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Nominations Process: Each nomination must be supported by two APS Members, one of whom must be an APS Fellow. For information on submitting nominations, please visit www.psychologicalscience.org/rising-stars.
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A Change of Face

New Approaches to Measuring Face Recognition

A change in hairstyle, lighting, or even facial expression may alter a person’s appearance so drastically that they look like someone else. Lab studies on face recognition often overlook this natural variability, but psychological scientists Andy Young and A. Mike Burton describe new tools to measure our ability to recognize and distinguish unfamiliar faces.

Online Exclusive

Identifying the Super-Recognizers

Scientists studying the human limitations of face perception have also uncovered a population of people with a remarkable knack for placing a face — a skill now being tapped by police in London.

Read our online exclusive at www.psychologicalscience.org/r/super.

Presidential Column

Growing Up With APS

Suparna Rajaram reflects on the growth and trajectory of the organization that she joined as a graduate student and now serves as President.

The 2017-2018 APS Board

As Suparna Rajaram takes the helm, Susan Goldin-Meadow becomes Immediate Past President. Barbara G. Tversky becomes President-Elect, and Stacey Sinclair and Howard M. Weiss begin 3-year terms as Members-at-Large.
Behavior Research at the Root of Cattell Fund Projects
Researchers embarking on sabbaticals supported by the James McKeen Cattell Fund will focus on the intersection of behavioral science with such areas as steroid use, cultural differences, and social anxiety disorder.

The Consortium Research Fellows Program: A Career-Launching Opportunity
A Washington, DC-based program offers top US graduate students in the behavioral and social sciences an opportunity to work in a federal research setting.

Injecting Science Into Police Lineups
The same experimental standards that apply to scientific research could also be applied to police lineups to improve the accuracy of eyewitness identifications, says APS James McKeen Cattell Fellow Gary L. Wells.

Living in Harmony
APS Fellow Nick Chater and other scientists outline the affective, social, and environmental cues that promote social coordination among individuals, teams, and entire societies.
Growing Up With APS

Everyone has at least one story. -Maya Angelou

I came to the United States in 1986 to join Purdue University’s graduate program in cognitive psychology. As I prepared for this relocation, the teasing refrain in my family was “from India to Indiana,” bridging the 8,000 some miles between the two locations with a single syllable. I had just completed my first graduate degree in psychology, and had come across Anne Treisman’s feature-integration theory of attention. I was blown away. I wanted to do experiments. Traveling across continents can be a challenging prospect, although I did have some experience with travel within country borders. I grew up first in Central India and then spent 8 years in South India. As a result, I had become somewhat accustomed to big changes, traversing very different languages and cultures. The peripatetic aspect of my early life repeated itself in the United States. I started my graduate training at Purdue, moved to Rice University in Houston to complete my PhD, and then to Philadelphia for my postdoctoral work at Temple Medical School. Perhaps as a fitting counterbalance, I have been at Stony Brook University for almost 25 years now! The journey may have been long and winding, but it was filled with immense good fortune, of learning from the best teachers, scientists, and mentors from the very start.

It was during my stint at Rice that I first heard about a new organization, the American Psychological Society (APS). I began to follow its development with great curiosity, and I soon learned that the Society would hold a convention in Dallas. What luck! I was a broke graduate student, and (jointly) owned an old (very old) car. But the car seemed good enough (just about) for a road trip from Houston to Dallas. And so I presented my first APS poster in 1990. The opportunity to hear about major research findings not only in my own area but also across the span of psychological science, all within one conference, appealed to me instantly. I have grown up with APS since, presenting talks as well as posters with my students over the years, and serving on committees, as Associate Editor for *Psychological Science*, and more recently on the Board of Directors. It has been a parallel and intertwined journey, it seems, and it is a privilege to become President of an organization that now features a global name, the Association for Psychological Science.

APS will celebrate its 30th anniversary at the 2018 Annual Convention in San Francisco, a moment in time to reflect on this still-young organization’s growth. I will look at three time points: (1) near the beginning when APS was formed in 1988, (2) the year before APS changed its name, around 2005 (a period that also falls near the midpoint in the timeline), and (3) the current window of 2016–2017. The first journal of the organization, *Psychological Science*, was launched in 1990. By 2005, the Association had three top-notch journals on its deck, including *Current Directions in Psychological Science* and *Psychological Science in the Public Interest*; the last decade or so saw the addition of two highly successful launches, *Perspectives on Psychological Science* and *Clinical Psychological Science*. This year, APS debuts its first journal on methodology, *Advances in Methods and Practices in Psychological Science*. The new journal, AMPPS, will provide a cutting-edge forum for publishing peer-reviewed articles on innovative methodologies, best practices, and reproducibility, as well as research tools and statistics tutorials, from all areas of psychological science. Simply put, this strong portfolio of six journals represents the rich variety of our discipline.

APS membership has grown impressively, too — within and outside the United States. Taking the same three timepoints I used earlier, here is a quick look. With about

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Suparna Rajaram is Professor of Cognitive Science at Stony Brook University, where she studies social transmission of memory and the emergence of collective memory.
400 members around the time of its birth in 1988, APS grew to almost 17,000 in 2005, just before APS changed its name to signal its mission to go global. At that time, about 8% of APS members were from outside the United States. By 2016, membership rose to around 33,000, with about 24% non-US members. That’s a nearly two-fold rise in membership since 2005 and a three-fold rise in international membership! About 17% of APS Fellows come from 34 countries outside the United States, and about 25% of the Rising Star designees in the last 2 years have been from outside the United States.

These foundational efforts to internationalize are developing in other new directions also. Two such recent steps have been the exciting and successful conferences held outside the United States (the International Convention of Psychological Science in Amsterdam in 2015 and in Vienna in 2017). The next international conference, in 2019, will be in Paris. I hope that at APS we will continue to find new ways to reach beyond and connect with colleagues globally, especially as we inhabit an unprecedented age of technological connectivity.

In this column, I have touched on two undertakings of APS — journal publications and internationalization. It is important to put these within the context of other major goals that run in parallel in an organization that has an expansive mission. Examples include the APS Diversity Initiative; the goals of clinical psychological science; and the goals of teaching and the APS Student Caucus; public outreach; connecting with funding agencies, legislators, and Congress; and the Annual Conventions. These diverse and coherent goals to strengthen our science and our scientific community are increasingly urgent in times when science must support and enhance the public’s understanding of its fundamental importance.

My association with APS has given me a large yet focused space within which to connect with researchers from all areas of psychological science. For someone who grew up with APS since the graduate training years, I appreciate this wonderful opportunity to reach out to faculty and student colleagues by way of this inaugural presidential column. In the coming months, I will be using this podium to address a broad range of topics in our discipline.
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Taking Responsibility for Our Field’s Reputation

To put it bluntly, academic psychology’s public reputation seems to be in free fall.

When the press coverage of the “replicability crisis” in psychological science first began a few years ago, reporters generally broached the topic in a respectful and delicate fashion, hinting at problems but not trumpeting them. That has changed noticeably in the past year or two. Science reporters who used to assume that peer review was a hallmark of “scientific literacy” are now openly stating that peer review is unreliable — not just in psychological science but across the scientific disciplines.

And the public is getting the message, if the comments sections of online science news stories are any indication. News reports of our field’s replication initiatives illustrate some troubling sentiments. Some typical remarks: “Psychology is not a science, I repeat not a science. It is similar to beliefs like religion.” and “Surprise, surprise, [psychologists are] quacks that produce garbage they claim is science.”

The perception that psychological science is more afflicted with replication problems than other fields may be completely unwarranted (for example, early results from the Cancer Reproducibility Project suggest at least as big problems there). And there is little doubt that psychological researchers (and APS itself) have done much more than their share to address these problems head-on. But be that as it may, our reputation is in need of a lift.

Looking Backward to Go Forward

So what can we do? Discussion in the field has been almost entirely focused on the question of how to improve the quality of research going forward. The past few years have seen a creative outpouring of progressive research models such as Preregistered Replications and Many Labs Projects.

That’s great, but our sole basis for our science being taken seriously by anyone besides ourselves is the credibility of our literature — our cumulative work product — rather than our good intentions for the future.

The numerous unsuccessful attempts to replicate findings — including some rather landmark results — means the textbooks we require our students to buy and the lectures we deliver probably describe as many false findings as true ones. But while tentative and incomplete theoretical understanding is a normal step in the scientific process, a literature strewn with empirical claims based, in part, on botched research and faulty peer review is something else entirely. And over the coming years, that situation is likely to sink into the minds of the educated public and wreck our reputation as a science.

So What Can We Do to Bolster Our Credibility?

We contend that our reputational problem can actually be fixed rather rapidly and decisively if we embrace an aggressive (and painfully thorough) commitment to honest labeling. We see this commitment as entailing two changes in our practices, which we can crudely label truth in packaging and investigator accountability.

Truth in Packaging

As a first key step, all reviews or summaries produced by psychological scientists, whether in textbooks or review-oriented journals or books (including mass-market books), need to explicitly and conservatively label the degree of support enjoyed by any research finding that is mentioned. The highest credibility category — call it “Class 1” — must be reserved for findings that have been confirmed in one or more preregistered replication, where publication bias, HARKing (hypothesizing after the results are known), and p-hacking can all be confidently excluded.

A few years ago, most of us would have assumed that being confirmed in a number of conceptual replications was an admirably high and thoroughly reassuring level of confirmation (confirmation with evidence of generalizability thrown in for good measure, as it were). However, we now see that this is incorrect. A discipline’s reliance on conceptual rather than direct replication interacts with publication bias to vitiate its literature more effectively than anything else we know of (Pashler & Harris, 2013). Over and over again, we see literatures that are resplendent with varied and imaginative conceptual replications, and yet somehow no result in particular ever seems to replicate when a direct replication is undertaken. Clever new meta-analytic tools will not rescue us either. For instance, precognition research, claiming support for ideas that would violate the laws of physics, has been given a bill of good health by the "p-curve" technique (Simonsohn, Nelson, & Simmons, 2014; Bem, Tressoldi, Rabeyron, & Duggan, 2015).

This Honest Labeling proposal is admittedly fraught with unappetizing consequences. Many of us — including the present authors — believe that there are large swaths of research within big parts of psychology where statistical power is good (usually because of general reliance upon repeated measures and within-subject designs). In these areas, we suspect, most of the findings reported probably stand up. Still, a field that means to take itself seriously needs to brand any result lacking in preregistered replication (including many of our own) as Class 2 (strongly suggested in the literature but not scientifically confirmed). All research that is based on single studies and/or low-powered designs we would call Class 3 evidence, or, to borrow a phrase from Harold Jeffreys’ classic Theory of Probability, “worth no more than a bare mention.”

Ironically, our proposal to classify a single experiment that has reached conventional levels of significance as a preliminary finding corresponds well with how English statistician Ronald A. Fisher himself, in his 1935 book The Design of Experiments, suggested people should view this test, which is to ignore results that are not even able to jump over this low bar.
He said:
“It is usual and convenient for experimenters to take 5 per cent as a standard level of significance, in the sense that they are prepared to ignore all results which fail to reach this standard, and, by this means, to eliminate from further discussion the greater part of the fluctuations which chance causes have introduced into their experimental results” (p. 13, italics ours).

So in Fisher’s view, 5% significance is far from a sufficient condition for accepting a hypothesis as true. For serious credibility, he required replicability, saying, “In relation to the test of significance, we may say that a phenomenon is experimentally demonstrable when we know how to conduct an experiment which will rarely fail to give us a statistically significant result.” That corresponds closely with what we propose for Class 1.

The positive consequences of adopting this disciplinary self-control will be immediate: Results labeled as having only second- or even third-class empirical support will constitute an obvious invitation for researchers to set about replicating these findings. We probably will discover that a great many results are real, which could produce a torrent of good news. These can then be confidently cited in textbooks and press releases. But we will also find that many results are more problematic than we ever suspected (see, for example, the recent failures to confirm the well-known “blocking effect” in Pavlovian conditioning; Maes et al., 2016).

We believe that the broad adoption of open labeling will create an incentive to focus resources on finding out what we think we know is real and what is unreal. And it stands to substantially stop the precipitous drop in the public reputation of psychological research.

**Personal Accountability**

Our field also needs to persuade individual scientists to respond more positively, as many have done, when other researchers fail to replicate their original results. Blaming a failed replication on unknown moderating factors should not be the acceptable response. If the original investigators know how to get the effect, let them step forward, repeat it, and show us all how to do it.

We propose a standard of accountability common in many professional fields. The code of conduct for professional engineers, for example, holds them accountable for the structures they design. And prior to 2010, the (rare) published failures to replicate seemed to breed a sense of obligation on the part of original investigators to try to recreate their phenomena. In the past few years, however, that sort of accountability seems to have diminished.

An ethic of personal responsibility should, in our view, be recognized as a fundamental ethical standard for psychological scientists, as well. Thus, it should be included in the ethics courses that are now becoming a standard part of graduate instruction. The goal here is not to embarrass those whose results turned out to be flimsier or narrower than suspected. Rather, it is to allow the field to efficiently determine if failures reflect methodological changes in the replication attempt or error in the original study. Figuring that out quickly is obviously Job No. 1 if we actually care about getting it right as a field.

To sum up, we believe that by embracing and codifying two explicit new standards of truth in labeling and responsibility in authorship, we can do a great deal to shore up the reputation of academic psychology. Of course, the exact mechanics needed to implement such a commitment are substantial, and the scientific community would need to discuss them extensively, but the proposed commitments are well within our individual and institutional resources. We hope to see the field that we love so much working in this way to hold on to its reputation as a respectable scientific enterprise.
Is This Really Necessary?

