Newsletter

Winter 2019

From the Editor's Desk

Annie Ginty, PhD, APS Newsletter Editor

Welcome to the Special Edition newsletter featuring the upcoming American Psychosomatic Society Conference. This year's conference promises to be filled with innovative and interdisciplinary science, with invited panels on interoception, the microbiome, and best practices in teaching. Additionally, this year is special for me, as it marks the 10th anniversary of my first APS conference attendance (Chicago, 2009). I vividly remember sitting in the opening session as a senior undergraduate student, captivated by Dr. Sarah Pressman in the Data Blitz session. I kept thinking to myself, "Dr. Pressman has an extraordinary gift to make science come alive." I left the conference with an even greater love of research and desire to pursue a career in the field of psychosomatic medicine.

Fast forward 10 years later with Dr. Pressman serving as the Program Chair and myself being the Newsletter Editor, I am constantly reminding myself how truly thankful I am for serving alongside incredible individuals and the opportunity to discuss the latest research with APS colleagues every March. With this special edition, we hope to provide a 'sneak peek' into some highlights of the upcoming conference. The Meeting Update from Dr. Pressman provides an essential guide to this year's conference.

A special thank you to the Program Committee, who in addition to working extensively to prepare for the conference, wrote many of the pieces in this special edition. Be sure to check out the summaries for some of the major tracks and sessions: Neuroscience, Microbiome, and Salons. The Meet the Scientist section is extensive and includes interviews with the four major award winners. You will not want to miss these interviews, which will allow you to get to know these amazing scientists before their award talks at the conference. Further thank yous to Drs. Christopher Fagundes, Paige Greene, Judith Carroll, Richard Lane, and Thomas Neylan for conducting the interviews of their fellow colleagues. Thank you to Dr. Crista Crittenden for all of her work on the Charity Initiative. This year APS will be raising funds for the Downtown Eastside Women's Center. See Dr. Crittenden's article to learn more about this amazing organization and the silent auction. Finally, thank you to Degnon Associates for making this newsletter possible.

Looking forward to seeing everyone in Vancouver!

American Psychosomatic Society

Newsletter

Winter 2019

A Meeting Update From Your 2019 APS Program Chair

Sarah Pressman, PhD

It's unbelievable that we are only a few short weeks away from the APS Annual meeting (#APSvan2019). The program committee has been hard at work all year to create a wonderful (and packed!) schedule that we hope you will truly enjoy. To date, this meeting is already setting records! As you may have heard, this was the most submitted to APS meeting of all time, and the early registration numbers indicate that it may also be one of the most well attended. If anyone asks you why are there so many simultaneous sessions this year, well, it's because never before have we had so many high quality abstracts sent to us. Beyond the incredible numbers, there are also many other things to be excited about for this meeting.

As you've seen from past email announcements, our social media activity, and this newsletter, we have a fabulous line-up of invited plenary speakers discussing critical topics on our theme of "Body to Mind" including body-mind connection implications for changing mood & anxiety, discrimination effects on body & mind, and how the gut interacts with the mind & brain. In addition, we have a stellar line up of invited speakers covering exciting body to mind topics on interoception and the microbiome. In addition, due to the passion of APS for all things stress, we have not one, but TWO invited sessions exploring critical issues on the future of stress measurement and where we stand today in the field of stress reactivity and health. We'll also have lively discussions on Open Science in Psychosomatic Medicine, Psychosomatic Medicine perspectives on Sickle Cell Anemia, and Best Practices for Teaching Psychosomatic Medicine. There are also new session styles to watch out for. For example, this year we put out a call for your latest (and incomplete!) clinical trial and research studies. As a result, we don't even know what some of the findings are that will be revealed at our two late breaking clinical trials sessions as well as our late breaking research session on culture, discrimination and health. In addition, we also invited our membership to submit new types of talks that didn't fit the typical symposia profile. Watch out for new session formats sprinkled throughout the schedule like group discussions, panels, and mini workshops on important topics like culturally inclusive research, qualitative methodologies, and new clinical practice tools and strategies, to name a few. Finally, from the speaker front, we have an incredible line up of award talks on psychoneuroimmunology, emotion and neuroscience, genetics, and traumatic stress that will truly knock your socks off.

As you can see, there are many great and new things to look out for at this year's meeting, but one thing in particular we want to call your attention to is the new format of the roundtables. In the past, the program committee has struggled with how best to handle this session type. It is obviously valuable to spend time in a smaller non-lecture format to discuss

