee includes Neuroscience and Brain and Cognitive Graduate Students: Carol Jew, Neal Shah, Cody McKee, Janis Intoy, Ashley Clark, and Kathryn Toffolo.

This past February, we hosted our fourth annual Rochester Brain Bee with 9 participants from 4 unique Rochester high schools. This competition consisted of 3 rounds of multiple choice and fill in the blank questions that covered a vast array of topics such as brain anatomy, development, and disease and disorders. Scott Schleede from Webster Thomas was the winner of our competition this year and was going to be provided an all-expenses paid trip to compete in the National Brain Bee at the University of Baltimore, Maryland. Unfortunately, due to the complications surrounding the COVID-19 pandemic, the National Brain Bee was canceled. We would still like to thank our sponsors, the Rochester Chapter of the Society for Neuroscience, the University of Rochester Neuroscience Program, Wegmans, Chipotle, The Little, and Rochester Museum and Science Center.

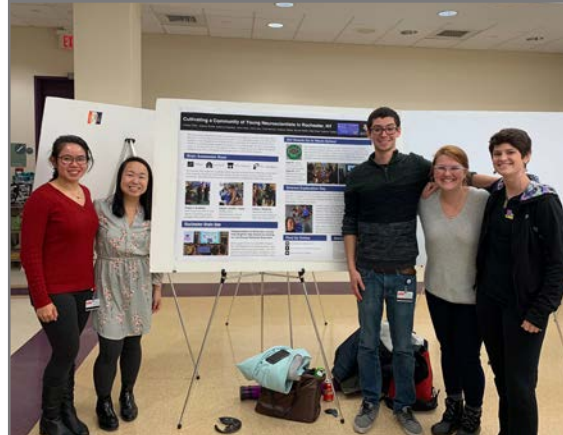
Due to some school closures and various unknowns during the COVID-19 pandemic, the BAC canceled all school visits and other activities that were to have taken place during the spring. Although we are deeply saddened by this decision, the health and well-being of our community was our top priority.

Nonetheless, we have been brainstorming various activities that we can perform remotely in order to continue to educate the youths of our community this upcoming year.

If you would like to get involved, or have ideas of your own, you can contact us at [URBrainAwareness@Gmail.com](mailto:URBrainAwareness@Gmail.com) and follow us on facebook at [Facebook.com/URBrainAwareness](https://Facebook.com/URBrainAwareness).



*Above: Brain Bee winners*



*Right: Brain Awareness committee members at the SfN Poster session*



*Left: Brain Awareness Committee Members*

## NGP Bootcamp 2020



*Welcome first year NGP students!!!*

Our NGP Bootcamp, a student-run orientation for first year students, proceeded in a mostly virtual format this year! The committee organized three days of events to welcome our newest class to the NGP, with a special emphasis on entering grad school in a unique and challenging time. Highlights included mock journal clubs to prepare for journal club courses, virtual talks and lab tours from faculty looking for rotation students, and information about life as an NGP student. Students had the opportunity get to know current students and faculty through Zoom lunches and happy hours, and the experience concluded with an in-person (socially distanced) picnic in the park. We are very thankful for all the students and faculty who helped make this year's Bootcamp a success. We are especially grateful for an amazing first year class that helped us pioneer the virtual Bootcamp experience.

-Allison Murphy, Emily Crosier, Luke Shaw, Linh Le, Sarah Yablonski  
2020 NGP Bootcamp Committee

**SU@B**  
**PhD Defense**  
Jessie Hogestyn successfully defended her thesis on December 9, 2019 and now is a postdoctoral fellow at Sanofi in Massachusetts.

## Student Updates

*(Right) NGP Volleyball Team Photo - March 2020  
(LtoR): Brendan Whitelaw, Michael DuHain, Greg Reilly, Keshov Sharma, Neal Shah, Allison Murphy, Kathryn Toffolo, Kate Andersh*



*(Left) Ally McHale got engaged on July 3, 2020!  
Picture taken at dinner after the proposal*

*(Above) PONS and the SMD Alumni Ambassadors hosted an NGP Student & Alumni Happy Hour on Thursday, 10/29 on Zoom. Several of our recent graduates answered questions about succeeding in graduate school and navigating career opportunities*

## Student Updates

### 2020 White Elephant Party

*1st year NGP students (LtoR):  
Emily Pryzsinda, Linh Le,  
Sarah Yablonski, MaKenna  
Cealiem Caitlin Sharp, Matt  
Adusei, and Michael DuHain*



*NGP students Luke Shaw,  
Allison Murphy, Jessie  
Hogestn, and Emily Crosier*



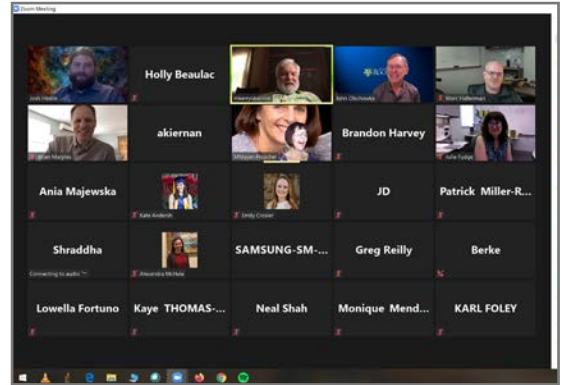
*Group Photo! 2020  
Holiday Season*



## Student Updates



*(Left) Congratulations to Emily Crosier (Warner)! Emily and Ed had their wedding on June 6, 2020*



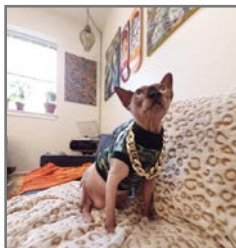
*(Above) Josh Hinkle's PhD Defense on July 16, 2020.*



*(Left) 1st year NGP students enjoyed an afternoon pumpkin picking at Wickham farms*

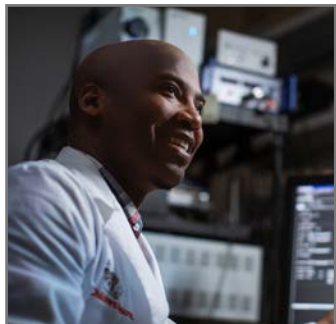


*(Right) While still a graduate student, Monique Mendes received the 2020 Edward Peck Curtis Award*



*As of July, Jessie Hogestyn is engaged (!) and has been enjoying COVID life with fiancé Taylor by taking day trips exploring Massachusetts and Rhode Island. Jessie has also joined Evolve Dynamicz, a local contemporary dance collective. They've been practicing safely via Zoom, and were lucky enough to perform virtually at the 2020 Rochester Fringe Festival! --- Also, Dobby (pictured left) the hairless cat is five years old and living his best life. His wardrobe continues to expand at a rate rivaling Jessie's.*

## Alumni Updates



Nathan Smith (above) received a \$600,000 DOD ARO grant to study the role of glial cells in neural excitability and cognition.



(Above) Revathi Balasubramanian is an Associate Research Scientist in Dr. Simon John's lab in the Department of Ophthalmology at Columbia University. She studied the genetics of anterior segment disorders in the eye and currently is focused on understanding the molecular basis of glaucoma. She has continued on a path towards studying ocular disorders since getting a PhD from UofR where she worked with Dr. Lin Gan on understanding the transcriptional basis of retinal subtype development. She also served on the executive committee of the Columbia University Postdoc Society, and continues to advocate for mentoring and empowerment of women and under-represented population in academia. Personally, she hopes to pass along her love for books, Science, and Ruth Bader Ginsberg to her daughter- Samhita.



Rianne Stowell (above), NGP alumn and current post-doc in Dr. Kuan Hong Wang's lab, married Matt on October 31, 2020 at ARTISANworks in Rochester, NY.

