

STRIDE

2019 ANNUAL REPORT

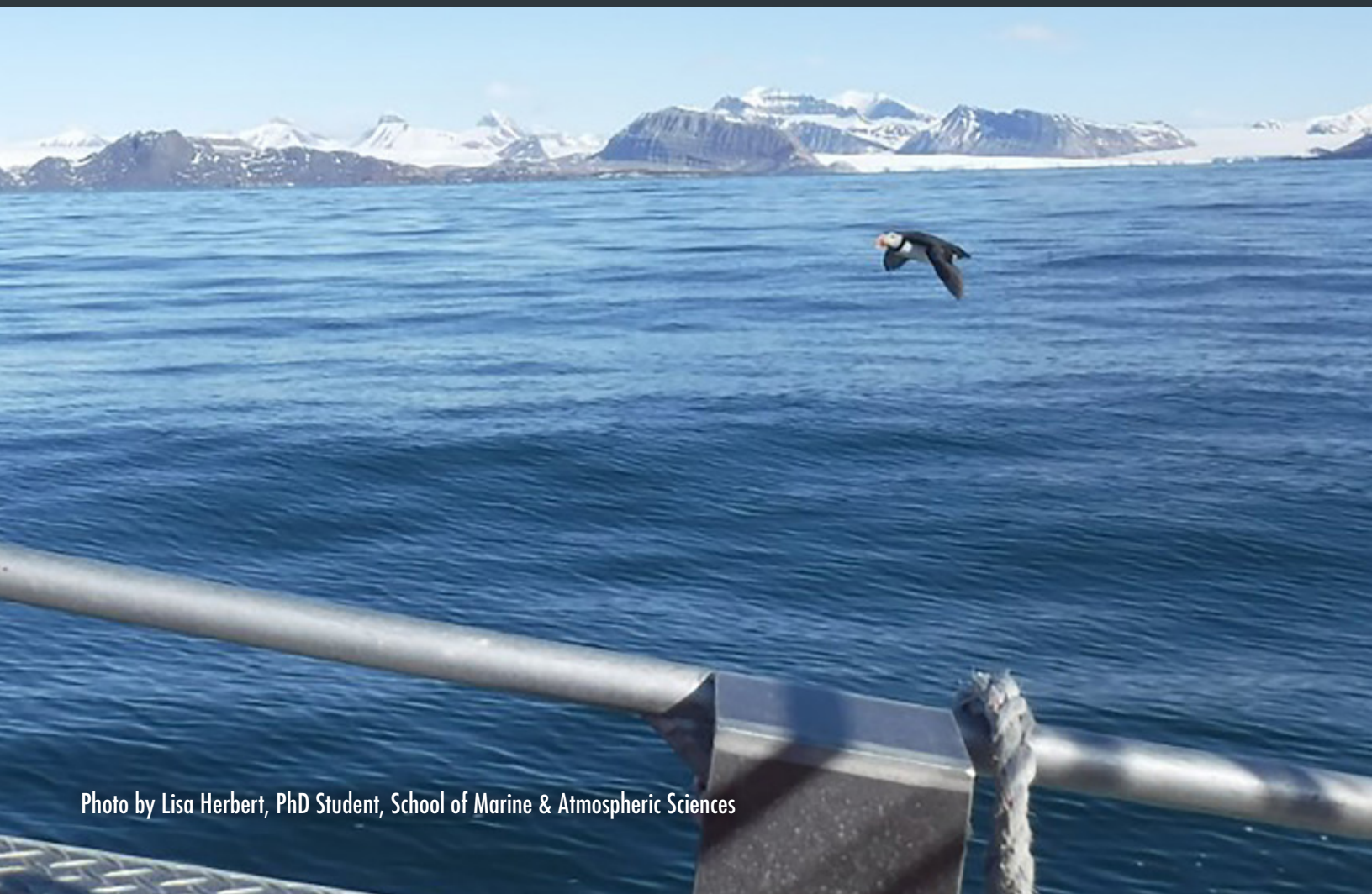


Photo by Lisa Herbert, PhD Student, School of Marine & Atmospheric Sciences

MESSAGE FROM STRIDE LEADERSHIP

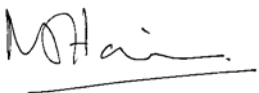
The STRIDE team is delighted to share with you another wonderful year of exciting STRIDE events and accomplishments. Our third annual report highlights the impacts and benefits of the training program to the Stony Brook community as well as to broader populations, along with the award-winning year of our students and faculty.

It is truly gratifying to look back at the origins of the STRIDE program and to see how far we have come in what is already the third project year. With each year, we have had the joy of witnessing transformational growth in the abilities of our STRIDE Fellows to communicate about their science. We have welcomed our third group of fellows, some of whom began as STRIDE trainees – it is truly a privilege for us faculty and staff to work with these talented students who all share a passion for their science and for science communication in myriad forms. All our trainees bring something unique and valuable to the program. In addition to our steadily expanding student cohort, we had another year full of seminars and other events given by our faculty members, affiliates, and students.

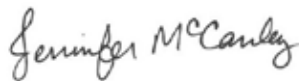
The advanced graduate certificate, C-STRIDE, continues to garner interest from students studying in the many affiliated departments, and we have now graduated our second alumnus of the program!

We enjoyed the 3rd annual STRIDE-Con, as well as Many Paths to Science. In addition to these annual events, we have continued to hold brown bag lunches and various other programming. One of the newest offerings was an Introduction to Python Programming workshop. After experiencing the success last year with the Advanced Python workshop, we decided to hold further workshops run by Software Carpentry in the coming semesters. We also held an IACS Meet & Greet so that students could have an opportunity to become more familiar with the IACS administrative staff, faculty, and other students, while learning about all that IACS and STRIDE have to offer them.

We invite you to continue reading this annual report for more in-depth coverage of our 3rd year accomplishments. We end by thanking our wonderful students for whom this program exists for all of their contributions towards its success.



Robert Harrison
IACS Director



Jennifer McCauley
STRIDE Program Coordinator

VISION & MISSION

We have developed an innovative training program that will provide STEM graduate students with unique interdisciplinary skills to assist, create, and eventually lead in the translation of complex data-enabled research into informed decisions and sound policies. These include skills such as data analytics and visualization that science students are traditionally taught, but also the skills of decision support such as understanding the perspectives of various stakeholders, science communication, and translating scientific uncertainty, that are too often not explicitly taught. The end-to-end training program transcends traditional graduate education by integrating multiple disciplines and novel training elements that span spatial data, advanced visual data analytics, high-performance and data-centric computing, a domain discipline, communication including interpersonal skills and modern media, decision making, and relevant internships.

Vision:

Our vision is to grow this National Science Foundation-funded training program into a scalable and sustainable model that will continue past the award period and to increase diversity of students and faculty within STEM.

Mission:

To realize our vision, we will:

- Grow our faculty and students emphasizing excellence and diversity;
 - Create lasting partnerships with affiliates and internship organizations
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C-STRIDE CERTIFICATE



Scientific Decision Support
Photo Credit: Janet Nye, PhD

The advanced graduate certificate, C-STRIDE, consists of three major components:

1. a set of specially designed courses on decision support, spatial data analysis, visualization, and communication required of all students;
2. training in a STEM domain discipline; and
3. a set of non course-based program elements in which all students will participate.

