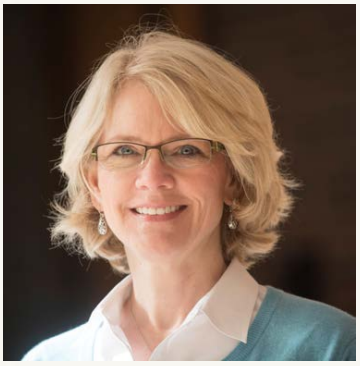
American Psychosomatic Society

Newsletter

Winter 2020

President's Message

Sue Everson-Rose, PhD, MPH, APS President



Season's greetings! With another year upon us, it is good to take time to reflect on the lessons and blessings of the past year, set new goals, and consider the ways we can best renew and revitalize ourselves, our relationships, our work, and our world around us. APS has had a very good year: an exciting annual meeting, a renewed focus for Council on values-driven and goal-oriented plans and activities, a successful journal publishing cutting edge and state-of-the art psychosomatic science, and continued engagement with colleagues and professional organizations from across the world. I so appreciate this Society, the work that it promotes, and the opportunities it creates for meaningful, engaging scholarship.

Council updates

In my role as APS President, I chair our monthly Council meetings. I want to highlight some of the actions Council has taken and discussions we have had in the last few months. As I noted in the last newsletter, there is particular energy amongst our leadership team to provide more opportunities and recognition to mid-career members. Accordingly, Council recently approved a new Fellows program that is being implemented in 2020 to recognize sustained excellence in scholarship and/or professional contributions to the field of psychosomatic science and commitment to the American Psychosomatic Society of members who are more than 10 years past their highest academic degree or clinical training. The idea for this new *Fellow of the American Psychosomatic Society* program, or "FAPS", originated out of the Membership Committee, led by Drs. Erin Costanzo and Ian Kronish, and with the leadership of our Council liaison to that committee, Dr. Gail Ironson, and Council input, evolved into a means of honoring our accomplished members who are mid-career and beyond who especially have contributed to making our Society and the science we represent rigorous and impactful. More information about FAPS and details on how to apply for this recognition will be available soon.

The Membership Committee also proposed, and Council unanimously supported, a new category of Early Career Membership for persons who have recently completed their training (e.g., post-doc or residency) and are in the early phase of their independent career. Specifically, this new category of membership offers discounted annual dues for up to 2 years for persons transitioning from Associate Membership (offered to those in training roles) to Regular Membership. The goal of this new membership category is to maintain a vibrant, diverse membership, in line with our APS Strategic Goals, by encouraging retention of Associate Members within APS who are moving into their independent careers.

To support our strategic goal of translating our scientific findings for clinical application and relevance, Council has discussed establishing a Clinicians' Committee. Simultaneously, the

Professional Education Committee (PEC), co-chaired by Dr. Dianne Lattemann and Dr. Vanessa Hux, while reviewing their committee's scope and responsibilities, suggested ideas for ways in which the PEC can support clinical translation of the terrific science that is done among our members. Given their ideas, we may not need a separate Clinicians' Committee, per se, but will work with the PEC as they seek to re-align their focus and activities in line with our strategic goals. Furthermore, the time is right to evaluate the current educational and professional development needs of APS members, since the ways in which we work and generate and share knowledge have been transformed since the PEC originated. A short survey is being designed to gather this information and Membership will be polled within the next 6 weeks to gain input on what members are seeking in these areas.

Additionally, we are very excited to report that Council voted unanimously to join the Federation of Associations in Behavioral and Brain Sciences (FABBS), which is a consortium of behavioral science and brain science societies that was formed nearly 40 years ago to represent and advance the sciences of mind, brain, and behavior. APS' membership in FABBS begins in January 2020. There are benefits to individual members as well as to the Society as an organization. In particular, the advocacy work that FABBS does will help us in our strategic goal to promote and sustain scientific excellence in psychosomatic medicine. As described to me by Dr. Roxy Silver, the President-elect of FABBS, "FABBS seeks to promote scientific research and training in these fields, seeks to educate the public about the contributions of research to the health and well-being of individuals and society, promotes communication among scientists, and recognizes scientists who have made significant contributions to building knowledge. Importantly, FABBS also serves a critical role in communicating about behavioral and brain science and lobbying the government to support funding for our science and for policies informed by the best possible scientific bases." Please see https://fabbs.org/fabbs-foundation/ for more information about the organization. To learn more about the benefits APS members receive and have access to by virtue of our Society's membership in FABBS, please see this document, provided to me by Juliane Baron, Executive Director of FABBS.

Council also voted to retain a 2-year model for the Program Committee chair and is pleased to note that Dr. John Ruiz, in addition to leading the efforts in planning the 2020 meeting will be at the helm again for planning the 2021 meeting. Council also voted to increase our speakers' budget for the annual meeting for the first time in over a decade.

These highlights showcase many of the important "behind the scenes" activities of the Society. I view Council as the leaders "steering the ship" but it really is the vibrant membership from across disciplinary lines that make up the heart and soul of this Society. We are looking forward to a wonderful meeting in Long Beach. Stay tuned for more details about the meeting in the next edition of the newsletter.

As President, I also Chair the Nominating Committee for APS and am pleased to have a terrific **slate** of candidates for 2020. Please watch your email for details on the voting process.

As ever, if you have any questions, concerns or suggestions, please feel free to reach out to me.

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American Psychosomatic Society

Newsletter

Winter 2020

From the Editor's Desk

Annie Ginty, PhD, APS Newsletter Editor

Happy New Year! I hope everyone's 2020 is off to a great start. I know receiving this issue so early in the year is definitely going to help with the great start.

The current issue is packed full of exciting news and content.

President Dr. Susan Everson-Rose's thoughtful column provides updates regarding the outcomes of several important efforts Council has been working on. Be sure to check out the column to learn more about the Fellow of the American Psychosomatic Society program, the new option for an Early Career Membership, a possible Clinician's Committee, the joining of the Federation of Associations in Behavioral and Brain Sciences, and much more! I am thankful to be a part of society where the Council is continuously driving the society forward and developing exciting new initiatives.

Program Chair Dr. John Ruiz, provides an Annual Meeting Update packed full of information about the 2020 Annual Meeting. The Program Committee has been hard at work. Check out his column for information regarding the number of scheduled talks (234!), plenary lineup, award winners, virtual attendance, and a list of activities to partake in while in Long Beach.

Dr. Willem (Wijo) Kop, *Psychosomatic Medicine* Editor, highlights several cutting-edge recent papers in *Psychosomatic Medicine*. It is always impressive to see the diversity of study designs and topics the journal covers. Additionally, Dr. Kop shares the results of the readership and author surveys.