Jay McLaughlin was promoted to Full Professor at the University of Florida, Department of pharmacodynamics.

Ryan Dawes received a promotion to Senior Research Scientist at Vertex Pharmaceuticals. On the personal side, Ryan and his wife and bought our first home in the Boston area!

Dr. Brandon Harvey, a NB&A Alumnus (2002) and current Tenure-Track Investigator at the National Institute on Drug Abuse was selected for the NIH Intramural Targeted Anti-COVID-19 Program to examine effects of SARS-CoV-2 proteins on endoplasmic reticulum proteostasis. For part of his project, he is collaborating with Dr. Stephen Dewhurst (UR CREDENTIALS INSERTED). In addition, a recent graduate from the Neuroscience Program, Dr. Joshua Hinkle has joined Dr. Harvey's lab and will be working on the COVID-19 project by studying disruption of ER proteostasis caused by SARS-CoV-2 proteins.

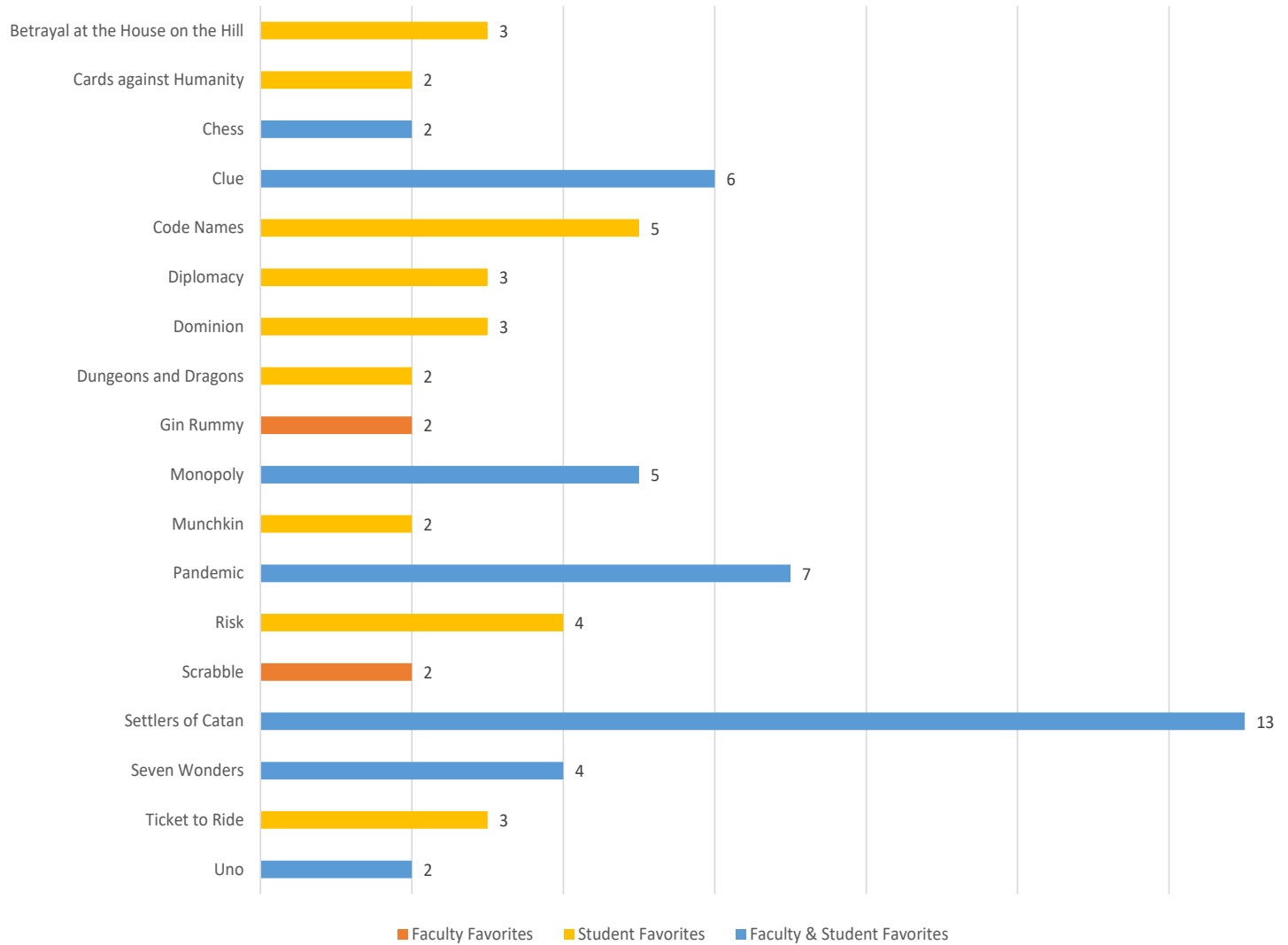


Rachel and Grayson (above) were married in Grand Rapids, Minnesota with only close family members in attendance. They cancelled a larger wedding due to the pandemic, but were happy to share the moment with their immediate families. Rachel, who works as a curatorial assistant at Harvard's Museum of Comparative Zoology, met Grayson while he worked as a postdoctoral fellow in the department of Brain and Cognitive Sciences at MIT.

## COVID-19 Polls

To entertain faculty and students the first few weeks of the COVID-19 shutdown, we polled them on their favorite board games, books, breweries, food, parks and bars.