Affiliated Departments:

Applied Math and Statistics
Biomedical Informatics
Computer Science
Computer and Electrical Engineering
Ecology and Evolution
Journalism
Materials Science / Chemical Engineering
Marine and Atmospheric Sciences
Technology and Society

Course Title

JRN 565: Communicating Your Science* – 3 credits
Statistics Course – 3 credits
MAR 534: Scientific Decision Support – 1 credit
Policy or applied science elective – 3 credits
Seminar Electives, Environment or Energy – 2 credits
CSE 564: Visualization – 3 credits

*If you have taken JRN 501 and JRN 503, complete 3 credits with JRN 513 – Science of Science Communication – 1 credit

Total Required Credits: 15

FELLOWS SHOWCASE



1. Molly Graffam

Molly is a PhD candidate in the School of Marine and Atmospheric Sciences. Molly's research interest is improving water quality through nutrient removal processes. Her dissertation is on the biogeochemistry of groundwater and wastewater treatment systems including permeable reactive barriers (PRBs) and nitrogen removing biofilters (NRBs). She is interested in understanding the link between hydrology and redox conditions which impact microbial processes and are critical for nitrogen removal. She is also interested in the alternative metabolic pathways that can sometimes lead to pollution swapping during water treatment. Her research can help inform the design criteria for NRBs and PRBs so that nutrient removal performance is optimized. This work is intended to contribute toward meeting nitrogen load reduction targets set by policymakers.

2. Megan Hahn

Megan is a fourth year PhD candidate in the School of Marine and Atmospheric Sciences. Her research focuses on using the threespine stickleback fish and its tapeworm parasite *Schistocephalus solidus* to develop an organismal model system to study the role of microbes in host parasite interactions. She primarily utilizes lab experiments in conjunction with next generation sequencing technologies to investigate host and parasite associated microbes, the impact of the parasite on host associated microbes, and the potential for host-parasite-microbe coevolution in this system. Megan's goal is for her research to help inform medical policy and to give way to new therapeutic strategies to prevent and treat tapeworm infections.

3. Jessica Maghakian

Jessica Maghakian is a PhD student and NSF GRFP Fellow in the Department of Applied Mathematics and Statistics. Her research addresses the challenge of designing optimization algorithms that are required to make decisions in real-time, with imperfect knowledge of the future. As real-time

optimization becomes more widespread in application areas such as the smart grid, autonomous vehicles and cloud computing, reliable algorithms with theoretical performance guarantees become all the more necessary.

4. Anna McPherran

Anna McPherran obtained her BA in Biology from Queens College before beginning her doctorate in Ecology and Evolution at Stony Brook. She also worked as a science communicator for four years at the New York Hall of Science, where she directly served students of all ages in her own community. Anna is broadly interested in how human social and economic systems affect extinctions and conservation of neotropical mammals. For her dissertation, she is interested in using an interdisciplinary approach spanning from genomics to the social sciences to understand the impacts of human activity on hutias (native Caribbean rodents) through multiple points in time and space.

5. Josue Nassar

Josue is a PhD student in the Department of Electrical & Computer Engineering. Under the supervision of Drs. Mónica Bugallo and Il Memming Park, the goal of his research is to create Bayesian machine learning algorithms for neural data that allow for interpretable results to be obtained.

6. Alyssa Stansfield

Alyssa Stansfield is a PhD student in the School of Marine and Atmospheric Sciences working with Dr. Kevin Reed. She graduated from Rutgers University in May 2017 with her B.S. in meteorology and physical oceanography. She utilizes climate models to study tropical cyclones and investigate how these powerful storms will change under the effects of climate change. While in the STRIDE program, she hopes to develop skills to effectively communicate future results of her research to the public and policymakers so that society can mitigate the damages due to tropical cyclones in the future.



Heather Lynch, core faculty in the Institute for Advanced Computational Science and associate professor of Ecology & Evolution in the College of Arts and Sciences, has been named a winner of the Blavatnik National Awards for Young Scientists in the category of Life Sciences. The award includes a \$250,000 unrestricted scientific prize.

The Blavatnik Family Foundation and the New York Academy of Sciences announced the 2019 national laureates, honored for their work in the awards' three disciplines —Life Sciences, Physical Sciences & Engineering and Chemistry. Nominated by 169 research institutions from across 44 states, the Blavatnik National Awards received 343 nominees – the largest pool of nominees ever received by the program for those 42 years of age and younger. Lynch was selected from 31 national finalists. Lynch was named a national laureate by the award sponsors for “her unique synthesis of cutting-edge statistics, mathematical models, satellite remote sensing and Antarctic field biology to understand the spatial and temporal patterns of penguin colonies to predict population growth, collapse and possible extinction in the face of climate change.”

“Big Data is a vital component in efforts to preserve our planet, for it is only through data driven interventions that can we strategically pursue a more sustainable future,” said Samuel L. Stanley Jr., MD, President of Stony Brook University. “Stony Brook University is proud to be a leader in research innovation, and this award is a testament to Heather Lynch, whose work will provide key insights on global ecosystems, and generate solutions to the most pressing issue of our time: climate change.”

A faculty member at Stony Brook since 2011, Lynch has received international recognition for her research as a quantitative ecologist monitoring Antarctic penguin populations, including the Adélie penguin. Her work with Adélie penguins in particular has provided key data on the health of the

Southern Ocean ecosystem. Lynch and her colleagues use field surveys in concert with satellite imagery that tracks the size of penguin colonies in the Antarctic. Using her expertise with advanced mathematical modeling, along with collected data on the spatiotemporal patterns of penguin populations, Lynch can detect population declines predictive of penguin colony collapse.

“Heather Lynch has once again proven herself an outstanding rising star at Stony Brook University,” said Michael Bernstein, Interim President of Stony Brook University. “I congratulate her on this prestigious honor, and I look forward to seeing many more accomplishments from this extraordinary colleague.”

“I am so delighted that Heather Lynch is a Blavatnik Laureate,” said Nicole S. Sampson, PhD, Interim Dean of the College of Arts and Sciences and Distinguished Professor of Chemistry. “She is incredibly creative and her data driven approach to understanding penguin populations in Antarctica is emblematic of the research process we need to understand our global ecosystem.”

“It is wonderful to see Professor Lynch’s seminal work so deservedly recognized. She has established a new field of quantitative population dynamics at the continental scale, and her innovative synthesis of big data analytics, physics-based modeling, and ecological science represents the very best of the multidisciplinary approach to discovery that we pursue at IACS,” said IACS Director Robert J. Harrison.

For the first time in the 13-year history of the Blavatnik National Award for Young Scientists all of the recipients are women. The two other winners are Ana Maria Rey of the University of Colorado Boulder, and Emily Balskus of Harvard University, the laureates in the categories of Physical Sciences & Engineering and Chemistry, respectively.

“These three women are leading scientists and inventive trailblazers with stellar accomplishments in their respective fields,” said Len Blavatnik, founder and chairman of Access Industries, head of the Blavatnik Family Foundation and a member of the President’s Council of the New York Academy of Sciences. The Blavatnik National Awards for Young Scientists provides the largest unrestricted scientific prize to America’s most promising, faculty-level scientific researchers.

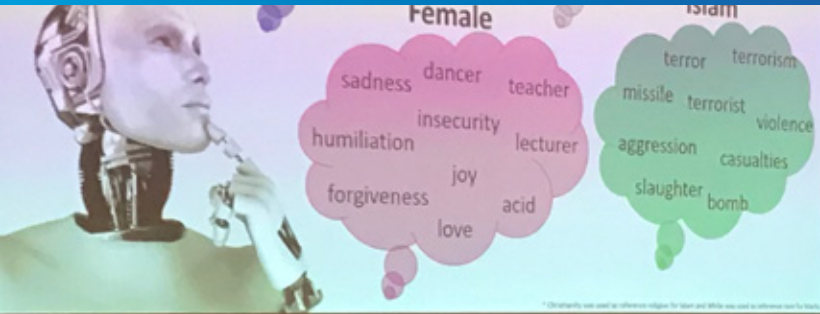
PROFESSOR DÁVALOS AWARDED HFSP GRANT TO STUDY THE REGENERATIVE PROPERTIES OF THE SHREW

The International Human Frontier Science Program Organization (HFSP) recently announced awards totaling \$35 million to support the top 4% of the HFSP Research Grant applications over the next 3 years. Receiving 814 letters of intent, only 34 winning teams were selected following a rigorous year-long selection process in a global competition with scientists representing more than 60 countries.

