

## **Fall 2023 Newsletter**

Dear Alumni and Friends,

We hope this finds you well! We had a busy 2022-23 academic year, with three concurrent faculty searches. We interviewed a fantastic group of 18 candidates and I am delighted to report that we successfully recruited three top-notch scientists; Jonathan Nelson, Benjamin Lin, and Kathryn Gunn. Jonathan and Ben arrived this August and Kathryn Gunn will start in January 2024. Additionally, Lina Carlini, a new joint faculty with the Laufer Center, will be joining us in March 2024. This coming fall and winter promise to be equally exciting and busy, as we hope to begin two additional faculty searches at the Assistant Professor level.

We were delighted to welcome two new colleagues to our Department this year. Dr. Stuti Sharma, our newest junior faculty member, arrived in September 2022, and her lab is part of the Center for Structural Biology in the CMM building. Dr. Sharma uses cryo-electron microscopy (cryo-EM) to study membrane proteins, with a special focus on v-ATPases. For more information, please visit [Dr. Sharma's website](#).

We are equally delighted to welcome Dr. Ivet Bahar, an established leader in the field of structural and computational biology. Dr. Bahar is known nationally and internationally for her pioneering work on developing novel models and methods, including the widely used elastic network models (ENMs) for analysis of protein dynamics. She has been recognized with many awards and honors, including election to the US National Academy of Sciences. Dr. Bahar will serve as the Director of the Laufer Center for Physical and Quantitative Biology. For more information, please visit [Dr. Bahar's website](#).

Our long-time friend and colleague Dr. Steve Smith will be retiring at the end 2023, after 25 years of research contributions, service, and teaching in the Department. Steve will be missed greatly, as he has been a great colleague, a fantastic scientist, and a stalwart proponent of structural biology at Stony Brook.



As we wish Steve good health and continued success in his retirement, we plan to hold a celebration in early Fall 2023, honoring his scientific accomplishments and contributions to the Department of Biochemistry and Cell Biology.

We will continue our efforts to make Biochemistry stronger, more diverse, and welcoming. We appreciate and rely on your enduring support. I wish to express my personal gratitude to all of the donors who have contributed to the BCB Endowment for Excellence. I also want to express our collective gratitude to Dr. Amy Liao '93, PhD, who has generously endowed a graduate fellowship in honor of her advisor Professor Sanford Simon; Dr. James Ripka '80, BS, who donated funds to support research in Dr. Dada Pisconti's laboratory, and an anonymous sponsor who generously donated a new autoclave and dishwasher. See our Philanthropy Corner in the following pages for more details.

Sincerely,

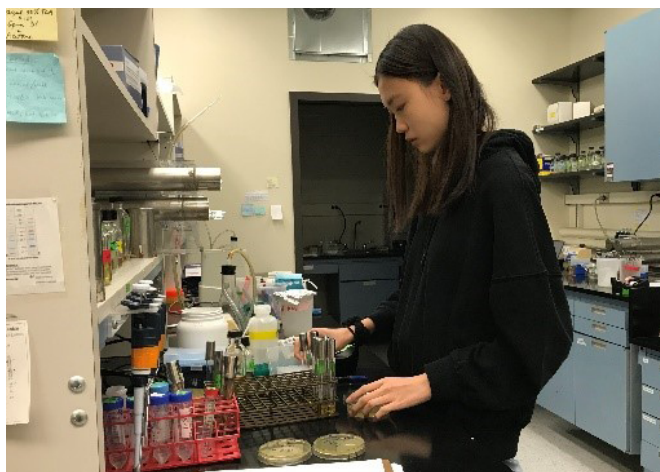
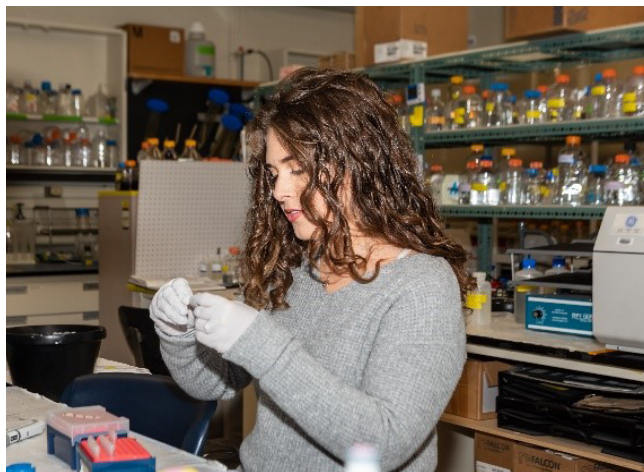
Wali Karzai  
Professor and Chair,  
Department of Biochemistry and Cell Biology



# PhD Program Announcements

The [Molecular and Cellular Biology \(MCB\)](#) and [Biochemistry and Structural Biology \(BSB\)](#) PhD programs train students in cutting edge biological sciences and prepare them for careers in academia and industry. Dr. Benjamin Martin continues to direct the MCB program. Dr. Michael Airola took the helm of the BSB program this year from Dr. Steven Glynn. Amy Saas serves as the administrator for both programs. Last year, 19 students graduated with PhD degrees (MCB: Drs Seamus Balinth, Yixin Hu, Yagmur Kan, Muyang Li, Victoria Mingione, Greisly Nunez, Eric Paulissen, Aziz Rangwala, Dongyan Song, Jialin Sun, and Yutong Xiao; BSB: Drs. Kafi Belfon, Yong Mi Choi, Elliot Crooks, Brandon Irizarry, Ming-Hao Li, Frank Mindlin, Lauren Prentis, and Xingyu Yin).

A joint program retreat was held this past year at the Old Field Club after several years of a pandemic-induced pause on large gatherings. The MCB and BSB programs are excited to welcome the incoming classes, which have 12 and three students, respectively. You can read more about the new students at the program websites in the links above.



## BCB MS Graduate Program Announcements

Our [Biochemistry and Cell Biology MS program](#) aims to prepare students to thrive in their future careers in the life sciences, including those in research, teaching, biotechnology, or further advanced studies in health and life sciences. We document the success of our program by student outcomes, including retention rates and the number of graduates who go on to successful careers in relevant fields. The documented track record of our graduates demonstrates our success as well as the value of the strategy we use to foster connections between our students with their peers, mentors, and SBU BCB MS alumni. Three of our graduating students, including Jiyao Chai, Lirong Chan and Adrienne Giannone will continue their PhD studies; Jiyao and Lirong in the MCB program here at Stony Brook, and Adrienne at the University of Michigan, Ann Arbor. Jonathan Wine will continue his studies at NYU Nursing School. Five of our graduating students have obtained research positions, including Andrew Sillato in the Glynn Lab, Stony Brook; Xinran Li in the Sheridan Lab, Stony Brook;

Angelina Mullarkey in the Huttenhain Lab, Stanford; and Jack Rogers in the Adayev Lab at IBR Institute, Staten Island. Congratulations to all!