### Favorite Board Games



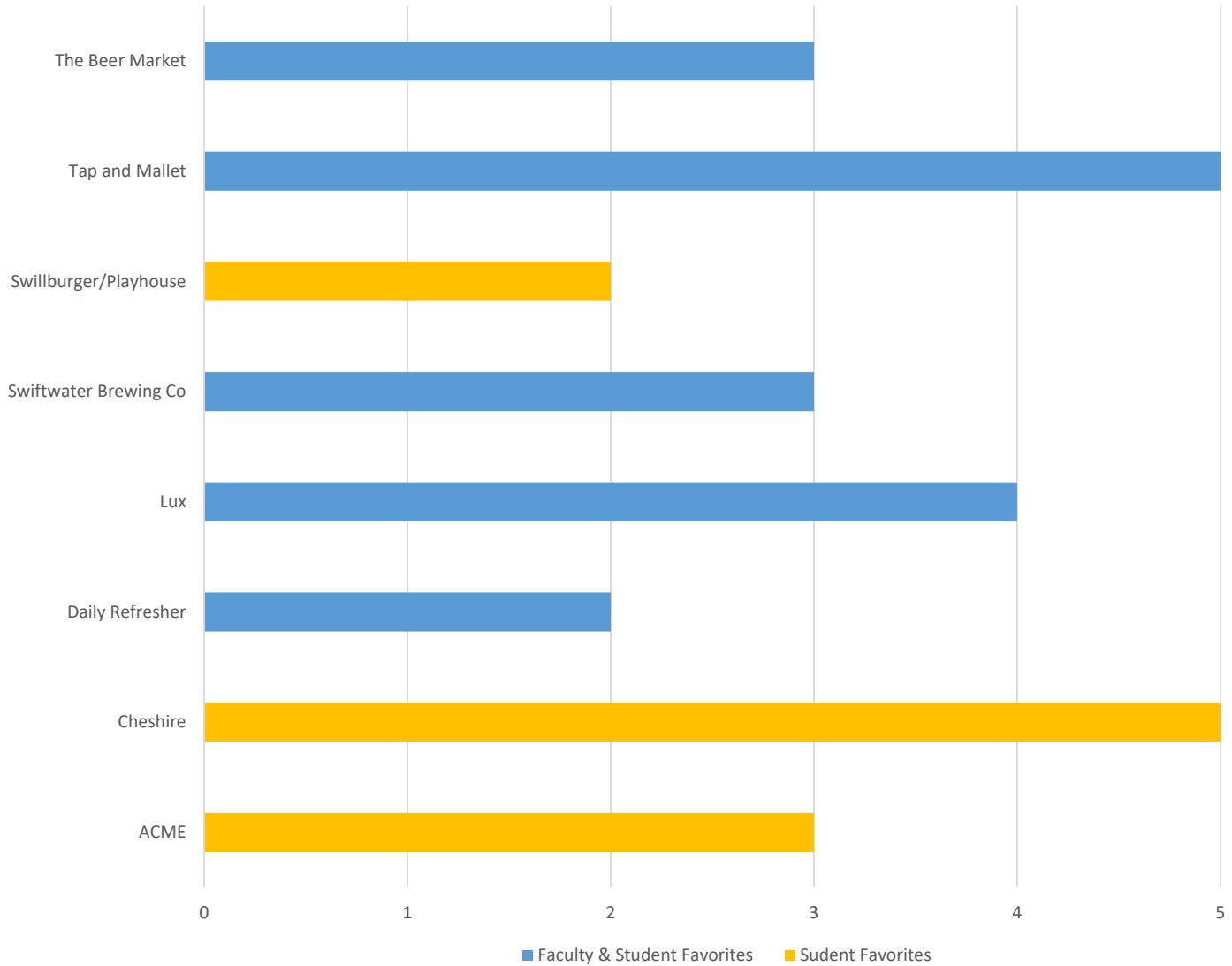
### Other Favorites

Agricola	Axis and Allies	Balderdash	Betrayal at Baldur's Gate	Bolkus
Candy Land	Captain Sonar	Chutes & Ladders	Dinosaur Island	Elder Sign
Exploding Kittens	Go	Guess Who	Jenga	King of Tokyo
Labyrinth	Oh Hell	Parcheesi	Puerto Rico	Scattergories
Secret Hitler	Sequence	Shadows over Camelot	Snakes and Ladders	Superfight
Taboo	Top Sector Spies	Trivial Pursuit	Trouble	Zombicide

[More COVID-19 polls on next page](#)

COVID-19 Polls (continued)

Favorite Local Bars



Other Favorites

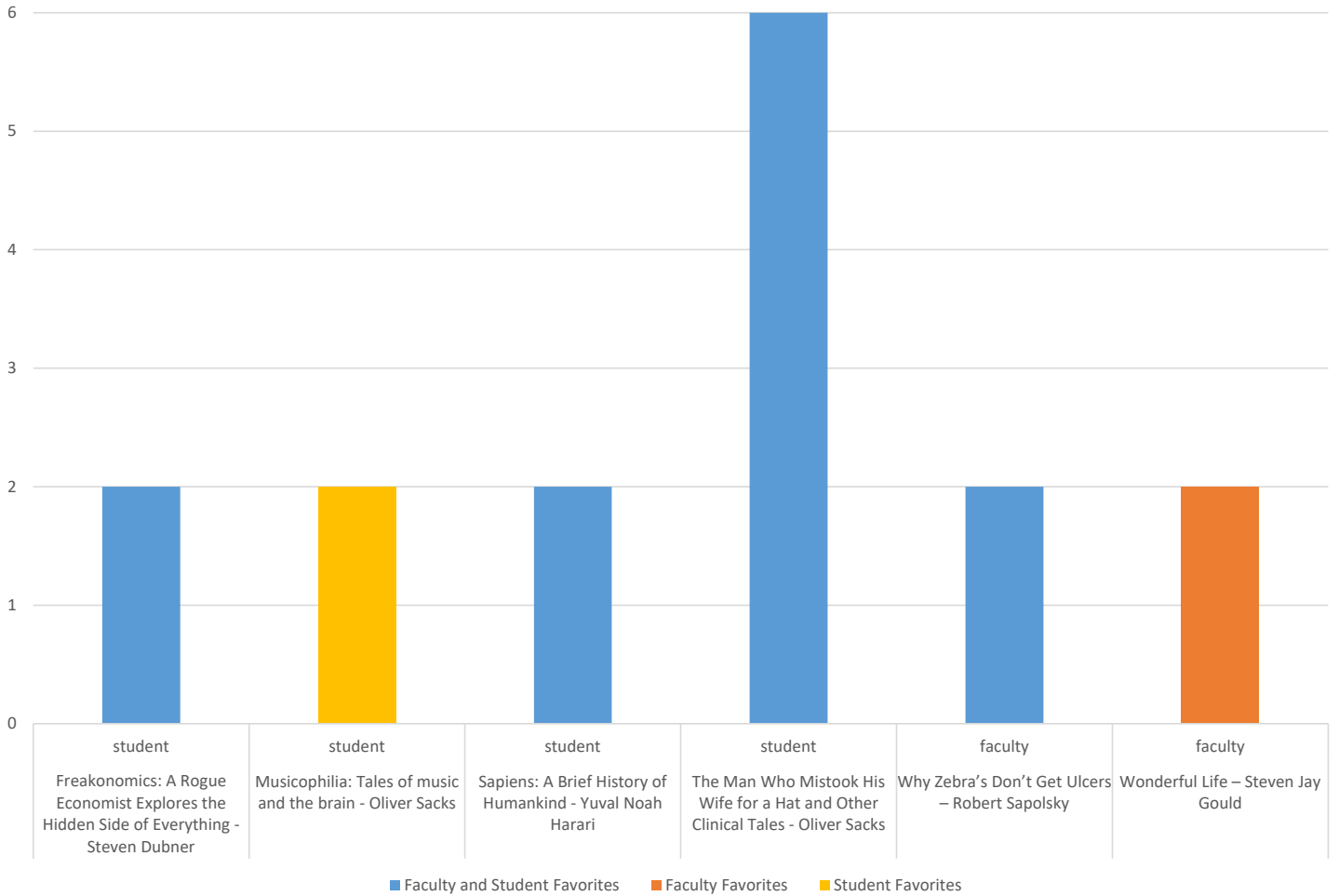
- |                     |                             |                        |                              |                     |
|---------------------|-----------------------------|------------------------|------------------------------|---------------------|
| <i>Caverly's</i>    | <i>Lock 32</i>              | <i>OTR</i>             | <i>The Daily Refresher</i>   | <i>Toasted Bear</i> |
| <i>Cub Room</i>     | <i>McGreggors</i>           | <i>Ox and Stone</i>    | <i>The Elmwood Inn</i>       | <i>Unter</i>        |
| <i>Cure</i>         | <i>Muller's Cider House</i> | <i>Rohrbach</i>        | <i>The Old Toad</i>          | <i>UUU</i>          |
| <i>Good Luck</i>    | <i>Nox</i>                  | <i>Roux</i>            | <i>The Spirit Room</i>       |                     |
| <i>Havana Moe's</i> | <i>Other Half Brewing</i>   | <i>Solera Wine Bar</i> | <i>Thirsty's (Pittsford)</i> |                     |

[More COVID-19 polls on next page](#)



COVID-19 Polls (continued)