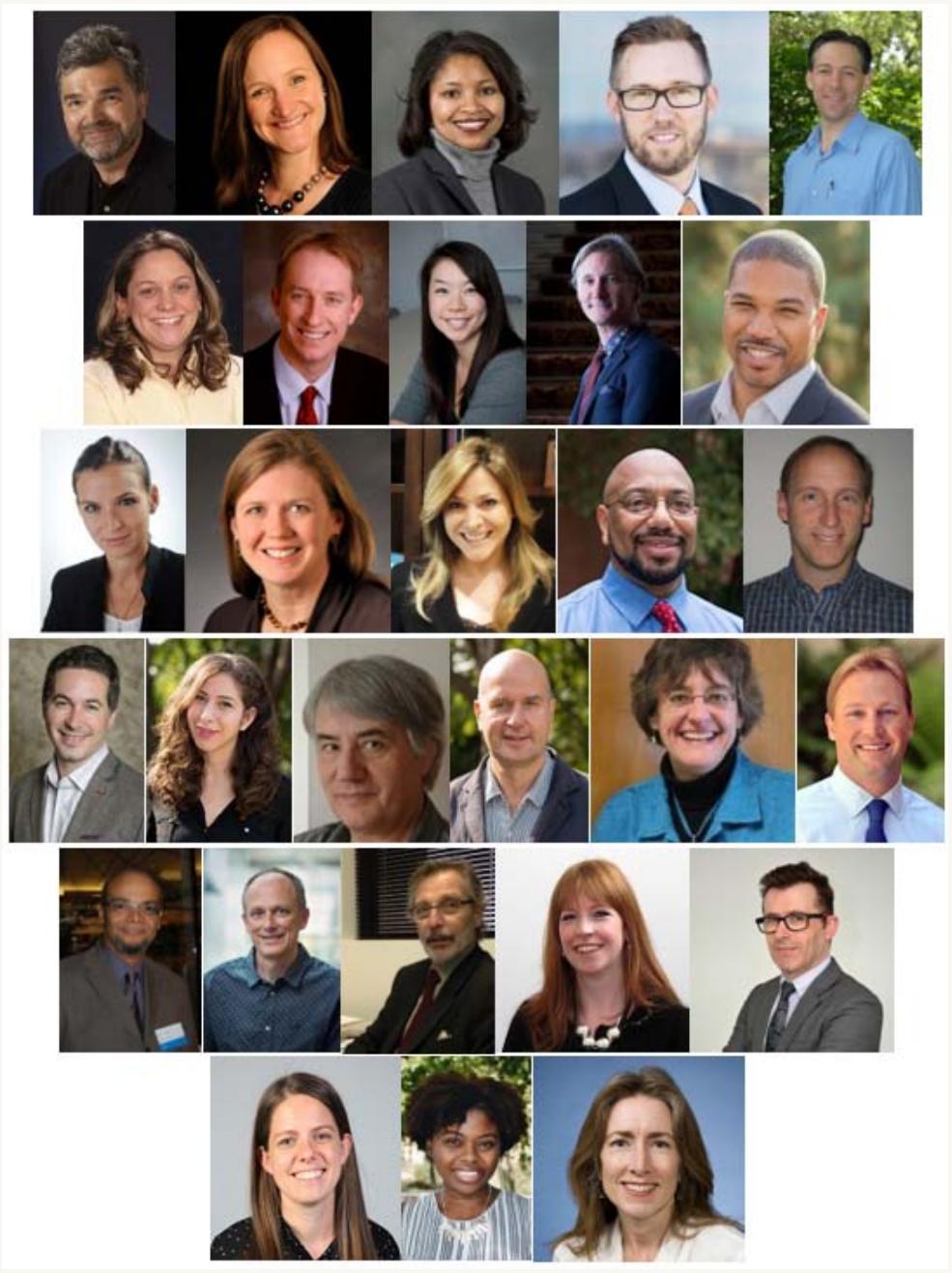
important topics, meet with experts, and learn something new, but because of the prohibitive cost of hotel lunches, our trainees and junior faculty were sometimes priced out of attending. As a result we have moved the roundtables to the morning (when you can grab you free meeting-included breakfast and head over to your session) and the late afternoon so that the price of lunch was no longer a concern. That is, roundtables are nowÂ completely free to attend. While we feel that this is an important change in ensuring access for all to our roundtables, there is a downside: Roundtable sessions will be filled on a first come first served basis. Thus, please be sure to head over early for the sessions you really want to attend. The meeting organizers are doing their best to pick room sizes based on expressed interest during registration, but obviously there are also upper limits to how many we can fit while still meeting the needs and goals of the session chairs. The other advantage of this change is that your lunch hour is now free to mix and mingle with your APS colleagues (something many people asked for), check out Vancouver, or attend a wellness break (e.g., breathe in the fresh ocean air on a walking tour, integrate your body and mind with Tai Chi, or give your weary mind a rest with some mindfulness).

Also relating to these afternoon sessions is our new and exciting interactive roundtable option: The Salon. Many full APS members miss the days of the trainee mentoring reception where they got a chance to pick the brain of a more senior faculty member. The Salon format brings that experience back for EVERYONE. Salons offer the opportunity to sit down with some experts in your field or a field that you are interested in, in a small group format. This is your chance to get some valuable expert insight into your career, expert advice on a project, hear where experts think a field is going, or even a chance for you to find a new collaborator. We can't wait to hear what you think of these.

Last but not least, our schedule is packed from beginning to end, so you definitely do not want to come late or leave early. For example, we have a stellar set of Wednesday workshops to warm yourself up with including an incredible all-day NIH organized meeting on how to intervene to change the negative life course effects of early childhood adversity. We also have a half day cutting edge topic session on utilizing objective neural interface technology to assess neurocognitive function in chronic disease. You can also build up your statistics prowess during a half day exploration showing you how to analyze data with a circadian rhythm. On top of that we have our member FAVORITE: The APS Banquet on Saturday night. For those of you who haven't been lucky enough to attend, this is your chance to cut loose on the dance floor with your favorite scientists and friends, enjoy live music, try out local cuisine, and simply celebrate the awesomeness that is this special meeting (see later in this Newsletter for the top reasons to attend the banquet). It also means you'll have yet another reason to extend your visit in beautiful British Columbia and explore Vancouver and all it has to offer (see the last APS newsletter for ideas!). Last but not least, don't forget to stop by our Silent Auction before the banquet to have a chance to do some good for a wonderful local Vancouver charity: the Downtown Eastside Women's Centre http://dewc.ca/. Never heard of a silent auction before? Check out the information later in the newsletter to learn more!

Hopefully you've already registered for everything, but if this newsletter message made you want to add a workshop, a banquet ticket, or express interest in a roundtable-- you still can! Just reach out to info@psychosomatic.org and they can help you do a late add on to your registration. Look forward to seeing you all very soon!

Want more meeting news? Keep up to date by following @connectAPS or me (@sarahpressman) on Twitter and searching for #APS2019van related news from our excellentÂ social media subcommittee.



Drs. Charles Raison (body-mind connection implications for changing mood & anxiety), Tene Lewis (Everyday Discrimination effects on body & mind), and Emeran Mayer (How the gut interacts with mind & brain). In addition, we have a stellar line up of invited speakers covering the hot topics body to mind topics of interoception (Drs. Sahib Khalsa, Sarah Garfinkel, Frederike Petzschner, & Hugo Critchley) and the microbiome (Drs. Brett Finlay, Kirsten Tillisch and Karl Maier). In addition, due to the passion of APS for all things STRESS, we have not one, but TWO invited stress sessions exploring current issues in stress measurement and our conceptualization of stress reactivity. These sessions are led respectively by Drs. Aric Prather and Anna Whitaker, and will feature an outstanding line up of stress experts (Stress Reactivity & Health: Drs. Brian Hughes, William Lovallo, Andrew Steptoe, Karen Quigley, & Annie Ginty; Perspectives on stress

& the next generation of stress measurement: Drs. Julian Thayer, George Slavich, Wendy Mendes, & Suzanne Segerstrom). Finally, we'll also have some lively discussions on important topics like Open Science in Psychosomatic Medicine (Drs. Daryl O'Connor, Mark Lumley & Janet Tomiyama), Psychosomatic Medicine perspectives on Sickle Cell Anemia (Drs. Charles Jonassaint and Shawn Bediako), and Best Practices for Teaching Psychosomatic Medicine (Drs. Vicki Burns, Nataria Joseph, & Crista Crittenden).

