

2nd Issue | SEPTEMBER 2017

# McGill Psychology

behavioural neuroscience | clinical | cognitive neuroscience | developmental | health | quantitative modelling | social & personality

## A Message from our Department Chair



“ We have been so preoccupied with consultations and planning for the university moving about 75% of us to 2001 McGill College that it is easy to forget the significant academic events of the past year. Bob Pihl retired after 50! Years of service to the department. Nevertheless, he and numerous other emeritus professors continue to contribute to the department in a variety of ways. We now have 6 Faculty with Canada Research Chairs and we have 10 Assistant Professors instilling new vitality to our research and teaching mission. Our Undergraduate Poster Day continues to grow in size and stature. Enrollment in our courses exceeds 10,000. Our graduate students continue to excel in research, presenting papers, publishing articles, and outperforming other science departments in winning national awards. The graduate students have also shown great initiative in organizing statistics workshops and professional issues symposia. Our support staff have extended themselves during this difficult year preparing for and then moving to 2001.

Our greatest concern throughout the year was the impending physical split of the department. The fact that this is such a serious preoccupation throughout the department attests to a key aspect of our greatness. We are ONE department filled with highly talented people who work tirelessly and generously in an environment of mutual respect. ”

## In This ISSUE

- More than a feeling? Emotional cues impact autobiographical memories.
- Meet our new Faculty Members and learn about their lines of research.
- Bob Dylan & Joan Baez are two reasons why this social scientist got started.
- Read about the exciting work our Alumni are doing since they left McGill.

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# In the Spotlight

## Happy notes, Happy memories



“We don’t access memories based on what we need, but based on the situation we’re in while we’re remembering”

“Music is a powerful trigger to thinking about the past,” said Dr. Signy Sheldon, assistant professor in the Department of Psychology.

In her February 2017 study, entitled “*More than a feeling: Emotional cues impact the access and experience of autobiographical memories*,” Dr. Sheldon explores what characteristics of music stimulate memory: Is the song itself what sparks an image from the past, or is it the characteristics of music as a whole?

Her work focused on how music can turn on different aspects of emotion, allowing for memory conjuration.

To investigate this question, participants in Sheldon’s study listened to unfamiliar, classical, scientifically-developed music that evoked different emotions. The happier music had a major key and was more upbeat, while the sad music samples had minor keys and slower tempos.

Unexpected results arose from this study.

Participants accessed memories faster when listening to happy music as opposed to sad, although they had never heard the classical tunes before. In addition, positive music promoted the recollection of positive memories, while the negative music, whether scary or sad, brought negative memories to the surface.

The ramifications of these findings reveal a lot about human nature.

“Past memories help us build our self-identity, or our concept of self,” Dr. Sheldon said. “So being able to access memories from past autobiographical events, and access our past personal experiences, to happy music, could mean that we are constantly trying to uphold a happy depiction of our autobiographical selves. Happy music will make us think about ourselves more than any other type of music because of this function of autobiographical memory, to maintain a positive self-identity.”

The fact that the tone of music influences human emotion also highlights key elements of memory retrieval—that it is dynamic and flexible. Accessing our past is not based on personal choice. Rather, our surroundings and the emotions being experienced, control which memories we access.

“This study shows us that we won’t access memories based on what we need, but based on the situation we’re in while we’re remembering,” Dr. Sheldon said. Scientists were able to make this observation after they discovered music’s impact on emotion.

In future studies, Dr. Sheldon hopes to examine how emotions experienced while listening to music affect learning or the uptake of information. Participants will be presented with complex images while listening to similar musical emotional queues, and eye tracking techniques will be applied to analyze how people digest this information. Dr. Sheldon also plans to use brain scanning in order to identify any differences in brain regions while subjects access memories in light of happy cues.

“The take-home message is that if you are trying to remind someone of a past event and you want them to remember it in a positive light, play happy music for them,” Sheldon said.

*Written by Izze Siemann and reprinted with the permission of The McGill Tribune.*

“*Music is a powerful trigger to thinking about the past*”

***For more on this research:***

- Sheldon, S., & Donahue, J. (2017). More than a feeling: Emotional cues impact the access and experience of autobiographical memories – Memory & Cognition.
- The Impact of Music on Identity – The McGill Tribune.
- Listening to Upbeat Music can actually make you feel happier, Science says – Elite Daily.