HFSP’s collaborative Research Grants are given for a wide range of projects which fall under the theme of “Complex mechanisms of living organisms.” The program funds cutting-edge research, such as this close look into the regenerative powers of the Shrew. While many animal species hibernate for the winter, shrews have a more unusual way of surviving the winter, by temporarily shrinking. Their brains, hearts, and bones shrink, sometimes by as much as a quarter of their total body mass. However, come springtime, they just start growing again. Shrews have the ability to actually regenerate brain tissue.

Dr. Dávalos believes this ability may have implications for future treatments for diseases such as Alzheimer’s and Parkinson’s in humans.





STRIDE TRAINEE, BHAVYA GHAI, TAKES 3RD PLACE AT 3-MINUTE THESIS!

Bhavya Ghai, a PhD student from Computer Science, studying in the lab of Professor Klaus Mueller participated in the 3-Minute Thesis (3MT) competition. Bhavya's talk, entitled, "Let's Make Technology Fair Again!" explored the dangers of technology in regards to various biases. After presenting alongside 18 other competitors, he was one of eight students invited back for a second round.

Three Minute Thesis, or 3MT, is an international competition, where doctoral candidates across many disciplines present their dissertation research findings to a general audience in just three minutes with only one slide. The goal of the competition is to have graduate students engage all their communication skills to make their research understandable by others not familiar with their areas of expertise. Student competitors receive special coaching from the nationally-renowned Alan Alda Center for Communicating Science. As a current STRIDE trainee, Bhavya has had several opportunities to communicate his science and has received extra training on doing so effectively.

Bhavya's third place victory earned him a ribbon and a check for \$300—being part of STRIDE has paid off—literally! Congratulations, Bhavya!



Bhavya Ghai (c) with Dr. Jennifer McCauley (L) and Dr. Klaus Mueller (R)

CHRISTINE O'CONNELL NAMED AS FIRST EXECUTIVE DIRECTOR FOR RILEY'S WAY

Riley's Way Foundation has named its first Executive Director, Dr. Christine O'Connell, who will lead the next stage of growth for the organization. Riley's Way is a non-profit organization in New York City building kind leaders for a better tomorrow. Riley's Way works with educators and youth to encourage empathy and kindness in teens, and provide them with the infrastructure and support to become change-makers and create lasting connections in their communities.

"I am humbled and amazed that we are at a point in our existence where we were able to recruit such a world class leader to lead Riley's Way. In addition to her fitting background, Christine is brilliant, kind and empathetic," said Ian Sandler, Co-Founder of Riley's Way and Chair of the Board.

"The vision of building a youth-led movement to advance kindness and empathy in this world is something in which I believe, and have dedicated the last ten years of my life to advancing those ideals in science and medicine," said Dr. O'Connell.

Dr. O'Connell is an organizer, a scientist, an educator, a strategist. She comes to Riley's Way with a distinguished career in communication, empowering voices, and building empathetic leaders. Dr. O'Connell is a sought-after public speaker and curriculum designer, and has led workshops and headlined at conferences and institutions around the world. She has spoken at dozens of institutions including NASA, Caltech, Broad Institute, Google, Yale University, Stanford, National Academy of Sciences, and Okinawa Institute of Technology.

She was the founding Associate Director at the Alan Alda Center for Communicating Science at Stony Brook University where she helped create and build the Center and its empathy-based communication curriculum to international acclaim. She led the growth of many of the Alda Center's flagship programs, and under her direction the Alda Center's workshop program trained over ten-thousand scientists worldwide to be more effective communicators.

"I love seeing how an idea can take shape and grow into a movement," O'Connell said. "I saw this happen with the Alda Center ten years ago, and am overjoyed to now be part of this journey for Riley's Way. Who better to lead a movement centered on kindness and empathy than our youth? They have the passion and ideas to make it happen. I am thrilled to be able to support their journey to become kinder, more empathetic leaders to build a better world."

With the talented team at Riley's Way, Dr. O'Connell will shepherd the organization into its next stage of growth and strategically build its three flagship programs for the national stage: 1) Riley's Way Councils, which partners high-school students from public and private schools to explore issues in their communities and implement projects that embody Riley's Way core values of kindness, empathy, connection-making and leadership; 2) The Call for Kindness, a national contest which awards funding to teen-led projects working to better their communities; and 3) The Youth Leadership Retreat, an annual event which brings together young women who are kind leaders and change-makers from around the country.

"I am thrilled to have Christine join us at such an important time for Riley's Way," said John Horner, Riley's Way Board member and Managing Director at JP Morgan Chase. "As we expand our reach both nationally, with The Call for Kindness and our first Youth Leadership Retreat, and locally with new Riley's Way Councils, Christine will enable us to continue to pursue our goal of empowering the next generation of kind leaders to build a better world. Given the backdrop both globally and in the US, this is needed now more than ever. We couldn't have dreamed of finding a better leader for the next leg of our journey."

"All of us at Student Leadership Network are so thrilled to welcome Christine O'Connell to the helm of Riley's Way Foundation," said Laura Rebell Gross, Riley's Way Board member and Managing Director, Student Leadership Network, which is a partner organization for Riley's Way Councils. "Not only does Christine embody the values of kindness, empathy and community, upon which Riley's Way is built, but she has the intelligence, experience and drive to take our work to the next level, impacting students across the country with the unique programs that have been so meticulously developed by the fabulous team at Riley's Way. Under Christine's leadership, we are going to see incredible growth and exciting innovation. We found the right leader and we're ready to expand and deepen our impact!"

"Christine has a rare ability to connect immediately," said Paul Burke, Riley's Way Board member and Head of School, Nightingale-Bamford School, a long-time partner to Riley's Way. "To connect to an idea, to another person and to a cause that is as big and as important as inspiring kindness. Beyond that she knows how to convert a notion into an operation and an operation into a movement. Without question, our sights have been lifted and our hopes made that much grander thanks to her arrival at Riley's Way."



THOMAS WOODSON AWARDED NSF GRANT TO MEASURE IMPACTS OF RESEARCH PROPOSALS

The mission of the National Science Foundation (NSF) is to fund research that has “universal” benefits. The impact of any research funded by NSF should broadly benefit the whole country’s health, prosperity, and welfare. However, there is currently no effective inclusivity measure of NSF-funded research, which may result in research delivering more benefits to advantaged communities and increasing inequality.

This is the disconnect Professor Thomas Woodson of the Department of Technology and Society within the College of Engineering and Applied Sciences wants to address. Woodson has received a \$274,000 grant from NSF to develop a model that will more accurately predict the true expected impacts of research proposals to ensure that only those projects that fulfill the “universal benefit” mandate are funded.

“For the past twenty years, the NSF has required scientists to discuss broader impacts (BIs) to show that their research extends beyond the laboratory,” Woodson said. “However, the current methods of assessing BI activities fail to account for three factors: the immediacy and inclusiveness of the BI activities, along with the impact the BI activities have on scientific productivity. There is a critical need to reframe the BI criteria to measure these crucial factors.”

The overall objective of this project is to use a new inclusion-immediacy criterion (IIC) to measure the immediacy and inclusion of NSF-sponsored research and determine how the different degrees of immediacy and inclusion relate to scientific output. Professor Woodson’s team will code and analyze project output reports from NSF-funded research going back to 2013 to create a system for accurately measuring potential outcomes of research proposals. An algorithm will be created to automate the coding and analysis process to reduce labor intensiveness and allow for quicker evaluation of research proposals.



“Smart engineering education goes beyond teaching technical skills by including societal competences, such as inclusivity, equality, and marginalization. The more we know about the societal impact of cutting-edge research the better we can apply that knowledge educating tomorrow’s engineers,” said Wolf Schäfer, Chair of the Department of Technology and Society. “Thomas’ research will help measure the extent to which the societal impact criterion has increased inclusive innovation, reduced inequality, and empowered marginalized communities.”

“Thomas’ research will help measure the extent to which the societal impact criterion has increased inclusive innovation, reduced inequality, and empowered marginalized communities.”