6728 Old McLean Village Drive | McLean, VA 22101-3906 | Tel: 703-556-9222 | Fax: 703- 556- 8729 |

Newsletter

Winter 2019

What to look forward to...

I'm honoured and excited to be part of the inaugural "APS Salons" feature at the Vancovuer conference. Lorenzo Cohen and I will be there ready for a candid chat about our over 20-years of experience in the world of psychosocial and integrative oncology research and practice; me in Canada and Lorenzo at MD Anderson in Houston. We've been around the block more than a few times now, and can't wait to see where your burning questions will take us! If nothing else, it should be a lively conversation and a good time for all. Hope to see you there!

-Linda Carlson, PhD, RPsych

I am looking forward to catching up friends and colleagues. I also think that the program committee did an outstanding job of securing some great keynote speakers. I am looking forward to talks by the award winners as well.

-Matthew Cribbet, PhD

As always, this year's meeting is full of innovative and important science! I'm especially looking forward to the sessions on Open Science and Cardiovascular Stress Reactivity. There are also a lot of great opportunities for trainees to get to know senior APS members. See you soon in Vancouver!

-Jennifer Morozink Boylan, PhD

I am excited for Tené Lewis' plenary. She's produced some of the most important work linking discrimination to health. She's also a fellow UCLA alumna, and one of my people I look up to as a female academic role model.

-A. Janet Tomiyama, PhD

“I am very excited for this year’s program. There will be a wide range of topics covered by true pioneers in the field that really get to the heart of psychosomatic research. I am personally looking forward to the hands-on workshops on offer this year, including “Modeling Circadian Rhythms in Psychophysiology” by McGrath, Thayer and Jarczok. With the increasing availability of psychophysiological time-series data, I think techniques to analyze and extract meaningful information from these intensive data streams will be important moving forward.”

-Jerrald Rector, PhD

Newsletter

Winter 2019

Inaugural Scientific Salons: Meet the Professor

Brooke Jenkins, PhD and Claudia Trudel-Fitzgerald, PhD, Co-Organizers

Let's gather, let's converse! A unique opportunity for all APS attendees (from trainees to full professors) to ask questions of experts from various domains in an informal setting. Senior scholars will be there to share insight about conducting research in their respective field, such as positive emotions & health, sleep & inflammation, psycho-oncology, or psychobiology & cardiovascular disease. This new activity is also a great context to discuss the management of a successful career path, potential collaborations, and the future of psychosomatic research with these experienced leaders! On Thursday, we'll have Drs. Linda Carlson, Lorenzo Cohen, Joel Dimsdale, Peter Shapiro, Susan Lutgendorf, Mike Antoni, Christoph Herrmann-Lingen, and Bruce Rollman at 4 separate tables to provide an intimate setting for dialogue. Then on Friday, Drs. Suzanne Segerstrom, Laura Kubzansky, Andrew Steptoe, Julian Thayer, Tica Hall, and Anna Marsland will be at 3 separate tables to converse on issues in their fields. Don't miss your chance - please join us Thursday and Friday afternoons from 5:30-6:30pm for this exciting inaugural event!

American Psychosomatic Society

Newsletter

Winter 2019

Meet the Scientist...*Steve Cole, PhD, Winner of the 2019 Patricia Barchas Award in Sociophysiology*

Steve Cole is a professor of Psychiatry and Biobehavioral Science at UCLA, at the Semel Institute for Neuroscience and Human Behavior, and the Cousins Center for Psychoneuroimmunology. Originally trained as a social psychologist, he is also widely recognized as a molecular biologist and bioinformatician. Dr. Cole is the founder and director of the UCLA Social Genomics Laboratory, where his pioneering work applies functional genomics approaches to the social and behavioral sciences. Dr. Cole's work applies computational modeling and bioinformatics to integrate information from epidemiological, clinical, animal, and molecular genetic studies to identify pathways through which social and psychological factors impact disease. His collaborative work has mapped many key connections, including biobehavioral factors that enhance replication of viruses (e.g., HIV-1 and HHV-8), alter expression of key immune response genes (e.g., *IL6* and *IFNB*), and up-regulate cancer progression and metastasis (e.g., in breast and ovarian cancers). His work has been highly influential in guiding research across the biobehavioral sciences for decades, and I suspect he may have a larger list of collaborators than anyone else in our society. Steve Cole is one of the most influential thinkers of our field, and his work has challenged not only conventional dogma, but also created new paradigms that allow us to better understand the true reciprocal interactions of social, behavioral, physiological, and biological factors with a truly interdisciplinary perspective.

We had the privilege of interviewing Dr. Cole in honor of his receipt of the ***Patricia Barchas Award in Sociophysiology*** (award talk Friday, March 8 at 10:30am). Below is a summary of his responses to our questions.

Interview by: Judith E. Carroll, PhD & Paige Greene, PhD, MPH, FABMR

JC & PG: Your undergraduate and graduate training was in psychology. At what point did you choose to dive into molecular work? Was there a particular moment or experience that shifted your course?

SC: It wasn't a moment in my life so much as a moment in history. At that moment in history, the HIV epidemic was killing hundreds of thousands of people. It was a malignant force, and you couldn't see it or touch it. Really the only way to interact with it was through the lens of molecular biology. So, I embraced molecular biology as a set of tools to advance a cause that I felt was important -- understanding how that virus preyed on our psyches. And it seemed that from some of the pioneering work- like Margaret Kemeny's work in the epidemiology of HIV- that psychological and social risk factors really were making the epidemic worse. In some of the first work I did, we investigated the risk factors for accelerated HIV progression, as it impacted some people more rapidly than others. In the gay men we were studying, it turned out that being in the closet mattered a lot. And this "closeting" result led us to consider why concealment of one part of one's identity was so toxic to human tissue. Concealment was a particularly potent predictor of who got sick and died from HIV. At the same time, there was a huge amount of research on the

basic biology of HIV, and as a behavioral scientist, this was very advantageous combination. It made it much more feasible to trace how the neuroendocrine system would interface between psychological and social processes and the basic biology of viral replication.