NGP Faculty & Student Favorite Pop Sci Books



Other Favorites

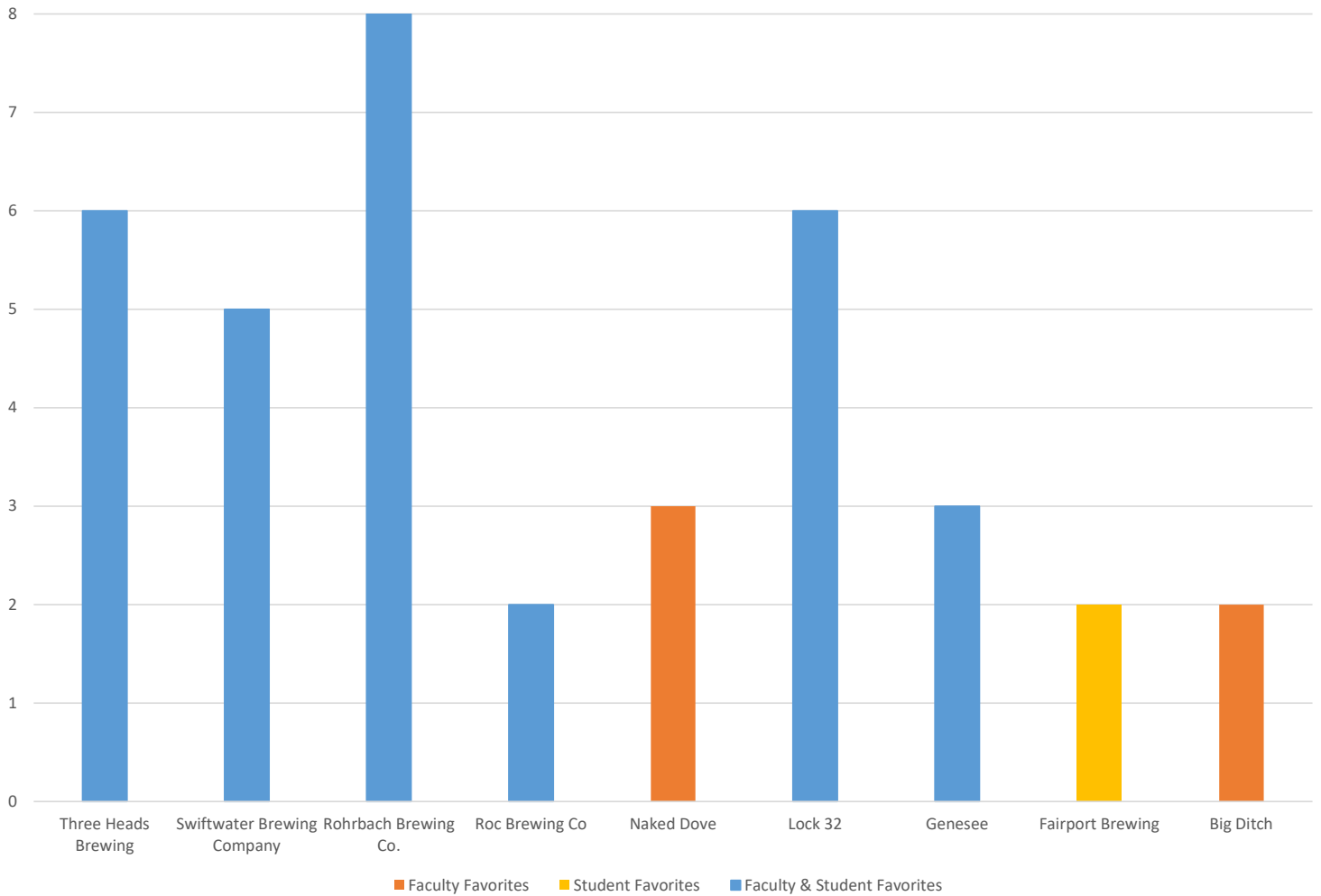
- A Madman Dreams of Turing Machines* - Janna Levin
- A Primate's Memoir* - Sapolsky
- Big Bang* - Simon Singh
- Botany of Desire* - Micheal Pollen
- Childhood's End* - Arthur C. Clark
- Emperor of All Maladies* - Siddhartha Mukherjee
- Ever since Darwin* - Steven Jay Gould
- Explorers of the Black box* – Susan Allport
- Fabric of the Cosmos* - Briane Greene
- Guns, Germs and Steel* - Jared Diamond
- Gut: The Inside Story of Our Body's Most Underrated Organ*
- How the Mind Works* - Steven Pinker
- How to Create a Mind: The Secret of Human Thought Revealed* - Ray Kurzwell
- I am a Strange Loop* - Douglas Hofstadter
- I am Joe's Body* – J.D. Ratcliff

More found at: <https://www.urmc.rochester.edu/education/graduate/phd/neurosciences/news.aspx>

More COVID-19 polls on next page

COVID-19 Polls (continued)

Favorite Local Breweries



Other Local Favorites

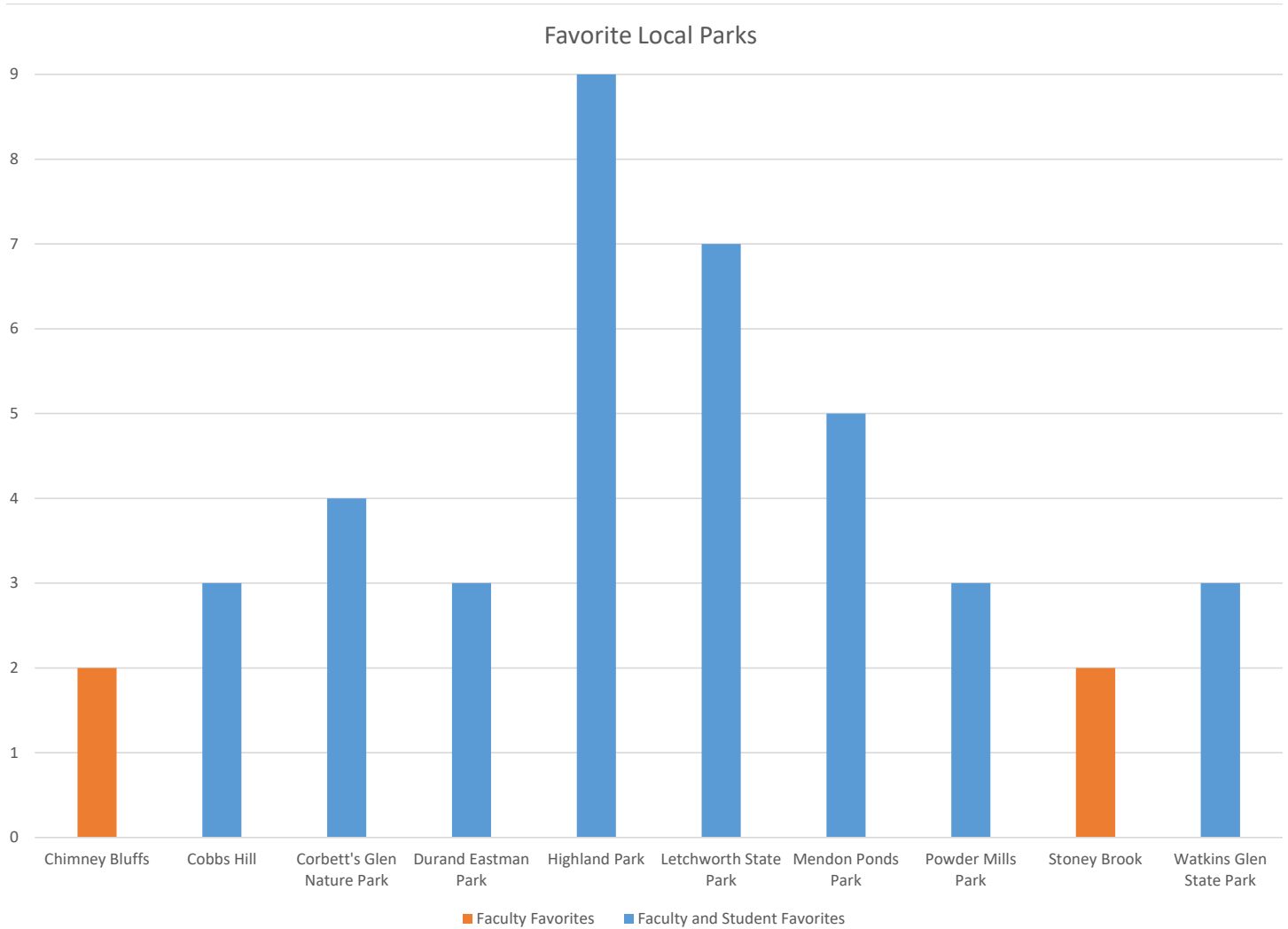
- Black Button
- Brindle Haus
- Iron Tug
- Other Half
- 3-Heads
- Community Beer Works
- Resurgence
- Seven Story Brewing
- Southern Tier
- K2 Brothers Brewing

