

# Student Driven Publication 2015

#### **Student Journalists:**

Morgan E. Bartholomew, University of California, Los Angeles Alexandra Moussa-Tooks, Indiana University Bloomington Haijing Wu, Washington University in St. Louis Nancy Lundin, Indiana University Bloomington John Purcell, Indiana University Bloomington Derek Novacek, Emory University Craig Rodriguez-Seijas, Stony Brook University Hailey Dotterer, University of Michigan

Newsletter Coordinators: Pamela Butler, Emily Durbin, Vijay Mittal

## Anastacia Kudinova, M.A.

Mentor: Brandon Gibb, Ph.D. SUNY Binghamton University 2015 Smadar Levin Award

nastacia Kudinova, a fourth year graduate student at Dr. Brandon Gibb's laboratory at Binghamton

University (SUNY), is this year's winner of the SRP Smadar Levin Award. The newsletter committee asked her to write about her career path to date, and to share her plans for the future with SRP.

I am very honored by this award and am grateful to the Smadar Levin's family,

the award committee, my mentor, Brandon Gibb, and fellow lab members. I completed my undergraduate studies in psychology at Brigham Young University in Hawaii and received my Master's degree from Teachers College, Columbia University. Taking a course in psychotherapy as an undergraduate student sparked my interest in clinical psychological science and being a volunteer research assistant in one of the faculty research labs ignited my passion for research.



During the three years I spent as a research assistant at the biomedical laboratory at Brigham and Women's

Hospital, Harvard Medical

School (PI: R.T. Lee, M.D.) after receiving my Bachelor's degree, I became interested in conducting clinicallyrelevant translational research in depression. This academic pursuit led me to apply to work with Dr. Gibb, who uses a multiplelevels-of-analysis approach to understand risk for depression across children, adolescents, and adults. My

specific interest lies in characterizing changes in inflammatory processes following exposure to early life stressors as potential mechanisms of risk for depression. With the vital support of my mentor, who has always been invested in, and encouraging of, his students' independent research, I started setting up a mini-wet lab, applying for external research funding, conducting independent research projects, and developing interdisciplinary collaborations. During my post-bac years, I was involved in studying the role of specific cytokines in tissue repair following myocardial infarction. After starting my work in Dr. Gibb's lab, I realized that one of the cytokines (IL-33) had not been investigated in relation to psychopathology at that time and had unique biological characteristics and functions that suggested in may play a plausible role in stress and depression. Upon discussing this hypothesis with Dr. Gibb, we started collaboration with Dr. Terrence Deak who is at the Behavioral Neuroscience Program within our department at Binghamton University. This project, parts of which were featured by a poster presented at this year's Society for Research in Psychopathology conference, developed into a cross-species investigation that combined data from two human samples and an animal sample and yielded promising preliminary results supporting the role of IL-33 in stress response and risk for recurrent major depression.

One of the studies from which I collected data for my project is a large ongoing investigation that aims to recruit 1000 parent-child dyads and will include multiple units of analysis including genes as well as neural and physiological reactivity. Everyone in Dr. Gibb's lab brings a unique prospective and methodology to depression research and the most exciting part of being a part of the lab is combining those methods to obtain a more enhanced and nuanced understanding of depression. The lab also collaborates with researchers from other institutions, who often come to visit the lab, so the lab members have great opportunities to learn more about innovative research methods from other disciplines.

"One of the biggest lessons I have learned from being in this lab is that forming productive collaborations early on in one's career is invaluable, since not only it can broaden the scope and the impact of one's research, but it is much more fun to work closely with someone who likes research as much as you do".

My plan for the near future includes proposing and running my dissertation this year and applying for internships next year. My dissertation will seek to extend my earlier crossspecies research and further explore the role of cytokines in stress response and depression risk. My long-term professional goal is to establish an independent line of research and have an academic career at a researchintensive institution.