This was a catalytic moment for me. The idea of connecting more concretely the psychological phenomenon of closeting with the biology of HIV motivated me to take a second postdoc to learn a new toolkit for answering questions about viruses. After working with Margaret Kemeny, I had a pretty good working hypothesis on what was going on -- How the fight or flight stress physiology might plausibly promote viral replication or interfere with the antiviral immune responses, but I didn't yet have any direct evidence for that. So I took a molecular virology postdoc specifically to do that work, to put all this together, starting in the test tube with immune cells. I started learning the technical tools of molecular biology, but also the scientific mindset or the cognitive style of the molecular biologist. This turned out to have been absolutely essential.

JC & PG: Was there someone at your second postdoc that helped you translate your ideas of connecting psychology to biology?
SC: Yes, Jerome Zack. I learned a lot from Jerry scientifically, but even more from how he responded to my little scientific adventure. In the beginning he was quite frankly skeptical â€“ saying "look, your project will fail in a couple of weeks but that's ok, you can do this and move on to another project after a month." I had developed a chain of inferences that if all these different small pieces I had put together from the literature were true, we should be able to take this stress hormone, put it on all these infected cells, and see those cells make more HIV virus. If that happens, then we can dive in there and figure out in more detail how that happened. Jerry would say, "yeah that might work, but probably not." After I had done the key "phenomenon-establishing" experiments several times and come back with fairly reasonable and reliable results, like a 3- to 10-fold increase in viral replication each time, and Jerry saw these results, he'd say: "yeah, looks like you've got something here." After a few more of these experiences, and as we began to conduct follow-up studies filling in the specific molecular mechanisms involved based on what was already known about the basic mechanics of HIV, Jerry switched from being skeptical about psychobiology to being a surprisingly strong advocate. What I learned about molecular biologists is that they are much more Bayesian than many of us in the behavioral sciences. They update rapidly based upon verifiable information, and as a result they can go from being critical to highly supportive much faster than I'd ever thought possible. And then they become very powerful champions. I've seen this over and over again, and I've learned a lot about the basic strategy of mustering evidence to trigger this kind of conversion process. This led me to feel a kindred spirit with molecular biologists. My training with Jerry also equipped me with a world view that was different from that of behavioral scientists. Understanding their worldview and scientific value system allowed me to present and talk about my work in this world of molecular biologists. I learned to use the toolkits and terminology that they were familiar with to create a compelling case about why this is relationship is biologically plausible, and without mentioning psychosocial factors at all explicitly, to implicitly bring along a sense of moral urgency with respect to the social issues that lay outside the test tubes.

JC & PG: Are there contemporary public health issues that can be informed by your early work on concealment and HIV progression?
SC: In general, the HIV example laid out a path through psychology and biology that turned out to be broadly applicable to a wide variety of other forms of social marginalization and health disadvantage. What I learned from the HIV epidemic was about power, threat, safety, and fear. Those themes permeate all of human life, in economic, racial, ethnic, and cultural disparities. We don't often discuss our everyday lives using those terms, but really when you look at how bodies are wired together, it is all very similar. It comes down to the idea of security vs. threat: I'm particularly interested in how this plays out in human biology in general, and in particular how these forces play out in the context of this huge genome wired by millions of years of evolution in the trenches of intense power competition, with both other species, and even more so, with others

of our own. Surely the genome has developed adaptations for power. What if they are also killing us?

As is now clear, even contemporary societies often leave people feeling threatened and insecure. Ultimately, however, for us to thrive in a society, it needs to leave people feeling ok. But the current media environment often leaves us feeling ever more threatened and insecure, constantly overwhelmed, stressed about potential danger, in danger of being bullied by the 1% and the growing disparities in economic power, realizing that those with much more wealth or political power can simply take advantage or treat us unfairly and get away with it. Just knowing that this could happen -- a threat, even if it doesn't happen, can create fear and insecurity. It's these vast gradations of power that leave people feeling that society is not fair and that "I'm not safe. And no one is looking out for me." That is the supreme challenge of our time. How do we make people feel fundamentally safe and generative without coddling them and smothering motivation, creativity, industry, and initiative, and without putting down others in the process?

JC & PG: What are the most pressing issues we should pursue under the biobehavioral framework?
SC: One thing I'm happy to see is an increasing focus on resilience factors, and the reasons to go on living when things seem perilous. If you really want to change things, as opposed to just describe our current miseries, then resilience to experienced adversity has to be one big ingredient for success. You can't understand psychology or biology solely through the lens of fear and threat and stress. For example, evolution is predominantly concerned with adaptation, selective advantage, and flourishing. Threat and defense are secondary, and useful only insofar as they keep one alive enough to reproduce and thrive later. So I think it will be essential to come up with more sophisticated and integrated accounts of how these positive and negative streams of value co-exist inside the human psyche and how they sort out verdicts about what a body is going to do to facilitate adaptation -- success and thriving in the long run.

Another thing that is important is to sort out is "what can we do about this?" People get a lot of coverage when they talk about threat and stress as bad, but when researchers go about trying to intervene to make things better, they get a lot less attention and often more criticism and gratuitous abuse. It's easy to say what's wrong, but I think we have an obligation based on the resources we're claiming to turn those critiques into useful ideas about how to do things better. Changing the world for the better, rather than just describing how it's bad, seems all the more pressing these days.

JC & PG: What types of individual- or population-level interventions do you feel are most promising?
SC: You might be familiar with the work some colleagues and I do using beta-blockers in cancer patients. Beta-blockers are great when someone is fully reasonably and unavoidably stressed and threatened, like when they've just been diagnosed with cancer. In those cases, beta blockers might be a good idea, but they're not a great solution for everybody or for ongoing everyday life challenges. Mindfulness, meditation, Tai Chi, and other wellness practices are being adopted much more widely than I'd ever have imagined a decade ago, and those interventions appear to be helping with everyday distress, so that seems promising. I think another significant opportunity is to help promote eudemonic wellbeing more broadly and consistently in everyday life. How can we help people engage in a sustained way with the topics, value, and communities they find most important in life? How can we help people reconnect with purpose in what they do on a daily basis? I'm happy to see these ideas manifest in some of the newer psychotherapy approaches like ACT and MI. It seems like a great opportunity to help people reconnect with meaning and purpose and other positive motivational processes, rather than focus solely on alleviating negative symptoms.