# Research in the News



## Thinking of loved ones lessens our need to 'reconnect'

Research by McGill Psychology's Dr. Jennifer Bartz, graduate student Kristina Tchalova, and undergraduate student Can Fenerci shows that reminding people of close, caring relationships can reduce their tendency to anthropomorphize objects as a way of feeling socially connected.



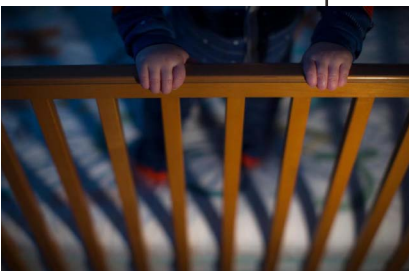
## Is bilingualism a good idea for at-risk learners?

McGill Psychology's language expert, Dr. Fred Genesee, discusses what researchers know about the benefits of bilingualism, and the evidence on the effectiveness of bilingual education for students who are at-risk for academic difficulty.



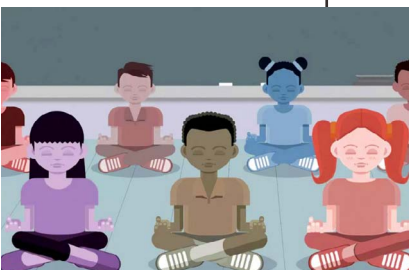
## Superfoods aren't the only things that can boost memory

McGill Psychology's graduate students Larah Maunder and Dorothée Schoemaker, and supervisor Dr. Jens Pruessner found a link between women's self-reported sexual behaviour and measured cognitive function.



## Early life stress encodes lifelong susceptibility to stress

A research collaboration involving McGill Psychology's Dr. Rosemary Bagot is one of the first studies to use genome-wide tools to understand how early life stress alters brain development, providing evidence for sensitive windows in emotion development.



## The science behind mindfulness meditation

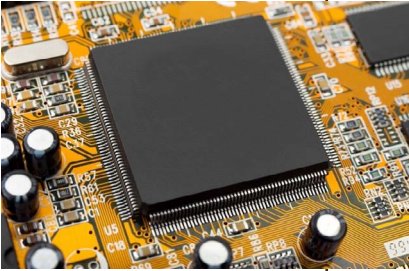
McGill Psychiatry's graduate students Stephanie Coronado-Montoya and Alex Levis, postdoctoral fellow Dr. Linda Kwakkenbos, and supervisor Dr. Brett Thombs found evidence that the field of mindfulness studies suffers from a positive publication bias.





## Happily coupled? Consider, for a moment, your ex

McGill Psychology's postdoctoral fellow Dr. Sabrina Thai suggests that comparing your partner to others is not always a bad idea, and in some cases, can actually strengthen relationships.



## From Vision to Imagination

McGill Psychology's Dr. Thomas Shultz has proposed a framework that enables discriminative artificial neural networks to generate novel examples of a category, bestowing important human-like features such as knowledge and imagination to machines.



## Why is weight loss so difficult?

McGill Psychology's Dr. Richard Koestner and Connecte Psychology's Dr. Jodie Richardson created a podcast to discuss the unique challenges behind goal success, covering topics like weight loss, new year's resolutions, and watching too much TV.



## Smile! Social reward drives attention

McGill Psychology's graduate alumnus Dr. Dana Hayward and graduate student Effie Pereira, along with supervisor Dr. Jelena Ristic and collaborator Dr. Ross Otto, demonstrate that socially rewarding acts can shape one's attention.



## Good news for anyone worried about 'senior moments'

New research from graduate student Elizabeth Ankudowich and supervisor Dr. Natasha Rajah suggests that the inability to remember details in your 40s may be the result of a change in what information the brain focuses on during memory formation.



## Expanding HPV vaccination programs to males

McGill Psychology's graduate students Gilla Shapiro and Dr. Samara Perez, and supervisor Dr. Zeev Rosberger have demonstrated that expanding human papillomavirus (HPV) vaccination programs to include males will help protect against HPV-related cancers.



