

Student Driven Publication: 2018

Indianapolis 2018



Essie Asan, Mclean Hospital
Erin Bondy, Washington University
Cheyanne Busso, Stonybrook
Riley Capizzi, University of Minnesota
Talia Cohen, McLean Hospital
Alejandro Corona, Notre Dame
Samantha Fradkin, Rutgers University
Briana Galindo, Rush University Medical Center
Maria Leis, McGill University
Lilian Li, University of Illinois Chicago

Jaisal Merchant, McLean Hospital
Allison Moreau, Washington University
Juhyun Park, SUNY Buffalo
Kimberly Rowghani, Northwestern University
Cody Schulte, Veterans Affairs Hospital
Parnkika Telagi, University of Illinois Chicago
Kate Valerio, Stonybrook
Shirley Wang, Harvard University
Madeline Wick, Florida State University
Alexander Williams, Northwestern University

Newsletter Coordinators: Randy P. Auerbach, Kristin Gainey, and Vijay Mittal

Raymond Knight

Brandeis University

Zubin Award Winner

Cheyenne Busso, Stony Brook University
Briana Galindo, Rush University
Lilian Li, University of California, Irvine
Kimberly Rowghani, Northwestern University

r. Raymond
Knight, the 2018
Zubin Award
winner, has dedicated
most of his professional
career to his pioneering
research in the field of
sexual aggression. He
has also made major
contributions to the
fields of schizophrenia

and psychosis, psychopathy, and bullying, with over 110 peer reviewed journal publications in these areas. Of particular note, he developed the Multidimensional Inventory of Developmental, Aggression and Sex (MIDSA), a contingency-based, computerized assessment tool that measures domains relevant to the identification and treatment of sexual aggression. The MIDSA has been widely adopted in the field and is used as both a research and a clinical assessment tool. Dr. Knight has been a highly dedicated member of the psychopathology research community, serving in the past as the president of the Society for Research in



Psychopathology and the Association for Treatment of Sexual Abusers. He has also served for many years on the executive boards for the Massachusetts Association for the Treatment of Sexual Offenders and the

Society for the Scientific Study of Psychopathy. In addition to his professional achievements, Dr. Knight has been recognized with multiple awards for his teaching and mentorship.

After receiving his bachelor's from Cathedral College of Immaculate Conception, Dr. Knight pursued a Ph.D. in clinical psychology from the University of Minnesota. He started his career with a trainingship at the Veterans Association in Minnesota, with William Schofield as his early mentor. He also was influenced by Paul Meehl, whom Dr. Knight describes as one of his "great heros" who "profoundly affected my thinking." Norman Garmezy opened his perspective to the vast possibilities

of research in psychopathology, supervised his doctoral dissertation, and set the course of his early research in schizophrenia. At the University of Minnesota, Dr. Knight was also able to develop his clinical skills from day one, when he had his first clinical interview with a schizophrenia patient. His clinical experience there "set [him] on the trajectory of studying schizophrenia."



For seven years in his early career, schizophrenia remained his sole focus, until he hit a turning point in 1976, when he stumbled across the opportunity to conduct research on sexual aggression. In his first few years as a faculty member at Brandeis University, Dr. Knight conducted both cognitive and longitudinal research on schizophrenia, but he soon realized that his department didn't view this work as particularly important. Keeping his options open, he was offered the position of research coordinator at the Massachusetts Treatment Center, and upon visiting the center, he found "incredibly rich files" on patients that contained detailed histories of their

pasts, including in many cases the actual documents of their childhood history and imprisonment. Contrary to his previous worry, Dr. Knight received tenure at Brandeis, and soon after he was awarded an NIH grant to study sexual aggression, armed with the data he had accessed at the Massachusetts Treatment Center.

Dr. Knight continued to combine research on schizophrenia and sexual aggression until a second transitional event. In 1999 Dr. Knight was considered for the position of Clinical Director at New York University. There, his job would be to "turn a psychoanalytical program into an experimental psychopathology program," which would also entail focusing his research solely on schizophrenia, rather than from going further into sexual aggression research. Ultimately, after taking a backpacking trip to afford him some clarity, he made the decision to turn down the offer from NYU. Reasoning that while there were dozens of great researchers pushing the field of schizophrenia forward, he was "standing alone as the sole person who was interested" in studying the core psychological mechanisms leading to the development of sexual aggression. Consequently, after turning down the NYU offer, he turned his attention exclusively to research on sexual aggression. Looking back, Dr. Knight regards this as "a wise decision," noting that what he has accomplished in studying sexual aggression is "more

than what [he] could have contributed in the field of schizophrenia."