JC & PG: What are some words of wisdom/advice to students beginning their career in behavioral medicine or PNI?

SC: I think the most important thing is not to slip out of touch with the curiosity, hunger, and delight in discovery that generally leads us into science in the first place. That explorer energy is an essential wellspring of motivation, and especially essential when you are doing the hard things on a daily basis that are required to survive in the competitive academic and social environment of science. One way to do that is to never stop analyzing one's own data. Maybe you can get someone else to help, when it's up to you to write the grants to pay the bills. But once you become personally disconnected from the personal immediate direct thrill of discovery, well then I'm not sure how the rest of this mess that is science stays worth it. Discovery and understanding -- those personal experiences are kind of the motivational solar energy that make everything else in the scientific solar system grow. That said, I've always felt that it was essential to balance this personal scientific hunger with some kind of a comittment and responsibility to others -- to bring our discoveries back to the rest of the human community (who are kindly paying our scientific bills!) to help improve the whole human experience. Just learning it for one's self seems selfish and futile. You won't have brought anything out of the dark if a discovery dies with you.

JC & PG: What makes a successful scientist?
SC: One part is keeping your curiosity -- the juice that keeps scientists going. Never lose your curiosity, and your opportunity to discover something new on a daily basis. Or at least on a weekly basis. I'm now down to a monthly basis, but I'm clawing my way back toward weekly. I feel like I have to give myself a dessert bar of insight every day to keep me going. And as we know from Edison and so many others, it's keeping going once you're decently good at something that is the most reliable recipe for long-term success.

JC & PG: What is something most folks don't know about you but would find interesting, like your hobbies, any extracurricular activities, etc?
SC: Once upon a time I did interesting things, but then I had kids. Before that, though, when I was a postdoc and had more time, I accidentally became an art buyer. If you wanted high art in Los Angeles, you could come to me, and I'd get to know you and your likes, eccentricities, and such using my armchair psychology. Then I'd go out to find art that you might potentially like. People really appreciated that. Much more than they appreciate my science. Someone gave me a Porsche once, but I had to give it back because my postdoc salary couldn't even pay the license fee on it, much less the insurance.

JC & PG: What is your favorite art medium?
SC: I have a stronger attachment to photography than any other medium, but I like most forms of visual and performance art. What is interesting about photography to me is usually not about what is in front of the lens, but what that image tells you about the mind's eye behind it. Pictures tell a kind of story about what in the outside world struck a particular person's eye, or heart, at least enough for them to go through the effort of capturing it and sharing it with you. And if you see the same thing, or maybe something different but still striking, then your soul gets treated to a momentary snack of wonder or beauty, or maybe just a brief jolt out of your everyday life. I guess all art is like that to some extent, but because photography often works with a real subject and found events, I think it throws the seer's soul into even more vivid relief.

6728 Old McLean Village Drive | McLean, VA 22101-3906 | Tel: 703-556-9222 | Fax: 703- 556- 8729 | © 2019 APS

American Psychosomatic Society

Newsletter

Winter 2019

Meet the Scientist...*Antonio Damasio, PhD, Winner of the Paul D. MacLean Award for Outstanding Neuroscience*

Antonio Damasio is University Professor, David Dornsife Professor of Neuroscience, Psychology and Philosophy, and Director of the Brain and Creativity Institute at the University of Southern California, Los Angeles. Trained as both neurologist and neuroscientist, Damasio has made seminal contributions to the understanding of brain processes underlying emotions, feelings, and consciousness. His work on the role of affect in decision-making has had a major impact in neuroscience, psychology, and philosophy. He is the author of numerous scientific articles and is regarded as one of the most eminent psychologists of the modern era. In addition to his plenary lecture in the morning, he will participate in an open roundtable discussion later that afternoon. Dr. Damasio is this year's winner of the ***Paul D. MacLean Award for Outstanding Neuroscience***. The award is intended to honor Dr. MacLean and promote the line of research that he created one motion, the brain, and physical disease. Dr. Damasio's award plenary will be on Saturday, March 9 at 10:00am.

Interview by: Richard Lane, MD, PhD

RL: Were there any meaningful events that shaped your research and career trajectory?
AD: My choice of career, in general, was dictated by my interest in philosophy and, to a certain extent, my interest in literature, cinema and music. Quite fittingly, I owe my specific decision to study neurology and neuroscience to my professor of philosophy in college. He brought to my attention the papers of the neurologist Egas Moniz. His work made the connection between neural tissue and mind and behavior transparent and approachable. Later in my career I was strongly influenced by the investigation of patients with disorders of affect. That opened a new world for me, first by studying the consequences of emotional defects on decision making, and then by exploring the biological underpinnings of affect itself.

RL: What do you think is the most pressing issue in Behavioral Medicine?
AD: The detailed understanding of the biological mechanisms behind the experiences of malaise and pain. Only then can those critical manifestations of human suffering be properly managed.

RL: If you could have dinner with three scientists (alive or dead) who would they be and why?
AD: *I can imagine two* fascinating dinners *with three* scientists from the past. The first would be with William James, alone. His understanding of the psychology of affect was remarkable, but I would tell him that we have not been idle. The second dinner would have two guests: Sigmund Freud and Carl Jung. The point of the evening would be to tell them that they complemented each other in ways that neither could fathom in their own time.

American Psychosomatic Society

Newsletter

Winter 2019

Meet the Scientist...*Aoife O'Donovan, PhD, Winner of the 2019 Herbert Weiner Early Career Award*

Aoife O'Donovan is an Assistant Professor of Psychiatry at the University of California, San Francisco (UCSF) and the San Francisco Veterans Affairs Medical Center (SFVAMC). Her lab is called THRIVE, the Trauma and Health Research on Immunity, Vitality and Emotions Laboratory. She is winner of the ***2019 Herbert Weiner Early Career Award from the American Psychosomatic Society***. The Herbert Weiner Early Career Award identifies scholars who, early on in their career, have contributed significantly to the field of psychosomatic medicine and show substantial promise of meritorious academic accomplishments in the field. Dr. O'Donovan's award plenary will be at 9:05-9:55am on Saturday, March 9.

