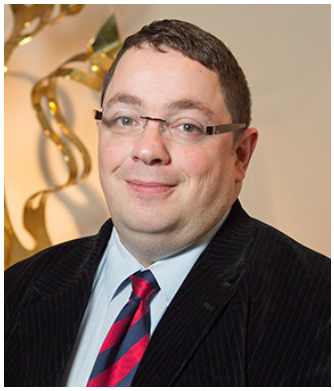
John F. Cryan

University College Cork



http://publish.ucc.ie/researchprofiles/C003/jcryan

John F. Cryan is Professor & Chair, Dept. of Anatomy & Neuroscience, University College Cork, Ireland and is also a Principal Investigator at APC Microbiome Ireland Prof. Cryan's current research is focused on understanding the interaction between brain, gut & microbiome and how it applies to stress, psychiatric and immune-related disorders at key time-windows across the lifespan. Prof. Cryan has published over 420 articles and has H-index of 86. He is co-author of "The Psychobiotic Revolution: Mood, Food, and the New Science of the Gut-Brain Connection" from National Geographic Press and co-edited four other books. He has received numerous awards including UCC Researcher of the Year in 2012; UCC Research Communicator of the Year 2017, the University of Utrecht Award for Excellence in Pharmaceutical Research in 2013 and being named on the Thomson Reuters Highly Cited Researcher list in 2014 and Clarivate Analytics Highly Cited Researcher list in 2017. He was elected a Member of the Royal Irish Academy in 2017. He also received a Research Mentor Award from the American Gastroenterology Association and the Tom Connor Distinguished Scientist Award from Neuroscience Ireland in 2017 and was awarded an honorary degree from the University of Antwerp, Belgium this Spring. He was a TEDMED speaker in 2014 and is currently President of the European Behavioural Pharmacology Society.

Title of Presentation: **Microbiome-Gut-Brain Axis: A Key Regulator of Stress Resilience?**

Isaac Galatzer-Levy

Mindstrong Health

https://isaacgalatzerlevy.weebly.com/

Isaac Galatzer-Levy earned his Ph.D. from Columbia University in Clinical Psychology in 2010 under the mentorship of George A. Bonanno, Ph.D. Subsequently, he completed a post-doctoral fellowship under the mentorship of Charles Marmar, M.D., in the Department of Psychiatry at the New York University School of Medicine. Following the completion of his fellowship, he was awarded an appointment at the level of Assistant Professor in the Department of Psychiatry at the NYU School of Medicine. He continues to receive postdoctoral training through the Center for Health Informatics and Bioinformatics (CHIBI) in Machine Learning also at the NYU School of Medicine.

His research focuses on the use of technology, machine learning, and artificial intelligence to characterize and predict heterogeneous responses to environmental stressors. He uses this approach in an attempt to understand why we respond to the same stressor in distinct ways, what are the mechanisms that influence the development of diverse patterns of response, and what are the long

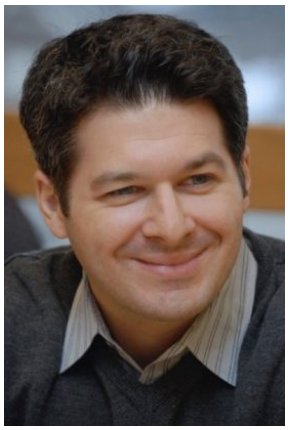
term consequences. To achieve this, he conducts research with highly diverse populations including naturalistic cohorts of trauma exposed individuals, nationally representative populations who are followed as part of large epidemiological, as well as animals exposed to experimental stress manipulations. Along with his colleagues and collaborators, he has identified cognitive, emotional, and neurobiological characteristics that predict heterogeneous outcomes along with long term consequences such as differential rates of mortality.

Recently Dr. Galatzer-Levy relocated from his faculty position in the Department of Psychiatry at NYU School of Medicine to Mindstrong Health, a tech company in Palo Alto, California that is focused on early prediction and prevention of deleterious mental health outcomes.

Title of Presentation: **A computational framework to optimize for resilience**

Ethan Kross

University of of Michigan, Ann Arbor



https://lsa.umich.edu/psych/people/faculty/ekross.html
http://selfcontrol.psych.lsa.umich.edu/members/

Ethan Kross received his B.A. from the University of Pennsylvania and his M.A. and Ph.D. from Columbia University. He is a Professor in the Psychology Department at the University of Michigan and the Director of the University of Michigan Emotion and Self-Control Laboratory. He is also a Faculty Associate at the University of Michigan's Research Center for Group Dynamics, Center for Cultural Neuroscience, and Depression Research Center.