Later in his career, Dr. Knight had the opportunity to serve on the Governor's Sex Offender Recidivism Commission of Massachusetts. He worked to reform the way the criminal justice system treats juvenile sex offenders, advocating for offenders to be treated as patients in need of treatment rather than simply as criminals and for evidence-based treatment and dispositional decisionmaking for those convicted of sexual aggression. This experience proved to be frustrating, as the Commission ultimately did not decide to change the system in ways that were supported by research. Although disappointing, this experience was enlightening in revealing just how much work is left to be done, even after the research has been completed.

Dr. Knight is currently a professor emeritus at Brandeis University, where he continues to refine the MIDSA and to mentor many students. When asked about the difficult nature of his research, Dr. Knight notes that it is definitely not for everyone, and that some students struggle with the often horrific content of sexual aggressions research. Though some degree of desensitization is needed, Dr. Knight said that the research still "affects you in all sorts of other ways." Despite this, being able to talk about these difficult topics together in a team helps researchers and students to quantify the data and view it objectively, and this way, they are able to make great strides in moving the field forward. Dr. Knight expressed much gratitude for his students over the years, whose empathy has created a "lab that's always been very supportive."

When asked for advice in pursuing a research career, Dr. Knight maintained that you've got to find what you're most passionate about and stick with it, despite what others may want you to do. To that end, he gives his students the space to really explore and develop questions on their own, so that they might find the research that speaks to them. He praises SRP as a community that allows you to "branch out and see what's going on in multiple different fields." He advises students to be observant of which way the field is going (for example, towards an RDoC framework of understanding mental disorders). He predicted that in the near future, there will be some "major transdiagnostic findings that will not only [help us] understand the mechanisms [of psychological disorders] but also [their] treatment." With this in mind, he recommended that students,

"Pick an RDoC area, but also be open to everything that's going on," and maintained that "SRP is really the organization to have you do that...and to get those kind of dialogues."

As an emeritus professor, Dr. Knight continues to positively impact the psychopathology research community by running his lab, writing new grants, and bringing in new students at Brandeis. His desire to engage with students and his dedication to advocating for them and their ideas is something that distinguishes Dr. Knight from his peers. He ended our talk by saying, "I can't conceive when I will stop doing that, because it's like going to see my family...we're working on something together, but really, we're friends, and the people who are in my lab are friends for life."

Anthony J. Rosellini, Ph.D.

Boston University

Alejandro Corona, University of Notre Dame Allison Moreau, Washington University in St. Louis Cody Schulte, Minneapolis VA Medical Center Parnika Telagi, University of Illinois Chicago

r. Rosellini is an up-and-coming leader in the fields of psychiatric assessment, classification, and predictive modeling. We had the opportunity to talk with him about how he has been able to be successful early in his career and his advice for

students starting out in the field. Dr. Rosellini received his Ph.D. in clinical psychology from Boston University (BU), after completing his pre-doctoral internship training at the University of Mississippi Medical Center. Following graduate school, he completed a postdoctoral fellowship in psychiatric epidemiology in the Department of Health Care Policy at Harvard Medical School. Dr. Rosellini joined the faculty at BU as a Research Assistant Professor in 2016, where he is currently the Director for the Optimizing Prediction of Anxiety and Depression Laboratory.

For undergraduate students reading this article, it might be



comforting to hear that Dr. Rosellini did not decide on his major until the last week of his sophomore year. After deciding to pursue psychology, he began working as an undergraduate research assistant to become more familiar with the research

process, which solidified his focus on a career as a psychopathology researcher. Upon graduating from college, Dr. Rosellini worked for a year in the lab of Dr. Tim Brown at BU and then joined the lab as a doctoral student the following year. While some students in clinical psychology programs choose to pursue careers in clinical work after completing their Ph.D., Dr. Rosellini said he knew from day one of graduate school that he wanted to be a researcher, and so he focused his attention when possible on research experiences. After earning his Ph.D., he decided to pursue a post-doctoral fellowship at Harvard Medical School,

where he wanted to develop an independent program of research that bridging clinical psychology and psychiatric epidemiology and using sophisticated quantitative methods.