Sincerely, Neta Dean  
Program Director

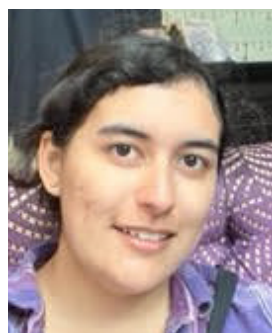
The students photographed below are the 2022-23 BCB MS class, currently performing research in areas spanning biochemistry, cell biology, and genetics. The outstanding mentorship these students receive from our faculty in the department of biochemistry and cell biology, as well as other departments, contributes hugely to their future success. We are proud of our students, faculty, and alumni for their efforts in making our BCB MS program worthwhile.



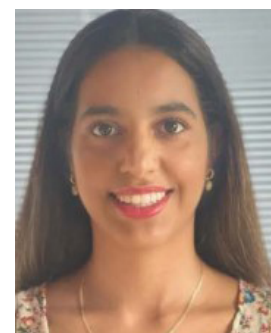
Victoria Coman



Emily De Onis



Helen Neiman



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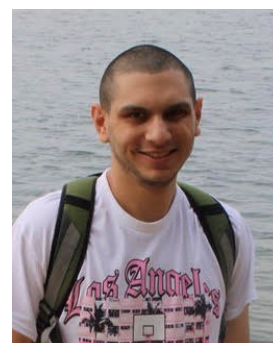
Cynthia Ouedraogo



Ryan Swick



Sara Page



Brandon Thrope



Declan Wallace

# I-STEM Updates

The Institute for STEM Education (I-STEM), housed in our department, was founded in 2007 by David Bynum, and has grown to become a national leader in STEM education research, teacher education and community outreach. I-STEM has been an incubator of innovative, interdisciplinary collaborations within the university and the surrounding communities. I-STEM is presently directed by Biochemistry and Cell Biology faculty member Keith Sheppard.

## **I-STEM has made notable contributions to science teaching, research, and policy at the university including:**

- Generating more than \$30M in external grant funding, including approximately \$8M in current funding.
- Assisting with the educational plans of 14 current and recent NSF Early CAREER awards across various departments at the university.
- Creating a PhD program in science education in 2010, which has graduated 25 students and currently enrolls 24 students. A new PhD in STEM education has been approved by the New York State of Education Department and will be enrolling its first cohort (12 students) in 2024, eventually replacing the program in science education.
- Faculty are active in state and national science educational policy activities, serving on editorial boards, writing policy statements, serving on advisory panels and meeting with key state leadership staff.

## **I-STEM is a major provider of high-quality Science Teacher Education:**

- I-STEM offers a full complement of BS and MAT programs in all science education fields and is one of the major producers of science teachers in the state.
- I-STEM is the regional hub for the New York State Science and Mathematics Master Teacher program, with over 90 appointed master teachers.



*Keith Sheppard, Director of I-STEM*

- I-STEM, working with the Department of Physics, has been awarded the American Physical Society 5+ Award for six of the last eight years for the high production of physics teachers and is on track to meet the requirements for 2022-23. For the last three years, I-STEM has been the New York Regional Network Hub for Physics Teacher Preparation programs.

## **I-STEM is a leading provider of high-quality Science Outreach and Student Support:**

- I-STEM has awarded more than \$7M in fellowships and scholarships to post-doctoral, graduate, undergraduate, and high school students who have been actively involved in research or teaching in STEM disciplines.
- I-STEM's teaching labs are offered in biology, geoscience, chemistry, sustainable chemistry and physics. Summer programs are offered in all sciences, mathematics, and engineering.
- I-STEM has established research and professional development partnerships with the wider scientific community at Cold Spring Harbor Laboratories, Brookhaven National Laboratories, STEM Hub, American Museum of Natural History New York Botanical Garden, as well as NYS schools and community colleges.



# 2022-2023 Undergraduate Biochemistry BS Graduate Achievements



## 2023 Ward Melville Valedictorians

(GPA 4.0) included five graduating Biochemistry BS seniors:

- Joshua Maximus Lee
- Prima Kalra (Dec 2022)
- Joy Lin
- Kevin Melcer
- Ian Thomas Winkeler

## 2023 Biochemistry majors graduating with distinction May and August

(56 of 87 total)

- 26 Summa Cum Laude graduates (3.85 GPA minimum)
- 18 Magna Cum Laude graduates (3.70 GPA minimum)
- 12 Cum Laude graduates (3.50 GPA minimum)

**2023 Phi Beta** included eight graduating Biochemistry majors:

- Ka Ho Cao
- Joyce Chen
- Divya Jagarain
- Shirley Jiang
- Saira Naqvi
- Rose Razavi
- Samuel Samous
- Jerry Zhang

## 2023 SBU Provost's Award:

- Joshua Lee
- Vindhya Rani Rapelli
- Ian Thomas Winkeler

## 2023 Irwin Oster Award in Genetics:

David Murtha (Dr. Nancy Hollingsworth, Biochemistry)

## 2023 Outstanding Achievement in Biochemistry Major

was awarded to 10 graduating seniors who excelled in academics, research, and service as biology and/or chemistry teaching assistants:

- Ruchitha Arvapally
- Ka Ho Cao
- Rina Gambhir
- Shirley Jiang
- Joshua Maximus Lee
- Kevin Melcer
- Vindhya Rani Rapelli
- Amrita Parag Shah
- Samuel Samois
- Ian Thomas Winkeler

## 2023 Frances Velay Women and Science Fellowship:

Nina Cheng, Biology major (Dr. Wali Karzai, Biochemistry)

## 2023 URECA Biology Alumni Research Award (U-BAR):

- Dimitris Koliatsis, Biochemistry major (Dr. Stella Tsirka, Pharmacological Sciences)
- Amber Mullins, Biochemistry major (Dr. Dongyan Tan, Pharmacological Sciences)
- Zachary Phelps, Biochemistry major (Dr. John Haley, Pathology)

## 2023 URECA Summer Program Award

### Recipients:

- Athena Choi, Biochemistry major (Dr. Maya Shelly, Neurobiology)
- Qi (Grace) Ding, Physics and Mathematics majors, iGEM team (Dr. Peter Gergen, Biochemistry)
- Alexander Gelman, Clinical Laboratory Science major (Dr. Martin Kaczocha, Anesthesiology/Biochemistry)
- Christopher Jannotta, Biochemistry major (Dr. Patrick Hearing, Microbiology and Immunology)
- David P. Li, Biology major (Dr. Paul Bingham, Biochemistry)
- Abigail Masri, BME major (Dr. Steven Glynn, Biochemistry)
- Aarush Mehta, Biochemistry / Psychology majors, iGEM team (Dr. Peter Gergen, Biochemistry)
- Aman Mistry, Biology major (Dr. Benjamin Martin, Biochemistry)
- Jayden Reilly, AMS and Biology majors, iGEM team (Dr. Peter Gergen, Biochemistry)
- Gabriella Vaccaro, Biochemistry major (Dr. David McKinnon, Neurobiology / Dr. Barbara Rosati, Physiology)
- Frances Faye Valmores, Biochemistry major (Dr. Ben Hsiao, Chemistry)
- Mahika Yarram, Biochemistry major (Dr. Shipra Agrawal, Medicine)
- Andrew Zhang, Biology/Psychology majors, iGEM team (Dr. Peter Gergen, Biochemistry)