Wolf Schäfer

Chair of the Department of Technology and Society

JENNIFER MCCAULEY HONORED WITH DEAN'S AWARD FOR EXCELLENCE IN SERVICE TO GRADUATE EDUCATION

The Graduate School at Stony Brook University coordinates an annual awards program to honor outstanding students, faculty, and staff. The awards celebrate excellence and achievement in areas from teaching and research to leadership and service. One such award is the Dean's Award for Excellence in Service to Graduate Education by a Graduate Program Coordinator (GPC).

We are very excited to announce that STRIDE's Jennifer McCauley has been recognized as one of the winners of the 2019 Graduate School Awards for her efforts as STRIDE Program Coordinator. Since the program's inception two years ago, Dr. McCauley has served as GPC for STRIDE, and has proven to be an outstanding asset to the university.

Her attention to her students goes far beyond giving advice on coursework. She counsels them with regard to career portfolio skills and helps them to navigate any issues they may be having with faculty or other students. She is always thinking about and creating new programming for her students

to take part in, including internships, professional development workshops, teaching experiences, recruiting trips, mentee and mentor opportunities, interactions with K-12 community and industry, etc.

Dr. McCauley is committed to broadening diversity in STEM and making it more inclusive and equitable for all. In this pursuit, she has been involved with recruitment efforts in partnership with the Center for Inclusive Education to recruit underrepresented students who are interested in STRIDE. She has also been involved with the Graduate Career Consortium, serving on both the mentoring and diversity committees. She has been generous with her time in supporting a large number of graduate students, serving as a guest judge for the 2018 3-Minute Thesis competition and attending the G-WISE Women in STEM showcase, where she served as a panelist and guest judge.



Dr. Jennifer McCauley (L) with Lynn Allopenna and Interim Dean of the Graduate School, Dr. Richard Gerrig

GRADUATE CAREER CONSORTIUM 2019

The Graduate Career Consortium (GCC) leads in the advancement of graduate and postdoctoral career and professional development and is a professional organization comprised of members at research universities and medical schools in the United States and Canada, serving graduate students and postdoctoral scholars.

This past June, Dr. Jennifer McCauley attended the 2019 GCC Conference in New Orleans, Louisiana to present the mentoring workshop model that she created in partnership with Dr. Christine O'Connell. Dr. McCauley condensed the 3-hours long workshop to 50-minutes to present Mentoring in STRIDE: A Workshop Model to Improve Mentoring Relationships and Inclusion Through Perspectives and Empathy. In this shortened iteration, participants were taken through many of the actual exercises including Finding Common Ground, where partners take turns listing the many "who's" they are, followed by the "who's" they are not. Afterward, the two compare similarities to find common ground. Partners went through an improvisation exercise known as "Rant!" During this exercise partners took turns ranting about any particular pet peeve for a full 2 minutes. Afterward, the partner summarized the other's rant, but with a positive spin on their complaint—a training mechanism to find the positives in a particular situation. Lastly, large groups (n=5) went through the exercise of perspective taking. Groups were randomly given a group of people who could be found on campus. Examples of possible groups included racial minorities, various religious groups, individuals who

identify with various sexual/gender identities, etc. While in these groups, they listed all of the things that an individual from their assigned category may struggle with as a member of a college campus. The exercises were found to be enlightening and the feedback from the participants was very positive.

The conference was an enjoyable learning experience featuring several keynote talks throughout the length of the conference and member-generated breakout sessions on such topics as visioning and implementing an inclusive model of professional development, addressing career challenges that international graduate students and postdocs face in the US, and developing and administering effective surveys.



McCauley with Dr. Alfreda James, Stony Brook Career Center



PhD Candidate, Molly Graffam in the field

STRIDE INTERNSHIPS

Internship opportunities are not something that most graduate students in the STEM fields get to take advantage of. STRIDE trainees are at a unique advantage as an internship is one of the requirements towards fulfilling the 15-credit advanced graduate certificate. In this past year, five trainees spent their summer engaged with research projects with the National Renewable Energy Laboratory, National Oceanic and Atmospheric Administration (NOAA), The United Nations, The International Ocean Discovery Program, and Stony Brook University Hospital.

Internship Panel

On Friday, October 25, 2019, STRIDE partnered with the Graduate School to host, *I (want to) Know What You Did Last Summer*, a panel event which showcased three students' internship experiences. During the panel, participants spoke about how they obtained their internships and whether or not they were paid. They also discussed how they navigated the time away from the lab, and in some cases, how they continued their research projects while interning across the country!

SEMINARS & EVENTS



Pizza & Policy

SEMINARS & EVENTS

Seminars: Brown Bag Lunches

Spring 2019

Plot.ly: From Experimental Physics to Data Science Software

Alex Johnson
February 13, 2019

Designing and Reading Embellished Visualizations

Klaus Mueller
May 30, 2019

Fall 2019

Your Place in the Universe

Paul Sutter
October 9, 2019

Seminars

Pizza & Policy

May 8, 2019
October 2, 2019

Python Workshop

February 16 – 17, 2019

Events

3rd Annual STRIDE-Con

September 13, 2019

Workshops

Mentoring in STRIDE

January 25, 2019



Mentoring in STRIDE



Mentoring in STRIDE



STRIDE Fellow, Molly Graffam

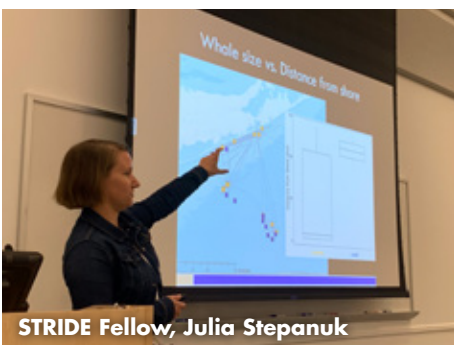
STRIDE-CON 2019

The STRIDE program's annual STRIDE-Con is a day-long event showcasing talks on science communication, data visualization, and policy. On Friday, September 13, the 3rd Annual STRIDE-Con took place at the Institute for Advanced Computational Science.



STRIDE-Con Plenary Speaker, Dr. Anjali Kumar

Carolyn Hall, of the Alan Alda Center for Communicating Science gave a talk on science communication entitled, *Sunk Shore: Art, the Public, and Engagement Around the Future of our Climate*. Hall spoke about her art piece, *Sunk Shore*, which took place on Governors Island, and was an experiential tour of our climate changed future. It was created to bring participants into an embodied experience of information on events expected to take place based on extrapolation of research including rising sea levels, changing animal species, and higher heat. This energized talk gave a new perspective of science communication, intersecting performance art with science.



STRIDE Fellow, Julia Stepanuk

Dr. Jason Jones, a computational social scientist, and Assistant Professor in the Department of Sociology gave a talk on data visualization entitled, *Identity Trends: Visualizing the Dynamics of Self-Ascribed Social Roles over Time and Space*.

STRIDE-Con's keynote speaker, Dr. Anjali Kumar of the Union of Concerned Scientists' talk, *Putting your Science to Work: Skills, Successes, and Failures in Using Science for Policymaking* was very informative and gave many insights to Dr. Kumar's own experiences throughout her career.

DIVERSITY & RECRUITMENT

RECRUITMENT ACTIVITIES

Richard Tapia Celebration of Diversity in Computing
September 18-21, 2019
San Diego, CA

Puerto Rico Circuit
September 26-27, 2019
UPR-Rio Piedras, Ana G. Méndez University
School of Science and Technology

Discover SB-You: Graduate Diversity Welcome Week
October 2-4, 2019
SBU
Pilot program – all-expense visit to SBU/ IACS for extended grad preview

Graduate School Preview Day
October 4, 2019
SBU

IACS Information Session
October 17, 2019
SBU

Baltimore, MD Circuit
October 29-30, 2019
University of Maryland Baltimore County,
Morgan State University

Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)
October 31-November 2, 2019
Honolulu, HI

Suffolk County Community College
November 7, 2019

IACS CodeQuest & Information Session @ SUNY Global Center in NYC
March 20, 2020

Pilot initiative to engage prospective graduate students from CUNY institutions who are interested in computational science. The event will feature a moderated panel with IACS faculty, programming challenge, lunch and announcement of winner(s).