Other Non-Local Favorites

- Guinness
- The Alchemist Brewery (Vermont)
- Zero Gravity Brewing (Vermont)
- Orono Brewing (Maine)
- Sam Adams
- Ballast Point
- Sierra Nevada
- Murphys

More COVID-19 polls on next page

COVID-19 Polls (continued)

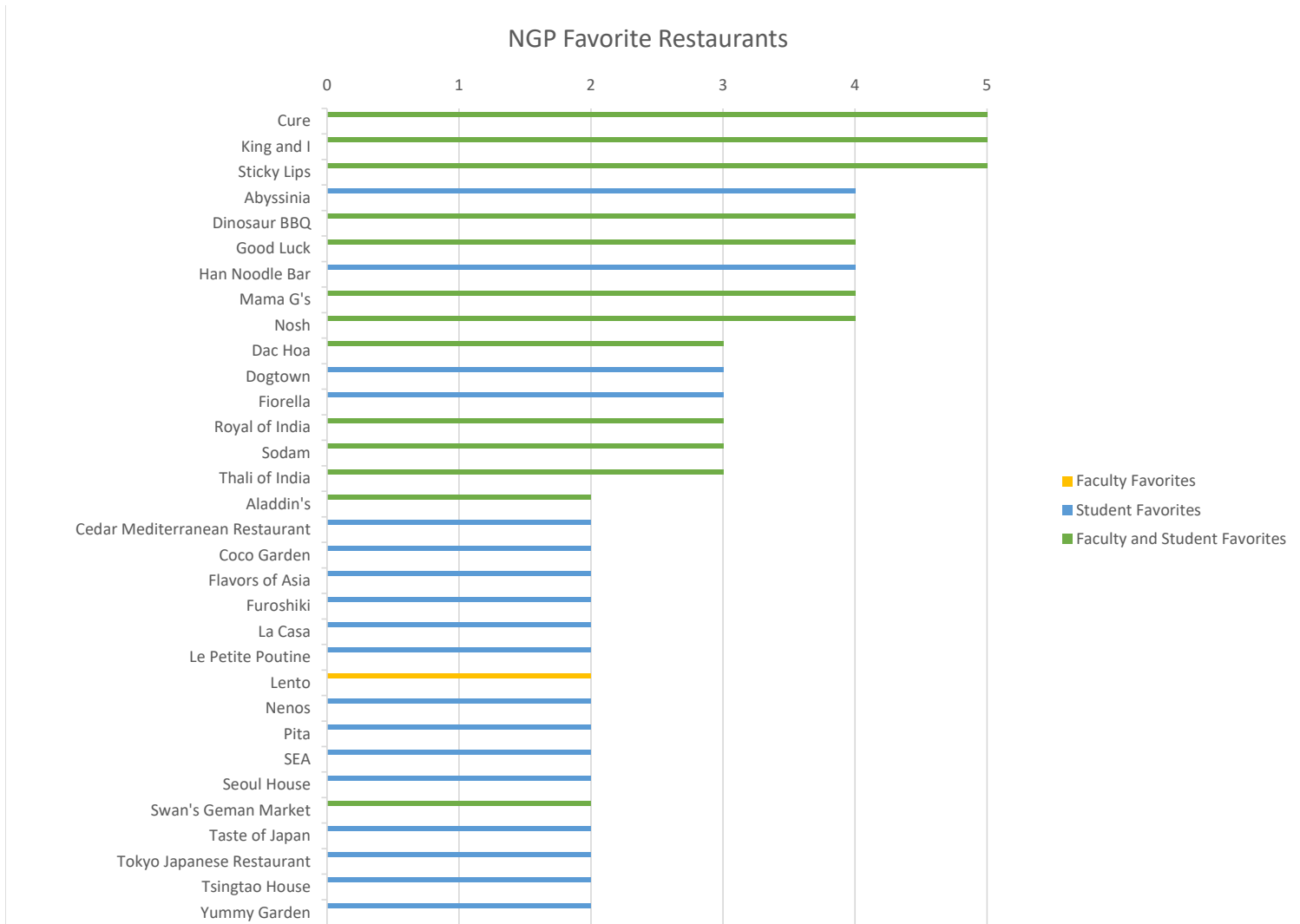


*Other Favorites*

- Ellison Park
- Lehigh Valley Trail
- Genesee Valley Greenway
- Riverfront near downtown
- Genesee Valley Park
- Tinker Park
- Genesee River
- Turning Point Park
- Harriet Hollister
- Washington Grove

*More COVID-19 polls on next page*

## COVID-19 Polls (continued)



### Other Local Favorites

<i>110 Grill</i>	<i>Blu wolf Bistro</i>	<i>Dibella's</i>	<i>Grappa</i>	<i>Juan and Maria's Empanada Stop</i>
<i>Acme</i>	<i>Blue Taro</i>	<i>Distillery</i>	<i>Harry G's</i>	<i>KungFu Tea</i>
<i>Bamboo House</i>	<i>Campi's</i>	<i>Elmwood Inn</i>	<i>Hedges Nine Mile Point Restaurant</i>	<i>Livingston County Pizza Co.</i>
<i>Beer Market</i>	<i>Castaways</i>	<i>Embers</i>	<i>India House</i>	<i>Lovin' Cup</i>
<i>Benucci's</i>	<i>Cerames</i>	<i>Ferrari's Pizza</i>	<i>Jeremiahs</i>	<i>Mad Hatter</i>

More found at: <https://www.urmc.rochester.edu/education/graduate/phd/neurosciences/news.aspx>

