

BRAIN NeuroAI Workshop Speakers

Revised 10.17.2024

Session 1 (NeuroAI Intro & Data)	
<p>Anton Arkhipov, Ph.D. Investigator Allen Institute</p> 	<p>Dr. Arkhipov joined the Allen Institute in 2013 as an Assistant Investigator in the Modeling, Analysis, and Theory group. He is leading efforts to carry out biophysically detailed simulations of individual neurons as well as large-scale neuronal circuits from the mouse visual system. The main focus of his research is on integration of experimental anatomical and physiological data to build sophisticated, highly realistic computational models of cortical circuitry, with the aim of elucidating mechanisms underlying processing of visual information in the cortex. Before joining the Allen Institute he was a Postdoctoral Fellow at D. E. Shaw Research in New York City, where he used a specialized supercomputing architecture to perform computational studies of structure-function relationships in proteins, with the emphasis on cancer-associated cell-surface receptors. Arkhipov received his B.S. and M.S. in Physics from Moscow Institute of Physics and Technology and a Ph.D. in Physics from the University of Illinois at Urbana-Champaign.</p>
<p>Bing W. Brunton, Ph.D. Professor University of Washington</p> 	<p>Dr. Brunton is currently a Professor of Biology and the Richard & Joan Komen University Chair at the University of Washington (UW) in Seattle, with affiliations at the eScience Institute for Data Science, the Paul G. Allen School of Computer Science & Engineering, and the Department of Applied Mathematics. She studied at Caltech (2006, B.S. in Biology, focus on biophysics) and then Princeton (2012, Ph.D. in Neuroscience). She is a computational neuroscientist with broad interests at the intersection of systems neuroscience, animal behavior, and artificial intelligence. Her research group focuses on developing data-intensive methods to understand and model neural function and behavior, using approaches from machine learning, deep reinforcement learning, computer vision, and physics-constrained simulations. She is drawn to understand how the nervous system solves challenges that are vital to the animal: sensing the environment, maneuvering in the physical world, planning and executing goals, and interacting with their societies.</p>
<p>Dominique Duncan, Ph.D. Assistant Professor of Neurology and Biomedical Engineering University of South California</p> 	<p>Dr. Duncan is an assistant professor of Neurology, Neuroscience, and Biomedical Engineering at the USC Stevens Neuroimaging and Informatics Institute in the Laboratory of Neuro Imaging (LONI) at the University of Southern California. Dr. Duncan's background spans mathematics, engineering, and neuroscience. She received her PhD at Yale University in Electrical Engineering where she analyzed intracranial EEG data using nonlinear factor analysis to identify pre-seizure states of epilepsy patients. Dr. Duncan is funded through both the National Institutes of Health (NIH) and the National Science Foundation (NSF). She has built international, multidisciplinary collaborations and developed novel analytic tools to analyze multimodal data, including imaging and electrophysiology, particularly in the areas of traumatic brain injury, epilepsy, and COVID-19. By creating large-scale data repositories and linking them with analytic, visualization, and quality control tools for multimodal data, her work aims to encourage collaboration across multiple fields.</p>
<p>Wolfgang Losert, Ph.D. Professor University of Maryland</p> 	<p>Dr. Losert is MPower Professor of Physics and Interim Associate Dean for Research in the College of Computer Mathematical, and Natural Sciences at the University of Maryland. His research team investigates the dynamics of living systems at the convergence of biophysics and AI. He co-led the Technology and Data Science Cores of an NIH BRAIN initiative U19 aimed at optogenetic measurements and control of the collective character of neurons in sensory processing of the brain. Prof. Losert's current research focuses on the multimodal electrical, chemical, and mechanical excitability of cells and tissues, which enable new paradigms for information flow and processing in living neural networks. Dr. Losert is a fellow of the AAAS and the American Physical Society.</p>