(Dr. Sandeep Mallipattu, Medicine)

- Ada Lin, Biology major, iGEM team (Dr. Peter Gergen, Biochemistry)
- Michelle Yang, Biology major, iGEM team (Dr. Peter Gergen, Biochemistry)
- Aria Zaman, Biology major, iGEM team (Dr. Peter Gergen, Biochemistry)

### 2021-2022 graduates from other majors completing an honors thesis in the Department of Biochemistry and Cell Biology labs:

- Meghan Italo (Advisor: Dr. Peter Gergen) "Investigating Odd-Paired's Role as a Transcriptional Regulator in the Drosophila Embryo"
- Marcela Muricy (Advisor: Dr. Steven Glynn) "Investigating Barth Syndrome Mutations on Tafazzin Membrane Binding"
- David Murtha (Advisor: Dr. Nancy Hollingsworth) "PIF1 Promotes Repair of Residual Double Stand Breaks Late in Prophase I During Yeast Meiosis"

## 2023 SUNY-SOAR / Summer Opportunities for Academic Research Award Recipients:

- Jerome Cai, Health Sciences major, iGEM team (Dr. Peter Gergen, Biochemistry)
- Katherine He, Biochemistry major, iGEM team (Dr. Peter Gergen, Biochemistry)
- Stacey Jiang, Biochemistry major



## Faculty Updates

### **Michael Airola, Associate Professor**

The lab's work has now expanded into the field of fat storage and mobilization, and antifungal therapeutic development. Mike was honored to be selected as an Alfred P. Sloan Fellow and his NIH MIRA award was renewed for another five years. His involvement in the ASBMB has continued to grow. Mike co-organized the "membrane" theme sessions at the annual ASBMB meeting, continued as a Junior Associate Editor for The Journal of Lipid Research, became an Editorial Board member for The Journal of Biological Chemistry, and joined the Steering Committee for the ASBMB Lipid Research Division. He presented talks at the Fredrickson Lipid Research Conference, Connecticut College, Discover BMB, and the Molecular Biology of Lipids GRC. Mike is now the course director for the undergraduate biochemistry (BIO361) and the Graduate Program Director for the Biochemistry and Structural Biology PhD program.

#### **Airola Lab member updates:**

- Yong Mi Choi defended her PhD in May 2023 and will start a postdoc at Harvard this fall.
- Jonathan Wine graduated with his MS degree in December 2022.
- Tereza Vitkovska will start medical school at UCLA this Fall.



Michael Airola and lab Members

- [Franceine Welcome was awarded an HHMI Gilliam Fellowship](#), the first time a Stony Brook student received this honor.
- Lingshuang Wu was awarded a predoctoral fellowship from the American Heart Association.
- MSTP student Khalayi Awya was selected as a Snyder Scholar.
- Rideeta Raquib will continue as a NIH Chemical Biology Trainee.
- Current lab members continuing in the lab include Dr. Shujuan Gao; PhD students Lingshuang Wu, Taylor Rahn, Doug Marr, Franceine Welcome, Rideeta Raquib, and Khalayi Awya; MS student Declan Wallace, and undergraduate Taisha Elizaire.

### **Neta Dean, Professor**

Research in the Dean Lab continues to focus on protein glycosylation and its regulation during fungal cell wall synthesis. The Dean Lab welcomed a new member, Kevin Zhou, who joins Xinyu Han, Kareem Halwah, and Nilufer Dilmen (biology undergraduates). This year Nilufer Dilmen was recognized for her academic and research excellence as a recipient of a summer URECA fellowship. She also presented her work in a poster at the URECA annual event and at our Department retreat. In other news, last November, Neta took a departure from the "usual" and participated in the newly launched efforts of the Bard Prison Initiative to introduce STEM college-in-prisons opportunities for incarcerated individuals. As part of a pilot program, she provided an intense three-hour biology lecture to a select group of inmates at the Eastern Correctional Facility in Napanoch, New York.

## **Ivet Bahar, Director, Laufer Center for Physical and Quantitative Biology**

The Bahar lab develops and uses fundamental theories and methods of physical sciences and machine learning, toward gaining a deeper understanding of biological mechanisms of action and assisting in bridging between molecular and cellular events and designing molecular interventions. We focus on 'dynamics' as a bridge between structure and function.

A major research area in the Bahar lab is the development of both structure-based and mathematical models and approaches for exploring the dynamics of biomolecular systems at multiple scales using theory and methods of statistical mechanics and machine learning (supported by NIH R01GM139297; PIs: Bahar and Doruker). Many software, servers, and databases are accessible online, including the [ProDy application programming interface](#), which has been used to date by more than 150,000 unique users, and downloaded more than 2.2 million times (according to [Google Analytics](#)). ProDy has several modules including novel methods for druggability simulations, pharmacophore modeling, and predicting the structural dynamics of cryo-EM structures.

On the biological side, one of the areas of focus in the Bahar lab is to investigate the structure and function of PTH class B GPCR (supported by R01DK116780; PIs: Vilardaga and Bahar). The objective of this project is to identify small non-peptidic molecule modulators of the parathyroid hormone type 1 receptor (PTHrP), a medically important G protein-coupled receptor (GPCR) regulating blood calcium and phosphate homeostasis, and bone remodeling in response to PTH. The other areas of focus in the Bahar lab has been to model and simulate neurosignaling, and neurotransmitter transport in the central nervous system, alongside applications and translational research in pharmacology, cancer biology, and immunology and virology. We have made significant contributions to elucidating the mechanism of function, inhibition, allosteric regulation and

interactions of proteins and their complexes with lipids and drugs at the neuronal synapses and at the mitochondria toward establishing the molecular origin of the experimentally observed cellular/systemic responses to pathogens. Details on the 13 active grant supports can be found [here](#).

## **Vitaly Citovsky, Distinguished Professor**

Vitaly continues to be funded by NIH, NSF, NSF/USDA/NIFA, BARD, and OVPR. He continues to serve on Editorial Boards of PLOS ONE, Scientific Reports (Nature Publishing Group), Biochemical and Biophysical Research Communications (BBRC), F1000 Research, Frontiers in Plant-Microbe Interactions, Frontiers in Plant Physiology, Plant Signaling & Behavior, and Communicative and Integrative Biology. Vitaly is a member of the Cell Biology section of Faculty 1000 Biology (Faculty Opinions) and a member of the Advisory Board of the Faculty 1000 Biology (Faculty Opinions) Plant Science Gateway. He served on the Genetics Graduate Program Admissions Committee and continues to serve on the Departmental Awards Committee, the Administrative Review Committee (ARC) of the University Senate, the CAS Senior Promotion and Tenure committee (PTC-S), and the CAS Academic Judiciary Committee. Vitaly was an invited speaker at the Israeli Center for Genome Editing in Agriculture, and an invited panel member at the 1000 Biology (Faculty Opinions) webinar "The Role of Publishers and Libraries in the Evolution of Open Research."