Interviewed by: Thomas Neylan, MD

TN: Tell us about yourself. What path has your career taken?
AO: I received my BA in Applied Psychology from University College Cork (UCC), and a Masters in Health Psychology from the National University of Ireland, Galway (NUIG). After this early education, I was smitten with psychobiology and decided to pursue a PhD in Clinical Psychobiology at the Department of Psychiatry, University College Dublin (UCD). A few months into my PhD, I read a seminal paper by Dr. Elissa Epel and colleagues linking psychological stress with accelerated cellular aging as indexed by shorter telomere length. I became somewhat obsessed with telomeres and eventually asked Elissa if she would accept me as a Visiting Graduate Student at UCSF. To my utter amazement, she emailed me back! She also accepted my request and I came to UCSF for nine months in 2007 funded by Fulbright and Rotary International Scholarships. Arriving at UCSF's Center for Health and Community (CHC), I had some serious culture shock. I felt like I was surrounded by the rock stars of health psychology and they were insisting that I call them by their first names! This was impossible for me and I just avoided calling them anything for a few months. Work at the CHC on chronic stress and health disparities led me to focus in on threat sensitivity, which in turn brought me to the field of traumatic stress research. Luckily, the SFVAMC is a leading center for the study of traumatic stress affiliated with UCSF and I am enormously grateful that you [Dr. Thomas Neylan] agreed to take me on as a postdoctoral fellow in 2010. Thanks in no small part to your careful leadership and mentoring, it has proved an ideal place for me to settle down and build my own lab. Eleven years after Elissa warmly welcomed me to the CHC, I am still in San Francisco...

TN: Were there any meaningful events that shaped your research and career trajectory?
AO: I initially pursued psychology with a view to learning how to read minds, which I imagined would be a very useful skill in my planned career as a journalist. However, my plans changed during my undergraduate degree while I was working as a reporter for a local newspaper in Cork, Ireland. At the newspaper, I proposed a series of articles about various chronic illnesses. While working on these articles, I interviewed patients living with major illnesses. Again and again, I was

struck by the importance of psychological factors for quality of life, disease management, and disease outcomes in these patients. Stress was the factor that stood out most. With renewed vigor and enthusiasm, which had waned somewhat as I had realized I would be learning more about the scientific method than reading minds, I returned to my psychology classes with a particular interest in health psychology. After my undergraduate degree, I abandoned my plans to become a journalist and I was accepted into the Masters in Health Psychology at the NUIG. Here, my primary mentor was Dr. Brian Hughes who taught me how to critically evaluate research through a transformative weekly seminar and our work together on social support and cardiovascular reactivity. He has remained a generous and wise mentor. Fortunately, I also developed an abiding love for statistics at the NUIG, thanks to classes taught by the awe-inspiring Dr. Jane Walsh. At UCD, through the mentorship of clinician-scientist Dr. Kevin Malone and immunologist Dr. Cliona O'Farrelly, I learned the importance of dedicating myself to work of clinical importance. This focus has served me well and it keeps me motivated when I face the inevitable failures and downturns of life in research. Being accepted to study at UCSF as a Visiting Graduate Student has been truly life altering. It completely changed my career path, introduced me to a group of phenomenal scientists who have become some of my dearest friends, and led me to my favorite collaborator in life and work Dr. Josh Woolley with whom I now have two strong girls who make me more determined to do meaningful work.

TN: What do you think is the most pressing research question in psychological stress? How do you think we can address this in the next decade?
AO: Numerous large-scale studies have established psychological stress as a potent risk factor for mental and physical ill health. There has also been considerable progress in identifying the biological pathways linking stress with ill health. I think the next step is figuring out how to translate this work into interventions that enhance health, particularly for those who are most vulnerable and at-risk worldwide. Funnily enough, some of the work we need to do to achieve this goal is basic research focused on identifying the precise mechanisms by which stress impacts health in individuals. We will need such information to guide the development of highly targeted and personalized interventions. Work to date shows that one-size-fits-all interventions that reduce the negative impact of psychological stress are unlikely, although such interventions may have a large impact at a population level. Fortunately, developments from other fields such as immunology and data science are allowing us to achieve levels of specificity and personalization that weren't possible in the past. It is an exciting time and researchers from our field are ideally poised to contribute to the development and personalization of both psychological and pharmacological interventions.

TN: If you could have dinner with three scientists (alive or dead) who would they be and why?
AO: This is a hard question and there are at least 1,000 living scientists I would want to invite! Luckily enough, many of these scientists will be at the closing dinner for APS in Vancouver. But here's an answer anyway. First, I would invite Ada Lovelace because she was interested in developing a "calculus of the nervous system" and I would love to hear her thoughts on what is possible now that computers have exceeded her prescient hopes. Second, I would add Dr. Mary Ainsworth. As I spend more time studying the effects of trauma, I am repeatedly struck by the importance of its effects on attachment. No "calculus of the nervous system" would be complete without somehow incorporating our social relationships and attachment styles. Finally, I would add Dr. Nancy Adler. I was fortunate enough to be mentored by Dr. Adler as a postdoctoral fellow and was repeatedly blown away by her wisdom and vision. She has an uncanny ability to use metaphor to convey important messages, which is incredibly powerful but it takes a lot of skill. I am sure Nancy would steer the conversation in the most interesting and productive directions.

TN: Any words of wisdom for those just starting out in research?
AO: The greatest stroke of luck of my life is that I have had truly outstanding people who have given me brilliant advice when I needed it. Here are just a few nuggets I have picked up on the

way. First, one of the greatest privileges we have as researchers is that we get to do work that is meaningful and energizing for us. Spend time figuring out who you are, what you value, and what energizes you. Don't work on projects or in places that suck the joy from your life for too long. Second, don't get caught up in too many comparisons with your peers. You are running your own race and you can't assume that you know what race anyone else is running. Third, work on developing a focus for your program of research. It's tempting to try to do everything and learn everything, especially in our field, but focus will ensure that you become one of the world experts in an area as early as possible. Fourth, communication is hard, really hard. It's so easy to underestimate how much unshared assumptions block the transmission of information. Try not to jump to unfavorable conclusions about others' behavior. People rarely have malicious intent, but instead are operating on different assumptions. Finally, nurture your relationships. One of the most robust findings in our field is that our social connections sustain us. I have been blessed with a great and very large extended family as well as with wonderful friends both within and outside of science. I wouldn't have made it this far without them and I wish I could mention them all here along with every single one of the many, many people who have mentored me.