#### **George Slavich, Ph.D.** University of California Los Angeles 2015 Early Career Award

Morgan E. Bartholomew, University of California, Los Angeles Alexandra Moussa-Tooks, Indiana University Bloomington Haijing Wu, Washington University in St. Louis

r. George Slavich was this year's winner of SRP's Early Career Award. He is currently an Associate Professor in the Department of Psychiatry and Biobehavioral Sciences at UCLA and a Research Scientist at the Cousins Center for Psychoneuroimmunology at UCLA, where he directs the Laboratory for Stress Assessment and



psychopathology, which resulted in a

multi-level theory of depression involving the role of cytokines in this disorder and in other major psychopathologies. He also developed the first online system for assessing lifetime stress exposure, called the Stress and Adversity Inventory (STRAIN). Dr. Slavich's current pioneering work centers on the emerging field of human social genomics, which examines how adverse

Research. He earned his Ph.D. in Clinical Psychology from the University of Oregon in 2006. He completed three years of postdoctoral training in psychoneuroimmunology, first as an NIMH postdoctoral fellow in the health psychology program at UCSF and then as an NIMH postdoctoral fellow at the Cousins Center for

Psychoneuroimmunology at UCLA.

Dr. Slavich has been an important force in research on life stress and immunological responses to these stressors. He was among the first to integrate this field with the study of social experiences and environmental exposures can reach deep inside the body to influence the expression of the entire human genome, leading to a unique biological self.

Because he is relatively fresh from graduate school, we asked Dr. Slavich if he had any advice for graduate students. Dr. Slavich focused on three major points: 1) finding protected time for writing; 2) quickly revising and resubmitting articles; and 3) taking advantage of multidisciplinary training opportunities. Regarding the first point, Dr. Slavich emphasized the importance of setting aside time for writing that is uninterrupted by email and phone; he suggested that it may be helpful to form a small group with other graduate students to achieve this. The second point was also related to time management. Dr. Slavich advised completing revise-and-resubmits in a timely manner -- specifically, for manuscripts requiring only minor revisions, he recommended turning them around within one week. The third point is particularly relevant to Dr. Slavich's progression as a researcher, as he did extensive postdoctoral work in health psychology, immunology, and social affective neuroscience to learn and integrate new methods of research and analysis. According to Dr. Slavich, it is important to remember that "if you have a burning question and focus on using cutting-edge methods to answer it, your program of research emerges organically over time." He stressed the importance of conducting research across different levels of analyses and encouraged graduate students to seek out multidisciplinary skills from different labs and resources available to them during graduate school, even if they exist in different departments.

Dr. Slavich also left us with some salient advice regarding the future of research and funding. He posited that,

*"Science does not produce actionable data often enough".* 

By this, he meant that research does not often enough lead to results that can directly improve health, or provide basic science data that can be used to directly improve healthcare efficacy, quality, or delivery. Accordingly, obtaining grant money in the future may rely on understanding this conundrum and proposing studies that yield data that can inform our understanding of whole body health, with direct implications for treatment.



Dr. Slavich gave us some sound advice for making sure our research is actionable so that we improve chances of receiving funding and maximizing the impact of our work. He suggested that simply adding a subgroup with a miniintervention or showing resilience in a group can convey the health impact of a study while also helping the researcher identify possible mechanisms of action. He framed this by stating the importance of considering policy in your research; that is, consider how would you advocate your research to a congressman who impacts the funding that your cause receives.

#### **Jill Hooley, Ph.D.** Harvard University Zubin Award

Nancy Lundin, Indiana University Bloomington John Purcell, Indiana University Bloomington Derek Novacek, Emory University

t was a delight to interview Harvard professor Dr. Jill Hooley at the 2015

Society for Research in Psychopathology (SRP) meeting. Dr. Hooley's work on the influences of family social interactions on depression and schizophrenia, as well as her work on origins of self-injurious behavior, has had an immense impact on understanding psychopathology. Her accomplishments, intellectual curiosity, and passion for research make her a worthy recipient of the 2015 Zubin Award for lifetime achievement. We asked Dr. Hooley about her research trajectory as well as her advice for developing scientists.