**Paul M. Bingham, Associate Professor, with Zuzana Zachar & Shawn D. Stuart**

We continue to make encouraging progress on the basic science supporting the clinical targeting of the altered metabolism of cancer cells [see Guardado Rivas, et al., 2022, PLoS ONE 17(6): e0269620 and references therein]. We continue to improve our understanding of the detailed mechanisms and basis of clinical performance of CPI-613, the lead compound in a drug family we invented and patented here at Stony Brook. This drug selectively targets several major features of the mitochondrial metabolism of tumor cells.

First, CPI-613 drug cocktails are currently in several, diverse Phase II and Phase III clinical trials. While one large Phase III pancreatic cancer (PDAC) trial (Avenger 500) did not meet some of its important goals, post-hoc analysis of these data showed a robust response in one sizable patient subpopulation. We have confidence that we can robustly define this responsive subpopulation going forward. We anticipate that this ongoing clinical work is likely to culminate in ultimate FDA approval of these initial CPI-613 drug cocktails.

Second, we are developing second-generation members of the CPI-613 drug family. Our approaches are designed to exploit the substantial progress in understanding crucial details of the mechanisms of action of this drug family. Our progress to date points to a straightforward, practicable route to very substantial improvement in performance in new drug family members.

Other news: in May 2023, Paul and Zuzana were inducted into the Stony Brook chapter of the [National Academy of Inventors](#). This honor was in recognition of our continuing work resulting in multiple University patents, including for drugs currently in clinical trials and/or expected to enter clinical trial in the near future.

Research faculty member in our group, Shawn Stuart, has shifted more of his efforts to teaching. In particular, he has taken over as the instructor for BIO558, Biological Basis of Human Evolution and Behavior, after Joanne Souza's retirement. He has also taken over as co-instructor with Paul in the large undergraduate BIO358 spring and summer courses.

Other members of the lab at present are Cynthia Ouedraogo, BCB MS candidate, and David Li, Scholars in Medicine undergraduate and recipient of a summer URECA award.



Paul Bingham and Zuzana Zachar at the NAI Awards Ceremony

## **Peter Gergen, Distinguished Service Professor**

Peter Gergen gave the opening keynote address for the 23rd International Runx meeting in San Antonio in November 2022. This meeting was organized by Dr. Gang Huang from the University of Texas Health Science Center in San Antonio who attended his first Runx meeting at Stony Brook in 1996 as a graduate student at Kyoto University.

Yasuno Iwasaki continues to be a mainstay of the research efforts in the Gergen Lab. Current efforts involve a commitment to publish her results on the role of the Odd-paired transcription factor in mediating Runt-dependent regulation in the *Drosophila* embryo. Yasuno also guided the efforts of undergraduate researcher Meghan Italo, who graduated with Honors in biology in May 2023. In addition to completing her Honors thesis she also presented posters on her work at Admitted Student Day, the URECA Symposium and the Honors College Research Symposium. Yasuno also provided important guidance to biology senior Illya Levin who was recruited to provide support for the *Drosophila* mutagenesis experiment undertaken by students in BIO 327, the Developmental Genetics laboratory course in the spring of 2023. Haoyu Zheng, one of the BIO 327 students, joined the lab following the completion of the spring semester and is currently continuing with the molecular mapping of the more than 60 P-element transposition events recovered as revertants of lethal transgene insertions in the sloppy-paired or 18-wheeler genes.

Gergen is now entering his 14th year as the Director of the Undergraduate Biology Program. He was awarded a Certificate of Recognition for [Excellence in Educational Effectiveness by Provost Lejuez at the inaugural Assessment Symposium](#) in the fall of 2022 based on work done in Undergraduate Biology. He continues to serve on the Undergraduate Council of the University Senate and is a member of the Re-accreditation Steering Committee for the Middle States Commission on Higher Education



*Left to right: Vice President for Educational and Institutional Effectiveness Braden Hosch, Peter Khost, Brenda Anderson, OEE Director Catherine Scott, Deborah Zelizer, Peter Gergen, and Executive Vice President and Provost Carl Lejuez.*

and serves as Co-Chair of the Sub-committee for Standard 4: Support of the Student Experience. Under Gergen's leadership, the biology program continues to promote undergraduate research in a variety of ways. He was the lead faculty advisor for Stony Brook's gold medal-winning iGEM team at the International iGEM Jamboree in Paris in November 2022. Unfortunately, he could not attend this event as it conflicted with the Runx Meeting in San Antonio. He hopes to join Stony Brook's 10th iGEM team at the International Jamboree in Paris this fall!

Student participation in research is still rebounding from the negative effects of Covid. In this light it is extremely rewarding to report that a record number of 62 undergraduates received financial support for immersive faculty sponsored research experiences this summer.

Thirteen of these students received funding from the biology program with support coming from donations by alumni and friends of the program. This year for the first time, all of the iGEM team members are receiving support for summer research. Five iGEMers are participating in the Explorations in STEM Program administered by the office of URECA and the Career Center.

(Continued Next Page)

Two of these five students are being supported by the Biology Program. Another five iGEMers are being supported by the new SUNY SOAR initiative to promote research participation by Pell grant recipients and first-generation students, and four iGEMers are receiving support from URECA.

Gergen continues to serve as the Principal Investigator and Project Director for Stony Brook University's NIGMS-funded IMSD-MERGE Training Grant. This project, now in its third year of funding, aims to broaden participation of students from historically under-represented groups in biomedical research careers. It provides full stipend support to ten trainees annually for the first two years of study in any one of nine different doctoral programs in the biological sciences. Gergen also co-organized along with Jennifer Knight (University of Colorado, Boulder) a week-long Northeast Regional Summer Institute on Scientific Teaching that took place at the New York City headquarters of Macmillan Learning in August 2022. He took on the position as the Treasurer for the National Institute on Scientific Teaching, a 501(c)(3) non-profit corporation dedicated to providing training opportunities to undergraduate educators to inspire the transformation of STEM education in September of 2022.