(From Left): Rosalia Davi, Diversity Outreach Coordinator, and Abdullah Shahneous Bari Sayket, PhD Student in Computer Science, recruiting for the IACS at the 2019 Richard Tapia Celebration of Diversity in Computing in San Diego, CA.

In collaboration with the Institute for Advanced Computational Science and the Center for Inclusive Education, the STRIDE Fellowship was promoted at nearly a dozen recruitment activities during the 2019-2020 academic year.

Most notable was the trip to San Juan, Puerto Rico from September 25-27, 2019. Despite the threat of Tropical Storm Karen, the team successfully completed a biannual visit sponsored by the Institute for Advanced Computational Science. The team consisted of STRIDE Fellow and PhD candidate in Marine and Atmospheric Science, Adelle Molina, IACS Core Faculty member from the Physics and Astronomy department, Dr. Marivi Fernández-Serra, and Rosalia Davi, Diversity Outreach Coordinator. Together they met with almost 50 students from the University of Puerto Rico - Rio Piedras and Ana G. Mendez at Cupey, and shared graduate research and fellowship opportunities in both English and Spanish. The trip was well received, and we look forward to returning in 2021. Overall, the STRIDE Fellowship was shared with over 260 prospective students in 2019-2020. To date, we have received 13 applications to STRIDE/C-STRIDE programs, with more than half identifying as underrepresented minority.

Other activities included exhibiting at the Richard Tapia Celebration of Diversity in Computing in San Diego, CA, and the Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) Conference in Honolulu, HI.

DIVERSITY & RECRUITMENT



(From Left): Dr. Marivi Fernández-Serra, Professor in Physics and Astronomy and IACS Core Faculty; Adelle Molina, PhD Candidate in Marine and Atmospheric Sciences and STRIDE Fellow; and Rosalia Davi, Diversity Outreach Coordinator visited the University of Puerto Rico - Rio Piedras, where they presented to undergraduate students about graduate opportunities at Stony Brook.

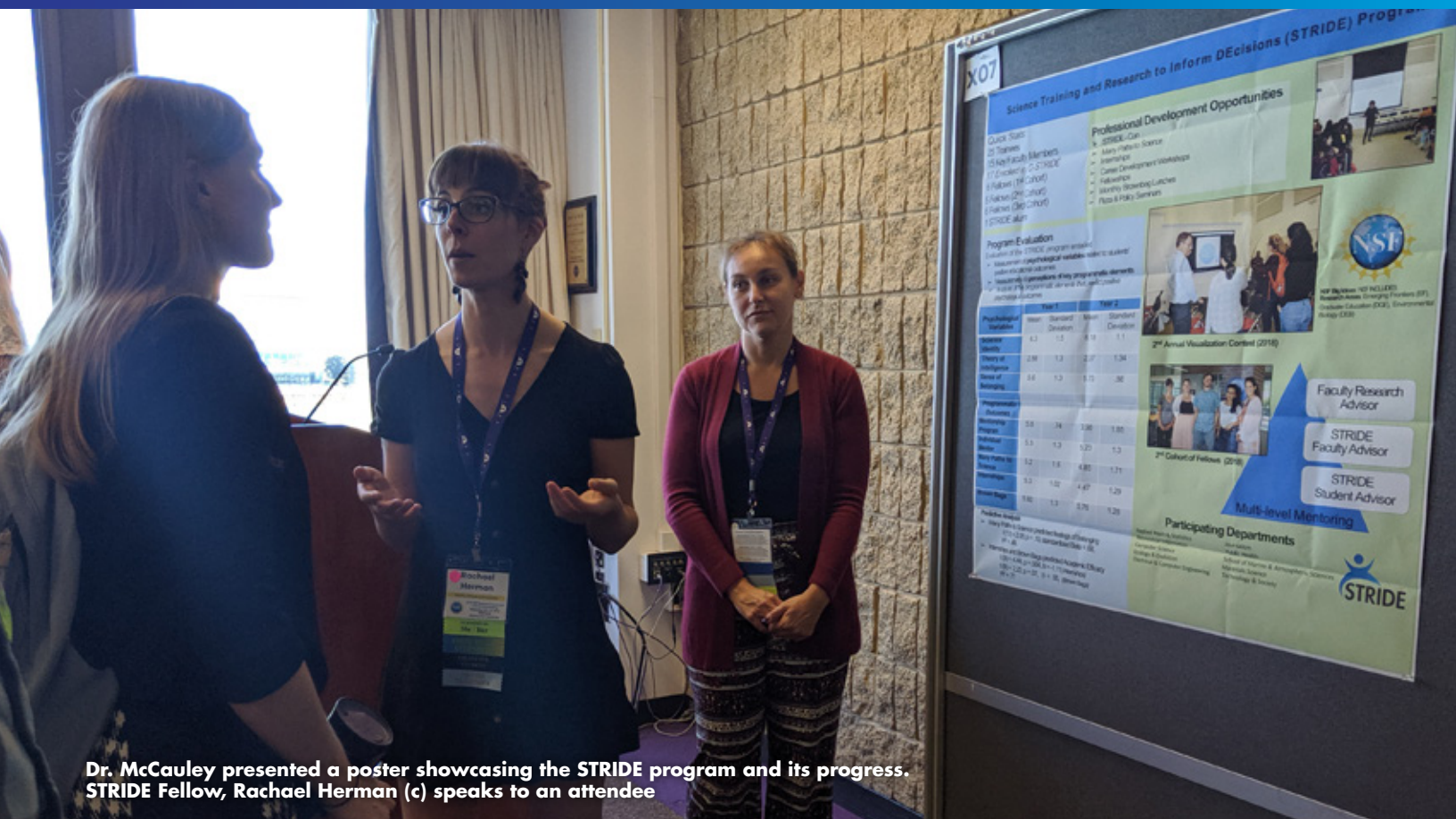
(From Left): Rosalia Davi, Diversity Outreach Coordinator, and Jonathan Vazquez Rivera, IACS Data + Computing = Discovery participant in 2017, who attended the Stony Brook/IACS presentation at Universidad Ana G. Méndez, Recinto de Cupey.

Jonathan looks forward to applying for graduate school at Stony Brook in Fall 2020.



Stony Brook University Exhibitor Booth at the Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) Conference in Honolulu, HI. (From right): Dr. Christian Luhmann, Associate Professor of Cognitive Science and IACS Affiliate Faculty; two SACNAS attendees; and Dr. Miguel Garcia-Diaz, Associate Professor and Director, Molecular and Cellular Pharmacology Graduate Program

2019 NSF MEETING



Dr. McCauley presented a poster showcasing the STRIDE program and its progress. STRIDE Fellow, Rachael Herman (c) speaks to an attendee

The 2019 National Science Foundation (NSF) Research Traineeship (NRT) Annual Meeting took place this year at Northwestern University in Evanston, Illinois. The meeting provides an informal, collegial atmosphere where NRT participants can come together to share experiences and explore ideas.

The three-day conference featured panel discussions on topics such as recruiting and retaining diverse trainee cohorts, forming a collaborative, transdisciplinary learning community, and developing internships and industry partnerships, among others. Professors Robert Harrison and Thomas Woodson, along with STRIDE Program Coordinator Dr. Jennifer McCauley traveled with Rachael Herman, a funded STRIDE fellow, to attend the meeting. Dr. Woodson gave a talk for the session on Increasing Retention of Underrepresented Trainees.

Dr. McCauley presented a poster showcasing the STRIDE program and its progress.



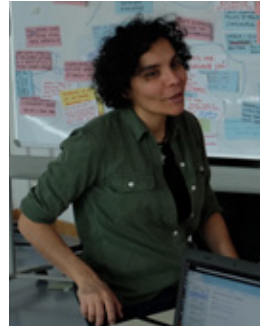
Dr. Robert Harrison speaks to an attendee about the STRIDE program



Robert J. Harrison, PhD

Robert Harrison is a distinguished expert in high-performance computing. Through a joint appointment with Brookhaven National Laboratory, Professor Harrison is also Chief Scientist of the Computational Science Institute at Brookhaven National Laboratory. Dr. Harrison comes to Stony Brook from the University of Tennessee Knoxville and Oak Ridge National Laboratory, where he was Director of the Joint Institute of Computational Sciences,

Professor of Chemistry and Corporate Fellow. He has a prolific career in high-performance computing with over one hundred publications on the subject, as well as extensive service on national advisory committees.