One major career stepping-stone for Dr. Rosellini was the receipt of a career development award (K01 award) from NIMH. This grant allowed him to hone his specific research interests and combine prior quantitative experience in latent variable methods with newly developed skills in machine learning. He focused on machine learning because of the current computational psychiatry movement at the NIMH. With a background in self-report assessment and clinical interviewing, he chose to develop advanced quantitative skills like machine learning as one path to remaining a competitive, well-rounded researcher in the field of psychology moving forward.

Dr. Rosellini's main advice for students stressed the value and importance of networking. Working with Dr. Kessler at Harvard Medical School gave him the chance to not only receive direct mentorship from a leader in the field, but also to meet many other prominent researchers. The collaborations formed during his postdoctoral fellowship have led to coauthorships on papers and coinvestigator roles on grants in the years following. Some additional advice that Dr. Rosellini shared with us emphasized the importance of focusing on what you most want to do. Some graduate

programs allow you to take additional electives or pursue diverse practicum opportunities, but if they do not reflect your ultimate goal, he suggested your time would be better spent working towards your focus area. Research was always Dr. Rosellini's primary focus, and so he sought out experiences to learn advanced data analysis techniques as a graduate student rather than taking on additional courses or clinical experiences. He emphasized the importance of not spreading yourself too thin, while also maintaining a good mixture of current projects and skills.

When asked about the biggest challenge he has faced thus far, Dr. Rosellini replied "maybe it's my personality, but I feel very lucky for how things have turned out" (though it seemed clear to us that his work ethic and commitment are what got him to where he is today). Eventually, Dr. Rosellini did identify a few factors that have impacted his career and could be considered challenges, although he still did not seem to like to refer to them as such. Perhaps the largest challenge is the stress and uncertainty associated with having a grant funded position. Overall, he enjoys the freedoms associated with being grant funded, but he mentioned that it is hard to deny that there is extra pressure in the highly competitive research funding climate. He does worry, at times, about what would happen if he does not get that next grant -- how would he continue to conduct research in line with his

interests? Dr. Rosellini approaches this challenge by being as flexible as possible, willing to work in different roles in a research team (e.g., statistics consultant) or in a temporary clinical position while working to secure research funding. Another challenge Dr. Rosellini identified in his career is finding a balance between forming strong professional relationships with prominent figures in the field and developing his own "brand" or line of research. One way he has approached this challenge is to expand the number of researchers with whom he works. In addition, when making career decisions (e.g., choosing a post-doc position), he has made sure to prioritize the opportunity to develop his own line of research over the comfort of working with familiar people.



Ultimately, Dr. Rosellini's goal is to obtain a tenure track position. But he is in no rush. For now, he is happy working in a non-tenure track research professor role, without teaching or administrative obligations, so he can devote all of his efforts to developing his research program. He also pointed out this allows him more flexibility in his schedule for his family with three young children. He hopes to remain competitive for a tenure-track position in the future by growing a strong, federally-funded, independent research program. With his cutting edge work using machine learning to improve prediction of individuals at risk for anxiety and mood disorders, it seems quite likely that his end goal will soon be a reality.

Luke Hyde, Ph.D.

University of Michigan Early Career Award Winner

Erin Bondy, Washington University in St. Louis
Talia Cohen, McLean Hospital
Shirley Wang, Harvard University
Alexander Williams, Northwestern University

r. Luke Hyde is an Associate
Professor at the University of Michigan and the recipient of the 2018 SRP Early Career Award. His multimethod research utilizes a



sophisticated approach towards understanding the development of psychopathology. This work examines environmental and genetic factors associated with antisocial and callousunemotional behaviors. Dr. Hyde's primary interest emerged when he did an internship in undergrad in a residential treatment center for adjudicated youth. Through this experience, he became fascinated with understanding environmental factors that shape behavior, "You read their files and you see this kid has a single parent who has been in and out of rehab, and they don't have any money. So, is it really surprising this kid started

dealing drugs to make money? That got me interested in antisocial behavior."

Following this experience, Dr. Hyde completed his doctoral degree from the University of Pittsburgh's joint Clinical and Developmental psychology program,

where he worked under the mentorship of Dr. Daniel Shaw. "I felt really lucky to go there because it's a program that has a good balance between clinical experiences and research. And I felt fortunate because my mentor always encouraged me to branch out into new areas." With this encouragement from his advisor, Dr. Hyde began learning neuroimaging techniques with Dr. Ahmad Hariri, which he would later integrate into his research on the complex environmental and genetic bases of antisocial behavior. This rare and valuable combination of skills has afforded him the ability to study antisocial behavior in a cutting edge

manner. For example, using genetically-informed designs, he has challenged longstanding assumptions about the causes of callous-unemotional behavior, such as the idea that environmental factors (e.g., parenting style) are not important in the development of callous-unemotional behavior.