For the 'Meet the Scientist' section, you will have the opportunity to read an extensive interview with Dr. William (Bill) Lovallo. Dr. Lovallo has been an influential and familiar face at APS for several decades. He has served the society in many capacities: Chair of the Program Committee, a member of the Council and Executive Committee, Chair of the Finance Committee, and President.

Travel north (well north of Texas) to Vancouver and Michigan for the 'Meet the Lab sections.' Dr. Eli Puterman shares the diverse and innovative work his laboratory, the Fitness, Aging, & Stress (FAST) Lab, is conducting at University of British Columbia. Dr. Puterman also highlights new work on Omics Profiling. Dr. Alyssa Cheadle discusses the interdisciplinary work of her laboratory at Hope College, the Laboratory for the Investigation of Health, Religiousness, and Spirituality (LIHRaS). Dr. Cheadle also discusses the creative way she incorporates undergraduates into her program of research and how she uses *Psychosomatic Medicine* in her courses.

I hope everyone enjoys reading this issue. A special thank you to Degnon Associates for all of their assistance in making this newsletter possible. If you have any comments or questions, please

contact me by email at Annie_Ginty@baylor.edu.

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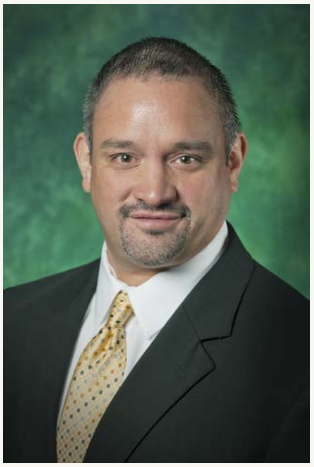
Annual Meeting 2020: Holiday Update

John M. Ruiz PhD, Program Chair



Just like Santa's elves, your APS program committee has been hard at work this holiday season! You must have been extra good this year judging by what we have in store for you. Let's take a peek in the bag and see what's coming...

Arrive Early!

Day one kicks off with two fantastic and timely preconference workshops, the Presidential Address, an APS Award Winner Talk, and a party! The era of **Open Science** is here and our first workshop is aimed at ensuring that all attendees from student to senior scientist are prepared to understand and incorporate open science principles in their work, grants, and publications. Our second workshop is a win/win for investigators and the science of health equity. Senior representatives from 4 key NIH cohort studies with significant diversity will host a **Diversity Data Workshop** with training and secondary data analysis opportunities. These events are followed by the opening address from APS President, **Dr. Sue Everson-Rose,** an award winner talk, and a welcome party that leverages California's location and beautiful weather. Put on your fancy Vans and come have fun!

A Contemporary Science of Health Equity Meeting with an APS Twist!

Each of the next three days features incredible programming from sunrise to sunset. Grab a colleague and start your day with goat yoga (it's California, so what did you expect?), paddle boarding, or a run past the Queen Mary.

Our plenary lineup features 8 (eight, ocho, acht!!!) plenary speakers, including 4 keynotes supporting the equity theme. **Dr. Eliseo J. Pérez-Stable**, Director of the National Institute of Minority Health and Health Disparities (NIMHD), will discuss the state of health equity research and NIH priorities. **Dr. Wizdom Powell**, UConn, brings expertise in the social determinants of health inequalities, including the intersection of gender and discrimination. **Dr. Robert M. Kaplan**, Stanford University, will provide a contemporary look at the science of socioeconomic status on health and raise questions about sociocultural targets vs. biomarkers as key leverage points to health equity. Finally, **Dr. Steve Horvath**, UCLA, will speak on molecular biomarkers of aging including the epigenetic clock and its application to phenomenons such as the Latino Mortality Paradox. In addition, the meeting features a plenary symposium on LGBTQ health equity featuring an all-star lineup of **Drs. David Huebner**, **Susan Cochran,** **Mark Hatzenbuehler,** and **Greg Millett** of AmFar. All of this leads to a packed meeting replete with scheduled and submitted programming that represents the cutting edge of psychosomatic health equity science.

Award Winners!

Oh, and did we mention the award winners??? APS 2020 features talks and events from the

incredible list of 2020 award winners including:

- **Dr. Karen Matthews**, winner of the Distinguished Scientist Award
- **Dr. Anna Marsland**, recipient of the Patricia R. Barchas Award in Sociophysiology
- **Dr. Christopher Fagundes**, recipient of the Herbert Weiner Early Career Award
- **Dr. Nim Tottenham**, winner of the Paul D. McLean Award
- **Dr. Hochang Ben Lee**, recipient of the Donald Oken Fellowship

Congratulations to all!

Additional Features

Additional programming includes invited symposia on environmental health disparities, pain disparities and treatment equity, and an out-of-this world symposia describing the psychophysiological effects observed in the NASA Twin Study recently featured on the cover of Science!

MD's, Trainees, and Mid-Career folks will also enjoy a full menu of daily focused-programming. Panels, paper sessions, symposia, book readings, grand rounds, and themed happy hours are just some of the highlights we have lined up for you.

Need a space to work out an idea with APS collaborators? We have a spot for you. The ***APS Collaboratory*** is a private, quiet space aimed at helping you capture the moment and leave the meeting having advanced your science. The *Collaboratory* has white boards, computers, printers, markers, paper, pens, coffee, snacks, and other essentials to facilitate your work.

Virtual Attendance. For the first time, APS is preparing a streaming package to accommodate those who can't make the trip to Long Beach, but don't want to miss key events. More information on this new development will be coming soon.

A record number of submissions!

All this is complemented by a massive slate of submitted programming. **We received the largest number of abstract submissions in APS meeting history and we're not done yet.** The program features an additional 234 talks clustered across 58 paper and symposia sessions. APS 2020 also features "Generations Symposia", which describe longitudinal, lab-driven work at the highest level. We've added a fourth poster session to accommodate the prolific science plus the Citation poster session. Notably, the Citation session is moving from night one to day two to allow greater focus on the best submitted science of the year. With this amount of material, attendees will have to make hard choices about what to see and what to miss.

One more chance to get in!

Missed the original submission window? Fear not - the "Late-Breaking" portal is now open through January 17th! There are two tracks -- 1) Late-breaking clinical trials and 2) Late-breaking everything else. Submit your work, grab your colleagues, and come to Long Beach!

Beyond the conference!

And while in Southern California make plans to visit Disneyland's new Star Wars: Galaxy's Edge, the incredible rides at Knott's Berry Farm, or Universal Studios Hollywood, go whale watching, drive the PCH in a convertible, try axe throwing, take a boat to Catalina Island, skateboard the beach paths, catch a Lakers game, spot celebrities, visit local breweries and food trucks, or shop till you drop. It's APS 2020 in Long Beach, California!