Some well-known and outspoken colleagues seem to believe that the radically self-critical measures we advocate here are quite unnecessary — that we can make all this go away by deploying a few quick and facile defenses. “Move along, nothing to see here,” would seem to be a preferred approach for some. In fact, the evidence for widespread problems is not restricted to the report of the now-famous Reproducibility Project (Open Science Collaboration, 2015), which found that less than a third of the findings could be replicated with standard statistical approaches. More sophisticated analyses of those data back up the bad news (Etz & Vandekerckhove, 2016; Morey & Lakens, 2016), and independently, a large swath of replications appearing in a special issue of the journal Social Psychology (Marsman et al., 2017) find more than “anecdotal” levels of evidence for only 7 out of 60 significant findings from the original articles.

Others lament the difficulty of establishing solid psychological findings and attribute the failure of our replications to hypothetical ad- and posthoc “moderator” variables.

These kinds of arguments carry no weight for a number of reasons. One is the deadly combination of publication bias and low power that indisputably characterizes much of behavioral research. Operating in tandem, these twin defects are in and of themselves fully sufficient to guarantee that our literature will be replete with imaginary findings, as statistician John Ioannidis showed in his famous 2005 article (see also Szucs & Ioannidis, submitted). Second, the situation is really far worse than what Ioannidis reckoned, since we now know that our field has many corrupted data-analysis practices (e.g., p-hacking) that greatly exacerbate the impact of publication bias and low power (Simmons, Nelson, & Simonsohn, 2011).

Anyone who views the field’s problems as exaggerated needs to explain (preferably supported by convincing simulations) how we could possibly be getting reliable one-shot findings given the absurd combination of low power, publication bias, p-hacking, and the evidently low bar of our conventional threshold of 5% significance. Continued efforts along these lines will simply make us look self-critical and deceptive.

By contrast, embracing open self-criticism and responsibility as investigators and as a field, as we propose here, will enable us to earn and ultimately enjoy the reputation we seek.

-Hal Pashler
University of California, San Diego
J. P. de Ruiter
Tufts University

References and Further Reading


Szucs, D., & Ioannidis, J. P. A. (submitted). When null hypothesis significance testing is unsuitable for research: A reassessment. Available at www.biorxiv.org/content/biorxiv/early/2016/12/20/095570.full.pdf

Notes

1 smithsonianmag.com/science-nature/scientists-replicated-100-psychology-studies-and-fewer-half-got-same-results-180956426

Estes Fund Grants Aim to Raise Awareness of Computational Tools

The William K. and Katherine W. Estes Fund, which was created to honor the legacy of influential psychological scientist Bill Estes, has awarded three grants for programs focused on increasing awareness of how computational tools, models, and data collection can improve all areas of psychological science. Overseen jointly by APS and the Psychonomic Society, the Fund supports summer schools and workshops offering training in mathematical and computational modeling for PhD students, postdocs, and advanced researchers. It also promotes the teaching and practice of rigorous methodology in experimental and quantitative psychological science.

The 2017 funded programs are:

- “Computational Tools for Developing and Testing Models of Quantum Cognition,” a workshop organized by Jerome Busemeyer, APS Fellow Tim Pleskac, Emmanuel Pothos, Jennifer S. Trueblood, and Zheng Wang. This workshop will highlight a novel approach to constructing computational models of cognition and decision-making using quantum theory. It took place on July 21, 2017, at the University of Warwick, United Kingdom.

- “Model-Based Cognitive Neuroscience Summer School,” a 5-day summer school program organized by Birte Forstmann, Dora Matzke, Uta Noppeney, Andrew Heathcote, Brandon Turner, Gilles de Hollander, and Guy Hawkins. Funding for this project will help raise awareness of nascent studies at the intersection of cognitive modeling and cognitive neuroscience. It occurred from July 31–August 4 in Amsterdam.

- “Data on the Mind: Collecting, Analyzing, and Sharing Research Using Big Data and Naturally Occurring Datasets,” a 3-day workshop hosted by the Center for Data on the Mind (CDM) and organized by APS Fellow Thomas L. Griffiths, Alexandra Paxton, Michael C. Frank, and Todd Gureckis. The aim of the workshop is to encourage graduate students and postdocs to delve into the connections between cognitive science and Big Data. The entire workshop, held June 26–29, 2017, at the University of California, Berkeley, is freely and permanently available via YouTube, GitHub, and Docker. Visit dataonthemind.org/2017-workshop for more information.

James Herbert Named President of University of New England

Clinical psychological scientist and APS Fellow James Herbert of Drexel University has been named the next president of The University of New England, the largest private university in Maine. Herbert is replacing Danielle Ripich, who in 2016 announced her intention to step down this year.

Herbert’s research focuses on cognitive behavior therapy; anxiety, mood, and eating disorders; remote Internet-based treatment, and the promotion of evidence-based practice in mental health care. He is known internationally for his writings on pseudoscience in mental health.

Herbert held a variety of administrative roles at Drexel, including interim provost and senior vice president for Academic Affairs, head of the Department of Psychology, interim head of the Department of Biology, associate dean of the College of Arts and Sciences, director of the Anxiety Treatment and Research Program, director of the PhD Program in Clinical Psychology, and president of the University Faculty. He earned his PhD in clinical psychology from the University of North Carolina at Greensboro.

Herbert is a Fellow of the Institute for Science in Medicine, the Association for Contextual Behavioral Science, the Association for Behavioral and Cognitive Therapies, the Academy of Cognitive Therapy, and the Commission for Scientific Medicine and Mental Health.
Sian Beilock Named President of Barnard College

Barnard College has named APS Fellow Sian L. Beilock as its new president. Beilock, an expert on how people learn and perform at their best, particularly under stress, leaves her post as the Stella M. Rowley Professor of Psychology and an Executive Vice Provost at the University of Chicago.

Beilock was tapped as president of the women’s liberal arts college at Columbia University following a 5-month search process, according to the school’s Board of Trustees. She replaces Debora L. Spar, who left Barnard earlier this year and is now president of Lincoln Center.

“Having spent my career investigating how people can perform at their best, I am thrilled at the prospect of leading a college focused on ensuring women have the tools to succeed in any path they choose,” Beilock says. “Barnard’s unique status as a leading liberal arts college associated with a major research university and its unparalleled urban setting provide important opportunities for supporting high-powered young women to reach their potential and for emphasizing the benefits of a diversity of viewpoints in leadership roles. And there could be no more timely moment to highlight the importance to society of women’s intellectual leadership.”

Beilock, who in 2011 received APS’s Janet Taylor Spence Award for Transformative Early Career Contributions, studies how high-stress situations influence underlying psychological, physical, and neurological mechanisms to compromise performance, even in highly skilled individuals. Her research has focused particularly on girls’ and women’s success in math and science and how performance anxiety can be worsened or alleviated by teachers, parents, and peers. She works extensively with educators and those involved in public policy, including serving on a National Research Council committee on decision-making and stress. She also is the recipient of the 2017 Troland Award from the National Academy of Sciences.

Beilock’s work on performance anxiety has resulted in the publication of more than 100 scientific papers and two critically acclaimed books, Choke: What the Secrets of the Brain Reveal About Getting It Right When You Have To and How the Body Knows Its Mind: The Surprising Power of the Physical Environment to Influence How You Think and Feel.

At the University of Chicago, Beilock created and launched UChicagoGRAD, a university-wide office and initiative designed to ensure that the university’s graduate students and postdocs develop the necessary skills — from writing and communication to advanced pedagogy — to be leaders in academia, government, industry, and the nonprofit sector. She provided details on UChicagoGRAD in a 2017 Guest Presidential Column for the Observer.

Beilock also oversaw the University of Chicago’s integrative efforts to bridge urban scholarship, practice, and engagement via meaningful collaborations and innovative programming with Chicago’s Southside neighborhoods and cities around the world. Beilock is also responsible for major academic centers ranging from the university libraries to the University of Chicago Press, academic space planning and allocation, and the development and implementation of several major building projects.

“Her insights into how students clear psychological and social hurdles to achievement have provided valuable lessons for educators across disciplines,” said Jolyne Caruso-Fitzgerald, Chair of Barnard’s Board of Trustees. “Her keen intellect, her empathic concern for student success, and her experience bridging liberal arts disciplines within an urban context make her uniquely qualified to lead Barnard.”
CALL FOR APPLICATIONS

James McKeen Cattell Fund Fellowship

Presented in partnership with
Association for Psychological Science
Application deadline: January 15, 2018

For over half a century, the James McKeen Cattell Fund has provided support for the science and the application of psychology. The James McKeen Cattell Fund Fellowships supplement the regular sabbatical allowance provided by the recipients’ home institutions to allow an extension of leave time from one to two semesters.

The maximum award is limited to the lesser of (1) half the recipient’s salary for the academic year, (2) an amount less than half salary that will bring the total of the university allowance plus the award up to the individual’s normal academic-year salary, or (3) a ceiling of $40,000.

Eligibility Requirements
James McKeen Cattell Fund awards are available to psychologists and other researchers in the broad field of psychological science who are faculty members at colleges and universities in the United States and Canada and are eligible, according to the regulations of their own institutions, for a sabbatical leave or its equivalent.

Candidates are eligible for a Cattell Award if they are currently tenured or will have formal University or College confirmation that they will be tenured by February 1, following our January 15, 2018 submission deadline.

Candidates are eligible for a Cattell Award if they have not had a leave with pay for the 5 years preceding the requested sabbatical leave (medical or pregnancy leaves are considered exceptions).

Prior recipients of a Cattell Fund Award are not eligible.

To be eligible for this year’s awards, candidates must not be on sabbatical at any time during the Academic Year 2017–18. Sabbaticals must be for the Academic Year 2018–2019.

The deadline for submissions is January 15, 2018.
Applications may be submitted online: www.cattell.duke.edu/cattappl.html.

James McKeen Cattell established the Fund in 1942 to support “scientific research and the dissemination of knowledge with the object of obtaining results beneficial to the development of the science of psychology and to the advancement of the useful application of psychology.”
2018
Janet Taylor Spence Award
For Transformative Early Career Contributions

Recognizing investigators in the early stages of their career for research contributions or the development or advancement of research that cuts across fields of psychological science.
Nomination Deadline: October 15, 2017

2019
William James Fellow Award

Honoring a lifetime of significant intellectual contributions to the basic science of psychology.
Nomination Deadline: October 15, 2017

2019
James McKeen Cattell Fellow Award

Honoring a lifetime of outstanding contributions to the area of applied psychological research.
Nomination Deadline: October 15, 2017

2019
Mentor Award

Recognizing those who have significantly fostered the careers of others, honoring APS Members who masterfully help students and others find their own voice and discover their own research.
Nomination Deadline: October 15, 2017

Fellows

Awarded to APS Members who have made sustained outstanding contributions to the science of psychology in the areas of research, teaching, service, and/or application.
Nomination Deadline: October 15, 2017

Rising Stars

Presented to outstanding psychological scientists in the earliest stages of their research career post-PhD.
Nomination Deadline: September 30, 2017
The 2017-2018 APS Board

Several renowned psychological scientists are joining the APS Board of Directors for the 2017–2018 academic year. Below, the Observer profiles the leaders taking on new roles. Suparna Rajaram of Stony Brook University is the new APS President, while Barbara G. Tversky of Stanford University is President-Elect. Susan Goldin-Meadow of The University of Chicago becomes Immediate Past President. New Members-at-Large for the coming year include Stacey Sinclair of Princeton University and Howard M. Weiss of Georgia Institute of Technology. They join Members-at-Large Deanna Barch of Washington University in St. Louis; Dörthe Berntsen of Aarhus Universitet, Denmark; Simine Vazire of the University of California, Davis; and Cindy Yee-Bradbury of the University of California, Los Angeles, along with Board Secretary Gün R. Semin, ISPA Instituto Universitário, Portugal, and Utrecht University, the Netherlands, and Treasurer Roberta L. Klatzky of Carnegie Mellon University. Ending their terms on the board are Past President C. Randy Gallistel of Rutgers University; Thomas Carr of Michigan State University; and Michelle “Mikki” R. Hebl of Rice University.

Suparna Rajaram
Stony Brook University
President 2017–2018

Suparna Rajaram is a leading psychological scientist known for her study of human memory and the interpersonal transmission of memory through social groups and networks. Rajaram has pioneered a conceptual framework to study cognitive mechanisms that underpin memory transmission in groups and the emergence of collective memory. Her contributions include the introduction of novel paradigms to model social networks in the laboratory and a study of emotional and nonemotional memory transmission. Rajaram's other lines of research have included a study of both people with amnesia and with normal memory to address the cognitive and neural bases of learning and memory; differences between implicit and explicit memory; the nature of recollective experience; and cognition and education. Rajaram's research has been supported by the National Institute for Mental Health, the National Science Foundation (NSF), the Russell Sage Foundation, and Google.

Rajaram received her PhD from Rice University. She directs the Social Memory & Cognition Lab at Stony Brook University, where she is a professor of Cognitive Science and has served as a former Associate Dean for Faculty Affairs in the College of Arts and Sciences. Rajaram is an elected fellow of the Society of Experimental Psychologists, the American Academy of Arts and Sciences, the Psychonomic Society, and the American Psychological Association. Rajaram is past Chair of the Governing Board of the Psychonomic Society as well as Past Chair of its Publications Committee. She is also one of the founding organizers of the international group Women in Cognitive Science (womenincogsci.org), which was developed in 2001 to promote the advancement of women in cognitive sciences and has been funded by the NSF.

Rajaram has served as associate editor for Psychological Science, Psychological Bulletin, and Memory & Cognition; has held editorial board positions for the Journal of Memory and Language, the Journal of Experimental Psychology: Learning, Memory, and Cognition, Memory & Cognition, and the APA Dictionary; and was guest coeditor for the special issue Social Aspects of Memory for the Journal of Applied Research in Memory and Cognition.

A founding member of APS, Rajaram has served on the APS Board of Directors as a Member-at-Large as well as on the APS Fellows Committee and the APS Leadership Network. She also was Chair of the APS Rising Stars Inaugural Committee.