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<p>Ali A. Minai, Professor University of Ph.D. Cincinnati</p> 	<p>Dr. Minai is Professor of Electrical & Computer Engineering at the University of Cincinnati, with a faculty appointment in the Neuroscience Graduate Program. He holds a Ph.D. in Electrical Engineering and completed postdoctoral training in neuroscience at the University of Virginia. Dr. Minai's research spans artificial intelligence, neural networks, computational neuroscience, and complex systems. His current focus is on place field-based models of robot navigation, analysis of stereo-EEG data using neural networks, representational interpretation in deep neural networks, and applications of large language models in cognitive tasks. Recently, he has engaged actively with philosophical issues in AI through writings, discussions, and talks. Dr. Minai has been a member of the Board of Governors of the International Neural Network Society for several years, serving as President of the Society in 2015-16. He is currently an action editor for Neural Networks, and has served on the editorial boards of several other journals.</p>
<p>Patrick Mineault, Ph.D. NeuroAI Researcher Amaranth Foundation</p> 	<p>Dr. Mineault writes the NeuroAI archive. He is senior machine learning scientist working at the intersection of neuroscience and AI, with an adjunct appointment at the Math and Stats department at Université de Montréal as chercheur invité. He received his B.Sc. in Math and Physics and a PhD in the computational neuroscience of vision at McGill, followed by a postdoc at UCLA. He was a software engineer at Google in Mountain View, CA and a research scientist in brain-computer interfaces at Meta. He was also the founding CTO of Neuromatch Academy and founded a NeuroAI startup called Blindsight Therapeutics. His research bridges neuroscience and AI, in particular modelling the dorsal stream of the visual cortex and building neural foundation models.</p>
<p>Andreas Tolias, Ph.D. Professor Stanford University</p> 	<p>Dr. Tolias is a Professor at Stanford University, with affiliations in Bio-X, Wu Tsai Neurosciences Institute, Electrical Engineering, and the Institute for Human-Centered Artificial Intelligence. He holds degrees from the University of Cambridge (B.A., M.A.) and MIT (Ph.D.), with postdoctoral training at the Max-Planck Institute. Previously, he was Brown Endowed Professor of Neuroscience at Baylor College of Medicine and founding director of the Center for Neuroscience and Artificial Intelligence. Tolias has received numerous awards, including the NIH Director's Pioneer Award and McKnight Foundation Scholar Award. His research integrates large-scale neurophysiology and behavioral neuroscience with deep learning to understand visual intelligence mechanisms. He has led international DARPA and IARPA-funded teams, notably completing the IARPA MICrONS project, which generated a multi-petabyte dataset of co-registered neurophysiological and neuro-anatomical brain data. Tolias developed the "inception loop" paradigm, combining neurophysiology with AI to decipher the neural code, leading to fundamental discoveries in visual cortex circuitry.</p>
<p>Session 2 (Encoding/Learning)</p>	
<p>Carina Curto, Ph.D. Professor Brown University</p> 	<p>Dr. Curto received an A.B. in physics from Harvard in 2000 and a Ph.D. in mathematics from Duke in 2005. During my postdoctoral years at Rutgers and NYU, I transitioned to theoretical and computational neuroscience. She then held faculty positions in mathematics at UNL (2009-2014) and Penn State (2014-2024). Her current research focuses on the theory and analysis of neural networks and neural codes, motivated by questions of learning, memory, and sequence generation in cortical and hippocampal circuits. A big part of her research program involves developing novel applications of algebra, geometry, topology, dynamical systems, and combinatorics to neuroscience.</p>