TN: Where do you see your research going over the next 10 years?
AO: My work has been focused on inflammation since the earliest days of my PhD and I remain as excited as ever about the inflammatory response and its relevance for mind-body/body-mind medicine. Immunology progresses at a very fast pace and it is fun to try to keep up with discoveries about inflammation and their relevance for our field. I don't see myself moving on from inflammation in the next decade, or maybe ever. In terms of new directions for me, there are three major paths I want to take. First, I am currently running a project focused on examining the effects of inflammation on the brain with Mary Smirnova, Dr. Eleanor Woodward, and others. Neuroimaging expert and top-notch mentor Dr. Dan Mathalon is ensuring that we maintain high standards in this work. A better understanding of how inflammation impacts the human brain has great potential to point us in the direction of new interventions for psychiatric symptoms. Second, it is critically important for us to conduct more randomized clinical trials in our field. Digital health interventions have enormous potential to transform health at low cost and to reach people who may not have access to more expensive treatments. An entirely remote app-based study that we did in the lab recently blew my mind. In 10 months, a team from my lab led by postdoctoral fellow Dr. Andrea Niles and Paige Tripp completed a randomized controlled trial of an app-based intervention in 689 people with clinically significant posttraumatic stress symptoms. For comparison, most clinical trials in PTSD enroll one or two patients per month. In the next 10 years, I would like to continue to exploit digital technology to enhance health. Second, some of the most exciting developments in health sciences are happening in the data science arena using big data. These developments will allow us to ask new questions that we have never been able to ask before. It is a great time to be in biobehavioral medicine.

6728 Old McLean Village Drive | McLean, VA 22101-3906 | Tel: 703-556-9222 | Fax: 703- 556- 8729 |

American Psychosomatic Society

Newsletter

Winter 2019

Meet the Scientist...*Janice Kiecolt-Glaser, PhD, Winner of the American Psychosomatic Society Distinguished Scientist Award*

Janice Kiecolt-Glaser is the S. Robert Davis Chair of Medicine and holds the title of Distinguished Professor. Additionally, she is the Director of the Ohio State Institute for Behavioral Medicine Research. She has authored more than 250 articles, chapters, and books in the field of psychoneuroimmunology. She is this year's winner of the ***American Psychosomatic Society Distinguished Scientist Award***. The award recognizes a senior scientist who has made an important and protracted contribution in any field within the Society's scope. Professor Kiecolt-Glaser's award address will be on Wednesday, March 6 during the Opening Session.

Interviewd by: Christopher Fagundes, Ph.D.

CF: First and foremost, congratulations on this much-deserved award. First, how has APS contributed to your career, and how you train your students?
JK-G: APS has always been my favorite conference. I like it because I always hear high-quality talks with new information and I get new ideas. I encourage my trainees to go (and hopefully present) because they will have an amazing opportunity to hear and meet leaders in the field, and also to network with their own peers.

CF: If you were going to identify a few keys to your success what would they be?
JK-G: I have a monthly list, a weekly list, and a daily list. During those times when I do not make a regular daily list AND look at it as I go through the day, I am definitely less productive. Things that do not appear on my list do not get done, so I try to write everything important down.

On my list I include some items that are time-based, e.g., spend 30 minutes on X, usually some bit of writing that I am having difficulty starting; having a limited time set out for the task makes it less formidable

CF: One aspect of your career that I admire the most is that you can identify novel and exciting new areas of research while maintaining continuity in your overall program. I have heard time and time again young investigators struggle with the temptation to repeat the same research design/framework again and again, with only slight modifications. I think this is especially the case when funded by NIH because of the amount of feasibility data one must present to obtain funding. What is your approach to finding new and exciting directions that are at the cutting-edge, while maintaining continuity?
JK-G: I skim a lot of literature, mostly biological; I have found a fair number of interesting articles while scanning medical/health news sections on the web. Once I find a new area that looks intriguing, I see if it is possible to add preliminary data collection to an existing study.

CF: Where do you think the field of psychoneuroimmunology and psychosomatic medicine is going in the next ten years?
JK-G: I think the more we understand about the gut microbiome, the more we will know about

broader behavioral influences on both mental and physical health. The area is exploding, and there are tantalizing findings almost every week showing that gut function is related to obesity, depression, and inflammation, to name only a few areas.

CF: I recall you telling me as I started my first job as an independent investigator that it is “alluring to go straight to interventions, do not do that. ”That has been very good advice, but came with some resistance from those in the medical school environment. Can you articulate why you think this is so important for a young investigator in our field to establish a program of research before moving into interventions?
JK-G: Interventions are high reward, potentially, but extremely high risk. They are always far more labor-intensive than they appear at the outset, and there are so many ways they can fail, including insufficient recruitment that stretches the required time far beyond what was projected, dropout rates that will make reviewers unenthusiastic, and much more. If the trial is not relatively fast and a clear success, a young investigator who is up against a funding and/or tenure clock can find him or herself without sufficient productivity despite the massive investment of time.

CF: What are the most important skills a psychologist or behavioral scientist who wants to go into the field of biobehavioral health should obtain?
JK-G: Statistical skills are essential, it is so very important to know how to analyze your data early in your career, and how to write it up clearly. When you become more senior you may have funding on grants for a biostatistician.

A good grounding in the biology of your chosen area is also essential. For example, a student who wants to do research in psychoneuroimmunology needs to have a basic knowledge of the immune system. In addition, in an area like psychoneuroimmunology where the behavioral person typically works with an immunologist, you need to be able to talk with your collaborator in their language, because they are unlikely to speak yours. Finding a good collaborator who brings skills you lack to your joint work is golden.

CF: You are now the director of the Institute for Behavioral Medicine Research at Ohio State College of Medicine. Can you describe your role, and what this institute does?
JK-G: The IBMR is a wonderful collection of researchers who represent nine different disciplines including psychology, psychiatry, immunology, endocrinology, molecular biology, neuroscience, microbiology/the microbiome, anesthesiology, biostatistics, and nutrition. It is precisely because we are so diverse that we can address questions from multiple disciplinary perspectives. We have incredibly talented animal modelers who work side by side with human researchers, and it is a pleasure to be in one of our seminars where IBMR researchers are discussing different approaches to a question.
My role is to encourage and support my stellar faculty, and to work with the College of Medicine administration on our behalf.