Throughout her research career, Dr. Hooley says that her "topics have shifted but retain core consistencies." At Cambridge University she studied social behaviors in rhesus monkeys; she later earned her doctoral degree at Magdalen College, Oxford, where she studied social behaviors in humans with



major depressive disorder. Dr. Hooley wanted to understand "the seemingly large role that family

member expressed emotion could play in relapse of depression." She found that perceived criticism increased relapse rates. After replicating this, she initiated a neuroimaging study. Dr. Hooley recruited participants who had fully recovered from depression, rather than

those with current depression. This allowed her to investigate their emotional responding without the confound of current dysphoric mood state. She vividly remembers interviewing mothers of these participants over the phone and recording their criticisms toward their adult children. Results demonstrated that when the participants heard their mothers' recorded criticisms, the formerly depressed group had decreased dorsolateral prefrontal cortex and anterior cingulate cortex activity, and increased amygdala activity compared to the control group. These findings supported aberrant neural mechanisms involved in response to expressed emotion from family members of euthymic subjects with a history of depression. It is possible that the decreased cortical activity found in the recovered depressed participants could make them less able to cognitively cope with negative remarks, leaving them more vulnerable to emotional reactions.



After completing her D.Phil at Oxford, Dr. Hooley moved to the United States to receive training in clinical psychology at SUNY Stony Brook and then became a faculty member at Harvard University in 1985. Dr. Hooley's interest in schizophrenia and in non-suicidal self-injury (NSSI) began when she was teaching a seminar and came across research showing decreased pain sensitivity in people with schizophrenia. Her team confirmed this finding in relatives of people with schizophrenia and also in people with NSSI. Since discovering this phenomenon, Dr. Hooley has studied NSSI for the last 15 years.

Her talk at this year's meeting was invigorating, outlining the roles of

emotion regulation and self-criticism in NSSI. Her studies show that people high in self-criticism have greater pain endurance; it is possible that those high in self-criticism may believe they are worthy of punishment, which removes a barrier to self-harm. Dr. Hooley explained that self-harm can be perpetuated with "pain offset relief" the harm itself is painful, but positive affect increases after its conclusion. Her team is working on a mobile app based on Therapeutic Evaluative Conditioning. The goal is to pair NSSI stimuli (e.g., images of cuts, scalpels, and the like) with aversive stimuli and to pair ideas of the self (e.g., me, mine) with positive stimuli in order to decrease the incidence of NSSI. Dr. Hooley's contributions are unique in that she investigates mechanisms of psychological phenomena and as well as works on interventions to directly treat mental illness, making her an inspiring embodiment of a clinical scientist.

Dr. Hooley has been a central part of SRP since the first meeting in 1986 at Harvard University. She fondly recalls bustling about William James Hall the morning of the conference, diligently filling coffee pots so that the attendees could enjoy hot coffee between presentations. Reflecting on previous SRP conferences, Dr. Hooley expressed her, "delight to attend the SRP meetings every year and see how much the society has grown." She describes the meetings as "exciting and fresh, a friendly atmosphere where graduate students can present their work." She enjoys watching the progression of people from associate members, to full members, to presenters in symposia.

When we asked Dr. Hooley for her advice for developing scientists, she suggested seeking out training experiences that expand our knowledge, and going to colloquia outside our topic area. She said,

"It makes research richer when there is cross-fertilization across disciplines. This engenders creativity and gives one a breadth of knowledge that may not seem immediately useful."

She advised us to work hard, follow our passions, and learn to genuinely accept feedback from mentors, professors, and reviewers, because our work can always improve. Lastly, she reminded us that, "research always takes longer than you think. Be prepared to be flexible."

Dr. Hooley has always pursued answers to her burning scientific

questions, and allows those findings to motivate her new research endeavors. "Data are as they are", she reminds us. "We love all findings, significant or not". From her vast span of research areas, it is evident that Dr. Hooley lives by this principle, pursuing answers to new questions as they arise. "We'll do anything that we are interested in," she cordially says, indicating that her research team has led her down several paths she hadn't originally thought to travel. As a mentor, Dr. Hooley wishes for her students to research whatever it is that they love and encourages them to be intellectually curious. When asked where she thinks the field is moving, Dr. Hooley replied, "toward a much more integrated focus, with investigations across a variety of domains. This trajectory toward breadth is a positive one, but can be challenging, given that you must constantly place your work in a broader context." It was a pleasure to glean insight from the 2015 Zubin Award recipient, Dr. Jill Hooley, and we look forward to her thoughtful questions and valuable contributions at future SRP meetings.