Barbara G. Tversky
Stanford University
President-Elect 2017–2018

Barbara G. Tversky is Professor of Psychology and Education at Columbia Teachers College and Professor of Psychology Emerita at Stanford University. Her work on spatial thinking has investigated the space of the body, the space around the body, the larger spaces we explore, and the things we encounter in those spaces; from there to the spaces we create to promote cognition, creativity, and communication for self and other, including maps, diagrams, sketches, art, architecture, urban design, and, importantly, gesture. Diagrams and gesture create meaning more directly than language using marks in space and place in space. Spatial visual communication leads naturally to language: descriptions, explanations, and stories. And space leads naturally to time and causality: event perception, cognition, and understanding. She has enjoyed collaborations not only with a set of terrific students and colleagues in psychology but also with linguists, neuroscientists, computer scientists, designers, engineers, biologists, geographers, chemists, and artists.
shape our understandings of ourselves and others. One of her lines of research investigates social tuning, the phenomenon whereby individuals unknowingly or unconsciously adjust stereotype-related beliefs about themselves upon interacting with the apparent views of another person. In a related course of study, Sinclair examines implicit homophily, which is the concept that individuals are interpersonally attracted to others who share similar intergroup attitudes and experiences; her work suggests that interpersonal interactions can be mechanisms by which culturally held beliefs can become individual thought. Sinclair currently is conducting projects aimed at studying the ramifications of intergroup bias in social networks, including how that bias might impact the intellectual performance and health of stigmatized groups.

Sinclair is a Fellow of the Society of Experimental Social Psychology, the Society for Psychological Study of Social Issues, and the Society for Personality and Social Psychology.

The underlying position of his Work Experience Laboratory is that work is an essential element of what it means to be human and that, because of the importance of work to human nature, you cannot fully understand humans without understanding the experience of working. While his research on work experience encompasses issues of agency at work, feelings of daily fatigue, and the experience of work mediated by technology, his primary research area is on the nature of immediate emotional experiences during the work day, with current research examining within-person changes in emotional states during the work day; the concurrent effects of those changes on attention and work performance; and the cumulative consequences of daily emotional experiences on feelings of fatigue, burnout, and well-being. Weiss is a fellow of the Society for Industrial and Organizational Psychology (SIOP) and the American Psychological Association. He has been a member of the National Research Council’s Board on Human Systems Integration and of the Executive Board of SIOP.

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Behavior Research at the Root of Cattell Fund Projects

The 2017–2018 James McKeen Cattell Fund Fellowships have been awarded to APS Fellow Koraly Perez-Edgar, Melissa Glenn, Paula Niedenthal, and Kiran Soma. Presented in partnership with APS, the fellowships allow recipients to extend their sabbatical periods from one semester to a full year. Here, in their own words, are the projects the three researchers plan to pursue during their sabbaticals.

Koraly Perez-Edgar
Pennsylvania State University

I am a developmental psychologist studying trajectories that place children at increased risk for anxiety, with a particular focus on risk due to temperamental traits. Over the last 15 years, I have carried out a complex line of research aimed at probing mechanisms that shape socioemotional development. Thus, I have both the content and methodological expertise to contribute to our understanding of early development. However, I lack expertise in the latest analytic approaches needed to make the most of the rich data generated by my lab. I will use the Cattell Fund Fellowship to implement a year-long systematic training program in analytics. My new skills will enhance my ability as a psychological scientist to produce more nuanced and three-dimensional views of complex developmental trajectories.

My work focuses on the temperament trait Behavioral Inhibition (BI). BI is early-appearing, rooted in biology, marked by social withdrawal, and relatively stable over childhood. BI also is our best-characterized predictor of Social Anxiety Disorder. As such, research on BI helps inform our understanding of both typical and atypical development across multiple levels of analysis. I examine attention patterns, particularly a child’s tendency to attend to perceived threat in the environment, that may trigger, shape, and reinforce cognitive and behavioral tendencies linked to anxiety. My current work makes use of mobile (ambulatory) eye-tracking in young children and behavioral, electrophysiological, and stationary eye-tracking data in a large longitudinal study of infancy. My sabbatical will focus on gaining advanced analytic skills through formal coursework at Pennsylvania State University (PSU), statistical workshops across the nation, and one-on-one didactics with collaborators at PSU and at the University of Sussex in the United Kingdom. As such, support from the Cattell Fund will allow me to empirically test the conceptual questions at the heart of this line of research.

Melissa Glenn
Colby College

My research focuses on the coordinated function of the neural systems that contribute to cognitive and emotional behaviors, the ways in which these systems are dysfunctional in mental illness, and whether they can be enhanced and protected by nutrient manipulations. I am particularly focused on the essential nutrient choline — the precursor to the neurotransmitter acetylcholine. Choline is also a potent epigenetic factor in development, and its availability during the perinatal period has an immediate impact on neural organization and behavior, altering animals’ responses to their environments and leading to lifelong enhancements in attention, memory, and emotion. My sabbatical research will focus on these changes and on the ways in which they may be protective in rodent models of depression and schizophrenia.

Though the translational potential of this research is high, there are major issues emerging in the field around how well rodent research translates to human clinical applications. This lack of translation from animals to humans is likely due to a constellation of factors, and paramount among them is the growing trend in behavioral neuroscience research, particularly around rodent models of human disorders, to reduce complex behavioral processes to very basic metrics. Thus, a major focus of my sabbatical research will be on developing richer, more naturalistic tools for use in rodent models of psychological disorders.

The Cattell Fund Fellowship will make it possible for me to spend portions of my sabbatical leave in Montreal, working with David Mumby in the Center for Studies in Behavioral Neurobiology at Concordia University. Mumby’s lab has been a leader in the study of rat cognition and behavior, and I am thrilled to have the opportunity to collaborate with him on innovation in behavioral methods for neuroscience research. Technological prowess in neuroscience and growing knowledge of cellular and molecular function is far
outpacing behavioral research. To best leverage gains made in understanding complex biological problems requires more sophistication in our animal models. To that end, I aim to develop new tools with Mumby, establish them in my lab at Colby College, and use them to study how prenatal choline supplementation may attenuate rats’ “naturalistic” symptomology in disorder models, thereby greatly improving success at translating these effects into humans.

Paula Niedenthal  
University of Wisconsin–Madison

My most recent research seeks to uncover the cultural origins of emotional expression and communication and to account for emotional misunderstanding across the globe. The theoretical grounding rests on the concept of heterogeneity versus homogeneity of long-history migration, defined in terms of the number of source countries contributing to the present-day population of a given country or region, starting at the dawn of colonialization (approximately 500 years ago). Migratory history should influence the form and function of facial expression in a society because substantial versus minimal migration to a country poses vastly different social challenges to communication and the prediction of behavior. Initial empirical findings bolstered this hunch: We first demonstrated that individuals in countries with high heterogeneity possess display rules that favor emotional expressiveness compared with individuals in historically homogeneous countries (Rychlowska et al., 2015). Follow-up research demonstrated that the facial expressions of individuals from heterogeneous cultures are easier to decode across cultures than are expressions found in homogeneous cultures (Wood, Rychlowska, & Niedenthal, 2016). Indicators of present-day diversity (e.g., ethnic fractionalization) do not account for these emotional expression outcomes, suggesting that cultures of diversity emerge over time.

But these insights and findings are just the beginning of the story. In theory, the mechanisms through which emotions are interpreted should differ as a function of historical heterogeneity. One way we decode emotion in others is by reproducing aspects of their bodily expression of emotion, a process that we call sensorimotor simulation (Wood, Rychlowska, Korb, & Niedenthal, 2016). In heterogeneous cultures, the task of decoding the emotions of strangers (compared with close others) should have become, over time, more recurrent and crucial. In addition, heterogeneous cultures have relied on sensorimotor simulation as a decoding strategy more often for this purpose than have homogeneous cultures, in which shared language and emotion culture could do much of the work. These differences should now be embedded in the cultures. During my sabbatical, I plan to master the emerging literatures in psychology and neuroscience on the roles of neural, physiological, and behavioral synchrony as components of emotion simulation and a basis of empathic understanding. Synchrony is the temporal alignment of behavior, and should be triggered by shared attention and mimicry. My synthesis of this literature, as it relates to emotion, will lay the groundwork for programmatic research on cultural variation in the processes by which emotional communication and joint action are achieved in social interaction. I plan also to gain expertise in techniques for measuring and modeling synchrony in facial expression and cardiovascular responding.

Taken together, the achievement of these aims will lay the groundwork for significant contributions to the literatures on emotion, behavioral, and physiological synchrony, and culture. Never has deeper understanding of how individuals from different cultures manage to align their emotions and their behavior been so important.

References


Kiran Soma
The University of British Columbia

My research examines the effects of steroids on behavior, the brain, and the immune system, particularly steroids that are locally synthesized within the brain and immune system. During my sabbatical, I will expand my expertise in steroid profiling via mass spectrometry. This is an emerging and high-impact technique in behavioral neuroscience. I established a cutting-edge mass spectrometry system at the University of British Columbia in 2016 and will maximize the potential of this system by visiting the lab of Fernand Labrie of the pharmaceutical company Endoceutics and the lab of Karen Chapman of the University of Edinburgh, Scotland. Both have world-class mass spectrometry facilities and novel techniques for measuring steroids in the brain, including mass spectrometry imaging to reveal where steroids are located in situ. I will refine my mass spectrometry protocols to characterize the suites of steroids present in the blood, brain, and immune tissues of rats and mice. I will pay particular attention to androgens, estrogens, and glucocorticoids. It will be especially interesting to determine whether different suites of steroids are present in blood versus tissues. These studies will fundamentally change our ideas about how the brain and immune system are regulated. Traditionally, neuroscientists and endocrinologists have focused on systemic steroid signals in the blood, but more recent studies suggest that this is only the tip of the iceberg, with much of the regulation occurring locally within the tissues themselves. This insight has major implications for understanding normal brain and immune function, as well as for steroid-sensitive diseases such as Alzheimer’s disease and depression.

Welcome, New APS Fellows

Reginald B. Adams, Jr.
The Pennsylvania State University

Donna Rose Addis
University of Auckland

Thomas R. Alley
Clemson University

Daniel Balliet
VU University Amsterdam

Daniel J. Beal
Virginia Polytechnic Institute and State University

David W. Bracken
Keiser University

Raymond C.K. Chan
Institute of Psychology, Chinese Academy of Sciences

Shane Connelly
The University of Oklahoma

Carla K. Danielson
Medical University of South Carolina

Patricia R. Delucia
Texas Tech University

Andreas Demetriou
University of Nicosia, Cyprus

Bert De Smedt
University of Louvain, Belgium

Paul W. Eastwick
University of California, Davis

Tobias Egner
Duke University

Pasco Fearon
University College London

Aurelio José (Al) Figueredo
University of Arizona

Grainne Fitzsimons
Duke University

Cristina B. Gibson
The University of Western Australia

Kelly M. Goedert
Stanford University

Jessica A. Grahn
The University of Western Ontario

James Herbert
University of New England

Mark A. Huselid
Northeastern University

Avi Kaplan
York University

Fruni Karayanidis
The University of Newcastle, Australia

Kimberly KirKPatick
Kansas State University

Erika Lawrence
University of Arizona

Chia-Ying Lee
Institute of Linguistics, Academia Sinica, Taiwan

Stephen Lomber
The University of Western Ontario

Matthew R. Longo
Birkbeck, University of London

David Mayer
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Vijay Mittal
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Teachers College, Columbia University

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Sean Polyn
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The Consortium Research Fellows Program as a Career-Launching Opportunity

Consortium of Universities of the Washington Metropolitan Area

By Scott A. Beal and John C. Cavanaugh

What if students in psychological science could access a specialized, high-level federal research facility where they would be employed and could conduct thesis/dissertation research and other research projects, as well as have opportunities to start their careers in the same or a related setting? What if they could do this all while accruing invaluable experience by working with some of the world’s top scientists? What if postdocs and faculty had similar opportunities? That is exactly what is available through the Consortium Research Fellows Program (CRFP) operated by the Consortium of Universities of the Washington Metropolitan Area.

The CRFP began in 1981 under the leadership of Robert Ruskin as a partnership between the US Army Research Institute for the Behavioral and Social Sciences (ARI) and the Consortium of Universities. From the beginning, the goal of this partnership was to provide some of the nation’s best and brightest graduate students in the behavioral and social sciences with an opportunity to work in a federal research setting.

In the more than 35 years since its inception, the CRFP has expanded in both its size and its mission. In addition to its initial contract with ARI, the CRFP has held contracts with the Air Force’s 711th Human Performance Wing/Human Effectiveness Directorate, the Defense Manpower Data Center, the National Defense University, and the Naval Air Warfare Center Training Systems Division. Its current leader, Scott A. Beal, was a CRFP Fellow himself, and so is uniquely qualified to understand the program from both the Fellow’s and the Director’s position. Beal’s current goals for the CRFP are to provide educationally relevant, well-paid professional experiences for undergraduate and graduate students; arrange research opportunities for postdocs and faculty; offer high-quality technical and analytical support to sponsoring agencies; and foster a new generation of scientists. These scientists, either directly as government employees or indirectly as contractors, will support Department of Defense (DoD) Research & Development in the future. In short, the CRFP is a critical talent pipeline for the DoD.

The CRFP’s core affiliation under the Consortium is a key to the CRFP’s longtime success. Consisting of 17 colleges and universities in the metropolitan Washington, DC, area and under the leadership of its President and CEO John C. Cavanaugh, an APS Fellow, the Consortium is one of the largest collaborations among public and private higher-education institutions in the country. It is also one of the few to sponsor a high-level research program on behalf of its members.

The CRFP currently employs 50 graduate and undergraduate students and postdocs and 30 faculty from colleges and universities in a wide array of disciplines, including psychology, computer science, information systems and technology, engineering, physics, chemistry, biomedicine, sociology, anthropology, and mathematics. CRFP Fellows serve with DoD agencies located in the Washington, DC, region and in six states across the country. Fellows have been recruited from 85 colleges and universities.