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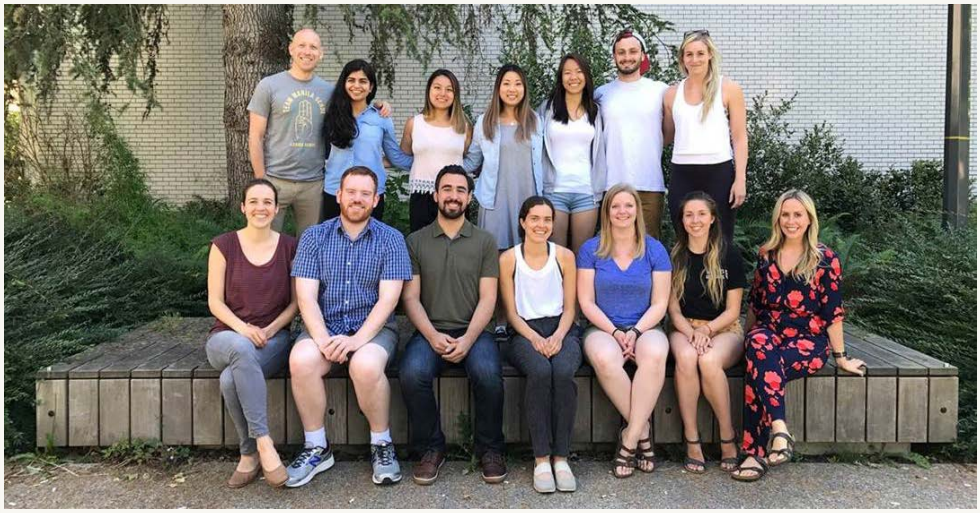
Meet the Lab...*Fitness, Aging, & Stress (FAST) Lab*

For the "Meet the Lab" we travel to University of British Columbia to meet the Fitness, Aging, & Stress (FAST) Laboratory. Dr. Eli Puterman is the director of the laboratory. The FAST Lab takes a unique approach to understand the interplay among stress, aging, and exercise. They aim to elucidate how physical activity acts as resilience for optimal health. The FAST lab conducts observational research and implement intervention trials to study both acute and long-term exercise. We were fortunate enough to interview Dr. Puterman. Please read below to see the diverse and innovative research the FAST Lab is currently conducting.



APS: Can you tell us a little about yourself and what you study in the FAST Lab?

EP: I am currently an Assistant Professor, Canada Research Chair Tier 2 in Physical Activity and Health, and Michael Smith Foundation for Health Research Scholar at the University of British Columbia's (UBC) School of Kinesiology.

My research focuses on the effects of long-term physical activity engagement and an acute bout of exercise on psychobiological and immune cellular processes that underlie disease pathogenesis in individuals with chronic distress. I'm currently pivoting to develop and evaluate movement-based programs for children and adults who are underserved, understudied, and marginalized, including children with obesity and women living with HIV. Over the next 5 years, I also aim to complete a series of laboratory-based studies to understand how features of a single bout of exercise, including intensity and mode, correspond to variations in psychobiological responses to a subsequent acute stressor that induces psychological threat.

Together, these studies will reveal integrated human psychobiological mechanisms that underlie responses to long-term and short-term psychological stress *and* exercise, ultimately advancing knowledge of the system-wide effects of exercising in the field of behavioural neuroscience.

APS: How did you become interested in a research and academic career?

EP: This is going to be a convoluted answer.
I was originally convinced I was going to be a medical doctor, since I was 5 - that's what my parents told me I'd become! But after completing my first undergraduate degree in Physiology at McGill University in Montreal, I became convinced my passion was to become a clinical psychologist. So, I completed undergraduate credits in Psychology at Montreal's Concordia University. Following a successful MA in Clinical Psychology at the University of British Columbia, I became more passionate about the thinking and solving required for research than for clinical practice and transferred to the newly created Health Psychology area in UBC's Department of Psychology's graduate program. I've never looked back from this decision, because I love the scientific approach to exploring how exercise can benefit our minds and bodies, especially when we experience stress.

Also, I get along with most people (Aric Prather might disagree with that) and the collaborative spirit in research inspires me, and keeps me going through the dark times (like all the failed grants). This academic career has provided me with a sense of fulfillment that I never really thought possible in my choice of profession.

APS: What are some of the research questions your lab is focusing on now?

EP: I currently have three big research questions that my team of graduate students and I are focusing on right now.

First, we're using national and nationally representative data from across the globe to determine the long-term effects of stress on both the healthspan and lifespan. In one of these studies, for example, my student and I are using national data on stress and exercise, collected in thousands of Canadians, to determine their prospective interactive effects on medication use, disease diagnosis, and mortality.

Second, my team is determining the proteomic, metabolomic, and socioemotional effects of a 10-week family-directed lifestyle program for children with obesity. This program, Shapedown BC, has been active across the province of British Columbia for over a decade, and we're testing its molecular impact, as well as its impact on social and emotional health in these children.

My team is also examining the immediate effects of the intensity, duration, and modality of a single bout of exercise on psychological and physiological reactivity and recovery to psychological stressors induced in the lab. We are hoping to discover some of the immediate affective, cognitive, and physiological mechanisms through which exercise benefits adults with and without psychiatric disorders.

APS: If you had to pick only one research finding from your work that was most interesting or surprising, what would it be?

EP: I think the most interesting research finding from my work would be the results from my randomized controlled study that investigated the impact of aerobic exercise on traditional and novel markers of aging in highly stressed family caregivers of Alzheimer's patients. We not only shifted perceived stress, weight, and cardiorespiratory fitness, but telomeres also lengthened in the study. These results are the first to show effects of exercise on a marker of cellular aging, not just observationally, but through an intervention. These results were published in *Psychoneuroimmmunology* in 2018 (and received the Curt Richter Award from the International Society of Psychoneuroimmmunology).

The most surprising results are different though! My work published in *Health Psychology* in 2017 used national data from the Midlife in the United States Study, and demonstrated that adults who maintained a physically active lifestyle react less intensely to stressful events during their everyday

lives, compared to those who are less physically active. These results really speak to the fact that physical activity not only impacts the pathogenesis of physical or psychological disorders, but also how we feel every single day and react to events that happen, even minor ones.

APS: The focus of your research is truly interdisciplinary, ranging from examining cellular aging to randomized exercise trials. When hiring members of your laboratory (research assistants, graduate students), what type of previous experience do you look for?

EP: I look for students who get excited by research in the science I pursue, where you can see a sparkle in their eyes when they speak about this research field. I also look for students who have shown, during their undergraduate or graduate degrees, that they can succeed in course work, and apply their course materials, volunteer experiences, and even their paying jobs to the research environment. My team is typically diverse, with some developing expertise in data driver statistical approaches using national datasets, and others becoming experts in laboratory-based experimental designs. I work with students to design studies that develop their skills based on their career goals.

APS: You recently published a paper in *JAMA Pediatrics* on Omics Profiling and pediatric obesity. Can you explain to readers what Omics Profiling is? What most excites you about the future of this line of research?