## Actions may speak more melodically than sounds

Research from McGill Psychology graduate alumnus Dr. Brain Mathais and supervisor Dr. Caroline Palmer shows that playing a melody on an instrument enhances how the melody is perceived and remembered, above and beyond just listening to it.



## Of Mice and Women: The gender gap in lab rats

Postdoctoral fellows and graduate students from Dr. Jeffrey Mogil's lab have shown differences in blocking pain for male and female mice, showing that gender representation is not just a problem with scientists but also with the mice and rats studied in experiments.



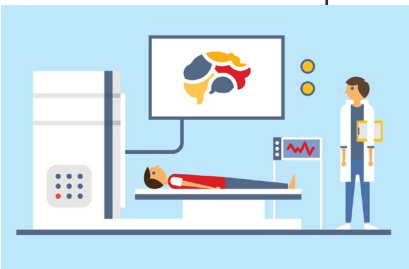
## How do children perceive lies?

Department of Educational and Counselling Psychology's Dr. Victoria Talwar has conducted a number of recent studies on lying, specifically looking at how children from different age groups evaluate hurtful lies, harmless lies, tattling, and confessions.



## Similarity and differences across reward processing

McGill Psychology's graduate student Paige Ethridge, along with supervisor Dr. Anna Weinberg and collaborator Dr. Melanie Dirks, demonstrated that reward processing for monetary and social incentives are both similar and different across neural responses.



## Can you think of a thought that isn't yours?

Work from graduate students Jay Olson and Mathieu Landry, and supervisor Dr. Amir Raz has used a form of stage magic known as "mentalism" to induce the experience of thoughts being inserted into the minds of volunteers.

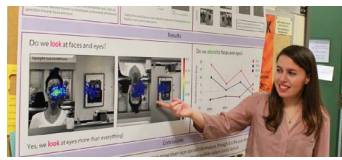


## Playing action video games may be bad for your brain

In a collaboration with Université de Montréal, McGill Psychiatry's Dr. Véronique Bohbot has found that playing first-person shooter video games causes some users to lose grey matter in areas of the brain associated with memory for past events and experiences.

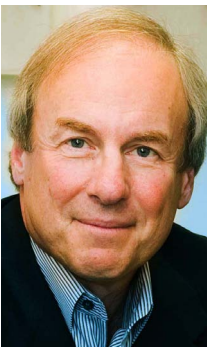


# Events & Colloquia



Our annual Undergraduate Research Day in April showcased some of the amazing research conducted by our undergraduate students throughout the year. Congratulations to everyone involved!

Our Psychology Research Methods Workshops have been a big hit this year, covering important topics in Python, R Programming, and Bayesian Inference.



Thank you to our invited speakers for their distinguished talks during our annual Hebb, Bindra, and Macnamara Lecture Series. Pictured left to right: Dr. Ian Gotlib (Stanford University), Dr. Fred Genesee (McGill University), Dr. Janet Werker (University of British Columbia), Dr. Jim McNulty (Florida State University), Dr. Jim Enns (University of British Columbia), Dr. Hervé Abdi (University of Texas at Dallas), & Dr. Eric Nestler (Icahn School of Medicine at Mount Sinai).

# Meet our New Faculty



## **DR. ROSEMARY BAGOT**

Dr. Bagot's work focuses on the mechanisms of altered brain circuit function in depression.



## **DR. CARL FALK**

Dr. Falk's research focuses on the development, computer programming, and testing of latent variable models and related statistical methods.



## **DR. OLIVER HARDT**

Dr. Hardt studies the neurobiology of memory, with a sharp focus on mechanisms involved in memory maintenance and forgetting.



## **DR. ROSS OTTO**

Dr. Otto's research investigates how our reliance on reflective versus reflexive choice vary based on cognitive and situational factors.



## **DR. SARAH RACINE**

Dr. Racine examines risk and maintenance factors for eating disorders and related forms of psychopathology from a transdiagnostic perspective.



## **DR. MATHIEU ROY**

Dr. Roy's work examines how the brain encodes subjective experiences of pain using a variety of psychophysiological and brain imaging techniques.