### ***Steven Glynn, Associate Professor***

The Glynn Lab continues to investigate how mitochondria achieve quality control of their essential protein and lipid components. Recently, we have been examining how degradation signals initially discovered in yeast mitochondrial proteins may be conserved in humans, and how proteases control the flux of phospholipids between mitochondrial membranes. This work is supported by NIGMS and the Barth Syndrome Foundation. In September, Steve Glynn became Director of Stony Brook's Center for Structural Biology, taking over from Steve Smith who had served as Center Director for more than 20 years. Steve will be stepping down as Director of the Biochemistry and Structural Biology (BSB) graduate program in June and is looking forward to spending more

time in the lab. The lab welcomed Helen Neiman, a BCB master's student, and Lauren Todd joined as a Research Support Specialist. Mariella Quispe-Carbajal successfully completed her PhD proposal examination and is continuing to study the regulated proteolysis of the mitochondrial lipid carrier protein, Ups1. AJ Sillato graduated with a BCB master's degree in December and will be continuing his project as a Research Technician. Abigail Masri, an undergraduate researcher, was awarded a URECA summer fellowship, which will allow her to investigate functional differences between homooligomeric and heterooligomeric isoforms of the m-AAA protease.

### ***Chi-Kuo Hu, Assistant Professor***

The dormant biology lab experienced its first big turnover. We happily welcome our first PhD student Nate Sweet and MD/PhD student Eric Girardi to the lab. We also have a new undergrad, Sid Desai, who joined the lab, along with two new wonderful research specialists, Wan Zhang and Yasmine Addo. At the same time, it is hard to say goodbye to our founding members: master's student Lu Jia, and undergraduate students Angel Zheng, Joyce Chen, and Nora Singh who are leaving the lab for their next life chapter. For research, we completed our first aging cohort lifespan experiment and found unexpected and interesting links between development and aging. We continue our work on biological dormancy and also the undergrad-specific research direction on the color and patterns of the killifish. We have been collaborating with Applied Math department labs to build up multiple machine learning models to recognize and analyze our images.

## **Erwin London, Distinguished Professor**

Erwin's NIH MIRA award "Transformative Lipid Exchange Approaches to Study Membrane Organization" ended its first of five years. He continued to serve as a member of the Postdoctoral Fellowship Award Committee for the Life Sciences Research Foundation. He also continues as a member of the Biochemistry and Cell Biology Department Executive Committee, and is course director of MCB 517 Biomembranes and BSB 512, Structural Biology and Spectroscopy. Lab members in mid-2023 included research assistant professor Guangtao Li, postdoctoral research associate Shinako Kakuda, and PhD students Betty Du and Bingying Xia. Erwin is also a co-advisor (with Todd Miller) for Antonio Torlentino and Sanjna Rana.

## **Nancy Hollingsworth, Distinguished Teaching Professor**

Nancy continues to do NIH-funded research on meiotic recombination in yeast. In June 2023, Nancy presented a poster at the EMBO Meiosis Workshop in Pamhagen, Austria. In July, she served on an NIH study section reviewing K99/R00 Pathway to Independence applications. Nancy hosted two speakers, Bruce Futcher and Doug Bishop, for departmental seminars. Raunak Dutta, a graduate student in the Biochemistry and Structural Biology program, successfully defended his thesis proposal and advanced to candidacy. Andrew Ziesel completed his PhD in Genetics in December and is now working for Meiogenix, a biotech company located in Ithaca, NY. David Murtha graduated with Honors in Biochemistry and was the recipient of the Irwin Oster Award for Genetics. David started medical school at Hofstra University this summer. Cody Cheng returned as a volunteer this summer after completing his sophomore year in high school.

### **Great news about former lab members:**

- Ray Suhandynata (former graduate student) is now an Assistant Adjunct Professor in the School of Pharmacy and Pharmaceutical Sciences at UC San Diego

- Min Jung (former undergraduate) accepted a Principal Group leader position at Genentech and was recently married.
- Cameron Burnett (former technician) completed his PhD in Biochemistry and Molecular Biophysics from UCSD and was recently married.
- Trevor Leong (former high school student) graduated from Carnegie Mellon University with a degree in Computer Science and is interning this summer at SpaceX before returning to CMU for a Master's degree in Computer Science.
- Hsiao-Chi Lo, (former graduate student) was promoted to Director of Regulatory Affairs at Regeneron.

Members of the Hollingsworth Lab in Fall 2023 are Bob Gaglione (Technician), Lihong Wan (Senior Research Scientist), Raunak Dutta, Sara Page (BCB master's student), and undergraduates Jonathan Caradonna, Anagha Khandelwal and Tyler Nagosky.

Cindy Lee, a former undergraduate in my lab, is returning to Stony Brook to be the Vice Chair of Clinical Research and Faculty Affairs, as well as section chief of breast imaging in the Department of Radiology.



*Nancy Hollingsworth and lab members*

## ***Bernadette Holdener, Professor***

Bernadette Holdener, in collaboration with Dr. Robert Haltiwanger at University of Georgia, is investigating the role of protein glycosylation in embryonic development. The Holdener lab uses mouse mutations to determine why sugar modifications on groups of proteins with Thrombospondin type I repeats (O-linked glucose-fucose disaccharide) or Epidermal Growth Factor motifs (O-glucose) are important for embryo development. Mutations that block these modifications have a major impact on the physical properties of the extracellular environment and impact morphogenesis, cell migration, and differentiation. Understanding the molecular basis for the developmental defects in the mouse mutants will provide a better understanding of what causes common human birth defects including craniofacial and skeletal abnormalities, hydrocephalus, and lung and cardiovascular abnormalities.

In the spring semester undergraduate Isabella Janowicz, postdoctoral fellow Dr. Sanjiv Neupane, and technicians Richard Grady and Kaitlyn Donnelly ran a Women in Science and Engineering (WISE) research class that introduced students into lung tissue sectioning, histology, and analyses of alveolar development. Isabella Janowicz was the recipient of an Explorations in STEM-URECA Program Undergraduate Award.

Bernadette and Dr. Thomsen continue to co-teach the core Developmental Biology course for the Biology Major Developmental Genetics track. She serves as the Director of Undergraduate Biochemistry Majors, is a member of the Biochemistry and Cell Biology Executive committee and chairs the SBU Stem Cell Research Oversight committee.

## ***Ed Luk, Associate Professor***

Ed Luk and members of his lab continue to study the regulation of chromatin structure and gene expression. Current team members include Leonidas (Louie) Pierrakeas, Cynthia Converso, Lirong Chen, Emily De Onis, and Shalvi Chowdhury.

Louie and Cindy are PhD students in the MCB program. Louie is investigating an unconventional chromatin particle and its role in gene silencing. He is a co-author of a new paper in PNAS that reports the very first structure of this unconventional chromatin particle. Cindy is studying the targeting mechanism of a chromatin remodeling enzyme in yeast. She recently discovered that the genome is encoded with instructions that can target remodeling activities at distinct sites along the chromosomes. Cindy presented her work at the BCB retreat and won the best poster prize! Perhaps more importantly, Cindy and her husband James gave birth to their beautiful son Forrest on June 27. We are so happy for her. Lirong graduated with a MS degree from the BCB program. Her master's thesis focuses on gene regulation in zebrafish development, a collaborative project with Ben Martin's Lab. She continues to work with Ben and Ed as a technician and will be joining the MCB PhD program this fall. Emily is a BCB student. She is working on a thesis project developing a 'plastic-eating' yeast. Shalvi is the newest member of the Luk Lab. He graduated Summa Cum Laude with a BS degree in Biochemistry in May. He joined Ed's team this summer and is working very hard to learn various molecular biology techniques. Finally, Ed received a new R01 grant from the NIGMS to work on the novel chromatin particle project and presented Cindy's work at the Penn State Summer Symposium in August 2023.