EP: Omics profiling is the investigation of molecular determinants of health, not just your typical traditional measures like cholesterol, fasting glucose, or BMI. Omics profiling can range from determining individuals' genetic makeup (i.e. genomics) and methylation of genes (i.e. epigenomics) to determining the circulating proteins (i.e. proteomics), metabolites (i.e. metabolomics), and gut microbiota (i.e. microbiome). By taking a more 'microscopic' approach to investigating the thousands of circulating molecules or genetic polymorphisms, we can begin to discover unique profiles for individuals who have specific chronic conditions. We can also layer in social and economic circumstances into this profiling, to help develop and tailor interventions towards these omic profiles that are unique to specific populations. It truly is the future of intervention research, where programs are tailored to unique profiles of individuals, since the typical solution of 'one size fits all' is failing many individuals medically, behaviourally, and psychologically. This type of research cannot happen in a vacuum, of course, and requires collaborations across campus and the globe.

APS: Some of your recent work discusses the importance of focusing on health promotion in high adversity communities. What specific at-risk population or communities are you working with currently or hope to work with in the future? Why have you chosen this specific population or community?

EP: In addition to children with obesity, who are more likely to emerge from understudied, underserved, and marginalized communities, I am also developing a dance-based program for women living with HIV.

It's a great question, 'why this population or community'? When I was growing up, my family lost all of their financial comforts, and I went from living in smash to living in, wellâ€¦ not such great circumstances. I experienced social, emotional, and financial pains along the way from childhood into adulthood as a result of these experiences. Layer into that the realization that I was gay in the 90s, when being gay was only just starting to be accepted but was still considered a "less-than" experience than being straight. I have been lucky to emerge with a strong sense of self, an almost free education (thank you Canada!) but have not forgotten the struggles and adversity of my past. For me, every marginalized community member is different, but many of us share the stories of having some type of adversity in our lives. Developing community and individual based programs to support the health and wellbeing of individuals who have experience adversity and trauma is emerging as my life goal.

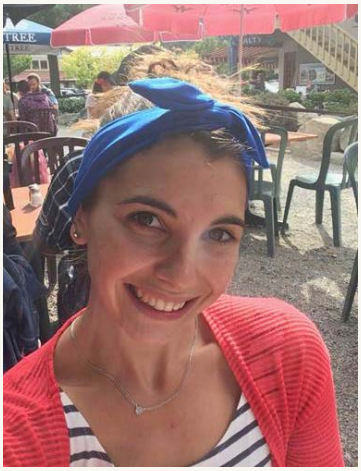
APS: How is the lab structured?

EP: I have 1750 square feet of lab space, including shared graduate student space, a meeting room, a phlebotomy chair for blood draws, a cardiorespiratory fitness room with two treadmills and an ergometer, a wet lab with a biosafety cabinet and -80C and -20C freezers, and two rooms for data collection and stress induction. My office is also in this space, so I get to interact and work with my students daily. I currently have 4 graduate students, two in the first year of their doctoral studies and two completing their masters. We also have a wonderful lab manager who coordinates many of our projects, which relieves some of my and my team's efforts throughout the data collection process. Our team meets weekly as a group to discuss project goals, and I have an open door policy for students to come and (harass me) ask me questions.

APS: Are there any unique aspects of the FAST lab?

EP: I think the collaborative spirit and comradery among the students in the lab is what makes our lab unique. Students truly get along with one another, and it's really lovely to see and experience.

PhD Students
Nicole Mazara



Nicole is a first year PhD student at UBC, and her background is in human physiology, with a focus on exercise and movement, and cognitive psychology. She studied cellular aging of human skeletal muscle during her MSc at the University of Guelph in Ontario, which led her to move into more interdisciplinary research. Her current work is focused on the physiological profile of the stress response in individuals who have experienced trauma, how it is different from individuals who have not experienced trauma, and if exercise attenuates the difference between those with trauma backgrounds and those without.

Ben Hives

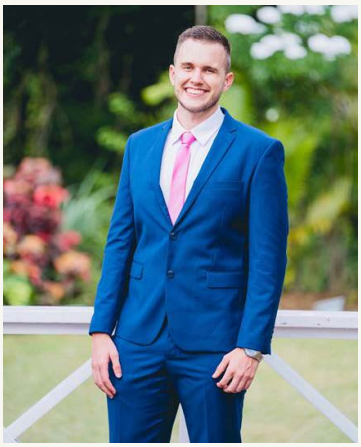
Ben is a first year PhD student, having recently completed his MSc with Dr. Puterman. His research interests include chronic stress and physical activity in epidemiological contexts.

MSc Students
Luke Peddie

Luke is a second year M.Sc. student in the School of Kinesiology under the supervision of Dr. Eli Puterman. While completing his B.Kin., Luke was a member of the Canadian national swim team and competed as a varsity athlete for 5

years. His career in competitive swimming has shaped his research goals and has driven him to examine the relationship between psychological stress, performance and responses to exercise in a healthy female population. This research will involve the examination of psychophysiological mechanisms and models that predict the relationship between stress, performance, and health. Luke is also completing a research project which involves assessing the physical and psychological health benefits of exercising outdoors compared to exercise performed indoors.

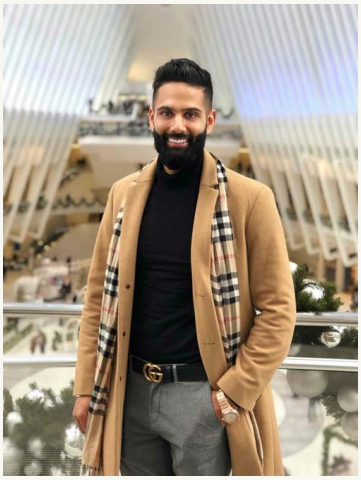
Joshua Webster



Josh is a student at the University of British Columbia in Vancouver pursuing a M.Sc. in Kinesiology. He recently completed his M.B.B.S. degree at the University of The West Indies CaveHill Campus in Barbados. Prior to that, he completed a BSc. in Chemistry (Major) and Biochemistry (Minor). He is an aspiring sports focused physician, with interests in holistic medical practices and research focusing on the interplay of stress, exercise and disease. His current research is aimed around the impact of exercise on cortisol responses to a subsequent psychosocial or physical stressor.

Arpreet Singh

Arpreet is currently the lab manager and research coordinator in Dr. Eli Puterman's FAST lab. He completed his Master of Public Health degree at Simon Fraser University where he specialised in population health and epidemiology. His prior research interests included the field of HIV/hepatitis C, and injury prevention in children and youth. He is excited to join this field and learn more about stress, ageing and physical activity.