# Why do you teach?

## DR. RHONDA AMSEL

“Part of it, of course, is the topic. Statistics can be found everywhere and are often misused, accidentally or deliberately. It is essential to be able to evaluate a numerical argument comfortably. The other motivator is the students: I enjoy getting to know them, thinking about how best to introduce material to them, and being able to make changes each year to improve learning. Although many students are resistant to taking a math course, by the end of the introductory course, some have begun to use what they’ve learned in contexts outside the classroom. It is also important for students to see that they can succeed in understanding mathematical material, despite initial anxieties. Hearing a student say, “I’ve succeeded in stats; now I feel I can do anything” is enough to keep me here year after year.”



## DR. RICHARD KOESTNER

“A number of years ago I realized that teaching is a flow activity for me. Flow activities are those that are optimal experiences for individuals—activities that completely absorb us, whether it is rock climbing, knitting, playing guitar, etc. So now I try to structure my life so that I cross-country ski 50 times a year, play golf 50 times a year, and give 50 lectures a year. Teaching is rewarding because I feel I am doing something meaningful.”



# Dr. Donald Taylor

## Fuelled by folk music & nuclear physics



*This past year, Dr. Donald Taylor was awarded with the McGill University Medal for Exceptional Academic Achievement. Established in 2009, the medal is awarded to retired members of McGill's academic staff who are uniquely deserving in light of their exceptional contributions to their discipline, to the University, and to society at large.*

When asked how he ended up spending most of his career as a social scientist devoted to working with and helping society's most disadvantaged people, Donald Taylor blames people like Bob Dylan and Joan Baez. "I was a kid of the 60s and I banged around on the guitar a little bit when the folk music boom was in full swing. Of course, folk music was all about championing inequality. I didn't realize it at the time, but I was being socialized into some sort of idealistic ideology," says Taylor. "By the time I started my research, I was going to rid the world of injustice, inequality, prejudice, discrimination and stereotyping.

Unfortunately the world is in worse shape now than when I began," says Taylor with a rueful chuckle. "I'm not sure what that says about me." But perhaps the state of the world is more a reflection of our collective shortcomings than of Taylor's.

Over the course of his career, Taylor emerged as one of Canada's most influential social psychologists. His work on everything from stereotyping and intergroup contact, to social identity and bilingualism has had an enormous impact around world. In the field, Taylor has championed everyone from immigrants and refugees to inner city kids in the U.S.

Another constant is his dedication to Canada's Indigenous populations. Over the course of his 20+ years working with First Nations communities in Canada's north, Taylor established a strong bond of trust and respect between himself and the people of these communities. A measure of this trust is reflected by Taylor having been asked to serve on the Truth and Reconciliation Commission.

## FLOWER POWER & NUCLEAR PHYSICS

Folk music and flower power aside, Taylor vividly remembers another early, less likely, source of inspiration. Walking through the Roddick Gates on his first day on the job at McGill, Taylor tried to find the Psychology Department. Taking a wrong turn, he ended up in the Rutherford Physics Building, staring at the plaque celebrating the building's namesake, Ernest Rutherford, Nobel Prize winner and the father of nuclear physics.

"I had been overseas in Asia doing my graduate work and I was totally intimidated with the prospect of coming to McGill, where I knew absolutely no one," says Taylor. "But looking at that plaque, I said to myself 'If little Ernie Rutherford can do it, let's see what this kid can do.' It kind of inspired me."

## OVER 30,000 UNDERGRADUATES SERVED

When asked what he is most proud of when looking back at his career, Taylor pauses. He says it is always satisfying when his research helps shape policy or influence meaningful change in his field. But he says, his proudest moment came in the classroom.

"In 47 years, I never missed a class. Never," says the man who has taught over 30,000 undergraduates. "One Sunday night playing hockey, I was hit in the face with the puck and I took 57 stitches. Monday morning, I taught my class with one eye closed and stitches holding me together. Upon reflection, it was one of my most meaningful moments because if you care about something and it matters to you, you just do it."

While Taylor will officially retire from McGill at the end of the month, he doesn't intend to ride off into the sunset entirely. "I'm still doing some work in the Indigenous communities," he says. "When you get a call and someone asks if you can help, what are you going to say, 'I'm retired?' No, I will get into that little Cessna again and bounce my way to wherever it is I'm needed. And I'll see what I can do to help – but first we have to fix the generator, of course, because there is always something broken to fix," says Taylor with a chuckle.

And when Taylor finishes lending a hand and climbs back into that small, rickety plane heading home, the world, contrary to his own assessment, will be a better place.