Consortium Research Fellows (graduate and undergraduate students) are paid and are assigned to research or...
technical teams at the sponsoring agencies and work up to 20 hours per week during the academic year and full-time in the summer. More importantly, they develop professionally under the mentorship of national and international experts in their fields, coauthor publications and presentations, and often accomplish their master’s theses or doctoral dissertations using fellowship research. The government gains more than 35 person-years of effort from Fellows each calendar year and benefits from the fresh perspectives they bring as a result of studying the latest research and practice in their disciplines.

Postdoctoral Fellows have earned their doctorates within the last 3 years and work full time in one of the sponsoring agencies for 1 to 3 years. Both the Postdoctoral Fellows and the sponsoring agencies they work for benefit from this relationship.

Faculty members are appointed for short-term, specific research tasks to augment government research teams by providing skills and expertise that are not available in-house. These Senior Fellows are valuable assets to the Program and are an example of the strong relationship the CRFP is able to foster between government and academia.

Since its inception, more than 1,200 students have participated in the Program. They have been 48% male, 52% female, and 24% ethnic minority. A study of psychology graduate students in the United States showed that those who participated in the CRFP were more likely to complete their degrees than those who did not. Many alumni of the CRFP have entered into government service after completing the Fellows Program and are now mentors of the next generation of research fellows. Numerous others have joined private firms that are government contractors, and thus continue to use the expertise gained in their fellowships in support of DoD.

In addition to mentoring a new generation of research scientists, the CRFP links individual students to their personal research and occupational goals. The following narrative describes Beal’s personal experience, from graduate student, to CRFP Fellow, to federal researcher, and to Program Director. Many former CRFP Fellows have followed similar pathways. Here is his story.

**Typical of many graduate students who advance to candidacy, I was anxious about an impending career search. My ambitions included a position with a prestigious consulting firm, a large salary, and plenty of time off. I maintained that naïve vision until a thoughtful professor offered unsolicited, but much needed, advice.**

He invited me to his home on a Saturday. When I arrived, he turned off his lawnmower, took me to his dining room, and spent 45 minutes describing the arduous work life associated with the type of consulting in which I had expressed interest. His advice was forthright and illuminating. After careful consideration, I concluded that consulting would not be a part of my future.

Shortly thereafter, I was approached by a fellow graduate student who suggested I attend a discussion with the US Army Research Institute for the Behavioral and Social Sciences (ARI). I expressed my disinterest in all things military, but she persisted, stating that I would find it interesting and that I was a “good fit.” She was correct on both counts.

I attended the discussion. My empirical curiosity was provoked. I was especially intrigued by the idea of conducting applied research with soldiers caught in the interacting worlds of the US Army, the federal government, and psychology. I applied for and was offered a CRFP graduate student research fellowship.

The fellowship was located at the US Army Infantry School at Fort Benning, Georgia. I was assigned to work with a senior ARI researcher on a broad range of topics including leadership, assessment and selection, training simulations, officer development courses, and basic rifle marksmanship. The senior researcher served formally as my mentor. Although I had few useful ideas and experiences to contribute, she adopted me as a member of her research team and reinforced my meager efforts.

After working for 2 years as a student fellow, I accepted a postdoctoral research fellowship following a successful dissertation defense. I served as a Postdoctoral Fellow for a year, and then accepted a full-time federal government position with ARI, where I worked for 15 years. During that time, I had the privilege of mentoring CRFP students and Postdoctoral Fellows at the US Army Infantry School and the US Army Special Operations Command.

In 2013, Robert Ruskin, CRFP Founder and Director, passed away. I left federal government service the following year to join the Consortium of Universities and direct the CRFP. Since then, it has been my great privilege to continue linking students, postdocs, and professors with federal agencies in support of academic achievement and research excellence.

Ruskin’s collaborative model was developed and implemented more than 35 years ago. For more than half that time, I have observed the mutual benefits that students, postdocs, professors, and federal researchers enjoy. The CRFP continues to make those possible.
APS: Your career has featured an impressive trajectory from research to academic administration to education policy. What are your observations after taking those steps?

JC: All three are intertwined in the sense that research, academic administration, and policy creation involve asking very good, insightful questions, then collecting and analyzing data to address those questions. Based on the evidence, decisions are made about how to proceed next. So for me, I did not “give up” doing research, as some see the transition from a more traditional career; I merely moved the focus of that research across topics.

APS: You are a coauthor of several textbook series. What are some of the ups and downs of this kind of work?

JC: Writing for undergraduates is different than writing for peers. There is more need to tell a coherent story, to steer the reader in a direction, and to get them to question while also providing a bit more certainty than one usually does in professional writing, especially in academic journals. The hard part is knowing that people are reading your book, discussing it, critiquing it, and so forth, and not being able to jump into the midst of the discussion firsthand.

APS: What skills or talents do academics need to transition to new or different careers, especially those outside of the university?

JC: I believe quite strongly that the same core skills are needed; that is, the ability to communicate ideas and knowledge clearly, to ask the right insightful questions, and to thrive in the excitement of uncertainty. In my experience, the only thing that has really changed is the target audience. Otherwise, I’m still doing teaching, research, and service using skills that we all hone over time.

APS: What do psychological scientists have to offer to professions outside of academia?

JC: Most important, psychological scientists are taught the mindful mental discipline needed to conceive the possible in the realm of the infinite. We are taught to be skeptical, to wonder, and to be comfortable with uncertainty. And we are skilled at working with diverse groups of people, especially in how they conceive the same questions with which we grapple. Those are the core skills that successful organizations seek, and the ones they most need for success. We have them. ☐

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CRFP Alumni in Their Own Words

Elizabeth Salmon is a postdoctoral Consortium Research Fellow working in the Personnel Assessment Research Unit (PARU) within the US Army Research Institute at Ft. Belvoir, Virginia. PARU researchers focus on developing and evaluating assignment measures and performance assessments for soldiers in the US Army. In a team with other psychological scientists, Salmon’s work centers on updating attitudinal and behavioral measures included in the Tailored Adaptive Personality Assessment System, “an initial entry selection test that measures personality and temperament,” she explains. Salmon also has contributed to End of Training assessments that enlisted soldiers complete upon finishing their initial entry training, which cover measures such as adjustment to Army life, reenlistment intentions, job knowledge tests, and self-reported training performance. Through her large-scale projects in PARU, Salmon has not only expanded the data collection and analysis skills she first learned in graduate school, but also developed new skills including project management, preparing technical reports and briefings, and interacting with different stakeholders.

Justin Nelson is a postdoctoral Consortium Research Fellow working with the Non-Invasive Brain Stimulation (NIBS) team at the 711th Human Performance Wing at the Wright-Patterson Air Force Base in Ohio. Nelson conducts neuroscience research on the cognitive effects of noninvasive brain stimulation, investigating whether transcranial direct current stimulation (tDCS) and other technologies “can be administered to improve cognitive performance in our active-duty military personnel,” he says. Nelson's team has found that tDCS “significantly improves performance in tasks that involve working memory, learning, sustained attention and vigilance, visual search detection accuracy, and multitasking.” In another study, Nelson and colleagues are comparing participants’ multitasking performance while receiving traditional tDCS versus transcranial stimulation through a portable headset. The team's research findings have been published in numerous journals as well as popular news outlets such as The New York Times, Boston Globe, London Times, ESPN, and The Guardian. Nelson added that as a result of his work with NIBS and the international recognition the team has received, his professional life has flourished.

Isaie Sibomana is a postdoctoral Consortium Research Fellow working with the Molecular Bioeffects Branch at the 711th Human Performance Wing at the Wright-Patterson Air Force Base in Ohio. Sibomana has helped conduct studies in several research areas, including sleep deprivation, stress, and metabolism. In one study, Sibomana and colleagues sought to better understand resistance and susceptibility to fatigue by identifying urinary markers that predict an individual’s performance while sleep deprived. In followup studies, Sibomana and colleagues found that participants with high-carbohydrate diets “were more susceptible to fatigue as compared to people [with] diets rich in protein.” Sibomana commends both the Consortium Research Fellowship Program and his colleagues for gathering diverse teams of researchers, emphasizing that a project evolves in different ways when incorporating different perspectives and expertise. Sibomana hopes to continue conducting independent research in a federal capacity and credits his fellowship for helping him acquire the professional and research skills to do so.

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Injecting Science Into Police Lineups

Telling participants the research hypothesis halfway through an experiment is such an obvious error that scientists often go to considerable lengths to keep participants from even guessing it. The understanding that experimental standardization and control are essential for interpreting data is foundational to scientific inquiry — and yet, this understanding is conspicuously absent in another domain with direct, real-life consequences: eyewitness identification.

In an award address at the 2017 APS Annual Convention, APS James McKeen Cattell Fellow Gary L. Wells explained how much eyewitness identification stands to benefit from science, especially when it’s treated as a scientific endeavor.

Imagine a police investigator as a researcher hypothesizing that an individual committed the crime that a bystander witnessed, he said. To test her hypothesis, the investigator designs a lineup, embedding the suspect among several individuals who are known to be innocent. The investigator asks the eyewitness — the participant in this experimental analogy — to look at the lineup and identify the perpetrator, if present. The investigator then evaluates the identification, or data, in light of her original hypothesis.

“What’s powerful about this analogy is that it arms psychologists who have experimental training to be experts right from the outset about lineups, because all the things that can go wrong with an experiment can go wrong with a lineup,” Wells explained.

Psychological scientists know the perils of bypassing standardized procedures and the hazards of overlooking potential confounds. They understand that experimenters can introduce bias into various parts of the research process, often without being aware of it.

And psychological studies repeatedly have shown that the limitations that apply to research in general apply to eyewitness identifications specifically.

The Paradigm
Since the 1970s, Wells and colleagues have used a straightforward experimental paradigm to better understand how witnesses make identifications. They’ve exposed people to an event and then asked them to look at a lineup and pick out the perpetrator — because they have experimental control, the researchers are able to evaluate witnesses’ identification decisions as definitively right or wrong. They can also manipulate aspects of the event and the lineup procedure to examine how these changes affect witnesses’ decision-making. And they can determine whether specific factors — such as how long it takes witnesses to make their decisions and how confident they are — correlate with identification accuracy.

Gary L. Wells has found that eyewitnesses are particularly confident in their identifications — even when those identifications are false — when encouraged by an experimenter who affirms their choice.

“This paradigm is pretty rich, pretty powerful — it gives us a lot of degrees of freedom to get in and start pulling together a literature,” said Wells.

As studies in this line of research were published, it became increasingly clear that eyewitnesses are generally prone to error and are sensitive to even minor differences in identification procedure, from the prelineup instructions to the format of the lineup and the interactions with witnesses afterward.

But for decades, these findings were dismissed by the criminal justice system.

“Until the mid-90s, this experimental literature in eyewitness identification had little impact, except for someone occasionally getting into the courtroom to give some expert testimony — otherwise, it was largely ignored by the legal system,” Wells said. “When you pressed them on why, you’d get responses like ‘Well, these are not real eyewitnesses. Real eyewitnesses would be too cautious to make these mistakes.’”

People questioned the value of lab experiments, arguing that they couldn’t be informative because they yielded poor approximations of real-world events.
But sentiment changed in the 1990s, when forensic DNA testing began revealing the number of people who had been falsely convicted of serious crimes on the basis of confident eyewitness testimony. To date, 349 people have been exonerated as a result of DNA evidence, and 258 of these cases involved mistaken eyewitness identification, Wells said.

And these cases likely represent only a fraction such false convictions due to the fact that most cases lack biological evidence.

“If you get mistakenly identified and the witness shows themselves to be confident, you’re in trouble, because chances are there’s no DNA to come to your rescue and it takes pretty much something that definitive to trump an eyewitness,” Wells said. “It turns out that the world isn’t CSI much something that definitive to trump an eyewitness,” Wells said. “It turns out that the world isn’t CSI after all — that’s fiction.”

Accumulating data from actual police departments underscore the magnitude of this problem. Examining 11 published field studies, researchers found that in about 41% of 6,734 lineups, the eyewitness identified the suspect; in about 35% of the lineups, the eyewitness made no identification; and in about 24% of the lineups, the eyewitness identified a known innocent person as the perpetrator.

This means that 37% of the positive identifications made by actual eyewitnesses in the real-life cases included in these field studies were “demonstrably mistaken.”

The Challenge of Recognizing Absence

Although the true base rate of mistaken identifications will always be impossible to pin down, what matters is that certain patterns of error are highly replicable, Wells emphasized. One such error occurs because identification decisions tend to be relative judgments (e.g., “Who looks most like the perpetrator?”) rather than absolute ones.

In one experiment, Wells and colleagues staged a crime 200 times for 200 separate witnesses. All witnesses were told before viewing the lineup that the perpetrator might not be in the lineup and were allowed to make no choice (reject). The perpetrator was present in the lineup for 100 of the witnesses but was removed (and not replaced) for the other 100 witnesses.

When the perpetrator was in the lineup, 54% of the witnesses identified him, 21% rejected, and 25% identified an innocent person. When the perpetrator was removed from the lineup, however, rejections increased very little (to 32%) and instead most witnesses (68%) simply picked one of the innocents.

“It’s really difficult for witnesses to recognize the absence of the perpetrator,” Wells said. “It’s hard to see that he’s not there.”

With evidence from these and other studies, it becomes clear that certain aspects of the lineup procedure can have a noticeable influence on identification judgments.

In another experiment, Wells and colleagues used the same basic paradigm — participants witnessed an event and looked at a lineup that did not actually include the perpetrator. After making their decision, some of the witnesses received positive feedback (“Good, you identified the suspect.”). This feedback drastically boosted their retrospective confidence in their identification. About 11% of the participants who received no feedback reported they had been positive or nearly positive in their decision, compared with 45% of those who were told they made the correct choice.

“This was manufactured false certainty. This wasn’t the fault of the witness,” Wells said. “In the experiment analogy, this is like debriefing the participants before you’ve taken all the measures.”