## Alumni

First Name	Last Name	Defense Date	Current Position, Location
Monique	Mendes	7/31/2020	Post-Doctoral Fellow in Dr. Mark Schnitzer's lab, Stanford University, California
Joshua	Hinkle	7/16/2020	Post-Doctoral Fellow, NIH NIDA, Baltimore
Patrick	Miller-Rhodes	7/14/2020	Science Marketing Writer, Biofluent Communications
Alejandra	Rodriguez	7/13/2020	Medical Student, Medicine, University of Rochester
Samantha	Abbott	6/19/2020	Resident Manager, Lifetime Assistance, Inc.
John	Wilson	4/2/2020	Medical Student, Medicine, University of Rochester
Jessica	Hogestyn	12/9/2020	Postdoctoral Fellow, Sanofi, Massachusetts
Aimee	Morris	7/1/2019	Medical Student, Medicine, University of Rochester
Rianne	Stowell	6/28/2019	Postdoctoral Fellow, Wang Lab, Neuroscience, University of Rochester
Dawling	Dionisio-Santos	6/26/2019	Medical Student, Medicine, University of Rochester
Aleta	Steevens	4/16/2018	Postdoctoral Fellow, Low Lab, Department of Neurosurgery and the Stem Cell Institute, University of Minnesota-Twin Cities
Rebecca	Rausch	11/3/2017	Senior Scientist, EyeCRO, Ann Arbor, Michigan
Heather	Natola	10/3/2017	Educator and Volunteer Coordinator, The Raptor Trust, New Jersey
John	O'Donnell	7/17/2017	Postdoc at Washington University Saint Louis in their neurology department looking at imaging of Parkinson.
Matt	Cavanaugh	7/17/2017	Post-doc with Dr. Steve Feldon, Ophthalmology M&D, University of Rochester
Laura	Yunes-Medina	6/16/2017	Postdoctoral Research Fellow, Indiana University School of Medicine
Xiaowei	Wang	4/17/2017	Postdoctoral Associate, Nedergaard Lab, University of Rochester
Evan	McConnell	4/12/2017	Medical Student, Medicine, University of Rochester
Nguyen	Mai	4/10/2017	Medical Student, Medicine, University of Rochester
Stephanie	Syc-Mazurek	3/27/2017	Medical Student, Medicine, University of Rochester
Berkeley	Farenthold	3/20/2017	Postdoctoral Fellow, Ophthalmology, University of Rochester
Kelli	Fagan	1/23/2017	Data Scientist, BCBS
Julianne	Feola	1/17/2017	Regulatory Specialist, Masonic Cancer Center, University of Michigan
Shiona	Biswas	9/28/2016	Postdoctoral Associate, Ophthalmology M&D, University of Rochester
Jennifer	Stripay	7/25/2016	Postdoctoral Fellow, Department of Tumor Cell Biology, St. Jude's Children Hospital
Ryan	Dawes	7/18/2016	Scientist 1, Vertex Pharmaceuticals

*Continued on next page*

## Alumni (continued)

First Name	Last Name	Defense Date	Current Position, Location
Rebecca	Lowery	7/7/2016	Postdoctoral Fellow, Majewska Lab, Neuroscience, University of Rochester
Brianna	Sleezer	5/20/2016	Postdoctoral Fellow, Brain & Cognitive Science, University of Rochester
Christina	Cloninger	4/7/2016	Scientist, Exponent
Grayson	Sipe	2/19/2016	Postdoctoral Fellow, Brain & Cognitive Science, MIT
Fatima	Rivera-Escalera	11/2/2015	Postdoctoral Fellow, Neuroscience, University of Rochester
Adam	Pallus	7/1/2015	Postdoctoral Fellow, Genome Sciences, University of Washington
Wei	Sun	6/29/2015	Postdoctoral Fellow, NIMH
Adrienne	Chesser	6/10/2015	Resident, Allina Health, Internal Medicine
Susanne	Pritchard Pallo	5/19/2015	Public Relations Assistant, University of Rochester
Revathi	Balasubramanian	11/7/2014	Postdoctoral Research Scientist, Ophthalmology, Eye Institute, Columbia University
Helen	Wei	6/24/2014	Department of Surgery, General Surgery Residency Program, Rutgers New Jersey Medical School
Imran	Punekar	6/19/2014	Resident, Anesthesiology Residency Program, University of Rochester
Irina	Statnikova	4/14/2014	Resident, Psychiatry, University of Rochester
Michele	Saul	4/7/2014	Adjunct Assistant Professor, University of Rochester; Visiting Assistant Professor, St. John Fisher
Simantini	Ghosh	12/12/2013	Postdoctoral Fellow, Neurology, Washington University School of Medicine in St. Louis
Kimberly	Fernandes	11/4/2013	Medical Writer, VirtualScopics, Inc, Rochester, NY
Danielle	DeCampo	11/1/2013	Pediatrics, Johns Hopkins Neurosurgery
Anasuya	Das	7/19/2013	Data Scientist, Memorial Sloan Kettering Cancer Center
Nathan	Smith	6/24/2013	Neuroscientist, Center for Neuroscience Research, Children's National Medical Center
Daniel	Marker	4/17/2013	Resident, Pathology, University of Pittsburgh
Veena	Ganeshan	4/11/2013	Senior Lab Engineer, BME, Rochester, NY
Danny	Rogers	3/29/2013	Resident Physician, Child Neurology, University of New Mexico
Philip	Rappold	12/20/2012	Resident, Urology, University of Rochester
Sarah	Allen (McConell)	12/18/2012	Assistant Professor, Neuroscience, University of Rochester
Maria	Diehl	11/7/2012	Postdoctoral Fellow, Psychiatry, University of Puerto Rico
Michael	Wu	9/8/2012	Resident Physician, Department of Anesthesiology, University of California San Francisco

*Continued on next page*

## Alumni (continued)

First Name	Last Name	Defense Date	Current Position, Location
Katherine	Selzler	6/25/2012	Associate Consultant for Scientific Communications, Eli Lilly and Company
Ethan	Winkler	6/18/2012	Resident, Neurological Surgery, University of California, San Francisco
Youngsun	Cho	6/11/2012	Resident, Psychiatry, Yale School of Medicine
Sally	Duarte	4/13/2012	Postdoctoral Fellow, Max Planck Institute
Crystal	McClain	3/2/2012	Post Doctoral Research Associate at the University of Colorado Anschutz Campus
Zhuoxun	Chen	3/8/2012	Student, University of Maryland School of Dentistry
Cory	Hussar	2/20/2012	Senior Medical Writer; Curry Rockefeller Group, LLC
Kathleen	McAvoy	11/11/2011	Postdoctoral Fellow, Amar Fahay Lab, Harvard Stem Cell Institute
Michael	Jacob	6/16/2011	Resident in Psychiatry, UCSF
Susan	Lee	4/4/2011	Resident Physician, Child Neurology, Cincinnati Children's Hospital Medical Center
Steve	Raiker	12/8/2010	Research Fellow, Thomas Schwarz's Lab, Children's Hospital Boston/Boston Medical School
Arnulfo	Torres-Pena	8/17/2010	Medical Writer at Freelancer, /Medical Communications
Michael	Moravan	8/13/2010	Assistant Professor, Radiation Oncology Department, Duke University and VA Hospital
Sarah	Bliss-Matousek	6/9/2010	Principal Consultant, Day Health Strategies, Spokane, WA; Teaching, Boston University; Affiliate faculty, Ariadne Labs, Harvard TH Chan School of Public Health
William	Mowrey	6/1/2010	Post-doctoral Fellow, HHMI, Anthony Leonardo's lab at Janelia Farm
Marina	Dobрева (Stoilova)	4/16/2010	Bulgaria
Deborah	Ryan	4/9/2010	IGPN
Michael	Pesavento	4/6/2010	Senior Data Scientist and Algorithm Engineer, 3 Scan, San Francisco, CA
I-Chen	Yu	1/28/2010	Research Fellow at Indiana University School of Medicine
Lynette	Desouza	1/25/2010	Post-doctoral Fellow, Tata Institute of Fundamental Research; in 2013 was a stay at home mom
Yuriy	Edwards (Shapovalov)	12/22/2009	Medical Director, Neurology, Alexion Pharmaceuticals, Boston
Bernard	Gee	8/13/2009	Faculty, Dept. of Psychology, Western Connecticut State University
Qi	Cui	8/11/2009	Ophthalmology Resident (Class of 2015), at UCSF completed fellowship at Wills Eye Institute in Philadelphia

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## Alumni (continued)