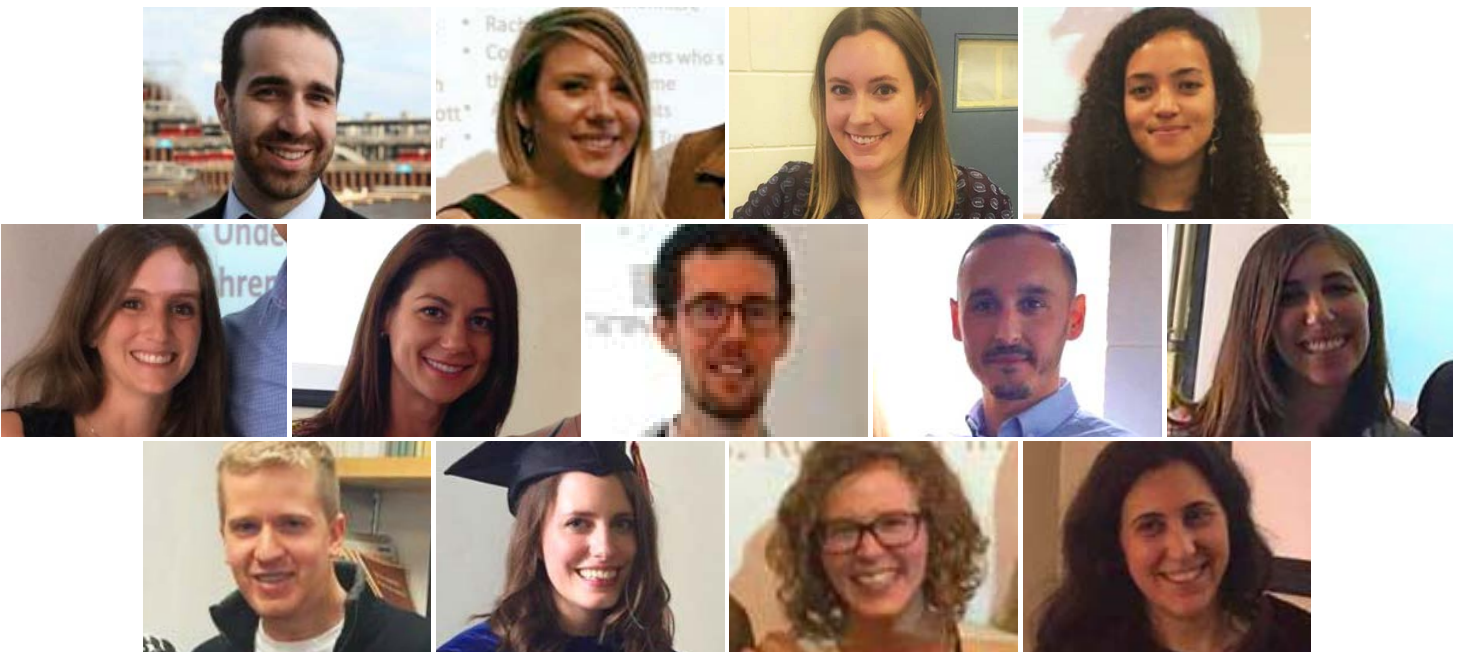
*Written by Neale McDevitt and reprinted with the permission of McGill Reporter.*



# Graduate News



Help us give a warm welcome to our incoming class of Psychology and Integrated Program in Neuroscience (IPN) graduate students! Pictured left to right: Jennifer Heyman, Nicole Dryburgh, Lauren Gazzard, André St-Jacques, Alison Farrell-Reeves, Christopher Lafferty, Marie-Catherine Mignault, Thomas Khullar, Kimberly Carriere, Nahyun Ju, Lauri Gurguryan, Zoey Walden, Mehrgol Tiv. Not pictured: Aislinn Sandre.



Congratulations to our Ph.D. students for successfully defending their theses this past year. Pictured left to right: Dr. Karim Bouayad-Gervais, Dr. Megan Cooper, Dr. Laura Cuttini, Dr. Régine Debrosse, Dr. Synthia Guimond, Dr. Elena Ivanova, Dr. Frank Kachanoff, Dr. Julien Lacaille, Dr. Tobey Mandel, Dr. Brian Mathias, Dr. Michele Morningstar, Dr. Maeve O'Leary-Barrett, Dr. Samara Perez. Not pictured: Dr. Ji Yeh Choi, Dr. Margaret Hastings, Dr. Jungkyu Park, Dr. Malak Abu Shakra, Dr. Alexander Tuttle.