This matters because eyewitness certainty is “the primary factor that determines the credibility of that witness in everybody’s eyes, [including] the jurors, the prosecutors, [and] the judges,” he explained.

Sometimes false certainty occurs naturally, but much of it seems to be a product of the legal system itself. Wells noted that he consulted on a case in which the key witness revealed that the detectives actually clapped when she pointed to the suspect in the lineup.

But in recent years, the work of Wells and other psychological scientists has begun to have real impact, being integrated into the US legal system in meaningful ways. The state supreme courts in New Jersey, Oregon, and Massachusetts have used psychological research to inform guidelines for determining the admissibility of eyewitness identification evidence.

And the International Association of Chiefs of Police, the US Department of Justice, and law enforcement agencies in many US states have adopted a core set of reforms for eyewitness identification procedures based on the scientific evidence produced by psychologists doing eyewitness identification research.

Today, Wells and his colleagues collaborate extensively with innocence projects, law enforcement agencies, and legal professionals. In doing so, they are applying findings from decades of scientific research to criminal justice procedures in ways that can ultimately change the course of many people’s lives.

When he started investigating eyewitness identification, Wells didn’t expect that rigorously and persistently pursuing a scientific question would ultimately have real impacts on the legal system — especially considering that an advisor once told him to “get out of this area because it’s going nowhere.” It’s an outcome that Wells said he couldn’t have achieved without the instrumental contributions of many students, colleagues, collaborators, and supporters, both in and out of academia.

-Anna Mikulak

To watch video of Gary L. Wells’s award address, visit www.psychologicalscience.org/r/eyewitness.
Many of us believe we’re rather good at recognizing faces. After all, few of us would fail to recognize Meryl Streep, Barack Obama, or Scarlett Johansson in a variety of photographs or video clips.

But the ease we have when identifying such familiar faces seems to have overshadowed our limitations in a different type of face perception: Our ability to identify relative strangers is generally rather weak.

Over the last several years, it’s become clear that unfamiliar-face recognition is a problem worthy of study in its own right, in large part because of its role in law enforcement and security settings. These situations include:

- photo-to-photo matching for an image of a suspect to a surveillance camera image from a crime scene;
- person-to-photo matching at passport control; and
- person-to-photo-ID matching to verify the age of people purchasing items such as alcohol, cigarettes, or guns.

Field studies have demonstrated that comparing a photo of a face to a person standing in front of us is not as easy as we imagine. In a 1997 psychological study conducted in a supermarket, for example, cashiers who were given an incentive to spot fake-photo credit cards challenged roughly 10% of confederate “shoppers” who presented valid cards and accepted 64% of the invalid cards if the customer looked similar to the person pictured.

Unfamiliar-face matching is also a problem for professionals who rely on this ability. This includes passport officers, who typically use photo identification when processing people’s applications for passports. In 2014, one of us (Burton) and colleagues showed that passport-issuing officers in Sydney had a 10% overall error rate when asked to verify photos of applicants. Despite extensive training, highly experienced officers performed no better, on average, than new recruits.

Lab studies have not always predicted such failure rates, and the reason may lie in the typical design of such experiments. Specifically, lab studies often use only one or two standardized photographs of each face throughout the experiment, failing to capture the way an individual’s appearance typically varies from picture to picture based on lighting, angle, pose, or even hairstyle.

Recognizing Pictures Rather Than Faces

Modern research on face recognition can be traced back to the seminal 1975 review by psychological scientist Hadyn Ellis, which brought together a wide range of studies of normal adults, infants, and children — as well as research on the effects of brain injury. Ellis noted remarkably high levels of correct recognition of faces in standard memory recognition tasks. In such experiments, researchers typically had participants study photographs of people they’d never seen before, then — in a test phase — had them pick out those photos when they were mixed with pictures of other unfamiliar faces. Studies that followed that review generated similar results, even when participants were able to study each face for only a few seconds.

But those lab results failed to generalize to real-world settings, particularly in the criminal justice system, where eyewitnesses were discovered to have misidentified perpetrators of various crimes despite insisting that they were correct.

APS Fellow Vicki Bruce of Newcastle University in the United Kingdom was among the first researchers to show why lab results were leading researchers to overestimate human performance with unfamiliar faces. In 1982, Bruce published the results of a study in which the faces that some of the participants viewed changed in expression, angle, or both between presentation and
the actual testing phase. She found that participants were slower to recognize an unfamiliar face if it changed during the test; in other words, they seemed to be better at memorizing still pictures rather than changing faces. Subsequent studies have produced similar results.

A powerful insight into the nature of this problem derives from an experimental sorting task devised by our lab and researchers from the United Kingdom and Australia. Participants were given a set of 40 everyday photographs showing unfamiliar faces and asked to sort the pictures into separate piles for each individual. Only two faces were shown, but the participants sorted their pictures into anywhere from three to 16 different piles, with nine piles being the most common number. In other words, participants typically thought that the set of 40 photos depicted nine different individuals when there were actually only two.

This finding is particularly interesting because it runs counter to the widely accepted intuition that people mainly struggle to tell similar faces apart. Rather, participants are likely to see photos of unfamiliar faces as more diverse than they actually are, as the aforementioned study shows. The problem is as much one of seeing that very different images can represent the same unfamiliar identity as it is one of telling faces apart.

Importantly, real-life views of faces are highly variable, whether they’re seen in person, in videos, or in photographs. This variability might result from within-person variability (e.g., differences between various views of the same face) or between-person variability (e.g., differences between similar views of different faces). This variability does not cause problems if a face is familiar, but has a substantial impact for unfamiliar faces.

Standard face-memory tests, such as the Recognition Memory Test and the Cambridge Face Memory Test, don’t specifically measure unfamiliar-face-matching ability. That’s what drove the development several years ago of a tool called the Glasgow Face Matching Test.

This psychometric test uses front-facing images of people taken with two different cameras. Subjects are shown photo pairs and asked to determine whether they represent two images of the same person or two different people. Typically, 15% to 20% of their matches are wrong, but there are substantial individual differences, and the measure also has been used to identify super-recognizers — people who show enormous accuracy in remembering faces.

The findings show that image variability can easily confuse the visual system when people look at unfamiliar faces. This seems curious given that we see so many faces in everyday life. But variability is, to some extent, idiosyncratic — that is, the ways in which Face A varies across different images need not be the same as the ways in which Face B varies across different images. Our lab analyzed the properties of face images both within and between identities. Consistent with previous findings, the largest variations, common to all the faces, involved physical differences such as pose and lighting direction. Once those common variations were removed, the differences among images of each individual were highly person-specific. Thus, learning a new face entails learning how that particular face varies.

### In Good Light and in Bad

This idiosyncratic changeability of faces explains how we can be “expert” at recognizing one face but not another. Learning how the face of actor Brad Pitt can vary — through seeing him in many settings over the course of his career — allows us to recognize new photos of him even when he’s caught with an unusual expression or in poor lighting. This “expertise” may not generalize to another person’s face, however, because that person will vary in different ways across images. This is why it’s easy to match two photographs of a familiar person but highly difficult to match two photographs of an unfamiliar person, whose range of variability we don’t know.

It also explains why attempts to train people to become better at pairing images of unfamiliar faces are likely to fail. Our research has demonstrated that observers can be trained to recognize a particular new face very well, but that this training will not generalize to recognizing a different face.

There are other aspects of unfamiliar-face perception in which people do show expertise, however. For example, people can usually make a reasonably accurate estimate of a person’s age or sex from his or her face, and they can interpret subtle differences in facial expression and gaze direction. What characterizes
such abilities is that, unlike face recognition, they involve cues that are highly consistent across many different faces.

It is clear that considering image variability is critical to understanding face recognition. We need to study naturally occurring, or “ambient,” images. Experimentally using standardized images in an attempt to minimize the impact of “nuisance” variation — such as lighting and camera differences — can limit our understanding of face recognition. By using the full range of ambient images of the type people encounter every day in newspapers, on television, and online, we can preserve the natural within-person variations that characterize our real-world experience of faces.

References and Further Reading

**Online Exclusive**
Identifying the Super-Recognizers
Read it at www.psychologicalscience.org/r/super


A special issue of *Current Directions in Psychological Science* brings together innovative research and theory in psychological science, computer science, neuroscience, and related fields, illuminating the myriad ways in which face perception infuses how we think and behave.

In this issue, “researchers from diverse areas within the psychological sciences illustrate various cognitive processes and social consequences, extending from face perception’s basic foundations in recognition, human development, and social and economic behavior, through individual and cultural variation in face processing, to the cutting-edge application of tools in computer science,” writes psychological scientist Nicholas O. Rule of the University of Toronto in his introduction to the special issue.

The special issue delves into the mechanisms that underlie face perception, exploring the adaptive functions that likely contribute to recognizing faces and facial expressions, the origins and developmental trajectory of face recognition across different people, and the reasons why we sometimes make errors when it comes to recognizing certain faces.

The issue also shows how:
• we use information from faces to make judgments about other people;
• biases in how we recognize emotions in faces can contribute to the onset and maintenance of mood disorders; and
• face perception ultimately guides our behavior towards others.

“Together, this collection of brief and accessible reviews will help readers to cultivate an understanding of how humans create and extract meaning from the face, justifying why it maintains such a high priority in perception, cognition, and behavior,” Rule writes.
Living in Harmony
The Dynamics of Social Coordination

From two people dancing a waltz to an entire country celebrating a national holiday, social coordination frames our interactions at every level of social engagement. Scientists who study these phenomena want to understand how we use language in addition to affective, social, and environmental cues to organize and reconcile our intentions and actions. Five psychological scientists at the forefront of this field convened at the 2017 International Convention of Psychological Science in Vienna to discuss social coordination from a variety of methodological and theoretical viewpoints.

As the leader of the Social Mind and Body Group at Central European University in Hungary, Natalie Sebanz knows that the often effortless-seeming nature of joint actions belies the precise coordination required to pull them off successfully.

We take advantage of multiple mechanisms to enable this coordination, including using our own motor system to predict the actions of another person, Sebanz said. In an EEG study examining the joint action of clinking glasses together, as in a toast, she found that subjects’ brain activity when clinking a glass with another person was more similar to their activity when clinking two glasses together themselves than when raising a single glass in the air. Coordinating with someone else looks a lot like coordinating with ourselves.

“When you are in a joint-action situation, on one level you are literally planning someone else’s action as if it was your own,” Sebanz explained.

Sensorimotor communication is another way of achieving coordination with another person, as it can be a way of making actions “speak,” she said. Punctuating a gesture with a superfluous flourish or increasing the arc of an arm movement when pointing can convey instructive or affective information beyond the motion itself.

In situations where we are trying to coordinate with someone we cannot see, we can’t rely on sensorimotor mechanisms, so we compensate by acting as predictably as possible, Sebanz said. In a higher-order framework, this could mean relying on precedent or known habits, but in the context of fine-grained motor coordination, it consists of reducing the temporal variability. This can mean taking the quickest, most direct path or otherwise cutting down on variables that the other person would not be able to anticipate.

Imitation Under Inspection

From a young age, humans (and a few other species) spontaneously imitate behaviors they observe others performing. Antonia Hamilton, Senior Lecturer at the Institute of Cognitive Neuroscience at University College London, investigates imitation with a particular interest in how direct gaze — a potent social stimulus — can affect how we perform this most basic act of social coordination.

She has found that direct eye contact makes imitators respond faster than when the person they are imitating is looking away, an effect regulated by the medial prefrontal cortex (mPFC) — a brain region associated with executive control. Her Social Top-Down Response Modulation model posits that the mPFC exerts top-down control via the visual-motor stream to regulate selective imitation response.

Hamilton hypothesizes that gaze induces an audience effect in the imitator, and she has developed an augmented reality system in order to test this theory in the real world.

In pairs comprised of a leader and a follower tasked with completing a puzzle, the leader viewed visual instructions on how to complete the puzzle that included variation in the height of the arc of the instructor’s arm movement. The followers, who did not see the instructions and had to learn from watching the leader perform the task, tended to take a similar trajectory as that of the leader, performing a highly faithful imitation. Their trajectory correlated even more strongly with the leader when the leader’s eyes were open as the follower completed the task versus when they were closed. The simple act of being watched by the leader made the follower’s imitations more accurate.

“This is an entirely implicit communication behavior, but it’s showing that adults will spontaneously imitate another person in order to communicate in this kind of a live interaction context,” Hamilton said.
Simulating Synchronization

Coordination on the basis of time, known as synchronization, occurs at every level of human life, from the firing of neurons to the formation of governments. Some level of synchronization is necessary for societies to perform their functions and satisfy the needs of individuals.

Psychological scientist Andrzej Nowak, working at Florida Atlantic University, also is the Director of the Center for Complex Systems at the University of Warsaw. He uses mathematical techniques and theories to help explain social psychological phenomena. He has developed mathematical models of synchronization among individuals within a society that account for the level of complexity and the strength of the connection between agents; these models have shown that strong coupling and simpler dynamics tend to make for better synchronization. Despite the complex and seemingly unpredictable nature of larger systems such as societies, synchronization can be simulated in a dynamical systems context via a network of chaotic oscillators. Nowak is able to measure the entropy, or disorder, of the simulated system, which acts as an indicator of synchronization: A high level of entropy suggests low synchronization, and vice versa.

By varying the level of control exerted on the network (analogous to the degree of control imposed on a society by governing structures) and the number of connections across the network (representing the relative strength of civil society), Nowak can observe how patterns of synchronization change over time as governmental entities evolve, such as when an autocratic leader is removed from power.

From these simulations, Nowak, APS Fellows Michele Gelfand and Arie Kruglanski, and Wojciech Borkowski have used a Minerva-funded grant from the US Department of Defense to glean insights into autocratic recidivism, explaining factors that can influence whether and how a society can transition from an autocratic regime into a democracy, or alternatively, after a brief period of freedom, return to an autocratic rule. Factors affecting the success of democracy include the need for a strong civil society, similar action tendencies among members, and optimal complexity of common actions.