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<p>Evelina Fedorenko, Ph.D. Associate Professor Massachusetts Institute of Technology</p> 	<p>Dr. Ev Fedorenko is a cognitive neuroscientist who studies the human language system. She received her bachelor's degree from Harvard in 2002, and her Ph.D. from MIT in 2007. She was then awarded a K99R00 career development award from NIH. In 2014, she joined the faculty at MGH/HMS, and in 2019 she returned to MIT where she is currently an Associate Professor of Neuroscience in the BCS Department and the McGovern Institute for Brain Research. Dr. Fedorenko uses fMRI, intracranial recordings and stimulation, EEG, MEG, and computational modeling, to study adults and children, including those with developmental and acquired brain disorders, and otherwise atypical brains.</p>
<p>Panayiota Poirazi, Ph.D. Research Director Foundation for Research and Technology -Hellas</p> 	<p>Dr. Poirazi is a Director of Research at the Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology-Hellas (FORTH) and head of the Dendrites lab (www.dendrites.gr). She received the B.S. in Mathematics from the University of Cyprus in 1996, M.S. and Ph.D. degrees in Biomedical Engineering in 1998 and 2000, respectively, from the University of Southern California. Her work focuses on understanding the role of dendrites in complex brain functions. She uses primarily computational modeling of neurons and networks, brain-inspired machine learning and recently in vivo experiments in mice. She has received several awards for academic excellence, including the EMBO Young Investigator award in 2005, two Marie Curie fellowships (2002 and 2008), an ERC Starting Grant in 2012, the Friedrich Wilhelm Bessel award of the Humboldt Foundation in 2018 and an EINSTEIN foundation visiting fellowship in 2019. She is a member of EMBO and currently serves as the Secretary General of FENS.</p>
<p>Blake Richards, Ph.D. Professor MILA -Quebec Artificial Intelligence Institute</p> 	<p>Dr. Richards is an Associate Professor in the School of Computer Science and Montreal Neurological Institute at McGill University and a Core Faculty Member at MILA. Richards' research is at the intersection of neuroscience and AI. His laboratory investigates universal principles of intelligence that apply to both natural and artificial agents. He has received several awards for his work, including the NSERC Arthur B. McDonald Fellowship in 2022, the Canadian Association for Neuroscience Young Investigator Award in 2019, and a CIFAR Canada AI Chair in 2018. Richards was a Banting Postdoctoral Fellow at SickKids Hospital from 2011 to 2013. He obtained his PhD in neuroscience from the University of Oxford in 2010 and his BSc in cognitive science and AI from the University of Toronto in 2004.</p>
<p>Karen S. Rommelfanger, Ph.D. Director, Neuroethics Program Emory University</p> 	<p>Dr. Rommelfanger is a neurotech ethicist and strategist. She founded and directs the Institute of Neuroethics, the first think tank dedicated to neuroethics, working across sectors to promote trusted neuroscience for all. Pioneering neuroethics-by-design approaches, she launched the first neuroethics consultancy Ningen Neuroethics Co-Lab. Her early career as PhD-trained neuroscientist, organically evolved into neuroethics research exploring how neuroscience challenges definitions of health across cultures and the ensuing societal implications of neurotechnology deployment. As a scholar, she maintains a professorship at Emory University in Neurology where she established a Neuroethics Program, has published extensively in neuroscience and neuroethics. She is a member of the NIH BRAIN Neuroethics Working Group and co-authored the BRAIN 2.0 Neuroethics Roadmap. A recognized global leader in neuroethics, she has collaborated with and advised policy, research, and diplomacy organizations such as the Council of Europe, DARPA, GESDA Science Diplomacy Anticipator, OECD, and World Economic Forum.</p>