First Name	Last Name	Defense Date	Current Position, Location
Sarita	Kishore	7/31/2009	2010-internship through University of Washington in Boise, Idaho, 2011-residency in Ophthalmology in Louisville, KY
Carolyn	Tyler	6/17/2009	Medical Science Liaison, Otsuka America Pharmaceutical, Inc.
Aaron	Cecala	6/15/2009	Associate Professor of Physiology, Elizabethtown College
Ditte	Lovatt	5/27/2009	Associate Principal Scientist, Merck
Kyung Hwa	Lee	3/16/2009	Post-doctoral Fellow, City College of New York, Itzhak Mano lab
Laurie	Robak	2009	as of 7/1/15-6/30/16 Post-doctoral Research Associate/ Clinical Instructor, Department of Neurology and Department of Molecular and Human Genetics, J. Schulman lab, Baylor College of Medicine, One Baylor Plaza
Onanong (Annie)	Chivatakarn	2009	Post-doctoral Fellow, Salk Institute
Yanan	Guo	12/1/2008	Associate Director, R&D at Biocytogen, Beijing, China
Verginia	Cuzon (Carlson)	10/17/2008	NIH, Bethesda, MD
Grace	Vangeison (Johnston)	9/19/2008	Vice President of Marketing, Sartorius, Boston, MA
Irah	King	7/25/2008	Assistant Professor, McGill University, Department of Microbiology and Immunology
Annie	Chivatakarn	7/24/2008	Senior Research Associate, Gene Expression Lab, The Salk Institute for Biological Studies, San Diego, CA
Glenn	Schneider	6/19/2008	Otolaryngology Specialist, URM
Nancy Ann	Oberheim Bush	6/18/2008	Neurology Resident, Class of 2015, UCSF
Allison	Stickles	4/21/2008	Resident Physician University of Cincinnati and Cincinnati Childrens, University of Cincinnati Academic Health Center
Meghan	Riley	4/17/2008	IRB Analyst III, The Children's Hospital of Philadelphia
Yasser	Elshatory	4/9/2008	Resident, Dean McGee Eye Institute, Department of Ophthalmology
Erin	Johnson (Venkatesh)	3/28/2008	Research Scientist, Children's Hospital, Boston, MA
Xiaoyan	Lin	8/14/2007	Associate Director WuXi AppTec, Shanghai City, China
Pushkar	Joshi	8/2/2007	Adjunct Professor, Stanford University, Dept. of Biology
Ling	Pan	8/1/2007	Research Scientist, Picower Institute for Learning & Memory
Karthik	Venkatesh	6/28/2007	Associate Director of Medical Writing, Biogen, Cambridge MA
Matthew	Bellizzi	6/4/2007	Sr. Instructor in Neurology, Division of Neuroimmunology, URM
Beth-Ann	Shanker	5/9/2007	Colon & Rectal Surgery, St. Joseph Mercy Livingston, St. Joseph Mercy Ann Arbor, St. Mary Mercy Livonia

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## Alumni (continued)

First Name	Last Name	Defense Date	Current Position, Location
Solomon	Shaftel	4/23/2007	Ophthalmic plastic and reconstructive surgeon, Medical Practice, San Diego, CA
Xiaohai	Wang	1/3/2007	Senior Research Biologist, Dept of Neuropharmacology, Merck Research Laboratories, Philadelphia, PA
Jason	Hamilton	11/7/2006	Novartis NY
Daniel	Zaksas	10/3/2006	Scientific VP, Dudnyk, Horsham, PA
Ziye	Sui	9/26/2006	CEO at Comed B.V.; Almere Stad Area, Netherlands; Medical Devices; Current: Analyst at Care Capital
Charles	Wuertzner	7/25/2006	Faculty, MCC, Rochester, NY
Roberto	Fernandez-Romero	6/13/2006	Medical director Roberto Fernandez, MD, MPH, PhD, The Pat Summitt Clinic's experienced multi-disciplinary team helps patients with memory disorders, and their families and caregivers. The University of Tennessee Medical Center
Jill	Weimer	9/16/2005	Associate Director & Scientist, Children Health Research Center at Sanford Research Sioux Falls, South Dakota
Kuei-Cheng	Lim	7/8/2005	Neurologist, St. Luke's University Health Network, Philadelphia, PA
Chiayu	Chiu	6/27/2005	Associate Research Scientist I Neurobiology, Yale University, New Haven, CT
Min	Zhu	6/22/2005	New England Neurological Associates, PC. Massachusetts
Zhiyong	Yang	6/6/2005	Surgical Intern, UC San Diego Health System
(Kitty) Chia-Wen	Wu	4/13/2005	Pipeline & Portfolio Planning at Genentech, San Francisco, CA
Zhenhua	Wu	3/15/2005	Principal Scientist at Merck, Philadelphia, PA
Renee	Miller	12/21/2004	Lecturer, BCS, University of Rochester, NY
Rebecca	Sappington	6/4/2004	Associate Professor, Department of Neurobiology and Anatomy, Wake Forest School of Medicine, Winston-Salem, NC
Michael	Froehler	12/18/2003	Vanderbilt Neurosurgery, Tennessee
Michael	Hanna	12/9/2003	Assistant Professor, Dept. of Biological & Environmental Sciences, Texas A&M University-Commerce, Commerce, TX
Luisa	Scott	8/14/2003	Research Associate, Department of Neuroscience, Waggoner Center for Alcohol & Addiction Research, The University of Texas at Austin
Patricia	Sheridan	8/1/2003	Study Director, Metabolon, Inc.; Adjunct Assistant Professor, Nutrition- Ops, University of North Carolina at Chapel Hill
Seth	Perry	7/24/2003	

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## Alumni (continued)

First Name	Last Name	Defense Date	Current Position, Location
Adnan	Siddiqui	4/23/2003	Assistant Professor of Neurosurgery, Assistant Professor of Radiology, University at Buffalo Neurosurgery, State University of New York, Buffalo, NY
Brandon	Harvey	11/15/2002	Investigator, Tenure Track, NIDA NIH
Andrew	Custer	9/25/2002	Lathrop Gage, Esq, Boston MA
David	Logan	8/5/2002	Principal Computational Scientist at Pfizer, MA
Marc	Dubin	6/18/2002	Assistant Professor in Clinical Psychiatry at Weill Cornell Medicine and an Assistant Attending Psychiatrist at New York Presbyterian Hospital
Mary	Maida	3/5/2002	THE MEDINGEN GROUP, LLC, Clerisy Corp., Rochester, NY
Deon	Harvey (Sanchez)	10/19/2001	Librarian; Director and Manager at Harvey Family, Baltimore County Public Library, MA
Mona	Thiruchelvam	10/18/2001	
Elizabeth	Kriscenski-Perry	8/3/2001	Assistant Professor, Biomedical Sciences, College of Health Sciences and Technology, Rochester Institute of Technology
Tina	Huang	8/1/2001	ALSO Tufts University, Scientist III, Nutritional Immunology Laboratory; Director of Research, Transparent Corporation, Columbus, OH
Jay	Nierenberg	2001	
Randall	Hayes	2001	Founder of Agnosia Media, LLC; Freelance Columnist, Orson Scott Card's Intergalactic Medicine Show; Specialist Roster, Fullbright Commission
Nikolaus	McFarland	2001	Assistant Professor; Acting Chief of Movement Disorders Division, Department of Neurology, University of Florida College of Medicine
Bonnie	Ward	10/12/2000	
Michael	Kaplan	8/14/2000	
Anna	Yermakova Allen	6/20/2000	Practicing Ophthalmology in Albany, New York
William	Page	3/27/2000	Research Assistant Professor, Department of Neurology, Memory Care, University of Rochester Medical Center
Russell	Ferland Jr.	3/22/2000	Associate Professor, Center for Neuropharmacology and Neuroscience: Albany Medical College, The Albany Medical College, 47 New Scotland Avenue, MC-136, Albany, NY 12208
Tim	Mhyre	2000	Team Manager, Office of Sponsored Programs, Washington State University, Pullman, WA
Jess	DiGiorgianni	12/21/1999	Licensed Professional Counsellor, LCMHC, VT
Sheila	Kelley	11/5/1999	Sheila Phelps Kelley MD, PhD, Family Doctor, Webster, NY