Dr. Hyde says that he thinks he is sometimes is thought of as the "brain and genetics guy", but he really thinks of himself as someone who is interested in the environment such as the effects of neighborhood and parenting contexts. He notes that his interests in studying contexts and the genetic components of his research have grown in parallel; as he has become more interested in the environment, his research also has become more genetically informed, because this can help strength inferences about the role of the environment. Dr. Hyde noted that he is always thinking about the clinical implications of his work. Some findings, like that of parental risk factors, point to clear and effective therapies such as

parent management training. However, these interventions have limitations too, as they often fail to reach the families who need them the most and they can be taken as implying that it is the "parent's fault" or that the parent is the main reason for their child's antisocial behavior. Moreover, not all of Dr. Hyde's findings involve straightforward solutions. For example, his recent work has elucidated the importance of neighborhood quality (including neighborhood poverty) in conferring risk for antisocial behavior via disrupted brain function. Neighborhood quality bears a strong etiologic link with antisocial behavior, but simple, nonpolitical solutions can be difficult. These findings give Dr. Hyde pause, making him wonder whether psychologists ought to be more politically active. Dr. Hyde expressed enthusiasm about the potential of trained psychologists to get involved in policy work and bridge the gap between research and implementation.

"We [as psychologists] have a desire to work with the individual, but that's not always scalable for the people that need help. I worry because much of what we find points to clear roles of wealth inequality and poverty. And those are things that we can modify – but not necessarily through one on one psychological interventions."

When asked about advice for current graduate students who hope to pursue careers in academia, Dr. Hyde emphasized the importance of avoiding becoming a carbon copy of their mentor, "If someone wanted to hire your mentor, then they'd hire them." Additionally, he advises students to think carefully about how big of a role each interest area (e.g. neuroimaging, molecular genetics, statistics) will play in their research. He urges students to find their niche within their labs, pointing out that they need not be an expert at everything, but rather that it is important to be deep somewhere. He also highlighted the merits of a postdoc position, citing this time as a great opportunity to publish and receive additional training.

When it comes to surviving the tough graduate school years, Dr. Hyde

points to gratitude as a critical quality to cultivate. He notes that it is easy to get caught up in the long hours and low pay, but at the end of the day it is important to recognize that pursuing knowledge and getting paid to do so is a privilege. Dr. Hyde's personal gratitude practice consists of making a gratitude list each night with his family and highlighting the best parts of their days. Since he has begun this practice, he told us that he has found himself happier and more content with his life and career. He encouraged us to do start a similar habit, emphasizing that students and researchers who are excited about what they are doing, and are grateful to be doing it, often tend to be more successful and enjoy the research process more.

Katy Thakkar, PhD

Michigan State University

Essie Asan, Mclean Hospital Riley Capizzi, University of Minnesota Samantha Fradkin, Rutgers University Jaisal Merchant, McLean Hospital

e had the pleasure of sitting down with Dr. Katy Thakkar during the annual SRP meeting to hear about the development of her career, current research, and her thoughts on the field as a whole. As an Assistant Professor of

Psychology at Michigan State University (MSU) and the director of the MSU Clinical Neuroscience Lab, Dr. Thakkar's research has focused on uncovering the cognitive and biological basis of schizophrenia and other psychotic disorders. Dr. Thakkar's work embodies the field of translational neuroscience as it strives to understand the mechanisms underlying complex behavioral dysfunction in psychosis by tying in findings from basic animal research. Dr. Thakkar's lab studies these mechanisms using a variety of techniques including eye tracking, fMRI, diffusion tensor imaging, magnetic resonance spectroscopy, objective behavioral

assessment, and animal neurophysiological techniques.

Dr. Thakkar became initially interested in psychosis early on as she grappled with how the brain generates subjective experiences that were not grounded in reality. After her undergraduate

degree, Dr. Thakkar worked at Mass General Hospital with Dr. Dara Manoach studying cognitive deficits in individuals with schizophrenia. Dr. Thakkar described how she quickly learned the devastation that came with receiving a diagnosis of schizophrenia: families often felt as if they were losing a loved one. The combination of her curiosity for the mechanisms behind the illness and a strong sense of empathy for those affected became a launching point for her career.

Dr. Thakkar received her doctorate in psychology from Vanderbilt University. In graduate school, Dr. Thakkar worked with Dr.