6728 Old McLean Village Drive | McLean, VA 22101-3906 | Tel: 703-556-9222 | Fax: 703- 556- 8729 |

Newsletter

Winter 2019

Neuroscience Programming

Richard D. Lane, MD, PhD

There is exciting neuroscience programming in this year's program. Here are several highlights.

On Saturday morning the Paul D. MacLean Award for Outstanding Neuroscience Research will be given to Antonio Damasio, who is University Professor, David Dornsife Professor of Neuroscience, Psychology and Philosophy, and Director of the Brain and Creativity Institute at the University of Southern California, Los Angeles. Trained as both neurologist and neuroscientist, Damasio has made seminal contributions to the understanding of brain processes underlying emotions, feelings, and consciousness. His work on the role of affect in decision-making has had a major impact in neuroscience, psychology, and philosophy. He is the author of numerous scientific articles and is regarded as one of the most eminent psychologists of the modern era. In addition to his plenary lecture in the morning, he will participate in an open roundtable discussion later that afternoon.

On Thursday afternoon an invited panel will present on "interoception," an important and emerging topic particularly relevant to this year's theme.Interoception describes the afferent communication of sensory information about the internal state of the body to the central nervous system and its subsequent processing. Interoception is fundamental to the homeostatic coordination of physiological processes within, and across, visceral organ systems. Interoceptive information orchestrates reactive and anticipatory control of internal bodily responses to challenges at multiple levels (internal pathology, external environment, behavioral, social or cognitive). In the content of psychosomatic medicine, interoception links the internal health of the body to normal and abnormal motivational and affective states, to the experience of physical symptoms, and to dysregulation of allostatic physiological responses to biopsychosocial challenges, maintaining maladaptive stress responses and health behaviors. We are fortunate, therefore, to have presentations from four leading experts in this area – Frederike Petzschner, Sarah Garfinkel and Sahib Khalsa who will present foundational concepts and major empirical findings and Hugo Critchley (2017 MacLean Award winner) will be the discussant.

Interoception is grounded in computational neuroscience, which has provided a powerful new way of understanding the functional architecture and dynamics of the human brain in interaction with the body and has garnered support in a variety of psychological and biological domains. A symposium on Friday afternoon titled "The Necessary Inseparability of Mind and Body: Implications of Computational Neuroscience for Psychosomatic Medicine" will include presentations on recent findings and conceptual advances by Sahib Khalsa, Ryan Smith, Frederike Petzschner and Hugo Critchley and Richard Lane will be the discussant. Later in the afternoon these investigators will be joined by Sarah Garfinkel in a friendly and informal roundtable discussion on computational neuroscience – answering questions, discussing basic principles and providing guidance about how to get started in this line of research.

American Psychosomatic Society

Newsletter

Winter 2019

Microbiomes!

Desiree Delgadillo-Chase, BA and Gerry Giesbrecht, PhD, RPsych

Microbes permeate and influence nearly every living system on the planet from the ocean to the human body. Like a finger print, every human has their own personalized microbiome which is thought to be in ongoing, bidirectional conversations with other body systems, such as the brain. This year's program offers a cornucopia of microbiome content including a keynote address by Emeran Mayer (Executive Director of the Oppenheimer Center for Neurobiology of Stress and Resilience at UCLA, Ted Talk lecturer and author of the book The Mind-Gut Connection: *How the Hidden Conversation Within Our Bodies Impacts our Mood, Our Choices, and Our Overall Health*), an invited microbiome panel with Kirstin Tillisch, Karl Maier and Brett Finlay (author of Let Them Eat Dirt: *Saving Your Child from an Over Sanitized World* and The Whole-Body Microbiome: *How to Harness Microbes-Inside and Out-for Lifelong Health*), and a roundtable discussion that will give opportunities for microbiome newbies and microbiome experts to share ideas. If that wasn't reason enough to join us, this year's APS will also include paper sessions on the newest discoveries in the mind-microbiome connection with topics ranging from a new brain-gut approach to psychotherapy to an exploration of the fascinating connections between microbial profiles and fear, anxiety, diet and mood, IBS, and asthma. We hope you can join us as we learn more about how this extra human microcosm within us might be influencing our cognitions, emotions, behaviors and mental health.

AMERICAN PSYCHOSOMATIC SOCIETY

Newsletter

Winter 2019

Charity Initiative

Crista N. Crittenden, PhD, MPH

Last year the Program Committee created a new charity initiative in an effort to give back to the communities in which we hold our annual conferences. This year, the charity sub-committee has chosen the Eastside Downtown Women's Centre (DEWC) of Vancouver to be the recipient of our efforts. DEWC is an amazing organization located in one of the most vulnerable neighborhoods in the city. Please check out all the good work they are doing at dewc.ca. As with last year, we will be holding a silent auction on Saturday night right before the banquet. What is a silent auction exactly? Auction items will be displayed on tables, and a bid sheet will accompany each. Bidders will place their names and bid amount on the sheet, and when the auction time is up, whoever has the highest bid wins! Up for auction will be many local arts and crafts and souvenir items, as well as books signed by APS leaders. We will also be having other fun charity activities throughout the conference -- so be on the lookout! Let us show DEWC and Vancouver what APS can do!

Downtown Eastside Women's Centre

Top Reasons to Attend the APS Banquet

Authors: APS Banquet Loving Attendees

The APS banquet is held every year on the last night of the conference. Why should you give up your Saturday night to party with APS, you might ask? Well...

1. You get to break it down to excellent music from a live band. Everyone dances: senior scientists, past and current APS leadership, practitioners, early career scientists, trainees, +1s...seriously, EVERYONE.

2. You can have an engaging conversation about exactly how many seconds it will take between when the first song starts and when the first person moves on to the dance floor (last year, it was exactly four seconds).

3. Advisors have the opportunity to embarrass/impress their trainees by being that first person out on the dance floor.

4. Banquet registration includes free drink tickets! Need we say more?

5. You can meet some awesome new collaborators out on the dance floor.

6. The food is delicious, local, and includes a wide variety of options (including vegetarian).

7. For the first time in four days, you have the choice to wear something that is NOT conference attire, so ditch that suit jacket!

8. You get to have one final, amazing night catching up with old conference friends and continuing to make new ones.

We'll see you on the dance floor!