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Meet the Lab...*Laboratory for the Investigation of Health, Religiousness, and Spirituality (LIHRaS)*

For the "Meet the Lab" we travel to Hope College in Holland, Michigan to interview the Laboratory for the Investigation of Health, Religiousness, and Spirituality (LIHRaS). Dr. Alyssa Cheadle is the director of the laboratory. The LIHRaS focuses on resilience; maternal health; and religious, spirituality and health. The laboratory is actively developing a new scale, collecting data, and conducting secondary data analyses. We were fortunate enough to interview Dr. Cheadle. Please read below to see Dr. Cheadle's unique approach to mentoring a laboratory with primarily undergraduate research assistants.

APS: Can you tell us a little about yourself and what you study in your lab?

AC: Hello, APS! My name is Alyssa Cheadle and I am currently an Assistant Professor of Psychology at Hope College, a liberal arts college in Holland, Michigan. At Hope, I teach Health Psychology and Research Methods and conduct research with undergraduates in my Laboratory for the Investigation of Health, Religiousness, and Spirituality (LIHRaS). I completed my PhD at UCLA in Health Psychology under the mentorship of Dr. Christine Dunkel Schetter after completing a Masters in Theological Studies at Harvard Divinity School and a BA in Biology at Luther College. Broadly, my work focuses on how and why religiousness and spirituality are associated with mental and physical health.

APS: Can you give us a sneak peek on the types of questions your lab is tackling in the near future?

AC: We have three major areas of focus: religiousness, spirituality, and health; maternal health; and resilience.

Currently, we have a number of projects going on. Our major data collection effort is aimed at validating the Resilience Resource Scale that I developed with Melissa Julian, Chris Dunkel Schetter, and others at UCLA. In addition to collecting data, we conduct secondary data analyses. In a collaboration with social psychologist Daryl Van Tongeren at Hope College, we are working on an examination of the health of individuals who were previously religious, but no longer identify as such. We have a few projects on maternal and women's health that are in the very beginning stages or in manuscript preparation. Last, one of my students, Kim Paquette, is conducting a student-driven project on how religiousness and spirituality are associated with mental health and late effects of polio in polio survivors. Look for her poster at APS in March!

APS: What do you think are some important unanswered questions in the intersect between religiousness and health?

AC: It is well established that there are associations of religiousness and spirituality with better mental and physical health. My main interest is why that is: what are the mechanisms of this relationship? Though many have been proposed, few have been systematically tested. My

program of research is aimed at answering this question.

APS: Hope College is a liberal arts, baccalaureate institution. What are some ways you incorporate undergraduate students into your research program?

AC: Hope College has a strong tradition of faculty-student collaborative research. Each semester, several students volunteer their time or receive course credit to work in my lab on current projects. During my four years at Hope, I have worked with over 20 students in this way. Working with undergraduates is different because I often meet them as Sophomores or Juniors and I can't keep them around after graduation as much as I would love to! This model necessitates developing a lab structure that allows students to learn from me and from each other while doing tasks appropriate to their level of training and ability. I approach my lab as part of my teaching just as much as it is part of my scholarship.

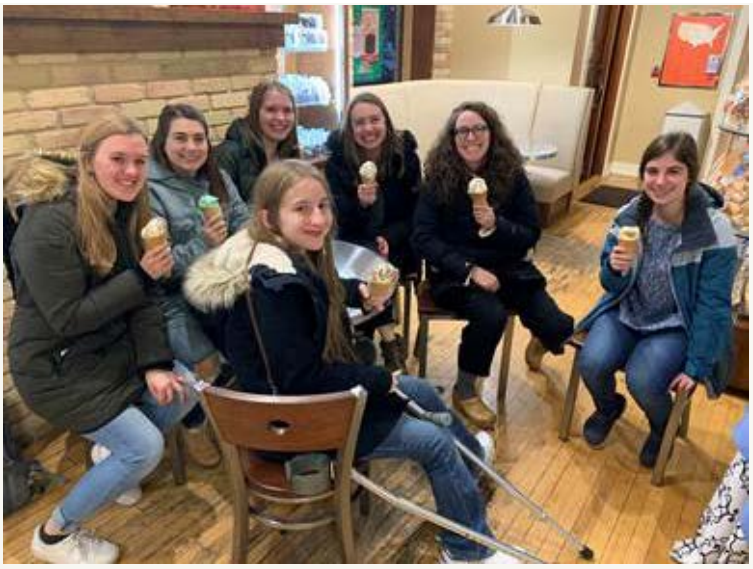
APS: How is the lab structured?

AC: In a semester, I have had as few as three and as many as 10 research assistants in my lab. Typically, students stay in the lab for 2-6 semesters. I like to group them into teams that include at least one senior student and one student who is new to the lab to create opportunities for peer mentorship about research and college in general. The number and size of the teams varies depending on the projects we have going on. In addition to research projects, lab members maintain a database of new literature relevant to our projects and work on professional development goals like preparing CVs and presenting research.

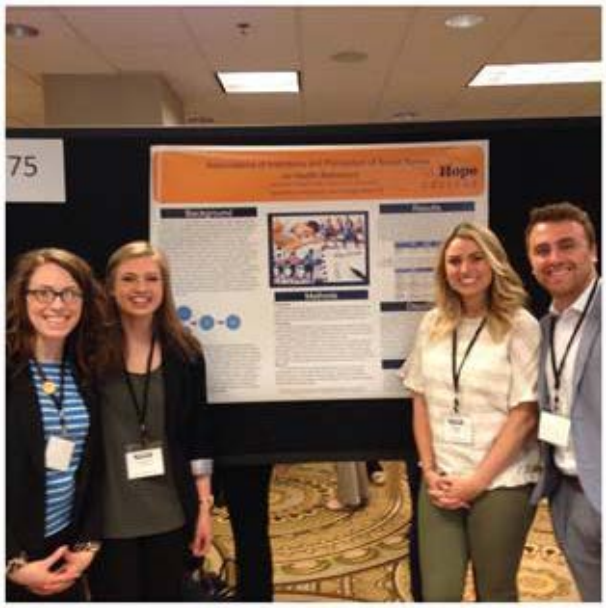
APS: Have you created any unique assignments for students in your courses? If so, what is your favorite one?

AC: I frequently use the APS journal *Psychosomatic Medicine* in my Health Psychology seminar course! In addition to course content readings, I assign one recent *Psychosomatic Medicine* article for each of our major course topics (about a dozen in total). All students read the articles and take turns leading the discussion of the article in pairs. If you have published an article in *Psychosomatic Medicine* in the last 3 years that is accessible to undergraduate readers, it is very likely I have assigned it to my class!