Striking a Virtual Bargain

APS Fellow Nick Chater, Professor of Behavioral Science and Head of the Behavioral Science Group at Warwick Business School, investigates a fundamental question of team coordination: How do the beliefs and desires of the many transform into a singular action of the group?

Individualistic perspectives of behavior assert that individuals aim to maximize their own value to the group by trying to predict what other members would do and acting accordingly. However, this individualistic approach ultimately leaves one stuck in a regressive loop, as Person 1 tries to determine what Person 2 would do, and Person 2’s actions in turn rely on what Person 1 would do, Chater explained. Thus, the key question is not “What would the other member(s) do?” but rather “What would we do?”

This is where the theory of virtual bargaining comes in. Adopting an implicit agreement based on what the whole group would agree to if there were open negotiations reconciles methodological individualism with collective agency, allowing for a team to emerge from individuals.

“What virtual bargaining is as a theory is a bridge between an individualistic perspective and the understanding of collective behavior, because actually it does provide an account of how individual preferences, beliefs, and desires can turn into a collective,” Chater explained.

Creating and Constraining Possibilities

Shaun Gallagher, a professor of philosophy at the University of Memphis, believes that corporeal components of interactions such as posture, facial expressions, vocal intonation, and gesture are critical aspects of coordination. Thus, perception depends not only on sensory stimuli but also on the dynamic interactions between one’s mind and one’s body, and between one’s body and the external environment.

Gallagher advocates for an embodied and enacted view of social cognition, a perspective that takes into consideration not only a situation’s constituent elements, including the participants and the environment, but also interactions among those elements as targets of analysis and vital components of cognition itself.

Gallagher discussed the idea of affordance, or the range of all possible actions — to or from the body or the environment — and how these possibilities are enabled and constrained by our own bodies and by the environmental context, both physical and cultural. Understanding the field of affordances available to an individual in a specific context and the larger landscape of affordances that defines all the possibilities for a whole culture enables philosophers and psychologists to fine-tune their analyses of interactions and delve into the many factors that promote or prevent coordination, including race, gender, and class.

-Amy Drew
APS Fund for Teaching and Public Understanding of Psychological Science

Small Grants Program

The APS Fund for Teaching and Public Understanding of Psychological Science (otherwise known as the APS Teaching Fund) invites applications for non-renewable grants up to $5,000 to launch new projects broadly addressing the categories below:

- **SCHOLARSHIP OF TEACHING AND LEARNING (SOTL):** Grants in this category support high quality, potentially publishable, scholarship directed at the teaching and learning of psychological science.

- **MEETINGS AND CONFERENCES:** Grants in this category support efforts that facilitate communication among teachers of psychological science who share common challenges and who would benefit from sharing ideas and resources.

- **TECHNOLOGY AND WEBSITES:** Grants in this category support projects leveraging technological resources to enhance the teaching and learning of psychological science, and to increase the reach and efficient dissemination of related resources.

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Questions? Contact **Neil S. Lutsky, Committee Chair**

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More than 35,000 people are using Wikipedia to learn about psychology every month. Yet, of the more than 8,000 psychology-related articles in Wikipedia, fewer than 0.01% have been assessed to have the quality of a professional encyclopedic entry. Hundreds of articles are missing accurate content and reliable citations.

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Happiness and Hurtfulness: Why Does it Feel So Good to Act So Bad?

By C. Nathan DeWall


How would it feel to get even with your biggest enemy? The answer, according to David Chester (2017), is as sweet as apple pie.

This is a paradigm-shifting idea. To help explain why people behave aggressively, classic theories have focused on negative affect, such as anger (Anderson & Bushman, 2002; Berkowitz, 1989; Dollard, Doob, Miller, Mowrer, & Sears, 1939). For example, situations that increase anger also tend to increase aggression (Bushman & Huesmann, 2010). Ditto for chronically angry people, who walk around primed to pounce (Wilkowski & Robinson, 2008). Neuroscientific evidence suggests that negative emotions such as anger activate the brain’s approach system, nudging people to retaliate rather than retreat (Carver & Harmon-Jones, 2009).

Chester proposes something different: People may also behave combatively because doing so feels good. Drawing on questionnaires and behavioral, genetic, and neuroimaging data, Chester shows a link between positive feelings and aggression. In one experiment, participants played a competitive reaction-time task against a fictitious opponent, in which they could blast the partner with unpleasant noise (Chester & DeWall, 2016). Sometimes participants got blasted; other times they could do the blasting. The more intensely they blasted their frustrating partner, the more activation they showed in brain reward centers. These neural signatures of pleasure even predicted how many fights individuals had gotten into in their everyday lives.

How does this research mesh with Freudian notions of catharsis? “Freud believed that aggression’s hedonic qualities took the form of a reduction in aversive feelings,” Chester says, “not an increase in positive feelings.” The difference is subtle but significant: People aggress not to reduce their anger but to increase their pleasant feelings. “Aggression does not reliably reduce negative feelings,” Chester says, “it amplifies them, and its subjectively enjoyable qualities are more strongly driven by the increased feelings of reward and pleasure that coincide with the aggressive act.”

To bring this cutting-edge science into the classroom, students can complete one of two activities. In the first activity,
Chester asks students to list five of their favorite movies. Next, he asks them to count how many of them have revenge as a central theme. The result? Students are “usually surprised by the number of their favorite movies that have revenge and violence as a central component,” Chester says. Common favorite films include one from the *Harry Potter* series (a young wizard seeks revenge on his parents’ murderers), *The Godfather* (a tale of retaliatory aggression among and within organized-crime families), *The Lion King* (the son of an assassinated ruler seeks revenge against his uncle, the assassin), and *Gladiator* (a tale of a soldier who dedicates his life to gaining revenge for the murder of his family).

Ask students why people often are drawn to movies where people seek revenge. How do they think getting revenge will make the character feel? How does that influence their perception of aggression as a result of negative emotions? Might positive emotions also play a role?

The second activity asks students to try to understand why serial killers get hooked on hurting others. Before I teach students about serial killers, I spend a few minutes reiterating the fact that these people caused tremendous harm to others. I also communicate that serial killers offer a useful teaching tool because their behavior was so extreme, not because it was glamorous.

First, ask students to form pairs. Have students use their smartphones or laptops to search for information about the following famous serial killers:

**Zodiac Killer:**
“I like killing people because it is so much fun. It is more fun than killing wild game in the forest.”

**Albert DeSalvo, the “Boston Strangler”:**
“It wasn’t as dark and scary as it sounds. I had a lot of fun … killing somebody’s a funny experience.”

**David Berkowitz, the “Son of Sam”:**
“I was literally singing to myself on the way home, after the killing.”

How much did students include negative and positive emotion words when describing the serial killers? Most people focus on negative emotions when explaining aggression. If your students followed this typical pattern, ask them why they emphasized negative emotions more than positive emotions? What does this say about the relationship between how we feel — and how we expect to feel — and how we act?

No matter how much society progresses, it will contain people who hurt others. Aggression is here to stay because aggressive urges will never go away. People may give up their cars, but they might feel angry or frustrated at their autonomous driver. People may forget the word “bully” but remember that they dislike their demanding boss. The bigger problem is that aggressive retaliation — the moment your clenched fist hits your enemy’s jaw — will still feel good. Even the most passive people will have to fight an uphill battle between their natural tendency to experience pleasure from getting even with their enemies and their desire to live a long and peaceful life. Our greatest hope is to promote a society that celebrates inclusion, equality, tolerance, and peace.
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Misinformation, Misconceptions, and Our Teaching Mission

By David G. Myers


Few things bother us teachers of psychology more than viral misinformation, or energize us more than opportunities to challenge misconceptions and cultivate discerning minds. Our mission: to teach reality-based, evidence-supported thinking.

Thus, we feel distressed when public understandings radically diverge from reality, and especially when those misconceptions have huge effects. Some examples:

**Belief: Crime is rising.** Every recent year, 7 in 10 Americans have told Gallup that there is more crime “than there was a year ago” (Swift, 2016). President Donald Trump agrees, having said in early 2017 that “The murder rate is the highest it’s been in 47 years,” with Attorney General Jeff Sessions echoing that “rising crime is a dangerous and permanent trend.”

**Fact:** For several decades, both violent and property crime rates have been falling. In 2015, the FBI-aggregated violent crime rate was less than half the 1990 rate — a downward trend confirmed by Bureau of Justice Statistics (BJS) crime-victimization surveys (BJS, 2017; Statista, 2017).

**Belief:** Many immigrants are criminals. Horrific incidents, as in the endlessly retold story of a Mexican national killing a young woman from San Francisco, feed this narrative. Trump’s now-famous words epitomized this perception: “When Mexico sends its people … they’re bringing drugs. They’re bringing crime. They’re rapists.”

**Fact:** Poor immigrants may fit our image of criminals (Butcher & Piehl, 2007), yet some studies report that, compared with native-born Americans, immigrants commit less violent crime (Riley, 2015).

**Belief:** Under Obama, unemployment rose and the stock market fell. At the end of 2016, 67% of Trump voters told Public Policy Polling (PPP) that unemployment increased during the Obama years, and only 41% said the stock market had risen.

**Fact:** At the end of 2016, the 4.7% US unemployment rate was about half the 2009 rate, while the stock market had more than doubled (Bureau of Labor Statistics, 2017; Vardi, 2017).

Lest these examples make misinformation seem partisan, a meta-analysis by APS Fellow Peter Ditto and his colleagues (2015) reveals “partisan bias in both liberals and conservatives, and at virtually identical levels.” For example, at the end of the Reagan presidency, more than half of strong Democrats believed inflation had worsened under Reagan. In actuality, it had plummeted — from 13% to 4% (Gelman, 2009).

Moreover, psychology-relevant misconceptions are abundant, note Alan Bensley and APS James McKeen Cattell Fellow Scott Lilienfeld (2017). At the beginning of an introductory psychology class, ask your students: True or false...

1. Human memory captures events like a video recorder.
2. Abnormal behavior is more common during a full moon.
3. People use only 10% of their brains.
4. Brain-training exercises increase people’s intelligence.
5. Students learn better when teachers match their teaching styles to their students’ learning styles.

Better yet, administer Bensley, Lilienfeld, and Lauren Powell’s (2014) Test of Psychological Knowledge and Misconceptions (TOPKAM), with its forced-choice format that pits misconceptions against evidence-based alternatives. Sample item:

Which is most true about the Rorschach (inkblot) Test?

a. It is like a “psychological X-ray” because it can penetrate the unconscious mind and tell a great deal about personality.

b. It can detect marked thinking disturbances but is not effective in detecting depression or anxiety disorder.

Or test your students on the 50 great myths of popular psychology (Lilienfeld, Lynn, Ruscio, & Beyerstein 2010).

Such popular but false beliefs — all discounted by psychological science, note Bensley and Lilienfeld — are weeds within psychology’s lush grass. We wonder: Why do these weeds spread despite the counterforce of fact? Why, despite our efforts to pull them, do they keep sprouting? And rather than succumb to fact-free, post-truth thinking, what can we do to eradicate them?

**Why Does Misinformation Spread?**

Psychological science has identified several seeds of false beliefs.

_The power of mere repetition._ How often have people heard or read it: Vaccines cause autism. Climate change is a hoax. Islamic terrorism is a grave threat to the United States (never mind that, of 230,000 murders since 9/11, only 123 have been perpetrated by Muslims [Kristof, 2017]). Mere repetition makes statements easier to process and remember (Lewandowsky, Ecker, Seifert, Schwarz, & Cook, 2012; Schwarz, Newman, & Leach, 2017).

The power of familiar, hard-to-erase falsehoods and fake news is appreciated by political manipulators, from those in Orwell’s fictional 1984 to those running today’s presidential campaigns.

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Moreover, rebuttals sometimes backfire because they repeat the myth. But the good news, as Bensley and Lilienfeld note, is that repetition also can power truth.

**The power of confirmation bias.** Our self-justifying brains welcome information that supports our preexisting beliefs and resist information that does not. In a May 2016 PPP national survey, those favorable to Trump believed Obama was Muslim rather than Christian by a 65% to 13% margin. Those unfavorable to Trump believed the reverse by a mirror-image 64% to 13% margin. As a Chinese proverb says, “Two-thirds of what we see is behind our eyes.”

**The power of cognitively available anecdotes.** Thanks to the availability heuristic, mere anecdotes have power. A brutal crime can make the world seem more violent than it actually is. An unseasonably warm (or cold) winter day can make climate change seem real (or not). Thus we teach — and repeat — “The plural of anecdote is not data.”

**The power of group polarization.** The Internet provides a fertile medium for group polarization — the strengthening of true and false beliefs as like minds interact among themselves. On social media, we feed our like-minded friends information — and misinformation. Thus, news and fake news spread. Within the Internet’s echo chamber of the like-minded, viewpoints become more extreme. Suspicion becomes conviction. As Steve Martin tweeted, “Dear Satan, thank you for having my Internet news feeds tailored especially for ME!”

Ergo, the great challenge for teachers of psychology, conclude Bensley and Lilienfeld, is the teaching of “critical thinking skill[s]” and a disposition “to skeptically examine knowledge claims.” Although human intuition has some remarkable powers, it also has perils — as illustrated by the correlation between high scores on the Faith in Intuition scale and endorsement of misconceptions. Go bold, they advise. Engage analytic thinking. “Activate misconceptions and then explicitly refute them.”

When wedded with a spirit of humility, the teaching of psychological science is a welcome antidote to rampant misinformation.