### **Scott Monroe, Ph.D.** Notre Dame 2015 John Neale Mentorship Award

Craig Rodriguez-Seijas, Stony Brook University Hailey Dotterer, University of Michigan

r. Scott M. Monroe was the recipient of this year's Society

for Research in Psychopathology John Neale Mentorship Award. Dr. Monroe began his career in psychology as an undergraduate at Saint Olaf College, MN, and then pursued graduate training at Southern Illinois University at Carbondale and SUNY Buffalo. Dr. Monroe is currently a

William K. Warren Foundation Professor of psychology at the University of Notre Dame. He sat with us for a heartfelt discussion about his particular mentoring style as well as one of his upcoming publications in the area of depressive disorders.

Dr. Monroe's research focuses largely on the nature of mental disorders, specifically depressive disorders. He discussed his thoughts on his most recent article, co-authored with one of his graduate students Samantha Anderson, entitled "Depression: The Shroud of Heterogeneity" (Current



Directions in Psychological Science 24(3), 227-231), with us. Dr. Monroe described some of the

> challenges he finds in studying syndromes such as depression, which led to the topic of the article. "In the many years I've been studying depression, it's not what it used to be. Depression has morphed into a much more general, fuzzy, really ill-defined non-entity." In the

paper, Dr. Monroe and Ms. Anderson discuss the conceptualization of heterogeneity within depression and the implications of this for the field. They provide an overview of the contemporary view of depression as a syndrome, its ramifications, and speculate on the best way forward in seeking to understand this phenomenon. Dr. Monroe mentioned that further efforts should be made towards understanding chronic, recurrent depression "where the core problem of depression really resides."

Along with an obvious passion for research, Dr. Monroe's career is characterized by a dedication to his students. It is easy to deduce that Dr. Monroe's goal as a mentor is to not only ensure academic excellence describing himself as "vicious" when it comes to his commentary on mentees' written word - but also to foster autonomy and actualization in his graduate students. "Get great students and don't mess them up is one way to think about it," he responded when asked to describe "good" mentoring. The warm manner in which he discusses his approach to the mentoring process makes it no surprise that he received the mentorship award. Despite being an advocate of frequent meetings with mentees, Dr. Monroe describes himself as a hands-off advisor. He considers the meetings to be an avenue for conveying to the student his/her importance to the mentor - be it through discussion of progress, or lack thereof, or through casual conversation about topics unrelated to academic spheres. Describing these meetings, Dr. Monroe mused "When you think about it...we did talk a lot and we had a lot of fun talking...but it doesn't seem like work." As is true for many professors, Dr. Monroe mentioned the challenges of balancing the responsibilities in academia with those of mentoring his students, whom he clearly values. "As a faculty member you're flaky at times, you miss meetings, you know, things happen, but let them know they're still a priority." While his role of mentor is technically one of being a teacher, Dr. Monroe expresses no qualms about switching seats with the students and says,

*"in some ways the best relationship is a symbiotic one, where (we) both learn and grow together."* 

His respect for the selfdetermination of his mentees is admirable; students are not there to do "his" research, he says, but to progress in their own areas of interest, with his counsel available to them.

When asked how he developed his mentoring style, Dr. Monroe elaborated that it is reflective of his own experiences as a graduate student under the mentorship of Dr. Richard Depue (currently at Cornell University). He often had one-on-one interactions with Dr. Depue, fostering a friendship that exists to this day, "It was the kind of relationship where for the first time somebody said Hey, you know, I think you can actually do this." Indeed, it seems that this mentoring approach might even be familial - in an academic sense - as Dr. Monroe said he thought a similar situation existed between Dr. Depue and his own graduate mentor, Dr. Don Fowles, who was also in attendance at the meeting this year. Dr. Monroe also mentioned that Dr. Depue had mentored Dr. Dan Klein, the

recipient of the 2012 Mentorship Award.

Maintaining successful relationships with students has clearly been an important aspect of Dr. Monroe's academic career. We think this is truly to be admired. When asked what advice he would offer graduate students on developing mentorship skills of their own early on, Dr. Monroe responded "The best thing to do is do the best research you can, and as you try to do that, keep your students involved with the excitement of the ideas."



Craig Rodriguez-Seijas and Hailey Dotterer conducted the interview with Dr. Monroe.