*Luk Lab members*

## **Benjamin Martin, Associate Professor**

The Martin Lab performs research to address questions related to cancer metastasis and stem cell biology. The cancer metastasis work focuses on a critical part of the metastatic cascade called extravasation, which is when circulating tumor cells exit blood vessels in new parts of the body. This work was funded in the past year by a Pershing Square Sohn Cancer Research Alliance grant to Ben Martin and a National Cancer Institute R01 grant to Chris Clarke, which Ben is a co-investigator on. The stem cell work seeks to understand the normal biology of cells called neuromesodermal progenitors, which give rise to the spinal cord and skeletal muscle of vertebrate animals (including humans), and to use neuromesodermal progenitors to model other stem cell related questions. This work was funded during the past year by a R01 grant to Ben from the National Institute of General Medical Sciences and a new R35 grant from the National Institute of General Medical Sciences to Ben. Both general lines of research use zebrafish as a model system.

The lab currently consists of technicians Wan Zhang and Lirong Chan; PhD students Rob Morabito, Sam Stettinisch, and Courtney Tello; MSTP rotation student Sabrina Hafeez; BCB master's student Ryan Swick; undergraduates Aman Mistry, Frederick Peetz, and Julia Zhu, and high school student Rohan Dalal.

The lab said goodbye to several members this past year. Eric Paulissen received his PhD from the Molecular and Cellular Biology program and is now a postdoctoral fellow in Gage Crump's lab at the University of Southern California. Alex Larkin received her PhD from the Molecular and Cellular Pharmacology program. She is part of the medical scientist training program and has returned to medical school to finish her MD degree. Undergraduate student Zhifei Zeng graduated and will start graduate school at Harvard University in the fall. Master's student Lirong Chan graduated from the BCB program in December 2022 and is currently working as a technician and is co-mentored by Ed Luk. She will join the MCB PhD program at Stony Brook in the fall. Technician Stephanie Flanagan



*Members of the Martin Lab, left to right: Courtney Tello, Alex Larkin, Sam Stettinisch, Zhifei Zeng, and Ben Martin.*

moved on to a new position in the Stony Brook Hospital. MCB PhD student Samantha Stettinisch is funded by a NIH F31 predoctoral fellowship, and undergraduate Aman Mistry was awarded a URECA fellowship that will fund him for his summer research in the lab.

Ben was nominated by the Dean of the College of Arts and Sciences to become a member of the Stony Brook University Emerging Leaders Program and he participated in a year-long series of workshops designed by the program. He was also an invited speaker at the British Society for Developmental Biology, which was held this past year in Sheffield, England.

## **Stuti Sharma, Assistant Professor**

The Sharma Lab is officially up and running! The lab's first hire was research technician Andrew Hillow, who came to us from Martin Kaczocho's lab. Caitlin Bricault, a BSB student who did her third rotation in the lab also decided to join us. The lab is making quick progress and we are looking forward to collecting our first cryo-EM dataset soon. Mayur Talele, a sophomore Biochemistry major, has joined us for the summer and is learning to purify proteins.



*Members of the Sharma Lab*

## **Dada Pisconti, Associate Professor**

The Pisconti Lab is back after being closed for several months across 2020/2021. We are back, and the Force (of our muscle research) is with us!

In May 2023 a new technician, Sandra Dillon, joined the lab, working mainly on an exciting new project that looks at using Low Intensity Vibration as a substitute for gentle exercise in the complex management of Duchenne muscular dystrophy. This project is funded by the Long Island Biotechnology Hub. Sandra is a skilled and experienced clinical lab technician venturing into research for the first time. When asked what she thinks the difference between a clinical lab and a research lab is, she will tell you; "Well, a clinical lab is like baking from a cake mix, while a research lab is like baking from scratch."

In Fall 2022 Kelly Ho and Rachel Zhao joined the lab as pre-med undergraduate students. Kelly works on a project in collaboration with colleagues in Norway that is trying to define the etiology and molecular pathogenesis of a common muscle disease affecting broilers: the disease can be so severe that in the meat industry it's commonly known as "Wooden Breast." Kelly, with some help from Sandra, is analyzing samples of breast muscle from chickens affected by the disease. A PhD student from Norway, Lucie Pejškova, will also join the lab as a visiting scholar in Fall 2023 to work alongside Kelly and Sandra on this interesting project, which is funded by the Norwegian Research Council. Rachel works on a project that aims to understand the mechanisms regulating muscle stem cell quiescence. This project started a few years ago when our lab was still in the UK and had to be paused when we moved to Stony Brook while waiting for a long experiment to yield results. These results have been coming in during the last six months or so and look very encouraging, so the project has now officially restarted under Rachel's careful lead.

This summer, we were joined by a master's student from the MAT Biology Program, Cali Koullias, and an undergraduate student from SUNY Farmingdale, Jason Benitez, as part of the SOAR Program. Cali is working on a project recently funded by a SUNY seed grant that investigates the role of muscle disuse in ME/CFS, while Jason is working on validating novel biomarkers for the surveillance of Duchenne muscular dystrophy progression.

## **Aaron Neiman, Professor**

The current members of the Neiman Lab are Jae-Sook Park (Research Assistant Professor), Kai Zhang (PhD Student), Victoria Coman (master's student), and Professor Emeritus Rolf Sternglanz. This year, we were awarded a new R01 grant to support our work on the process of prospore membrane morphogenesis during yeast sporulation.

Several folks moved on from the lab this year. Greisly Nunez completed her PhD in May and left for a postdoctoral position at St. Jude's Hospital in Memphis. The bulk of Greisly's doctoral studies were published in an article in *Molecular Biology of the Cell* in April. Jiyao Chai completed his masters thesis in December. He will be joining the MCB program at Stony Brook in the fall. Emily Cioppa graduated with her BS in May and will be working as a research technician in New York City.

In January, Aaron organized the second annual "Sporulation by Zoom," a day-long virtual meeting that expanded this year to include a dozen labs from around the U.S. and Asia. Kai presented his work at the meeting and the Department retreat in May, where he won an award for best talk. Aaron stepped down this year after 18 years as faculty director for the School of Medicine's Microscopy Core Facility. He continues to serve as an Associate Editor of the *Journal of Fungi*.