*“Convocation is the most wonderful snapshot of the present. It is the culmination of years of hard work and dedication of students; the support and encouragement of friends and family; and the commitment and professionalism of faculty and staff.”*

Best wishes to our Ph.D. graduates on their convocation! Pictured left to right: Dr. Samara Perez, Dr. Régine Debrosse, Dr. Laura Cuttini.

Congratulations to our Ph.D. students Emily Moore and Danielle Rice for being awarded this year’s Vanier Canada Graduate Scholarships! Vanier Scholars are chosen for their strong leadership skills and high standard of scholarly achievement in their graduate studies across the fields of social sciences, humanities, natural sciences, engineering and health.



We have bloggers in our midst! Ph.D. candidates Junie Carriere and Miriam Kirmayer have lent their voices to providing expert commentary on their respective fields of specialty. Junie launched her own successful blog *Pain Explained* to share scientific-based information on pain psychology with the world. Miriam is a regular contributor to *Psychology Today* and *The Every Girl*, writing on topics related to friendships and mental health.



A big hand to our graduate students Kristin Horsley, Amanda Ravary, Sarah Peters, Lauri Gurguryan, and Trisanna Sprung-Much (not pictured) for being awarded with the Michael Quek Teaching Assistant award for their outstanding work as TAs this past year!



Our Ph.D. student Kristin Horsley participated in a Hackathon sponsored by the CIHR Institute of Gender and Health Research and the Heart and Stroke Foundation. Her team won second prize for their pitch on *Improving Communication about Heart Health during Pregnancy!*

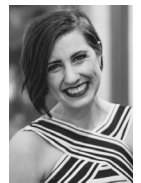




McGill Psychology was well-represented at many national and international conferences this past year – American Men's Studies Association Annual Conference in Ann Arbor, MI; Association for Psychological Science in Boston, MA; Australian Institute of Health Innovation in New South Wales, AUS; Canadian Neuroscience Annual Meeting in Montreal, QC; Canadian Psychological Association National Convention in Toronto, ON; Canadian Society for Brain, Behaviour, & Cognitive Science conference in Ottawa, ON; Joint Action Meeting in London, UK; Psychonomic Society Annual Meeting in Boston, MA; Queen's University Belfast in Belfast, UK; Rotman Baycrest Conference in Toronto, ON; Society for Neuroscience Annual Meeting in San Diego, CA; Society for Personality and Social Psychology Annual Convention in San Antonio, TX; Society for Research in Child Development Biennial Meeting in Austin, TX; Vision Science Society in St. Pete Beach, FL.



# Undergraduate News

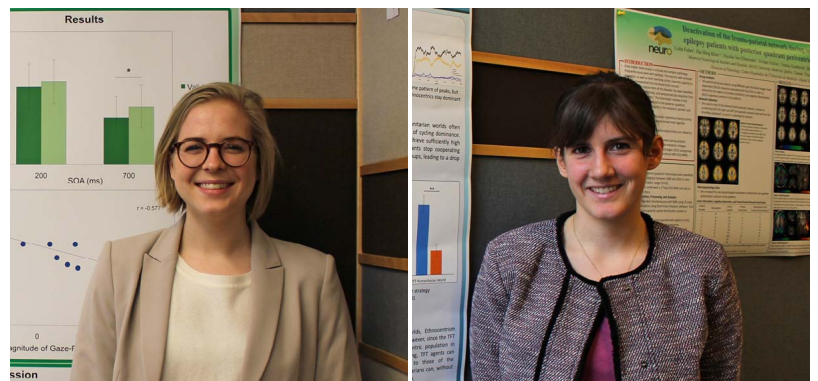


Congratulations to McGill Psychology Students' Association (MPSA) for all of their well-attended events throughout the year! From fostering collaboration through meet-and-greets and mentoring sessions, providing guidance through career planning and graduate student panels, and playing host to *The Cocktail Party Effect*, their annual end-of-year semiformal, the MPSA has been a driving force in bringing our undergraduates together, and we are proud to celebrate their great work!