Liliana M. Dávalos, PhD

Liliana M. Dávalos is professor of Conservation Biology at Stony Brook University (New York). Dávalos is a 2012 National Academies of Sciences Education Fellow in the Life Sciences, a 2013 Kavli Frontiers of Science Fellow for outstanding early career, and has advised the United Nations Office of Drug and Crime on deforestation since 2007. She is a coauthor of the 2016 World Drug Report. Dávalos is interested in the forces

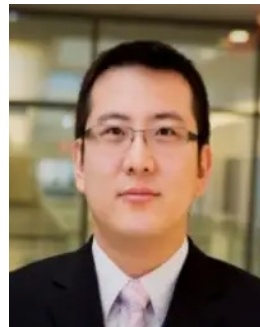
shaping biodiversity in time and space. She focuses on the evolution of species and trait diversity, and on how to conserve ecosystems today and into the future.



Mónica Bugallo, PhD

Mónica Bugallo is a Professor of Electrical and Computer Engineering and the Associate Dean for Diversity and Outreach of the College of Engineering and Applied Sciences at Stony Brook University. She received her B.S., M.S., and PhD degrees in computer science and engineering from University of A Coruna, Spain. She joined the Department of Electrical and Computer Engineering at Stony Brook University in 2002 where she is currently a Professor.

Her research interests are in the field of statistical signal processing, with emphasis on the theory of Monte Carlo methods and its application to different disciplines including biomedicine, ecology, sensor networks, and finance. In addition, she has focused on STEM education and has initiated several successful programs with the purpose of engaging students at all academic stages in the excitement of engineering and research, with focus on underrepresented groups. She has authored and co-authored two book chapters and more than 190 journal papers and refereed conference articles. Bugallo is a senior member of the IEEE, serves on several of its technical committees and is the current vice chair of the IEEE Signal Processing Society Signal Processing Theory and Methods Technical Committee and the chair of the EURASIP Special Area Team on Theoretical and Methodological Trends in Signal Processing. She has received several prestigious research and education awards including the State University of New York (SUNY) Chancellor's Award for Excellence in Teaching (2017), the 2019 Ada Byron Award of the Galician Society of Computer Engineers (Spain), the Best Paper Award in the IEEE Signal Processing Magazine 2007 as coauthor of a paper entitled Particle Filtering, the IEEE Outstanding Young Engineer Award (2009), the IEEE Athanasios Papoulis Award (2011), the Higher Education Resource Services (HERS) Clare Boothe Luce (CBL) Scholarship Award (2017), and the Chair of Excellence by the Universidad Carlos III de Madrid-Banco de Santander (Spain) (2012).



Zhenhua Liu, PhD

Zhenhua Liu is an assistant professor of Applied Mathematics and Statistics. He is an affiliate of the Department of Computer Science and Smart Energy Technology Cluster. Liu received his PhD in Computer Science at the California Institute of Technology. Before Caltech, he received his MS degree of Computer Science and Technology and BE degree of Measurement and Control from Tsinghua University with honor. He also received a

dual degree of Economics from Peking University. Liu's research interests include cloud computing, online convex optimization, energy-efficient computing, machine learning, internet of things, market design, and distributed control. His research combines rigorous analysis and system design, and goes from theory, to prototype, and eventually to industry to make real impacts.



Heather J. Lynch, PhD

Heather J. Lynch is an associate professor of Ecology & Evolution and the Institute for Advanced Computational Science Endowed Chair in Ecology & Evolution at Stony Brook University. Dr. Lynch is currently a AAAS Leshner Leadership Institute Fellow for Science Engagement. Prior to Stony Brook, Dr. Lynch was a postdoc in the Biology Department at the University Maryland. Dr. Lynch received her A.B. in Physics from Princeton University in 2000,

an A.M. in Physics from Harvard University in 2004, and a Ph.D. in Organismal and Evolutionary Biology from Harvard University in 2006. Dr. Lynch's research is focused on spatial population dynamics of Antarctic penguins, with a particular focus on statistical and mathematical models to integrate patchy time series with remote sensing imagery. These data will allow Dr. Lynch and colleagues to develop mathematical models to explore how coloniality constrains the colonization and extinction of individual habitat patches and, ultimately, the metapopulation dynamics of colonial seabirds.

FACULTY



Jaymie Meliker, PhD

Jaymie Meliker is a Professor in the Department of Family, Population, and Preventive Medicine and the Program in Public Health. His research contributes to the fields of exposure science, health geography, and environmental epidemiology. Highlights of his work include pioneering development of space-time information systems for lifetime exposure reconstruction, and epidemiology of low-level exposure to arsenic in drinking water.

He has published on drinking water contaminants, air pollutants, arsenic, cadmium, asthma, osteoporosis, stroke, and different types of cancers, and enjoys tackling environmental epidemiologic and spatio-temporal methodological problems to advance population health. Dr. Meliker received his PhD and MS from the University of Michigan School of Public Health and his BA in Neuroscience from Oberlin College.



Klaus Mueller, PhD

Klaus Mueller received a PhD in computer science from The Ohio State University in 1998. He is currently a professor in the Computer Science Department at Stony Brook University and he is also a senior scientist at the Computational Science Initiative at Brookhaven National Lab. From 2012-2015, Klaus served as the founding chair of the Computer Science Department at SUNY Korea and he was also VP for Academic Affairs and Finance at SUNY

Korea for two years. His current research interests are visualization, visual analytics, data science, explainable AI, and medical imaging. He won the US National Science Foundation Early Career award in 2001, the SUNY Chancellor Award for Excellence in Scholarship and Creative Activity in 2011, and the Meritorious Service Certificate and the Golden Core Award of the IEEE Computer Society in 2016. In 2018 Klaus was inducted into the National Academy of Inventors. To date, he has authored more than 200 peer-reviewed journal and conference papers, which have been cited over 10,000 times. He is a frequent speaker at international conferences, has organized or participated in 18 tutorials on various topics, chaired the IEEE Visualization Conference in 2009, and was the elected chair of the IEEE Technical Committee on Visualization and Computer Graphics (VGTC) from 2012-2015. Klaus currently serves as the Editor-in-Chief of IEEE Transactions on Visualization and Computer Graphics. He is a senior member of the IEEE.

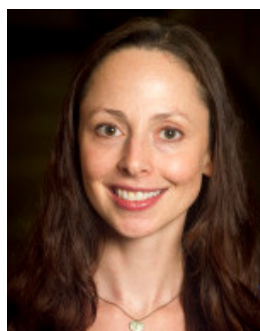


Janet Nye, PhD

Janet Nye is a quantitative fisheries ecologist, using mathematical and statistical methods to study fish populations and coastal ecosystems. Although she has conducted research on a variety of issues in fisheries ecology, Dr. Nye's current research is focused on how climate variability and anthropogenic climate change affects marine ecosystems and fisheries. Her past research examined shifts in spatial distribution of fish in response to

warming water temperatures and fishing. Dr. Nye's current research seeks to understand how large-scale climate variability translates to more local oceanographic processes and how those processes influence North

Atlantic ecosystems. Naturally, the study of how historic climate variability has affected ecosystems sparked her interest in how future climate change may affect ecosystems. Dr. Nye works with climate scientists using global climate models to project changes in abundance and distribution of living marine resources. Although her current research focuses on climate variability and change, an important emphasis of her work is to look holistically at the many drivers of environmental change such that her research can be used to inform ecosystem-based management.