From left to right: Victoria Gardner, Emily Blackwell, Kimberly Paquette, Dr. Alyssa Cheadle, Nina Cuthrell, Amy Osterbaan, and Lilly Hemesath



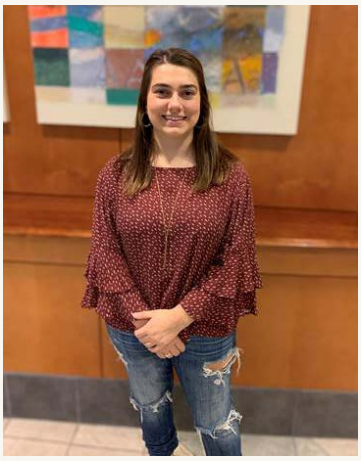
From left to right: Lilly Hemesath, Nina Cuthrell, Amy Osterbaan, Emily Blackwell, Kimberly Paquette; front: Victoria Gardner



Lab Alumni, left to right: (Alyssa Cheadle), Allison Johnson, Reagan Spindler, Samuel Kuiper

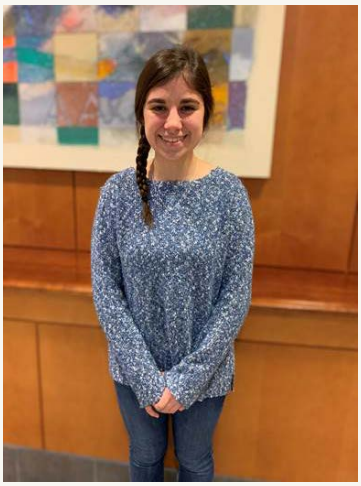
Individual lab members:

Lab member **Amy Osterbaan**: Amy Osterbaan is from Cascade, Michigan. She is a Junior majoring in Psychology and Exercise Science and plans to pursue a career in Occupational Therapy. She says, “I do research because I enjoy learning about health psychology and research methods through active participation!”

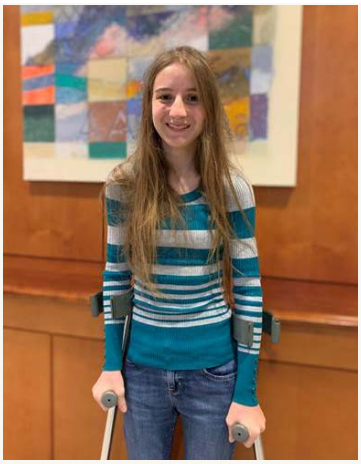


Lab member **Nina Cuthrell**: Nina Cuthrell is from Bath, Michigan, “right down the street from East Lansing.” She is a Sophomore majoring in Psychology on a pre-med track to become a Pediatric Gynecologist. She says, “I do research with Dr. Cheadle because her research combines my two favorite things: health and psychology!”

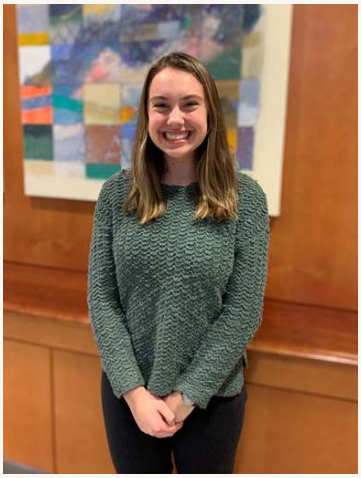
Lab member **Kimberly Paquette**: Kimberly Paquette is from Hartland, Michigan. She is a Junior majoring in Biology and Psychology on a pre-med track and hopes to attend medical school and train in Neurology. She says, “I enjoy doing research in Dr. Cheadle's lab and especially find it interesting to analyze the relationship of religiousness and spirituality on different health outcomes.”

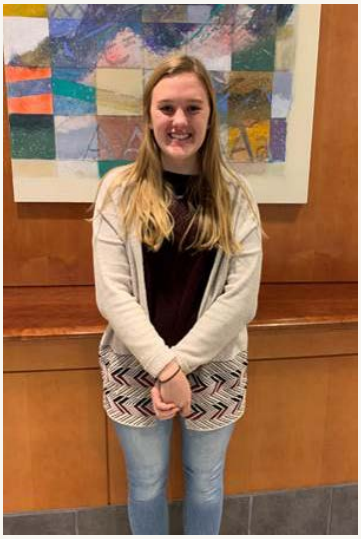


Lab member **Victoria Gardner**: Victoria Gardner is a Senior from West Bloomfield, Michigan and is majoring in Psychology with minors in Writing and Neuroscience. She enjoys learning about people, the brain, and behavior, and she hopes to continue her education and conduct more research in graduate school. She says, “I do research with Dr. Cheadle because she enjoys working on the aspects of psychological research (e.g., data collection, data analysis, dissemination), and she is curious about the area of study (i.e., resilience resources in college-aged individuals).”



Lab member **Emily Blackwell**: Emily Blackwell is a Junior from Libertyville, Illinois majoring in Psychology and minoring in French-Speaking Culture and Society. She aspires to become an Occupational Therapist. She says, “I am a research assistant in Dr. Cheadle's lab because I am intrigued by health psychology and want to learn more about the research process as I hope to continue doing research in graduate school and beyond.”





Lab member **Lilly Hemesath**: Lilly Hemesath is a Junior from Libertyville, Illinois. She is a Chemistry major with minors in Biology and Psychology. She aspires to go to medical school to study pediatrics or cardiology. She says, “I do research in Dr. Cheadle’s lab because I like to see the implications that religiousness/spirituality have in different aspects of one’s life.”

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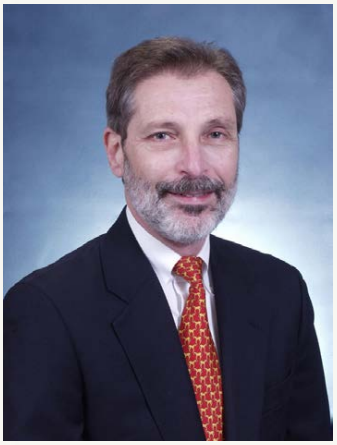
American Psychosomatic Society

Newsletter

Winter 2020

Getting to Know You...*Bill Lovallo, PhD*



Dr. Bill Lovallo is a Professor of Psychiatry and Behavioral Sciences at the University of Oklahoma Health Sciences Center and a Senior Research Career Scientist and Director of the Behavioral Sciences Laboratories at the VA Medical Center in Oklahoma City. He obtained his undergraduate degree in Psychology from the University of California at Los Angeles, his MA in Experimental Psychology from the University of Colorado, and his PhD in Biological Psychology from the University of Oklahoma. His interdisciplinary research examines relationships between life history, emotions, the stress axis and bodily outputs, and their implications for health. Dr. Lovallo served as the Associate Director of the John D. and Catherine T. MacArthur Foundation's Research Network on Mind-Body Interactions. He has served on several advisory committees and peer review panels for the National Institutes of Health and the Veterans Administration. Dr. Lovallo has over 150 peer-reviewed journal publications and is the author of a well-known textbook, *Stress and Health: Biological and Psychological Interactions (3rd ed.)*. He has served on the editorial boards of several journals in our field (*Psychosomatic Medicine*, *International Journal of Psychophysiology*, *International Journal of Behavioral Medicine*, *Annals of Behavioral Medicine*). He has impressively received continuous funding from the National Institutes of Health since 1985 and from the VA since 1979. Dr. Lovallo has served the American Psychosomatic Society as Chair of the Program Committee, a member of the Council and Executive Committee, chair of the Finance Committee, and as President.