**References**


‘I Can’t Do This’

Starting a Dialogue About Struggling in Graduate School

By Elise Goubet

It’s a little hard to tell what’s a failure and what’s just something that is shifting your life in a whole new direction. -Pema Chodron

"I can’t do this.” Almost every graduate student experiences that moment — or hour or week or month or year — when she questions her ability to succeed in graduate school and beyond. We are constantly reminded that rejection is the norm, and since many of us are over-achievers, this can sting and lead to the feeling that we just don’t “belong here.” Here’s the worst part: We don’t talk about it. Everyone is trying to make it seem like they have everything under control and never feel overwhelmed or defeated. This leads to even more feelings of inadequacy when you feel like a failure, because you think you are alone. Guess what? You are not! In this article, I will share several ways to combat the sense of impending doom and total failure that seems to be a hallmark of graduate school.

Surround yourself with your own personal cheerleaders and people who are honest about their own struggles.

We all need at least one person in our life who encourages us and at the same time is willing to be vulnerable about their own struggles and doubts. Here’s the best part: You can be competitive and supportive at the same time. Competition is healthy; it motivates us to reach higher and push ourselves to be the best researcher/clinician/teacher we can be. However, it is also important to remember that we are all in this together. You have to ask yourself the question: What’s more important, being the best or having a positive work environment?

A recent study found that psychology graduate students reported spending time with peers in their program, seeking support from advisors, and relaxing with friends or significant others as effective sources of support to manage stress levels. In addition, individuals who have strong social support networks report less overall stress and a higher quality of life compared with students who don’t. These results highlight the importance of creating a positive work environment in which you and your fellow students are comfortable sharing and supporting each other.

Another way to encourage camaraderie and support is to become part of a writing group. Many of us struggle with writing, so having a group that motivates us to write on a consistent basis can be very helpful. Often, universities have writing centers that provide graduate student writing groups (some even have ones specific to psychology), but you can also start your own. A great article about how to start your own graduate student writing group is available at chris.golde.org/filecabinet/writegroups.html.

Take care of your physical and mental health, even if this means taking time off from school.

We all know that eating well and getting adequate amounts of sleep are important, but we aren’t always able to make that a reality. A recent study found that students who exercise regularly report lower stress levels than students who do not. Additionally, burnout rates are lower among individuals who sleep and eat well and exercise regularly. Here’s my advice: Do a case study. Make a questionnaire for yourself (or use an app such as Daylio) to track your mood, energy level, and other factors throughout the day. For the first 3 days, do your normal routine. For the next 3 days, make an effort to eat healthier meals and snacks throughout the day, and get however many hours of sleep are necessary for you to function at your highest capacity. For some people, that’s 9 hours; for others, it’s 7. Now compare your results; hopefully, you will see an improvement in your mood and energy level.

The average age of onset for numerous mental illnesses is in the early- to mid-20s, which is often the time when people attend graduate school. Many individuals will experience diagnosable mental illness at some point in their life, with some estimates as high as 18.5% to 20%. However, only approximately half of American adults with mental illness receive treatment. Many people feel ashamed because
our society places illogical taboos on mental health issues, and the consequences can be deadly. In the United States, suicide is the second leading cause of death from the ages of 15 to 34 and the 10th leading cause of death across all age groups. Research suggests that the experience of thwarted belongingness is a critical component in predicting suicide. This only increases the importance of being open and honest with each other about our struggles and fears in graduate school. Many universities have support groups for graduate students through their counseling centers, so if you feel the need to talk to someone about your concerns, check to see if your university has one.

In closing, remember, you are not alone! You just might be amazed at the positive response you get from your peers if you are honest about your struggles and doubts. Let’s start the dialogue. Ready? Go.

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More APS Members in the news online at www.psychologicalscience.org/MembersInTheNews
The National Institute on the Teaching of Psychology is designed for teachers of psychology who are interested in:

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To view the full program and register online, go to [www.nitop.org](http://www.nitop.org). To receive the full conference brochure by mail, contact Joanne Fetzner by email (jfetzner@illinois.edu) or phone (813-973-6969).
University of British Columbia
Psychology
Assistant Professor - Clinical Psychology
The Department of Psychology at the University of British Columbia—Vancouver campus (psych.ubc.ca) invites applications for two tenure-track positions at the Assistant Professor level in clinical psychology, which will begin 1 July 2018. Candidates must hold a PhD from an accredited clinical training program (including an APA- or CPA-accredited internship) before starting the position. They are also expected to obtain registration as a psychologist in the province of British Columbia once their formal appointment begins. We are seeking applicants with strong research records who would enhance our research-oriented CPA-accredited doctoral program. One position is open with regard to clinical research specialization. The second position is designated for an applicant with specialization in clinical child/adolescent psychology. For both positions, we are particularly interested in candidates whose research complements existing strengths of the clinical program and bridges clinical psychology to other areas of the department (psych.ubc.ca/faculty/index.psy). The successful candidates will be expected to maintain a program of scholarly research that leads to publication; conduct effective undergraduate and graduate teaching; provide effective clinical and research supervision; and contribute to departmental service. Applications must be submitted online through the UBC Faculty Careers website at the appropriate link provided below. (1) Applicants for the open clinical research specialization position should upload a single PDF file (containing the following documents in the order listed: a cover letter, CV, research statement, teaching statement, evidence of teaching effectiveness, and three publications) to: www.facultycareers.ubc.ca/27003. (2) Applicants for the clinical child/adolescent position should upload their application materials to: www.facultycareers.ubc.ca/26988. Applicants interested in the Clinical child/adolescent position will automatically be considered for the open clinical research specialization position as well and should not upload their materials to both links. After uploading their materials, applicants should arrange to have at least three confidential letters of recommendation submitted by the same deadline via email to ubcpsycjobs@psych.ubc.ca. The closing date for applications is: 1 October 2017. These positions are subject to final budgetary approval. Salary will be commensurate with qualifications and experience. Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Métis, Inuit, or Indigenous person. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

BRITISH COLUMBIA, CANADA

Clinical Psychologist
California Correctional Health Care Services has one of the largest interdisciplinary treatment teams in the nation. Our staff enjoys the challenges of complex diagnostic evaluations along with the chance to collaborate with talented colleagues.

Not only do we have positions available throughout the state, our flexible work schedules allow our clinical staff to work in one location while living in another community.

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• 40-hour workweek
• Comprehensive medical, dental, and vision coverage
• Retirement plan that vests in five years
• 401(k) and 457 plans
• Visa sponsorship opportunities

See the full listing and apply online at<br>www.CaliforniaCPS.com/JobListings/13249379
California State University-San Marcos  Psychology  Assistant Professor
California State University San Marcos seeks to hire two Assistant Professors (tenure track) -- one with expertise in Developmental Psychology (specialization in adolescent development), and one with expertise in Social Psychology (specialization in prejudice, stereotyping, and discrimination or effects of ethnic identity and acculturation/multiculturalism on behavior). Must have Ph.D., evidence of active research program, demonstrated evidence of teaching excellence, and ability to supervise Masters theses. DEADLINE to assure full consideration is Oct. 1, 2017. For complete description of position and application procedures please visit: http://www.csusm.edu/facultyopportunities/listings.html

Stanford University  Graduate School of Business  Faculty Positions in Organizational Behavior
The Graduate School of Business seeks to hire tenure-track assistant professor faculty in organizational behavior beginning September 1, 2018. Applicants should possess a strong research background and an interest in the study of organizations and organizational behavior broadly defined, and the ability to teach effectively in both MBA and PhD programs. The position is open to all ranks for candidates with a macro-OB/sociology orientation, but we are only looking at the junior level for candidates with a micro-OB/psychology orientation. Applicants should have or expect to complete a PhD by September 1, 2018. Candidates must have a Ph.D. in Psychology (or foreign equivalent) and a record of peer-reviewed publications in social and/or personality psychology. Preference will be given to candidates who use an experimental approach with an interest in stereotypes and prejudice or prosocial behavior. Duties include teaching undergraduate lecture and research courses in the candidate's area of expertise; major and career advising; and departmental, college, and university service. The ideal candidate will have evidence of exceptional teaching skills, an ongoing program of research, experience working with diverse populations, and potential to obtain outside funding. Laboratory space is available and faculty development funds for research are awarded on a competitive basis. Teaching assignments may include courses at the Hayward, Concord and online campuses. For additional information, visit the department website (http://www20.csueastbay.edu/csci/departments/psychology/). Please submit a cover letter, curriculum vitae, copies of major publications or preprints, teaching statement, research statement, diversity statement, and contact information for three references to: http://apply.interfolio.com/42041. Applications are due October 16, 2017. Contact: Prof. David Fencsik (david.fencsik@csueastbay.edu; +1-510-885-3484). A background check (including a criminal records check and prior employment verification) must be completed and cleared prior to the start of employment.

University of California, Irvine  Psychology  Social/Personality Psychology
The Department of Psychology invites applications for a tenure-track assistant professor position in Social/Personality Psychology to begin Fall 2018 (Position No. 18-19 PSYC-SOCIAL/PERSONALITY-TT). Candidates must have a Ph.D. in Psychology (or foreign equivalent) and a record of peer-reviewed publications relevant to ABA. Certification as a BCBA or BCBA-D, or eligibility for certification, is desirable. Duties include teaching undergraduate and graduate courses in ABA, conditioning and learning, and others in the candidate's area of expertise; major and career advising; and departmental, college, and university service. The ideal candidate will have evidence of exceptional teaching skills, an ongoing program of research, experience working with diverse populations, and potential to obtain outside funding. Laboratory space is available and faculty development funds for research are awarded on a competitive basis. Teaching assignments may include courses at the Hayward, Concord and online campuses. For additional information, visit the department website (http://www.csusm.edu/facultyopportunities/listings.html). Please submit a cover letter, curriculum vitae, copies of major publications or preprints, teaching statement, research statement, diversity statement, and contact information for three references to: http://www.gsb.stanford.edu/recruiting. For an application to be considered complete, all applicants must submit a CV, a job market paper and arrange for three letters of recommendation to be submitted. Applicants applying with a micro-OB/psychology orientation are encouraged to submit a research statement, but this is not required. The application deadline is October 1, 2017, but candidates are strongly encouraged to submit as soon as possible. For questions regarding the application process, please send an email to faculty_recruiter@gsb.stanford.edu. Stanford University is an equal opportunity employer and is committed to increasing the diversity of its faculty. It welcomes nominations of and applications from women, members of minority groups, protected veterans and individuals with disabilities, as well as from others who would bring additional dimensions to the university's research, teaching and clinical missions.

California State University-East Bay  Psychology  Assistant Professor in Applied Behavior Analysis
California State University, East Bay—The Department of Psychology invites applications for a tenure-track assistant professor position in Applied Behavior Analysis to begin Fall 2018 (Position No. 18-19 PSYC-ABA-TT). Candidates must have a Ph.D. in Psychology (or foreign equivalent) and a record of peer-reviewed publications relevant to ABA. Certification as a BCBA or BCBA-D, or eligibility for certification, is desirable. Duties include teaching undergraduate and graduate courses in ABA, conditioning and learning, and others in the candidate's area of expertise; major and career advising; and departmental, college, and university service. The ideal candidate will have evidence of exceptional teaching skills, an ongoing program of research, experience working with diverse populations, and potential to obtain outside funding. Laboratory space is available and faculty development funds for research are awarded on a competitive basis. Teaching assignments may include courses at the Hayward, Concord and online campuses. For additional information, visit the department website (http://www.csusm.edu/facultyopportunities/listings.html). Please submit a cover letter, curriculum vitae, copies of major publications or preprints, teaching statement, research statement, diversity statement, and contact information for three references to: http://www.gsb.stanford.edu/recruiting. For a complete application to be considered, interested candidates must submit a CV, a job market paper and arrange for three letters of recommendation to be submitted. Applications will only be considered if the position has not yet been filled. Applications completed by October 1, 2017 will be granted full consideration. Applications will continue to be accepted until December 1, 2017, but will only be considered if the position has not yet been filled. The University of California, Irvine is an Equal Opportunity/Affirmative Action Employer advancing inclusive excellence. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, protected veteran status, or other protected categories covered by the UC nondiscrimination policy.

Wesleyan University  Psychology  Tenure-Track Assistant Professor in Clinical Psychology
The Department of Psychology at Wesleyan University (Middletown, Connecticut) seeks to hire a tenure-track Assistant Professor in Clinical Psychology. The appointment is scheduled to begin July 1, 2018. A Ph.D. in clinical psychology or related field in hand by the time of appointment is required. Preference will be given to those whose work focuses on psychological or behavioral conditions.
interventions, although research area is open. Wesleyan University is a selective liberal arts university with strong support for both research and teaching (two-course per semester teaching load). The ideal candidate will have a research program with a trajectory that will include learning opportunities for undergraduates, and will be prepared to teach a breadth (introductory) course in clinical psychology (e.g., clinical interventions, theories of personality, health psychology), two specialized courses in their area of expertise (seminar and advanced research methods), and one service course (research methods, statistics, or introductory psychology). Additional duties include advising and mentoring students, and participating in faculty governance at the departmental and university level. Salary, fringe benefits, and start-up funds will be competitive. The Department currently has 18 full-time faculty members in cognitive, developmental, neuroscience, psychopathology, cultural, and social psychology; some faculty also contribute to interdisciplinary programs including Feminist, Gender, and Sexuality Studies, Integrative Sciences, Neuroscience and Behavior, and Science and Society. There are additional opportunities to participate in a departmental postdoctoral training program. Wesleyan University does not discriminate on the basis of race, color, religious creed, age, gender, gender identity or expression, national origin, marital status, ancestry, present or past history of mental disorder, learning disability, physical disability, political beliefs, veteran status, sexual orientation, genetic information or non-position-related criminal record. We welcome applications from women, and from historically underrepresented minority groups. Inquiries regarding Title IX, Section 504, or any other non-discrimination policies may be directed to: Antonio Farias, Vice President for Equity & Inclusion, Title IX and ADA/504 Officer, afarias@wesleyan.edu, 860-685-3927. Please apply electronically to: http://careers.wesleyan.edu/postings/5950 and include: curriculum vitae, reprints, a statement of research plans, teaching interests, teaching evaluations (if available), and email addresses for three recommenders. In your teaching statement and/or cover letter, we invite you to describe your cultural competencies and experiences engaging a diverse student body. Review of applications will begin on October 15, 2017, and applications received after that date may not receive full consideration.