The goal of his research is to shed light on the psychological and physiological processes that allow people to control emotions that undermine their goals and compromise their health. He uses a variety of tools (e.g., behavioral, diary, physiological, neuroscience-fMRI methods) to address this issue and focuses on both normal-healthy and clinical populations.

Title of Presentation: **Beyond Chatter: How Small Shifts in Language Promote Psychological Resilience**

Klaus Lieb

Deutsches Resilienz Zentrum, Mainz

https://www.german-resilience-center.uni-mainz.de/ag-lieb/

http://www.unimedizin-mainz.de/psychiatrie/startseite/mitarbeiter/lebenslauf/prof-k-lieb.html

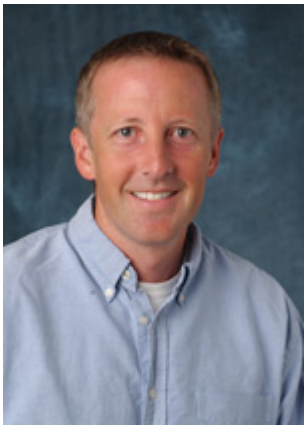
Prof. Dr. Klaus Lieb is the Managing Director of the DRZ and Director of the Department of Psychiatry and Psychotherapy of the University Medical Center of the Johannes Gutenberg University Mainz.

The research group of Professor Lieb is working on 3 topics: 1) Based on the methods of the Cochrane Collaboration, it creates systematic reviews and metaanalyses on resilience mechanisms and resilience-promoting interventions, thus providing a knowledge base for the DRZ as well as external scientists. 2) It develops psychotherapeutic, pharmacological and other interventions for the promotion of resilience, which are based on resilience mechanisms identified in our long-term studies and in cooperation with other working groups of the DRZ. Such interventions include among others closed-loop neurostimulation procedures, sports and online psychotherapy programs. 3) It critically reflects ethical and theoretical implications of the resilience concept and the effects of resiliency-promoting measures and examines the effects of pharmacological cognitive enhancement on individual resilience.

Title of Presentation: **Interventions to foster resilience - what works and how to develop them?**

Christopher Lowry

University of Colorado, Boulder



https://www.colorado.edu/intphys/people/lowry.html
https://www.colorado.edu/neuroscience/christopher-lowry
https://www.colorado.edu/intphys/research/behavneuroendo.html

Christopher A. Lowry, Ph.D., is an Associate Professor in the Department of Integrative Physiology and Center for Neuroscience at the University of Colorado Boulder, with a secondary appointment in the Department of Physical Medicine and Rehabilitation (PM&R) and Center for Neuroscience at the University of Colorado Anschutz Medical Campus (AMC), a Principal Investigator in the Department of Veterans Affairs Eastern Colorado Health Care System, VA Rocky Mountain Mental Illness Research, Education, & Clinical Center (MIRECC), Denver Veterans Affairs Medical Center (VAMC), and director of the Behavioral Neuroendocrinology Laboratory at CU Boulder. He is Co-Director, with Dr. Lisa Brenner, of the Military and Veteran Microbiome Consortium for Research and Education (MVM-CoRE). Dr. Lowry's research program focuses on understanding stress-related physiology and behavior with an emphasis on the role of the microbiome-gut-brain axis in stress resilience, health and disease.

Title of Presentation: **An immunization strategy for promotion of stress resilience**

Carmen Morawetz

Medical University Vienna

http://www.ewi-psy.fu berlin.de/einrichtungen/arbeitsbereiche/emotionspsych/mitarbeiter/post-docs/morawetz/index.html

Her research focuses on the neural correlates of emotion regulation and on the question how emotion regulation can influence value-based decision-making linking the fields of psychology, affective and cognitive neuroscience and neuroeconomics. Applying a multi-methodological research approach, her work aims to functionally dissect the different cognitive processes involved in emotion regulation and to examine the modulatory effect of emotion regulation of immediate emotions on decision-making using functional magnetic resonance imaging (fMRI). The ultimate goal of her research is to develop theoretical and neural models of emotion regulation that will lead to a better understanding of emotional behavioral disorders.