APS: Were there any meaningful events that shaped your research and career trajectory?
BL: The single most important event was leaving my study of traditional cognitive psychology at Colorado and moving to the VA Hospital in Oklahoma City where I worked on a study of physiological reactions in different groups of patients. This gave me a first exposure to the simultaneous workings of the person's behavior and emotional reactions along with their physiology with an eye toward individual differences in health outcomes. Watching physiological changes in real time can be a very convincing demonstration of the connections between the mind and the body.

APS: You have spent several years conducting cutting-edge, funded research on the impact of caffeine on exercise and psychological stress. What are some important "take-aways" from this line of research?
BL: We had developed a nice stress protocol in the lab and had pioneered the use of impedance cardiography to measure cardiovascular stress responses. This allowed us to study cardiovascular patterning of emotions, such as anger and hostility, with Susan Everson and Rajita Sinha. When my graduate student, Gwen Pincomb, pointed out that no one had documented the

effects of caffeine in persons at rest and under stress using rigorous placebo controlled designs, our use of impedance cardiography showed for the first time that caffeine raises blood pressure by increasing peripheral resistance to blood flow and not by increasing cardiac output, as previously believed. The peripheral resistance finding spurred us to start studying persons at risk for hypertension, and, along with Mustafa al'Absi, we showed that prehypertensive individuals have larger blood pressure and cortisol responses to caffeine and to stress than low-risk persons do.

As a spinoff of this cortisol work, we got interested in how cortisol may affect brain function. We started administering hydrocortisone to our volunteers to match cortisol levels seen during our stress protocol. Tony Buchanan showed that cortisol increases memory for emotionally relevant material but not for neutral material. Since most of our knowledge about cortisol effects in the brain was derived from nonhumans, we used an MRI scanner to show that intravenous cortisol reaches the brain in about 17 minutes and these first responses are diminished activity in the hippocampus and amygdala, representing cortisol's negative feedback and regulation of brain function.

APS: Your recent work has been focused on examining the impact of early life adversity and genetics on alcohol use and other substance use disorders. What are you currently working on in this line of research that excites you most?
BL: Our stress work led my colleague and mentor, Oscar Parsons, and graduate students, Austin Errico, Nancy Bernardy, and Andrea King, to probe stress reactivity in patients being treated for alcohol dependence at the VA Hospital. To gloss over some detail, the patients had blunted cortisol and heart rate stress responses. This was replicated more by my student, Stacy Dickensheets, in which we improved the study design by testing patients on both a resting control day and a stress day, a design feature we still use. I next asked myself if this blunted reactivity was a consequence of drinking or a pre-existing condition. This led to our current work in persons with a family history of alcoholism. This has shown that blunted cortisol responses to stress are a pre-existing characteristic and most prominent in persons exposed to early life adversity. These individuals also have detectable differences in cognitive function, risk taking, and emotional stability.

We most recently found that blunted reactivity in response to early life adversity is confined to persons inheriting the met allele of the val158met polymorphism of the gene for catechol-O-methyltransferase. No such effects were seen in persons inheriting two copies of the val allele. Most importantly, the met carriers who experienced early life adversity were more likely to start drinking before age 15 and to experiment with drugs in high school, thereby showing a clinical outcome.

Most satisfying to me is that the impact of early life adversity and the blunting of stress reactivity has been studied by my colleagues Doug Carroll and Anna Whittaker in the UK and also by Pete Gianaros and, yourself (APS Newsletter Editor Annie Ginty), here in the US. This is going to be a rich field for further study of gene-by-environment interactions and their implications for health.

APS: I have always found your experimental study designs to be creative and fascinating. What is your favorite experimental study you have conducted?
BL: The two most important designs in our work are the use of a resting control day to better document cortisol responses to stress and therefore to display them against a clear diurnal background. More work, but worth it. My other favorite was using the repeated fMRI acquisitions to see what cortisol was doing in the brain and how long it took to happen. Really clean and simple.

APS: What is your secret to having such a successful history of National Institutes of Health funding?
BL: I think we were able to try to think through a genuine integration of biological function in relation to behavior and the emotions. This helps us to get beyond using biological indicators as

statistical constructs and to embed them fully into a biobehavioral framework. This seems to be appealing to reviewers and it advances the science. I am pleased to note that your work along with that of Pete Gianaros and Hugo Critchley are pushing this conceptual model along very nicely. The future looks good.

APS: What do you think is the most pressing research question related to stress and health? How do you see the field addressing this in the next decade?
BL: There is a huge opportunity to study early life circumstances, genotypes, and health outcomes in order to ident fy gene-by-environment interactions and health.

APS: You have had a long career as a successful mentor and have mentored many familiar APS leaders (i.e., current President Dr. Sue Everson-Rose, past President Dr. Mustafa al'Absi). What advice do you have for junior faculty members regarding mentoring graduate students?
BL: The most enjoyable facet of my career has been working with talented graduate students. I always tried to understand where they were in their career development and to help them work through the seemingly confusing swamp of uncertainty in doing science. I also hope I let them be themselves without being a micromanager.

APS: Do you have an academic idol – someone whose work fascinates or inspires you?
BL: If I get two picks, I'll say Bruce McEwen and Michael Meaney.

APS: As a history buff and lover of architecture, what is your favorite city in the world? Why?
BL: Kyoto, because it preserves such a great cultural history. Japanese design and architecture are very pure and stripped down to essentials and have an intuitive esthetic character.

APS: In the Winter 2013 edition of the American Psychosomatic Society Newsletter, Dr. Pete Gianaros stated that he felt "*strongly about being the stunt double for Bill Lovallo*" in the long-discussed APS movie. Pete went on to say the following, "*It would be an honor to get roughed up for him. But then again, I imagine that Bill would do his own stunts. He's that kind of guy*."

So, to answer the question APS members have been wondering since 2013, would you do your own stunts for the movie?
BL: I always thought Pete reminded me of Brad Pitt! I think he would be better at the stunts. I'll stick with the dialogue.

APS: If such a movie were to exist, who would you like to play you?
BL: Leonardo DiCaprio.