Christine O'Connell, PhD

Christine O'Connell, Ph.D., an organizer, a scientist, an educator, a strategist. She is an expert in the field of science communication, engagement, and building empathetic leaders and organizations. She is currently the Executive Director of Riley's Way Foundation (rileysway.org), an organization whose mission is to empower kindness and empathy in teen leaders to build a better world. Previously, she was the founding Associate Director

and a professor at the Alan Alda Center for Communicative Science (aldacenter.org) at Stony Brook University where she helped create and build the Center and its curriculum to international acclaim. Christine has a record of providing strategic direction to grow non-profit and academic organizations, research initiatives, and environmental and community campaigns. She is a sought-after public speaker and curriculum designer, and has led workshops and headlined at conferences and institutions around the world. In 2018, she was named a Women in Power Fellow, a New York based fellowship for rising female leaders.

Currently she is the co-chair of the Advisory Board for 500 Women Scientists, and retains visiting faculty appointments at Stony Brook University in New York and the Centre for Public Awareness of Science at Australia National University. She received her B.S. from Cornell University, and Ph.D. in Marine and Atmospheric Sciences at Stony Brook University. Her research focuses on best practices in empathetic communication, novel collaborations, science policy, and women in STEM.



Jason Trelewicz, PhD

Dr. Jason Trelewicz is an Associate Professor of Materials Science and Engineering at Stony Brook University with a joint appointment in the Department of Materials Science and Chemical Engineering and the Institute for Advanced Computational Science. His research explores the science of interface engineered materials using in situ and analytical characterization tools coupled with large-scale atomistic simulations to design materials for extreme

environment applications. Professor Trelewicz received his Ph.D. in Materials Science and Engineering from the Massachusetts Institute of Technology in 2008. Prior to joining the faculty at Stony Brook University, he spent four years as Research Director at MesoScribe Technologies, Inc. responsible for managing the development of harsh environment sensor technologies produced by additive manufacturing processes. Professor Trelewicz is a recipient of the 2017 DOE Early Career Award and 2016 NSF Faculty Early Career Development (CAREER) Award. He was selected as a Stony Brook University 40 Under Forty Honoree in 2019, awarded the Fusen and Yijen Chen Prize for Innovative Research in 2018, received the 2015 Young Leader Professional Development Award from The Minerals, Metals, and Materials Society (TMS), and was selected as a

TMS representative for the 2014 Emerging Leaders Alliance Conference. Professor Trelewicz is an active member of the Materials Research Society, TMS, the American Nuclear Society, and ASM International.



Laura Wehrmann, PhD

Laura Wehrmann is an assistant professor within the School of Marine and Atmospheric Sciences. She earned her PhD at the Max Planck Institute for Marine Microbiology in Bremen, Germany. Her research focuses on several aspects of (bio)geochemical element cycling in marine systems, ranging from subseafloor sediments to glacially influenced fjords. She is specifically interested in the drivers of early diagenetic processes and the connections between different element cycles, e.g., the carbon, sulfur, and iron cycles. She also investigates the response of microbially mediated processes in the deep sub-seafloor biosphere to changing (paleo) environmental conditions over different temporal and spatial scales. Her work combines classical inorganic geochemical techniques with stable isotope analyses and the application of radiotracer methods.



Thomas S. Woodson, PhD

Dr. Thomas S. Woodson is an assistant professor at Stony Brook University in the Department of Technology and Society. He investigates the effects of technology on inequality throughout the world and the causes/consequences of inclusive innovation. For the past 3 years he has focused on the relationship between innovation and inequality in 4 areas: nanotechnology, 3D printing, science funding and engineering education.

Thomas received his Ph.D. from the Georgia Institute of Technology (Georgia Tech) in public policy with a specialization in science and technology policy. While at Georgia Tech, he was a part of the Technology Policy Assessment Center and the Center for Nanotechnology in Society at Arizona State University. At these centers, he investigated the effects of nanotechnology on inequality and poverty throughout the world. Thomas received numerous awards while at Georgia Tech including the Georgia Tech Presidential Fellowship and the NSF Graduate Student Fellowship. Thomas received his B.S.E. at Princeton University. He studied electrical engineering with a focus in electrical materials. Thomas and his family reside in Centereach, NY although he was born and raised in Texas. In his spare time, Thomas volunteers at his church, teaches at a local jail and competes in triathlons. His current goal is to complete a full Ironman Triathlon.



Erez Zadok, PhD

Erez Zadok earned his PhD from Columbia University in 2001. Erez Zadok's research focuses on operating systems, with a specialty in file systems, storage, and security. He studies operating systems and file systems from many aspects: security, efficiency, energy use, scalability, reliability, portability, survivability, usability, ease-of-use, versatility, flexibility, and more. Special attention is given to balancing five often-conflicting aspects of

computer systems: performance, reliability, energy use, security, and

ease-of-use. Since joining the faculty of Stony Brook in 2001, Zadok and his group in the Filesystems and Storage Lab (FSL) developed many file systems and operating system extensions; examples include a highly-secure cryptographic file system, a portable versioning file system, a tracing file system useful to detect intrusions, a replaying file system useful for forensics, a snapshotting and sandboxing file system, a namespace unification file system, an anti-virus file system, an integrity checking file system, a compiler to convert user-level C code to in-kernel efficient yet safe code, stackable file system templates, and more. Zadok's research has been supported by several NSF grants including an NSF CAREER award, two IBM Faculty awards, two NetApp awards, and several equipment gifts. Zadok is the winner of the 2004 Computer Science Department bi-annual Graduate Teaching Award, the winner of the 2006 Computer Science Department bi-annual Research Excellence Award, and a recipient of the 2008 SUNY Chancellor's Excellence in Teaching award. Zadok's lab exposes students to internals of over a dozen different operating systems. Zadok co-chaired several conferences and is on the steering committee of some (e.g., ACM SYSTOR, USENIX FAST), as well as on the editorial board of ACM TOS. Zadok is the author of "Linux NFS and Automounter Administration" (Sybex, 2001). Zadok's published several dozen conference and journal articles in the past few years—in IEEE, ACM, and Usenix venues; three papers won awards. Zadok is named inventor on four U.S. patents. Zadok is now the Graduate Academic Adviser at Stony Brook's CS department.



Minghua Zhang, PhD

Minghua Zhang is an expert on climate modeling. He was Director of the Institute for Terrestrial and Planetary Atmospheres for ten years, Dean and Director of the School of Marine and Atmospheric Sciences for six years. Dr. Zhang's research focuses on numerical modeling of climate and global climate change. It includes development and analysis of physical parameterizations in general circulation models, diagnostic study of

feedback processes in the climate system, understanding of past and future climate changes, by using models and measurements from satellites and other sources. His research on model development focuses on moist processes related to clouds, radiation, convections, boundary layer turbulence, and their interactions, with the goal of improving global models to more accurately predict climate change on a wide range of time and spatial scales. He has also participated in several field large-scale atmospheric field experiments and developed a variational method to integrate heterogeneous measurements from multiple measurement platforms with results used by most major climate modeling centers in the world. He also does research on the dynamics of large-scale atmospheric waves, such as their excitation, propagation, dissipation, and interaction with atmospheric circulations.

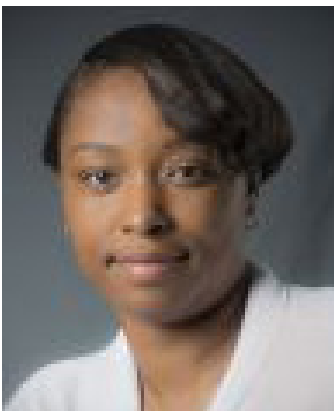
Dr. Zhang has authored more than 150 papers and two books on climate and atmospheric sciences. He has served on many editorial boards, including as Editor of the Journal of Advances in Modeling Earth Systems (JAMES), and Editor-in-Chief of the Journal of Geophysical Research (JGR)-Atmospheres. He has also served on many advisory and professional committees, including the Advisory Committee of the US Department of Energy on Biological and Environmental Research (BERAC), the Steering Committee of the International Global Water and Energy Cycle Program (GEWEX). He is an elected member of the Eurasian Academy of Sciences, Fellow of American Meteorological Society, and a co-recipient of the 2007 Nobel Peace Prize for his work with the Intergovernmental Panel on Climate Change (IPCC).