Title of Presentation: **Mapping emotion regulation as a resilience mechanism: From circuitry to network and behavior**

Carla Nasca

Rockefeller University

Carla Nasca is a postdoctoral fellow of the American Foundation for Suicide Prevention in Bruce McEwen's laboratory at the Rockefeller University in New York. Dr. Nasca received her Ph.D. in Neuropharmacology at Sapienza University in Rome, Italy. The main outcome from her Ph.D. studies led to the discovery of a putative rapidly-acting antidepressant acetyl-L-carnitine (LAC), which acts as an epigenetic modulator of glutamatergic function and histone-acetylation programming of gene expression in brain regions key to depressive-like behavior. These findings provided the basis for Dr. Nasca postdoctoral studies in Dr. McEwen laboratory where her basic and translational research is providing a mechanistic epigenetic framework of linkage between depressive disorders and systemic metabolic dysfunction, including a LAC deficiency and insulin resistance. Through this pronged basic and translational approach Dr Nasca's research aims to inform the development of pharmacological and behavioral interventions that can be effective to ameliorate, or possibly prevent, depressive disorder and its long-term consequences including dementia. Dr Nasca's research is supported by

grants from the Robertson Development Therapeutics and the Sackler Center for Biomedicine and Nutrition Research, among others. Other recognitions include ACNP Travel Award, NYAS F1000 Prize, “Best Ph.D. Thesis” from the Accademia Gioenia, ECNP fellowship award.

Title of Presentation: E**pigenetic regulation of the glutamatergic system in ventral hippocampus for resilience to stress: toward novel intervention strategies?**

Stefan Reber

University of Ulm

https://www.uniklinik-ulm.de/psychosomatische-medizin-und-psychotherapie/forschung/sektion-molekulare-psychosomatik.html

Stefan Reber, Ph.D., is Professor for Molecular Psychosomatics at the Clinic of Psychosomatic Medicine and Psychotherapy at the University of Ulm. The main research aims of the Laboratory for Molecular Psychosomatics are to extend the current knowledge on the mechanisms underlying 1i) stress-induced development of somatic and mental pathologies and 1ii) individual differences in stress resilience and 2) to use this mechanistic knowledge for the development of novel strategies in terms of stress protection.

Title of Presentation: **"Old friends", immunoregulation and stress resilience - lessons from an animal model of PTSD**

Soojin Ryu

Deutsches Resilienz Zentrum, Mainz

https://www.ryulab.org/people

Soojin Ryu is a Professor at the University Medical School of the Johannes Gutenberg University Mainz. She obtained her bachelor’s degree from Harvard and her Ph.D. at the University of California, Berkeley at the laboratory of Prof. Robert Tjian, before moving to Freiburg, Germany, for her postdoc at the laboratory of Prof. Wolfgang Driever. In Freiburg, she started working with zebrafish and has been continuing to work with zebrafish ever since. After her postdoc, she was a group leader at the Max Planck Institute for Medical Research in Heidelberg before moving to Mainz as a professor. She is fascinated by how stress hormones alter our behavior and the brain and would like to understand how stress resilience can be developed and fostered.

She studies the effects of stress on brain and behavior using zebrafish. One major goal is to use this insight to identify novel molecular mechanisms that contribute to resilience to stress-induced

dysfunctions in humans. She is interested in answering three major questions: (1)How does stress rapidly alter an animal's behavior? (2) How does stress exposure during development alter neural circuit structure and function? (3) How is resilience and vulnerability to stress-induced disorders established?

Title of Presentation: **An approach to develop a new animal model to study resilience using zebrafish**

Mathias V. Schmidt

Max Planck Institute of Psychiatry, Munich

http://www.psych.mpg.de/1496026/schmidt_m

Mathias V. Schmidt is is a group leader at the Department of Stress Neurobiology and Neurogenetics at the Max Planck Institute of Psychiatry in Munich (Germany). He received his PhD in 2004 at the University of Leiden (Netherlands) for his work on the mechanisms of early life stress in mice. His current research, which is funded by a number of national and international grants, focuses on the impact of stress during different life stages on individual health and disease. Using a wide array of behavioral, neuroendocrine and molecular approaches, Mathias Schmidt is pursuing the question why some individuals are resilient to severe stress exposure and thrive even in the face of adversity. His work is published in over 100 peer-reviewed research articles. Among his awards are the Ernst and Berta Scharrer Award of the German Endocrine Society and the NARSAD Young Investigator Award.