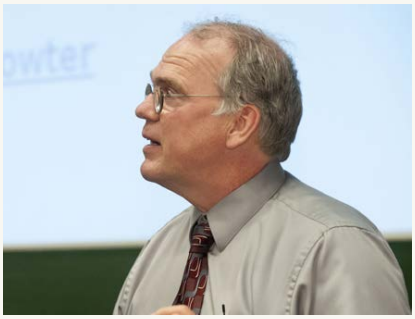
American Psychosomatic Society

Newsletter

Winter 2020

Highlights from *Psychosomatic Medicine*

Willem (Wijo) Kop, PhD
Editor-in-Chief



It is a pleasure to share results of our *Psychosomatic Medicine* readership and author survey that was sent out late Fall of last year (October 22 – November 11, 2019). The readership survey was completed by 140 people and showed, among other things, that many colleagues who completed the survey have been reading Psychosomatic Medicine for over 10 years, both in print and online. It was good to see that readers of the journal make good use of the Article Summary page, available through the Table of Contents page in each issue. Some of the readers would like to have more 'clinically applicable' articles, which fits well with our recently started series on this topic (see: Introducing a New Special Series: Clinical Applications in Psychosomatic Medicine. Boland RJ, Weihs KL, Gündel H. Psychosom Med. 2019 Feb/Mar;81(2):112-113). The quality of the journal was rated as high, also in comparison to other journals in our field. We do need to do more with social media such as twitter (78% of the respondents mentioned not following the journal on social media) and we are now working on improving that. If you are interested in actively participating in this initiative, please contact the journal's office (editorialoffice@psychosomaticmedicine.org) or the APS office.

The author survey, completed by 231 respondents, revealed that most had submitted about 1 or 2 papers to *Psychosomatic Medicine* over the past three years. The main reasons for sending papers to the *Psychosomatic Medicine* are the impact factor (3.968), followed by *Psychosomatic Medicine* being the authoritative voice within our specialty as well as the timeliness and up-to-date nature of the articles published in the journal. Authors were generally satisfied with the submission website (Editorial Manager) and the quality of the review process, although we were encouraged to further shorten the duration between submission till publication (15% of the authors were not satisfied with the overall submission-review-publication trajectory). The journal has an open access option, but only about one-third of the authors were familiar with the details in how costs can be reduced or waived; we will try to make this more clear in the near future.

We are now reviewing the individual written responses provided at the end of the survey to find other ways to improve the journal. I would like to take this opportunity to thank the publisher Wolters Kluwer (LWW journals), particularly Marianne Kerr and Ryan Brophy, and the APS office for their help in making these surveys possible. Also, I would like to thank those of you who took the time to respond to the survey – this input is very helpful to us in further improving the journal.

Let me also highlight a few recent papers that we published (ahead of print) that highlight the high quality of the articles and range of biobehavioral topics published in the journal.

Romero EK, Abdalla M, Thanataveerat A, Alcantara C, Kronish IM, Edmondson D, Shechter A.

Short Sleep Duration After Hospital Evaluation for Acute Coronary Syndrome Is Associated With Increased Risk of 6-Month Readmission. Psychosom Med. 2020 Jan;82(1):57-63. https://doi.org/10.1097/PSY.0000000000000730

Trudel-Fitzgerald C, Poole EM, Sood AK, Okereke OI, Kawachi I, Kubzansky LD, Tworoger SS. Social Integration, Marital Status, and Ovarian Cancer Risk: A 20-Year Prospective Cohort Study. Psychosom Med. 2019 Nov/Dec;81(9):833-840. https://doi.org/10.1097/PSY.0000000000000747

Gomaa N, Glogauer M, Nicolau B, Tenenbaum H, Siddiqi A, Fine N, Quiñonez C. Stressed-Out Oral Immunity: A Gateway from Socioeconomic Adversity to Periodontal Disease. Psychosom Med. 2019 [Epub ahead of print]. https://doi.org/10.1097/PSY.0000000000000774

Swanepoel I, van Staden W, Fletcher L. Psychological resilience and vulnerability as mediators between adverse life events and fatigue, motor dysfunction and paraesthesiae in multiple sclerosis. Psychosom Med. 2019 [Epub ahead of print]. https://doi.org/10.1097/PSY.0000000000000770

Moazzami K, Wittbrodt MT, Lima BB, Levantsevych O, Kaseer B, Martini A, Haffar A, Nye JA, Quyyumi AA, Shah A, Vaccarino V, Bremner JD. Neural Correlates of Stress and Abdominal Obesity in Patients with Coronary Artery Disease. Psychosom Med. 2019 [Epub ahead of print] https://doi.org/10.1097/PSY.0000000000000776

Smith LE, Weinman J, Yiend J, Rubin GJ. Psychosocial factors affecting parental report of symptoms in children: a systematic review. Psychosom Med. 2019 [Epub ahead of print] https://doi.org/10.1097/PSY.0000000000000767

Dong L, Freedman VA, Mendes de Leon CF. The association of comorbid depression and anxiety symptoms with disability onset in older adults. Psychosom Med. 2019 [Epub ahead of print]. https://doi.org/10.1097/PSY.0000000000000763

We are continuing to explore ways in which we can further improve the link between our annual meeting presentations and the papers that will be submitted for review for the journal. Also, we very much welcome new submissions in the Special Series on Clinical Applications in Psychosomatic Medicine (see Psychosom Med. 2019 Feb/Mar;81(2):112-113 for details).

I wish all of you an excellent 2020 and we are very much looking forward to receiving your papers in the coming year.

Willem J. (Wijo) Kop
Editor-in-Chief, *Psychosomatic Medicine*

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American Psychosomatic Society

Newsletter

Winter 2020

Announcements

APS Late Abstract Submission window closes January 17 at 11:59 pm PST

The European Association of Psychosomatic Medicine invites you to attend their next meeting from June 24 to 27, 2020! The EAPM conference will take place in the former imperial palace, the Hofburg Vienna (Austria) they expect up to 700 scientific presentations, including Nobel Laureate Eric Kandel, Michael Lambert, and APS President Sue Everson-Rose. For more detailed information please visit: *www.eapm2020.com.*

Higher Logic Community Platform Coming to APS

APS is excited to announce that soon it will be easier than ever for APS members to connect with one another! With the Higher Logic Community platform, available next month, APS members can seek advice and share expertise, join and create special interest groups and other communities, participate in online forums, and interact with one another through discussion boards and direct messaging. We've designed this new communication and networking platform for interactive discussions and resource sharing, and the APS communities will be focused on topics of interest to you, and member-driven. Watch your email for details on how to be a part of this new Community and get the most out of your APS membership.

The National Institute on Aging-funded Stress Measurement Network, in collaboration with Gateway to Global Aging Data, produced by the Program on Global Aging, Health & Policy, University of Southern California, has recently completed the harmonization of psychosocial stress variables across nine longitudinal studies on aging from around the world. The Network is now seeking proposals to utilize this rich and newly available resource to answer questions about the relationships among stress, health, and aging, utilizing cross-national datasets. Please see the full request for proposals at the website: https://stresscenter.ucsf.edu/pilot-studies.