Sohee Park on self-related phenomena in psychosis and was co-mentored by Dr. Jeffrey Schall, a monkey neurophysiologist. Dr. Thakkar described how this collaborative experience allowed her to approach difficult questions of psychopathology from new perspectives. Thus, her dissertation was a product of these influences as she adapted a saccadic task from the primate literature to better characterize cognitive performance in individuals with schizophrenia. She continues to incorporate ideas across disciplines today and has begun to examine how corollary discharge may be related to the manifestation of self-related symptoms in psychosis. Dr. Thakkar explained how neural pathways related to this phenomenon have already been mapped out in the animal literature allowing development of "very concrete mechanistic hypotheses for behavioral impairments." She hopes that this work will help identify more targeted treatment avenues for some of the most debilitating symptoms.

When asked about advice she had for future researchers, Dr. Thakkar explained she was hesitant to give blanket advice, as there are a range of promising paths to take as a young academic researcher. However, she did encourage exploring collaborations with researchers in fields beyond one's specific interests. Dr. Thakkar was clear this was an integral part of her graduate experience. She explained that this

would be beneficial for the individuals involved as well as moving the field forward as a whole.

"Read broadly, and collaborate broadly," she said, "and take this advice with a grain of salt!"

This framework of collaborating across disciplines is truly evident in her current work today as she tackles untamed areas of the field while bringing in new insights from the basic animal literature.



Dr. Thakkar was happy to discuss some of the future directions of the field and emphasized the need for objective tests of behavior that work well in research settings as well as in the clinic. There is a need to focus on translating our research findings to clinical practice. She went on to explain that we currently have well replicated findings that can be used as diagnostic markers, but the paradigms are often too intensive to be factored into routine standard care. Researchers will need to think about how to make these paradigms shorter

without sacrificing the psychometric properties.

Although there are hurdles researchers may face, it was motivating to discuss these challenges with Dr. Thakkar, who sees paths towards increasing translational work. It is clear Dr. Thakkar's excitement for the field as well as her motivation to explore diverse collaborations across disciplines has contributed to her success in the field thus far.

Jingwen Jin

Smadar Levin Award Winner Stonybrook University Mentor: Aprajita Mohanty

Maria Leis, McGill University
Juhyun Park, SUNY Buffalo
Kate Valerio, Stonybrook
Madeline Wick, Florida State University

r. Jingwen Jin is a recent graduate of
Stony Brook University's
Clinical Psychology program, and she is the recipient of the 2018
Smadar Levin Award.
Dr. Jin first became interested in psychology while attending high school in China. She applied to undergraduate

psychology programs in the United States, and after receiving her degree in psychology from the University of Iowa, she pursued her Ph.D. in Clinical Psychology at Stony Brook University. Her experiences in Dr. Aprajita Mohanty's lab reinforced her passion for psychological research. She expects to continue this research as a faculty member at the University of Hong Kong following her post-doctoral position at Stony Brook University.



During her time at Stony Brook, Dr. Jin pursued two different research tracts. Her dissertation examined threat anticipation and expectation, and this approach applied multivariate pattern analyses, computational modeling, and neuroimaging. Addition ally, Dr. Jin also has obtained expertise in

resting state functional connectivity to predict depression, which she has pursued in collaboration with Dr. Roman Kotov and Dr. Daniel Klein of Stony Brook University.

Dr. Jin credits much of her success to excellent mentorship from Dr. Mohanty, and similarly, Dr. Mohanty spoke glowingly about Dr. Jin's passion for psychology as well as her relentless scientific curiosity. Dr. Mohanty mentioned that she often discusses what it takes to predict success in

science with her colleagues. They believe the most important factor is a deep passion, which seems to embody Dr. Jin. According to Dr. Mohanty, Dr. Jin is constantly reading and questioning the literature to find a deeper understanding of concepts. She also is proficient in examining scientific questions; for example, at SRP a couple years ago she became inspired to do resting state imaging and question if using a combination of theory and a data-driven approach could predict depression. She took on this challenging question by herself and intends to continue to pursue this line of work.

When pondering important traits for young investigators to be successful, Dr. Mohanty stated that a passion for science and being open to new methods is the key. Even if methods seem challenging or scary, it is important to delve into them. Further, having research that is programmatic and building towards a larger goal is important to develop a successful career path. Dr. Jin added that you first must develop a question, and then develop the skills to address that question. She stated that although this may be intimidating, that's the key to growth as a scientist.