Title of Presentation: **Ramping up stress resilience through inhibition of FKBP51**

Gal Sheppes

Tel Aviv University

https://en-social-sciences.tau.ac.il/profile/sheppes

Professor Gal Sheppes, is an associate professor of psychology, the head of the clinical-science program, and the director of the Emotion and Self-Regulation Laboratory in the School of Psychological Sciences in Tel Aviv University. Gal received his B.A in behavioral sciences, M.A. and Ph.D. in clinical psychology from Ben-Gurion University in Israel. He then completed a two year postdoctoral training at the affective neuroscience program at Stanford University. He also engaged in clinical training in the Sderot area, working with children with various emotional problems. Gal joined Tel Aviv University at 2011. In his studies he integrates basic and applied science in order to study the underlying mechanisms of emotion regulation and self-regulation among healthy and clinical populations. He incorporates experiential, behavioral and electrophysiological methods. Gal has won

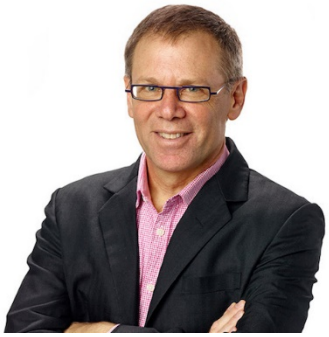
the Rothschild fellowship for postdoctoral fellows, the Allon fellowship for outstanding young researchers, and received grants from ISF, BSF, National Institute of Psychobiology, and NIMH. He has published in major outlets including: Annual Review of Clinical Psychology, Social, Cognitive & Affective Neuroscience, Personality and Social Psychology Review, Psychological Science, Journal of Experimental Psychology: General. He also serves as Associate Editor in the APA journal Emotion.

Title of Presentation: **Facilitating Resilience by Transcending the "Good & Bad" and "Here & Now" in Emotion Regulation**

Michael Ungar

Dalhousie University

http://www.michaelungar.com/
https://www.psychologytoday.com/blog/nurturing-resilience



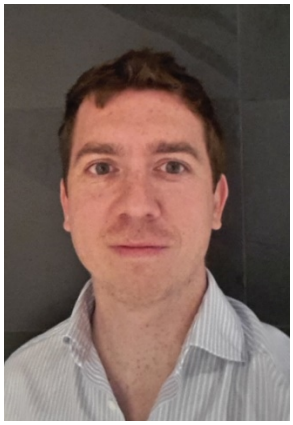
Dr. Michael Ungar is the Canada Research Chair in Child, Family and Community Resilience at Dalhousie University in Halifax, Canada. He received his PhD in Social Work from Wilfrid Laurier University in 1995. He is the author of 14 books that have been translated into five languages, as well as more than 150 scientific papers. Dr. Ungar is also the founder and Director of the Resilience Research Centre where he has held over $10,000,000 in research funding for studies that have involved colleagues from dozens of low, middle and high income countries. Dr. Ungar regularly provides consultation and training to organizations like the World Bank, UNESCO, and the Red Cross. He is the former Chair of the Nova Scotia Mental Health and Addictions Strategy, executive board member of the American Family Therapy Academy, and a family therapist who continues to work with mental health services for children and families at risk.

Title of Presentation: **The Impact of Social and Physical Ecologies on Resilience: A Multisystemic Model for Positive Development**

Models of resilience are becoming increasingly multisystemic as disciplines work together to understand if a change in the resilience of one system (such as an individual's epigenome, family, community or natural environment) affects the resilience of other co-occurring systems. Using results from studies of resilience of young people using multiple psychosocial services, youth living in communities affected by violent extremism and culturally diverse youth in different global contexts, Dr. Ungar will explore the differential impact of resilience, exploring how protective processes interact with risk exposure to produce positive developmental outcomes. The implications of this multisystemic approach to resilience for policies and practices relevant to work with populations under stress (such as immigrant youth) will also be discussed.

Michael van de Kooij

Deutsches Resilienz Zentrum, Mainz



He studied Medical Biology at Leiden University, The Netherlands where he obtained his Bachelor's and Master's degrees. He then moved to University Medical Center of Utrecht University, The Netherlands. Here he studied the functional outcome and treatment response in animal models for neonatal hypoxia-ischemia and was awarded his PhD in 2010. That same year he moved to the EPFL in Switzerland to work as postdoc in the laboratory of Prof. Carmen Sandi. The studies performed here focused on the role of stress on the brain or dealt with the influence of metabolic (mitochondrial) function in social hierarchies in rats. In 2015 he moved to the Johannes Gutenberg University Mainz to work in the laboratory for Translational Psychiatry (Prof. M.B. Müller), where he leads projects that investigate the role of stress on metabolic function in the murine brain with a keen interest in glucose metabolism. His work includes 14 first authored papers that have been published in influential journals, such as *Nature Communications*, *PNAS* and *Molecular Psychiatry*.

Title of Presentation: Resilience to stress-induced metabolic dysregulation predicts preservation of cognitive integrity