## **Steven O. Smith, Professor**

Steven Smith will be retiring at the end of 2023. In the lab, we still have two major ongoing research projects. The first is on G protein-coupled receptors. Lauren Todd, who completed her MS degree in Biochemistry and Cell Biology in May 2022, has taken over our work on rhodopsin and is working on the mechanism of congenital stationary night blindness. A review of this work was published this June in the *Annual Reviews of Biophysics*, which completes a long-time goal of describing in molecular detail how light is converted into a chemical signal in the retina. The second research focus is on Alzheimer's disease (AD). Brandon Irizarry and Elliot Crooks, both BSB graduate students, graduated in the past year. We are now working with Jack Fu, a former MS student in the lab, and our long-time collaborator Dr. William Van Nostrand to bring our remaining projects to completion. A recent advance in the lab has been to determine the structure of fibrils derived from amyloid plaques in the brain. Finally, we have just published a study in *Elife* describing the activation mechanism of the thrombopoietin receptor. This receptor controls blood cell development, and the study addresses the molecular origin of several blood cell diseases arising from mutations within this receptor.



Steven O. Smith, Professor and Director of Structural Biology



## **Lonnie Wollmuth, Professor**

Synapses are specialized structures that control the flow of information between neurons in the brain. Alterations in synaptic transmission contribute to neurological and psychiatric diseases, such as autism, epilepsy, intellectual disability, and schizophrenia. Research in the Wollmuth group addresses biophysical, structural and physiological mechanisms underlying fast synaptic transmission in the brain, focusing predominantly on those synapses that use glutamate as a neurotransmitter. Much of our work is done in collaboration with Dr. Helen Hsieh, a pediatric surgeon at SBU Medicine. Details of our research program and activities can be found [here](#).

Our group had a successful year. We published three primary research papers – including a major paper in *Nature Communications* – as well as a preview in *The Journal of General Physiology*. I was also invited to give talks at the University of Wisconsin at Madison, Winter Conference on Brain Research at Snowbird, Utah (the snow was beautiful), CureGRI Annual Research Conference in Boston, and the Ionotropic Glutamate Receptor Conference at Northwestern in Chicago. The CureGRI conference in particular was invigorating, since I met many parents as well as the children who have missense mutations in the genes encoding glutamate-gated ion channels. Their



clinical manifestations are severe – epilepsy, autism, intellectual disability – and it really makes you want to work harder to help these families.

Students presented posters at the Biophysical Society (Miaomiao He), who won an award for outstanding presentation; Society for Neuroscience (Noele Certain), and the zebrafish meeting (Josiah Zoodsma, Amalia Napoli). Noele Certain graduated in the summer of 2022 and went to Yale for a Post-doc. Erica Nebet is a new MD/PhD student joining the lab.



## **Promotions and Awards**

### **Michael Airola:**

From Assistant to Associate Professor

### **Peter Gergen, Distinguished Service Professor:**

Certificate of Recognition for Excellence in Educational Effectiveness, awarded by Provost Lejuez at the inaugural Assessment Symposium



Michael Airola and Franceine Welcome

## New Grants

### ***Aaron Neiman, Professor:***

**NIH R01:** "Mechanisms of de novo membrane assembly"

**NIH R01:** "Assembly and Function of the Yeast Spore Wall"

### ***Wali Karzai, Professor:***

**NIH R01:** "Quality Control Mechanisms in Protein Synthesis"

### ***Benjamin Martin, Associate Professor:***

**NIH R35:** "Sponsoring Agency: NIH R01, Molecular and Cell Biology of Neuromesodermal Progenitors"

### ***Ed Luk, Associate Professor:***

**NIH R01:** "Uncovering the biomolecular function of the R-octasome – a nucleosome-like particle with only H3 and H4 histones"

### ***Michael Airola, Associate Professor:***

**NIH R35:** "Structure and Regulation of Lipid Metabolism and Transport"

### ***Gerald Thomsen, Professor:***

**NIH R03:** "A small molecule screen for regulators of regeneration"



## New Fellowships

### ***Franceine Welcome, PhD Student***

### ***Michael Airola, Associate Professor***

#### **Howard Hughes Medical Institute:**

James H. Gilliam Jr. Fellowships for Advanced Study Program

### ***Lingshuang Wu, PhD Student***

### ***Michael Airola, Associate Professor***

**American Heart Association:** "Molecular Basis for Membrane Binding and Lipolysis Activation by ABHD5"

### ***Samantha Stettinisch, PhD Student***

### ***Benjamin Martin, Associate Professor***

**NIH F31:** "Cell Cycle Regulation of Cell Fate and Morphogenesis in *D. rerio*"



*Franceine Welcome HHMI Award Ceremony*



# Alumni Corner

## 1970s

### **Melanie Ehrlich '70, PhD Molecular Biology, advisor Monica Riley**

I was the first PhD student recruited into the Molecular Biology Program, under Mel Simpson, to receive a PhD. My husband, Ken Ehrlich '69, PhD Chemistry, and I are currently collaborating on bioinformatics research on the epigenetics of human differentiation and its relationship to disease.

I am a professor at Tulane Medical School and President of the [Epigenetics Society](#). I recently directed the revamping of the Society's website. I am also helping to steer the organization of our Society's international conference in Rome, Oct. 12 - 14, 2023 [Epigenetics \(sardiniacocs.it\)](#).

### **Simon Halegoua '74, BS Biochemistry; '78, PhD Biochemistry, Advisor Masayori Inouye**

Simon is currently a professor in the Department of Neurobiology and Behavior at SBU.

### **Elias Quintos '77, BS Biochemistry, MD, FACS**

After graduating from Tulane School of Medicine, I pursued general surgery training at Stony Brook, obtained specialized training in cardiothoracic surgery in Syracuse, and currently practice cardiothoracic surgery specializing in coronary revascularization, valve repair and replacement, atrial ablation, and open and robotic thoracic procedures, and remain certified by the American Board of Thoracic Surgery and American Board of Surgery, and a fellow of the American College of Surgeons.

### **Ray Semente '79, BS Biochemistry and Biology**

Ray has a private chiropractic practice in St. James, NY.

### **Larry Zwiebel '79, BS Biochemistry**

Larry is a professor at [Vanderbilt University](#) in Nashville where he continues to lead an [active laboratory](#) pursuing research focused on olfactory driven behavior in mosquitoes and eusocial ants.

## 1980s

### **Donald J. Rueckert Jr., '80, BS Biochemistry**

I reside in central New York with my beautiful wife and two wonderful daughters. I have been with Aon PLC - one of the premier global insurance brokers and consultancy firms - for 33 years and serve as vice chairman and actuary. I have extremely fond memories of my time at Stony Brook.

### **Paul Rothberg '81, PhD Biological Sciences, Advisor Eckard Wimmer**

I am now Professor Emeritus at the University of Rochester.

### **Frank Ross MD '81, BS Biochemistry**

Ross graduated in 1981 under the tutelage of Dr. Masayori Inouye and was a graduate student at the time Ellie Wurtzel was working with mu phage and the ompB outer membrane protein of E. coli. He is the associate director of The Helen L. and Martin S. Kimmel Hyperbaric and Advanced Wound Healing Center of NYU Langone Health. In January 2023, he was promoted to Clinical Professor of Surgery, NYU Grossman School of Medicine. He currently teaches second year medical students NYU's first surgical clerkship elective in wound healing and gives local and international lectures on wound surgery.