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## Alumni (continued)

First Name	Last Name	Defense Date	Current Position, Location
Scott	Evans	10/21/1999	University of Washington, Psychiatry and Behavioral Sciences, Electronics and Material Engineering Shop
Stephanos	Kyrkanides	3/3/1999	Associate Dean for Research & Faculty Development, Professor & Chair, Department of Orthodontics and Pediatric Dentistry
Tracy	Callahan	2/5/1999	Community Lab Director, Biogen, Boston, MA
Michael	Gordon	7/28/1998	Lecturer I, Communication Sciences, College of Nursing and Health Sciences, The University of Vermont
Caroline	Little	7/13/1998	Women's Healing Centers, Inc., Assurex Health, A Place of Refuge Ministries
Deborah	New	5/22/1998	New Smiles Orthodontics, Rochester, NY
Jay	McLaughlin	4/9/1998	Associate Professor, Pharmacodynamics, University of Florida
James	Greene	2/20/1998	Associate Professor, Department of Neurology; Director, Neurohospitalist Program, Emory University School of Medicine
Alice	Roberts	12/17/1997	Dermatopathologist at Richfield Dermatopathology Laboratory, Cincinnati, OH
Derek	Choi-Lundberg	7/8/1997	Senior Lecturer, Division of Medicine and Paramedicine, School of Medicine, Faculty of Health, University of Tasmania, Australia
Mark	Basham	6/5/1997	Associate Professor and Director of the Neuroscience Program, Regis University, Department of Psychology, D-12 Regis University
Xiaofeng	Qi	11/25/1996	Programmer, Optometry, Indiana University, 800 E. Atwater Ave., Bloomington, IN 47405-3680
Gary	Samoriski	7/12/1996	Associate Vice President at Allergan R&D, NYC
Wu	Zhou	4/29/1996	
Kumi	Nagamoto-Combs	4/23/1996	Assistant Professor and Neuroscience Outreach Director, University of North Dakota School of Medicine & Health Services
Jay	Gibson	1/29/1996	Assistant Prof., Southwestern Medical Center, Dept. Of Neuroscience, Dallas, TX
San	Ouyang	11/29/1995	
Stephen	Breneman	8/3/1995	Associate Professor, Department of Anesthesiology & Perioperative Medicine, University of Rochester Medical Center
James	Way-Young Chen	6/2/1995	Associate Professor, Neurology, UCLA
Kevin	Kinney	4/24/1995	Professor, Biology, Depauw University, IN
Michael	Burek	3/8/1995	

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## Alumni (continued)

First Name	Last Name	Defense Date	Current Position, Location
Daniel	Selski	1/27/1995	Assist. Prof., Central Washington University, Dept. Of Biological Sciences, Science Building, Ellensburg, WA
Diane	Lawrence	9/30/1994	Program Official in the Division of AIDS, NIAID, National Institutes of Health, Washington, DC
Joseph	Colombo	7/20/1994	Medical Director and Executive Vice-President at Ansar, Inc., Philadelphia, PA
Tsung-i	Peng	6/28/1994	Department of Neurology Physician / Associate Professor Chang Gung University, Department of Neurology, Keelung Chang Gung Memorial Hospital, Taiwan
Willard	Wilson	6/27/1994	Acting Director- Therapy Research at Neurostream Technologies Corp, 2 Carlson Parkway, Suite 155, Minneapolis, MN, 55447
Margaret	Veruki	4/8/1994	Professor, Department of Biomedicine, University of Bergen, Norway
Sandra	Aamodt	1/21/1994	Science Writer, WINTERS, CA
Eileen	Lynd-Balta	5/5/1993	Faculty, St. John Fisher College, Rochester, NY
Thomas	Wengenack	7/25/1991	
Laura	Sim-Selley	7/9/1991	Professor, Department of Pharmacology and Toxicology, Virginia Commonwealth University
Susan	Sullivan	6/25/1991	Senior VP of Clinical Operations at Upstate NY Transplant Services, Buffalo, NY
Christine	Checkosky	6/7/1991	Empire Vision: Checkosky Christine M OD; Syracuse, NY
Stephen	Gucker	4/5/1991	Retired Patent Examiner at US federal government
Dana	Selley	3/25/1991	Professor, Pharmacology and Toxicology, Virginia Commonwealth University, Richmond, VA
Tracy	Romano	2/6/1991	Vice President of Biological Research / Chief Scientist, Mystic Aquarium
James	Maxwell	1/24/1991	
Claire	Gavin	1/21/1991	Water Testing Director at Clean Up Sound and Harbors, Connecticut
Farida	Sohrabji	10/5/1990	Assist. Prof., Texas A&M Health Science Center, sohrabji@medicine.tamhsc.edu, <a href="http://hsc-anatomy.tamu.edu/ANAT/CV-Sohrabji.html">http://hsc-anatomy.tamu.edu/ANAT/CV-Sohrabji.html</a>
Danru	Zhang	7/6/1990	
David	Berlove	2/5/1990	Senior Group Leader, Principal, Berlove Pharmacology Consulting, Boston, MA
Lucinda	Hemmick	10/14/1989	Teaching A.P. chemistry and science research at Longwood High School in Middle Island on Long Island
Kurt	Ackerman	9/21/1989	Associate Professor of Psychiatry, University of Pittsburgh
Fitzsimmons	Marker	6/8/1989	

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## Alumni (continued)

First Name	Last Name	Defense Date	Current Position, Location
Rajesh	Miranda	2/27/1989	Department of Neuroscience and Experimental Therapeutics, Interdisciplinary Program in Neuroscience
Guoying	Bing	8/4/1988	Professor, Neuroscience, University of Kentucky College of Medicine
John	Kruse	1990	Physician specializing in Psychiatry, San Francisco, CA
Sonia	Carlson	10/21/1987	
Harold	Lesser	7/14/1987	Professor of Clinical Neurology in the Department of Neurology at the University of Rochester Medical Center
Frederick	Monsma	5/1/1987	Senior Vice President, Scientific Operations, The New York Stem Cell Foundation
Jeffrey	Levine	1987	
James	Herman	10/20/1986	University of Cincinnati, Director of the Neuroscience Graduate Program; Director of Basic Neuroscience, UC Neuroscience Institute; Director of the Stress Neurobiology Laboratory
Mark	Fitzsimmons	6/11/1985	Editor-in-chief, Annual Reviews, Palo Alto, CA
Webster	Pilcher	1983	The Ernest & Thelma Del Monte Distinguished Professor of Neuromedicine and Chairman of Neurosurgery at the University of Rochester Medical Center in Rochester, New York
James	Reese	11/3/1980	International Coordinator, US Food and Drug Administration
Ronaldo	Riso	4/12/1979	
David	Amaral	1977	UC Davis Distinguished Professor, Beneto Foundation Chair and Research Director of The M.I.N.D. Institute The M.I.N.D. Institute, Department of Psychiatry and Behavioral Sciences, Center for Neuroscience, and the California National Primate Research Center; Director, NIH Autism Center of Excellence; Director, Autism BrainNet; Editor-in-Chief of Autism Research
Robert	Stoughton		Research Administrator, Montgomery County Human Services & Planning Development Department, University of Dayton
Michael	Levine		Chair, Graduate Interdepartmental Ph.D. Program in Neuroscience, Mental Retardation Research Center University of California at Los Angeles, 760 Westwood Plaza, Semel Institute for Neuroscience and Behavior Room, 58-258, Los Angeles, California 90095
Fred	Kim		

**Corrections to your information? Please email  
Tori D'Agostino @ [victoria\\_dagostino@urmc.rochester.edu](mailto:victoria_dagostino@urmc.rochester.edu)**

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