ADVISORY BOARD



Kirk E. Jordan, PhD

Dr. Kirk E. Jordan is an IBM Distinguished Engineer in the DataCentric Solutions organization at IBM T.J. Watson Research Center, an IBM Technical Executive position in IBM's Research Division, and is the Chief Science Officer for IBM Research UK responsible for high performance computing (HPC) direction and strategy. Dr. Jordan is also a member of the IBM Academy of Technology. He has a Ph.D. in Applied Math and has held computational science positions at Exxon R&E, Argonne National Laboratory, Thinking Machines and Kendall Square Research before joining IBM in 1994. A Research Affiliate in MIT's Department of Aeronautic and Astronautics, he holds leadership positions in SIAM, is a member of the Committee on Science Policy, and is a SIAM Fellow. He is also a Fellow of AAAS. He is a Visiting Scientist in the Scientific Computing Department of the Science and Technology Facilities Council in the United Kingdom. He is on several boards including the Board of Visitors for the Institute Computational Engineer and Science at the University of Texas at Austin and the National Advisory Committee of the Statistical and Applied Mathematics Institute in North Carolina.



Bonita London, PhD

Dr. London's research examines how individuals perceive, experience, and negotiate their social and academic worlds, both through the lens of their social identities (e.g., race and gender), and through their individual competence beliefs (e.g., do I have the skills and ability to succeed?).

Dr. London developed the social-cognitive Sensitivity to Gender-Based Rejection model for women (London, Downey, Romero-Canyas, Rattan, & Tyson, 2012) to explore the dynamic interaction among individual and situational/contextual factors that can both interfere with or facilitate the successful achievement and well-being outcomes of members of traditionally marginalized or stigmatized groups. Her research on Gender-based Rejection Sensitivity (Gender RS) explores individual differences in how women anticipate, perceive and cope with gender-based evaluative threats in select contexts.



Christopher Martinez, PhD

Christopher Martinez's research concerns the diversity of fish forms and its implication for lifestyle variation. He is interested in understanding the evolutionary processes involved in morphological diversification and the extent to which shape impacts function and performance. He has worked with a number of systems, from sexual dimorphism in skate pectoral fins to co-variation of body and jaw shapes in cichlids. At University of California Davis, he is using geometric morphometrics to study cranial kinesis in cichlid fishes as a novel way to understand their trophic evolution and niche segmentation.



Carlos Medina, EdD

Dr. Carlos Medina is a Vice Chancellor and the Chief Diversity Officer at the State University of New York (SUNY). He is charged with leading SUNY's efforts in promoting and advancing the University's diversity goals and ensuring that they are properly captured within all university policies and procedures. He provides leadership and strategic direction to SUNY campuses in connection with the recruitment and retention of faculty, staff and administrators who come from groups within our society that are underrepresented in higher education and in SUNY.

He received his B.S. in Education from the State University of New York, College at Cortland, M.P.S. in Human Services Administration from Cornell University and his Doctorate in Education from St. John Fisher College. Dr. Medina has more than 25 years of progressive responsibility in state government and higher education with proven experience in leadership, management, and staff development.

ADVISORY BOARD



Mark Montgomery, PhD

Mark R. Montgomery is a population researcher in the Population Council's Poverty, Gender, and Youth program, and is a professor in the Economics Department at Stony Brook University. He studies the increasing urbanization of the world's population.

Before joining the Council in 1993, Montgomery was in the Office of Population Research at Princeton University and was a Rockefeller Foundation senior fellow at the University of Lagos. He is a member of the Population Association of America and the International Union for the Scientific Study of Population. He also sits on numerous editorial and advisory boards, e.g. the Journal of Urban Health; the Wittgenstein Center for Demography and Global Human Capital; the Urban Health Resource Centre in New Delhi, India; and the Integrated Demographic and Health Surveys Project (I-DHS) and the Minnesota Population Center.



Cynthia Peterson, PhD

Dr. Peterson, Louisiana State University's College of Science's first female dean, earned a B.S. in biochemistry at LSU, followed by a Ph.D. in biochemistry from the LSU Medical School in Shreveport. She then pursued postdoctoral training at the University of California, Berkeley. She formerly was a professor in the Department of Biochemistry and Cellular and Molecular Biology and associate dean of academic personnel in the College of Arts and Sciences, University of Tennessee-Knoxville.



Ellen K. Pikitch, PhD

Dr. Ellen K. Pikitch is Executive Director of the Institute for Ocean Conservation Science and Professor at Stony Brook University School of Marine and Atmospheric Sciences. She is an international expert in ocean conservation science and management whose research has focused on the assessment of fish stocks, the management of bycatch, and ecosystem-based fishery management. Dr. Pikitch spearheaded the first scientific consensus on ecosystem-based fishery management, which was published in the journal *Science* in 2004, and she is Chairperson of the Lenfest Forage Fish Task Force, which will develop scientific recommendations to sustainably manage forage fish using an ecosystem approach.



Robert Tribble, PhD

An experimental physicist whose work spans a broad range of topics, Tribble has conducted groundbreaking research exploring fundamental symmetries, the Standard Model, nuclear structure and reactions, nuclear astrophysics, and proton spin. He is widely credited with developing new tools and techniques that have advanced the field, and has also served as a member or chair of numerous long-range planning committees for the American Physical Society (APS) and the Nuclear Science Advisory Committee (NSAC, an advisory committee for the Department of Energy and National Science Foundation).

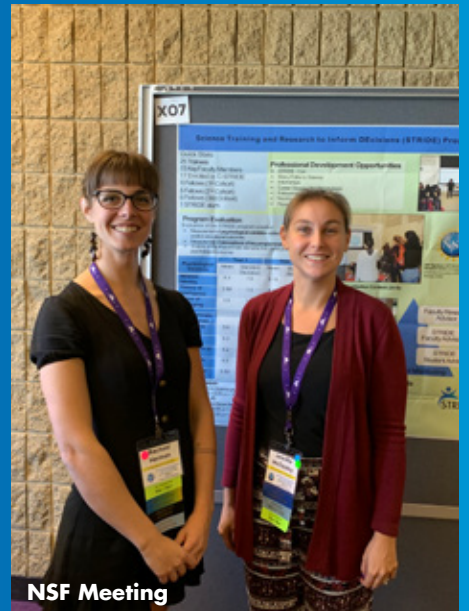
Tribble earned his B.S. with honors in Physics from the University of Missouri, Columbia (1969), and his Ph.D. from Princeton University (1973). He joined the Texas A&M University faculty in 1975, served as Department Head of Physics 1979-87, has been a Distinguished Professor at Texas A&M University since 2010, and has served as Director of the Cyclotron Institute since 2014.



WISE Honors Dinner



WISE Honors Dinner



NSF Meeting



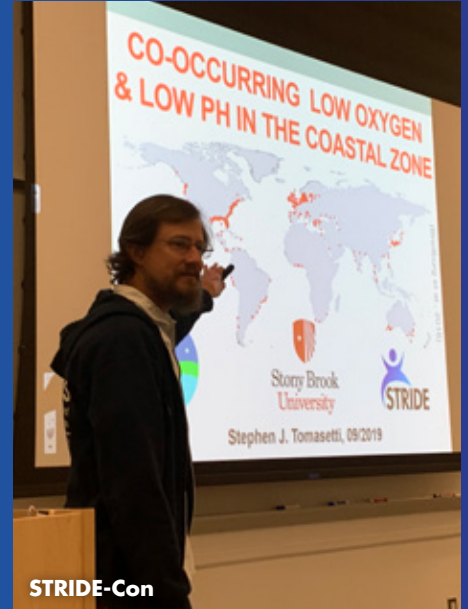
STRIDE-Con



Pizza & Policy



Pizza & Policy



STRIDE-Con



NSF Meeting



STRIDE-Con



Pizza & Policy



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