### **Lauren Pecorino '84, BS Biology; '90 PhD Cellular and Developmental Biology, Advisor Sid Strickland**

Lauren is a professor at the University of Greenwich. The 5th edition of her textbook "Molecular Biology of Cancer: Mechanisms, Targets, and Therapeutics" has recently been published.

### **Richard Baker '88, BS Biochemistry**

My daughter Emily graduated from Penn State with a degree in Biochemistry, couldn't be more proud of her. She will be working as a research assistant at the Yale School of Medicine.

### **Lawrence J. Fox '89, BS Biochemistry**

I own a laboratory consulting business and I am also a lab director for five medical facilities.

## 1990s

### **Candace Cummings MD '95, BS Biochemistry**

I currently serve as the Vice-Chair of Medicine at Stony Brook Eastern Long Island Hospital.

### **Arkadiusz Jachimowicz '95, BS Biochemistry**

After practicing for 20 years on the lower East Side, NYC (podiatry), I finally moved to Pearl River in upstate New York and I love it.

### **Keisha Stephen '97, BS Biochemistry**

I am a High School AP Chemistry teacher.

### **Jyh-Haur Lu '98, BS Biochemistry**

Neurologist / Epileptologist. Elected fellow of American academy of Neurology (FAAN).

### **Julio Yacub 99, BS Biochemistry**

Thanks to my major, I own a successful supplements company.

## 2000s

### **Isaac Wei '00, BS Biochemistry**

I'm currently serving as an officer for the Department of Homeland Security, adjudicating asylum applications. Interested in connecting with long lost classmates and suitemates!

### **Tommy Tiao '01 BS Biochemistry**

I'm currently working as an anesthesiologist in NYC.

### **Sarika Ramachandran**

#### **'03 BS Biochemistry; '07, MD**

Sarika is an associate professor in the Department of Dermatology in the Yale School of Medicine where she was recently appointed as the Vice Chair of Diversity, Equity and Inclusion. In 2022, she was awarded the Winn Career Development Award through the Bristol Myers Squibb Foundation to increase diversity in clinical trials, particularly lupus, her area of clinical interest. She is also the co-director and co-founder of the Yale Multidisciplinary Combined Clinic in Rheumatology and Dermatology.

### **Shakil Ahmed '09, BS Biochemistry**

Shakil has created and launched a Habit Tracker app (iOS) for Alpha Health to target metabolic disorders.

## 2010s

### **Masooma Kazmi '17 BS Biochemistry**

Hello! I'm currently in my last year of emergency medicine residency. I stayed at Stony Brook for medical school and am completing residency here.

### **Natalie E Stenzoski '18 PhD Biochemistry and Structural Biology, Advisor Dan Raleigh**

Natalie completed her postdoctoral fellowship at CU Anschutz under Professor John Carpenter in 2019. After joining Cipla (USA) in 2020, she worked with a small team of international partners to submit the company's first NDA (505 (b)(2)) and then assisted in a rare singular review cycle, culminating in an approval by the FDA for a peptide therapeutic in December 2021. She continues her research as a Senior Manager in the R&D department on Long Island, NY.

## 2020s

### MD Nazim Bhuiyan '20, BS Biochemistry

I am finishing up my master's program on bioinformatics at NYU while working full time at a local pharmaceutical company as QC scientist.

### Austin Budhram '21, BS Biochemistry

I am currently in my first semester of the Physician Assistant program at Marist College! I am grateful for all the professors who have taught me. Taking undergraduate classes such as Cancer Biology, Genetics, Biochemistry, Cell Biology and many others taught by the professors at Stony Brook has been helping me understand the language and concepts taught in PA school!

### Riya Gandhi '22, BS Biochemistry

I will be attending Renaissance School of Medicine at Stony Brook as part of the class of 2027.



*Ben Martin with Alex Larkin (Martin Lab) and Michael Martinez (Matus Lab). Alex and Michael graduated from the Molecular and Cellular Pharmacology PhD program and both have returned to medical school as part of the MSTP program.*

## More News!

### **Holdener Lab Alumni Updates:**

**Daniel Cameron**, former undergraduate, completed his master's in Bioinformatics through Johns Hopkins University and continues in his research position at Memorial Sloan Kettering.

**Dr. Lance Lee**, former graduate student and now Associate Professor of Pediatrics at Sanford School of Medicine of the University of South Dakota, renewed his NSF REU grant, "REU Site in Cellular and Molecular Biology at Sanford Research." This three-year award will provide research opportunities to 10 undergraduate students each summer with an emphasis on enhancing diversity in science.

**Dr. Christina Leonard**, former graduate student, was recently appointed as Senior Scientific Advisor to the National Marrow Donor Program's "Be the Match."

**Dr. Janet Lighthouse**, former graduate student and Assistant Professor of Pharmaceutical Science in Wegman's School of Pharmacy at St. John Fisher University, passed her tenure mid-probationary review and is looking forward over the summer to catching up on lab work and developing a new elective covering cardiac physiology and pharmacology for the fall semester.

Thanks to our alumni who shared their updates with us! We look forward to hearing more. Please submit your notes [here](#).

## Philanthropy Corner

Philanthropy is an increasingly important source of support of both our research and teaching efforts. This Department received several gifts this year that have had an immediate impact and will continue to benefit us for years to come:

### **Sanford Simon Graduate Fellowship**

Amy Liao '93, PhD generously endowed a Graduate fellowship in honor of her advisor, Sanford Simon. The fellowship will annually provide one year of partial stipend support for a 3rd or 4th year PhD student doing their thesis research in a BCB faculty member's lab. The first Sanford Simon fellow will be announced at the MCB/BSB graduate program retreat in October.

### **New Autoclave and Dishwasher**

Basic maintenance equipment like autoclaves and dishwashers are essential for the function of laboratories but can be hard to support as they are expensive to purchase and maintain and they fall outside the usual purview of instrumentation grants or state support. An anonymous benefactor very generously donated a new autoclave and new dishwasher that were installed on the 3rd floor of the LSB (see photo) and are already in heavy use.

### **Support for the Pisconti Lab**

In memory of his former professor and mentor Carl Moos, Dr. James Ripka '80, BS donated funds to support the research in Dada Pisconti's laboratory. The Pisconti lab is focused on understanding the molecular basis of, and developing treatments for, muscular dystrophies.

### **Giving Day**

More than 100 different friends and alumni contributed to our Giving Day drive helping us raise a record \$56,000 for the Departmental Endowment Fund. Building an endowment is critical effort to ensure the long-term health of the Department.

Your gift can make an impact too! Please consider supporting Biochemistry and Cell Biology by contributing to our [Endowment for Excellence](#). Thank you for your support!



*New autoclave and dishwasher*