The University is an Equal Opportunity Employer, and is committed to building a culturally diverse workplace.

The Department of Psychology at the University of Notre Dame invites applications for a faculty position at the assistant professor level. The successful applicant will have research interests in Cognitive Psychology, Cognitive Science, Cognitive Neuroscience, or Cognitive-related Biopsychology. Scholars whose research will contribute to the evolving neuroscience/biopsychology emphasis in the Cognition, Brain and Behavior Area and the department are especially encouraged to apply. The successful applicant will be expected to maintain an internationally visible and externally fundable research program, supervise doctoral research, and teach at the graduate and undergraduate levels. The position will begin in the Fall of 2018. Candidates are asked to apply free of charge at http://apptkr.com/1047095. To guarantee full consideration, applications must be received by October 31, 2017, but the review of applications will continue until the position is filled. Questions and informal inquiries regarding this position may be directed to Search Committee Chair, Prof. Chuck Crowell, at ccrowell@nd.edu.

The University is an Equal Opportunity Employer, and is committed to building a culturally diverse workplace.

The Department of Psychology anticipates making a tenure-track appointment at the assistant professor level to begin July 1, 2018. We seek candidates with expertise in the application of computational models toward understanding human perception or cognition. Our interest is less in specific areas and methods than in innovation and excellence in the application of modeling techniques to experimental data from adult humans, children or animals. The appointment is expected to begin on July 1, 2018. Candidates at all levels are encouraged to apply. Candidates must have a strong doctoral record and have completed their Ph.D. Candidates should have demonstrated a promise of excellence in both research and teaching. Teaching duties will include offerings at both undergraduate and graduate levels. Please submit a cover letter, curriculum vitae, research and teaching statements, up to three representative reprints, and names and contact information of three to five references (three letters of recommendation are required, and the application is complete only when all three letters have been submitted) to http://academicpositions.harvard.edu/postings/7663. Questions regarding this position can be addressed to alvarez@wjh.harvard.edu. The committee will consider completed applications starting immediately on a rolling basis through October 1. Interviews will be conducted in late September and continue in October. Harvard University is an affirmative action/equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veteran status, or any other characteristic protected by law. We actively encourage applications from women and minority groups.

The Department of Psychology at the University of Michigan, Ann Arbor, invites applications for a faculty position (Assistant or Associate Professor) focusing on social/affective/cultural neuroscience in healthy populations, which may include research that touches on cognitive, clinical and/or developmental processes as well. The successful candidate will likely be a faculty member who would affiliate with the Social Psychology area of the Department. Preference will be given to individuals whose methods include brain imaging (e.g., fMRI, EEG, eCog), genetics/epigenetics, biomarkers or stimulation techniques (e.g., tDCS, TMS) paired with behavioral studies. This is a tenure-track university year appointment. The expected start date is September 1, 2018. Successful candidates must have a Ph.D. in a relevant discipline (Psychology or Neuroscience) by the time the position starts.
and a commitment to undergraduate and graduate teaching. New faculty hired at the Assistant Professor level will be expected to establish an independent research program. More senior applicants should have a well-established, externally-funded research program with an excellent international reputation. Please submit a letter of intent, curriculum vitae, a statement of current and future research plans, a statement of teaching philosophy and experience, and evidence of teaching excellence (if available). The University of Michigan and the Department of Psychology value contributions to diversity, equity, and inclusion (https://diversity.umich.edu/). We encourage applicants to comment (in a separate statement or in the cover letter) about how their research, teaching, and/or service in the past, present, and/or future could contribute to these values. Applicants should also request at least three letters of recommendation from referees. Once the application is submitted, an email will be sent to each of the referees with instructions for submitting letters directly to the application system by September 15, 2017. All other application materials noted above should be uploaded to https://psychology-lsa.applicantstack.com/x/apply/a2s9hqlygv70 by September 15, 2017 as a single PDF. For inquiries about the position please contact Ethan Kross (ekross@umich.edu). The University of Michigan is an equal opportunity/affirmative action employer. Qualified women and minority candidates are encouraged to apply. The University is supportive of the needs of dual-career couples.

ONTARIO, CANADA

University of Toronto Mississauga

Social/Personality & Cognitive Developmental Faculty

The Department of Psychology, University of Toronto Mississauga (UTM) invites applications for two tenure-stream positions, one in Social/Personality Psychology and the second in Cognitive Developmental Psychology. These appointments will be at the rank of Assistant Professor and will begin July 1, 2018. SOCIAL / PERSONALITY PSYCHOLOGY: Applicants should demonstrate research excellence in the area of social/personality psychology. Applicants are expected to use multiple methods, including ecologically valid approaches, and utilize advanced statistics in their program of research. Expertise in a distinct methodology or subject area that compliments the existing research strengths of our faculty is especially encouraged. The application deadline is September 18, 2017. COGNITIVE DEVELOPMENTAL PSYCHOLOGY: Applicants are expected to have demonstrated excellence in both research and teaching in developmental psychology, with a focus on cognitive development, in an area that expands the breadth of our program. The application deadline is October 2, 2017. The successful candidate will have received his or her Ph.D. in Psychology or related field by the start date of the appointment, or shortly thereafter. He/she must demonstrate evidence of excellence in both teaching and research. Evidence of excellence in teaching will be demonstrated through teaching accomplishments, strong letters of reference and the teaching dossier submitted as part of the application. Candidates must have a record of excellence in research, as demonstrated by a record of sustained contributions and publications in respected and field relevant academic journals, presentations at significant conferences, awards and accolades, and strong endorsements by referees of high standing. The successful applicant will be expected to develop and maintain an active, innovative, externally funded program of research and to contribute to the education and training of undergraduate students as well as graduate students enrolled in the tri-campus University of Toronto Psychology Graduate Program. There will be opportunities to collaborate with UTM psychologists in research clusters focused on Behavioural Neuroscience, Developmental Science, Human Communication, and/or Health, Adaptation and Well-being, as well as with researchers on all three campuses of the University of Toronto. Salary to be commensurate with qualifications and experience. For more information on the Department of Psychology, UTM please visit us at http://www.utm.utoronto.ca/psychology/welcome-psychology-utm. Application Information: All qualified candidates are invited to apply online by visiting https://utoronto.taleo.net/careersection/10050/jobsearch.ftl?lang=en and click job number 1700999 (for Social, Personality, or Health Psychology position) or job number 1701000 (for Cognitive Developmental Psychology position). Applications should include a cover letter, curriculum vitae, teaching dossier (including a statement of teaching philosophy), a statement outlining current and future research interests, and copies of their top three publications. For the Social, Personality or Health Psychology position, the research statement should include information about how the applicant has or intends to respond to issues of replicability and open science. All application materials should be submitted online. Please direct questions to psychair.admin@utoronto.ca. Submission guidelines can be found at: http://uoft.me/how-to-apply. We recommend combining documents into one or two files in PDF/MS Word format. Applicants should also ask [at least] three referees to send letters (signed and on letterhead) directly to the department via e-mail to psychair.admin@utoronto.ca by the closing dates. We strongly encourage applicants to use Interfolio http://www.interfolio.com/services/dossier/ for their letters of reference only. The University of Toronto is strongly committed to the diversity within its community and especially welcomes applications from racialized persons/persons of colour, women, Indigenous/Aboriginal People of North America, persons with disabilities, LGBTQ+ persons, and others who may contribute to the further diversification of ideas. As part of your application, you will be asked to complete a brief Diversity Survey. This survey is voluntary. Any information directly related to you is confidential and cannot be accessed by search committees or human resources staff. Results will be aggregated for institutional planning purposes. For more information, please see http://uoft.me/UP. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

Villanova University

Tenure-Track Position (Assistant Professor in Developmental Psychology)

THE DEPARTMENT OF PSYCHOLOGICAL & BRAIN SCIENCES of VILLANOVA UNIVERSITY invites applications for a TENURE TRACK POSITION (ASSISTANT PROFESSOR), starting late August 2018, in DEVELOPMENTAL PSYCHOLOGY, with an emphasis on some aspect of cognitive development preferred. Candidates should have a strong publication record, the ability to generate a high-quality research program, and a commitment to teaching in both undergraduate and graduate (MS) programs. Responsibilities include direction of master’s theses in our rigorous, research-oriented program, and teaching developmental psychology, general psychology or other courses depending on one’s interests and the fit with departmental needs. For more information, see http://www.villanova.edu/arts/p/psychology. Applications must be submitted at https://jobs.villanova.edu/ and must include a cover letter, vita, three letters of reference and other supporting documents as detailed at the application website. Review of applications will begin on September 25, 2017, and will continue until the position is filled. The search committee can be contacted by email at rebecca.brand@villanova.edu. Villanova University is a Roman Catholic University sponsored by the Augustinian Order. Diversity and inclusion have been and will continue to be an integral component of Villanova University’s mission. The University is an Equal Opportunity/Affirmative Action employer and seeks candidates who understand, respect, and can contribute to the University’s mission and values.
The theme of this year’s Annual Convention is “Applying CBT in Diverse Contexts” and it is intended to showcase research, clinical practice, and training that increases our understanding of mental health problems and mechanisms, improves the efficacy and effectiveness of CBT for diverse groups, and enables us to disseminate these evidence-based treatments across professions.

• Three Invited Addresses:
  
  **Stanley Sue**, Ph.D., Palo Alto University and UC Davis
  “Cultural Competency: Political Correctness or Necessity?”

  **Steven A. Safren**, Ph.D., ABPP, University of Miami
  “Applying Evidence-Based CBT Principles to Disease Prevention and Self-Care in Diverse, Sexual Minority and Global Populations: Lessons Learned From HIV/AIDS”

  **Jeanne Miranda**, Ph.D., UCLA
  “Cognitive Behavioral Therapy With Low-income and Minority Communities”

• Presidential Address by **Gail Steketee**, Ph.D., Boston University
• Lifetime Achievement Award Address by **Marsha M. Linehan**, Ph.D., ABPP, University of Washington
• Clinical Grand Rounds hosted by **Katharina Kircanski**, Ph.D., National Institute of Mental Health, 2016 Annual Convention Program Chair

• 145 Symposia, 34 Panel Discussions, 14 Clinical Roundtables, 1 Spotlight Research
• Over 1,400 Poster presentations
• Over 52 Clinical Intervention Trainings, Institutes, Master Clinician Seminars, AMASS, Workshops, and Mini Workshops

**Preregistration deadline: October 16, 2017**
ANNOUNCEMENTS
Send items to apsobserver@psychologicalscience.org

GRANTS

NIH Postdoctoral Research Fellowship Opportunity
The University of Vermont’s Center on Behavior and Health announces NIH postdoctoral research fellowship opportunities in its center of excellence for the study of substance abuse. Applicants must have completed their training in psychology, behavior analysis, cognitive neuroscience, or a related discipline and be US citizens or permanent residents. Trainees are selected on the basis of scholastic record and commitment to a career in substance abuse research. Individuals must be highly motivated and possess initiative and a desire to learn and expand their interests and expertise. The appointment last for 2–3 years. Benefits include a stipend, medical insurance coverage, and travel funds supported by NIH Institutional Training Awards. For more information, visit med.uvm.edu/behaviorandhealth/careeropportunities.

NIH Announces Funding Opportunities
NIH’s Office of Behavioral and Social Science Research (OBSSR), in conjunction with several other NIH institutes, is looking to support efforts to conduct intensive longitudinal analysis of health behaviors, with a focus on leveraging new technologies to understand health behaviors. OBSSR aims to establish a network of 5 separate projects, and 1 research coordinating center, “to collaboratively study factors that influence key health behaviors in the dynamic environment of individuals, using intensive longitudinal data collection and analytic methods.” Another set of opportunities of potential interest: NIH’s National Institute of Child Health and Human Development (NICHD) has invited researchers to examine the impact of human–animal interaction on typical and atypical child development and health, evaluation of animal-assisted intervention for children and adults with disabilities, and effects of animals on public health. Researchers can apply for research project grants, small grants, or exploratory/developmental grants in this area. For more information, visit grants.nih.gov/grants/guide/listserv.htm.

CASBS Fellowship Program Accepting Applications
The Center for Advanced Study in the Behavioral Sciences (CASBS) at Stanford University is now accepting applications for residential fellowships for the 2018–2019 academic year. CASBS has hosted generations of scholars, thinkers, and researchers who come for a year as fellows. Former fellows include Nobel laureates, Pulitzer Prize winners, winners of MacArthur “genius awards,” and hundreds of members of the National Academies. Fellows have played key roles in starting new fields, ranging from cognitive science to behavioral economics to the sociology of urban poverty. They have developed new policies and practices in fields as diverse as medicine, education, electoral politics, Third World development, and crime prevention. The CASBS fellowship provides an excellent opportunity to pursue innovative ideas and expand horizons while engaging in a diverse, interdisciplinary community. Online applications will be accepted at the Center’s website through November 3, 2017, for the 2018–2019 fellowship year. For more information, guidelines, and application requirements, visit our website at casbs.stanford.edu/fellowships.

MEETINGS

10th Biennial Meeting of the Society for the Study of Human Development
October 6–8, 2017
Providence, Rhode Island, USA
support.sshdonline.org/conference-links

58th Annual Meeting of the Psychonomic Society
November 9–12, 2017
Vancouver, Canada
psychonomic.org/page/2017annualmeeting

2018 Anxiety and Depression Conference
April 5–8, 2018
Washington, D.C., USA
adaa.org/resources-professionals/conference/registration

2018 Cognitive Aging Conference
May 3–6, 2018
Atlanta, Georgia, USA
cac.gatech.edu

30th APS Annual Convention
May 24–27, 2018
San Francisco, California, USA
psychologicalscience.org/convention

3rd International Convention of Psychological Science
7–9 March, 2019
Paris, France
icps.psychologicalscience.org
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