*Photographs by Brock Jenken and Naomi North, and reprinted with the permission of the MPSA.*



The MPSA published *PSI Journal Issue VII*, their annual platform for the insightful research that our undergraduate students completed either independently or through a supervised project.



Congratulations to undergraduates Olivia Larson (supervised by Dr. Jelena Ristic) and Dominique Danco (supervised by Dr. Thomas Shultz) for being awarded best presentations at the Cognitive Science Undergraduate Research Day!

# Alumni in the News



## Essential lessons on the hidden forces that shape us

Research from McGill Psychology alumnus, Dr. Nour Kteily of the Kellogg School of Management, helps us explain a key psychological concept that shapes the Trump era of politics.



## Recognition for innovative and insightful research

Congratulations to our Ph.D. alumnus and Carleton University's Dr. Marina Milyavskaya for being presented with CPA President's New Researcher Award and the NeuroLeadership Institute's Application of Science Award for her work on goal pursuit and self-regulation.



## Keep your eyes on the stars!

McGill Psychology Ph.D. alumnus and University of Calgary's Dr. Daniel Kopala-Sibley was named a Rising Star by the Association for Psychological Science and just won the NARSAD Young Investigator Award from the Brain and Behavior Research Foundation!



## #BeyondAcademia

Former McGill Psychology undergraduate and University of Pennsylvania's Postdoctoral Fellow Dr. Anja Jamrozik explores the five categories of valuable skills that experimental psychologists have that are beneficial outside of academia.



## Honouring outstanding contributions

Congratulations to former McGill Psychology Ph.D. graduate and Harvard Medical School's and McLean Hospital's Dr. Randy Auerbach for receiving the Theodore Blau Early Career Award for Distinguished Professional Contributions to Clinical Psychology!



# Announcements

Did you hear we've been on the move? Part of the Psychology Department has temporarily relocated to 2001 McGill College Avenue while renovations are being completed at Stewart Biology Building. Come visit us at our new home!



Congratulations to McGill Psychology's Dr. David Zuroff who won the Canadian Psychological Association Gold Medal Award for his distinguished lifetime contributions to Canadian psychology in the area of depression.



A big congratulations to McGill Psychology's Dr. Lauren Human, Dr. Signy Sheldon, and Dr. Anna Weinberg for their Canada Research Chair appointments! We look forward to all of your outstanding research for years to come!



Our very own Antonia Di Paola received the McGill Faculty of Science Excellence Award! This award is given in alternating years to a management and a clerical person from the administrative and support staff across the Faculty of Science to acknowledge their outstanding performance and contribution to the department, the faculty, and the university. A well-deserved honour!



We lost one of the greats with Dr. Suzanne Corkin's passing last May. A McGill University Alumnus, Dr. Corkin's groundbreaking work with her graduate supervisor Dr. Brenda Milner on the patient H.M. helped clarify the biology of memory and its disorders, and established the hippocampus as an area of the brain critical to the consolidation of long-term memories. She shall be missed.





# Your Support



For more than 90 years, we have been graced by a highly diverse and talented array of students. We are proud of our former undergraduates, graduate students, post-doctoral fellows, and non-majors, many of whom have gone on to distinguished careers in psychology, related fields, or other professional endeavors. We are also proud of our long-standing record of excellence in training the next generation of psychologists, neuroscientists, and clinicians, and students who use their knowledge of psychological science to enrich other fields.

Gifts from our alumni and friends provide valuable support for scholarships and student aid, equipment and infrastructure, and research projects and program development. However you choose to support our department, your generosity is both essential and truly appreciated.

## Keep in touch!

Hearing from our former students and alumni is important to us, so please keep in touch through our [alumni mailing list](#), and our [facebook](#) and [twitter](#) pages.

*The McGill Psychology newsletter was created by the 2016-2017 Development Committee, chaired by Dr. Debra Titone and Dr. Melanie Dirks, and designed and edited by McGill Psychology graduate students Effie Pereira and Anne Holding. Questions or comments regarding content or submissions for future editions are welcome at [mcgillpsychmedia@gmail.com](mailto:mcgillpsychmedia@gmail.com).*

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