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<p>Martin Schrimpf, Ph.D. Tenure-Track Assistant Professor École Polytechnique Fédérale de Lausanne</p> 	<p>Dr. Schrimpf is a tenure-track assistant professor at EPFL where he builds artificial intelligence models of the brain. To achieve this goal, he bridges research in Machine Learning, Neuroscience, and Cognitive Science. He initiated the community-wide Brain-Score platform for evaluating models on their brain and behavioral alignment, and built state-of-the-art models such as CORnet and VOneNet. Martin completed his PhD at MIT with Jim DiCarlo, following Bachelor's and Master's degrees in computer science at TUM, LMU, and UNA. Previously he worked at Harvard, MetaMind/Salesforce, Oracle, and co-founded two startups. His work has been published at top venues including PNAS, Neuron, Nature Human Behavior, NeurIPS, and ICLR. He has received numerous awards for his research, including the Neuro-Irv and Helga Cooper Open Science Prize, the McGovern and Takeda fellowships, and the Google.org Impact Challenge prize. Among others, Martin's work has been recognized in the news at Science magazine, MIT News, and Scientific American.</p>
<p>Doris Tsao, Ph.D. Professor University of California, Berkeley</p> 	<p>Dr. Tsao is a professor in the neurobiology division of the Department of Molecular & Cell Biology, and the Helen Wills Neuroscience Institute. She studies visual perception in primates in order to understand how the brain creates our sense of reality. She is widely recognized for her work on the neural system for face processing within the temporal lobe, clarifying its anatomical organization and coding principles. Most recently, her lab discovered that this system is part of a larger map of object space.</p>
<p>Session 3 (Neuromorphic/Theory)</p>	
<p>James "Brad" Aimone, Ph.D. Computational & Theoretical Neuroscientist Sandia National Laboratories</p> 	<p>Dr. Aimone is a Distinguished Member of Technical Staff in the Center for Computing Research at Sandia National Laboratories, where he is a lead researcher in leveraging computational neuroscience to advance artificial intelligence and in using neuromorphic computing platforms for future scientific computing applications. Brad currently leads a multi-institution DOE Office of Science Microelectronics Co-Design project titled <i>COINFLIPS</i> (which stands for CO-designed Influenced Neural Foundations Inspired by Physical Stochasticity) which is focused on developing a novel probabilistic neuromorphic computing platform. He also currently leads several other research efforts on designing neural algorithms for scientific computing applications and neuromorphic machine learning implementations.</p>
<p>Kwabena Boahen, Ph.D. Professor Stanford University</p> 	<p>Dr. Boahen is a Professor of Bioengineering and Electrical Engineering at Stanford University. His group models the nervous system computationally to elucidate principles of neural design at the cellular, circuit, and systems levels; and synthesizes neuromorphic electronic systems whose energy-use scales with their size as efficiently as the brain does. His research has resulted in over a hundred publications, including a cover story in Scientific American featuring his lab's work on a silicon retina and a silicon tectum that "wire together" automatically (May 2005). He has received several distinguished honors, including the National Institutes of Health Director's Pioneer Award (2006). He was elected a fellow of the American Institute for Medical and Biological Engineering (2016) and of the Institute of Electrical and Electronic Engineers (2016) in recognition of his lab's work on Neurogrid, an iPad-size platform that emulates a million neurons in the cerebral cortex in real time.</p>





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<p>Frances Chance, Ph.D. Computational & Theoretical Neuroscientist Sandia National Laboratories</p> 	<p>Dr. Chance's research focuses on understanding how biological neural networks represent, transform, and transmit information in the brain. At Sandia Labs, she uses computational modeling and mathematical analysis of neurons and neural networks to understand the basic computations that underlie sensory processing and cognition.</p>
<p>SueYeon Chung, Ph.D. Assistant Professor New York University</p> 	<p>Prior to joining NYU, Dr. Chung SueYeon was a Postdoctoral Research Scientist in the Center for Theoretical Neuroscience at Columbia University, and a Fellow in Computation in the Department of Brain and Cognitive Sciences at MIT. Before that, She received a Ph.D. in applied physics at Harvard University. Before that, she studied physics and mathematics as an undergraduate at Cornell University.</p>
<p>Mitra Hartmann, Ph.D. Professor Northwestern University</p> 	<p>Dr. Hartmann received a Bachelor of Science in Applied and Engineering Physics from Cornell University, a PhD in Integrative Neuroscience from the California Institute of Technology and was a post-doctoral scholar at the Jet Propulsion Laboratory in the Bio-Inspired Technology and Systems group. She is currently a professor with a 50-50 joint appointment between the Departments of Biomedical Engineering and Mechanical Engineering at Northwestern University. She is the recipient of the Charles Deering McCormick Professor of Teaching Excellence award and an elected fellow of the American Institute for Medical and Biological Engineering (AIMBE).</p>
<p>Jennifer Hasler, Ph.D. Regents Entrepreneur Georgia Institute of Technology</p> 	<p>Dr. Hasler is a Regents Professor in the School of Electrical and Computer Engineering at Georgia Institute of Technology. Dr. Hasler received her M.S. and B.S.E. in Electrical Engineering from Arizona State University in 1991, received her Ph.D. from California Institute of Technology in Computation and Neural Systems in 1997, and received her Master of Divinity from Emory University in 2020. Dr. Hasler received the NSF CAREER Award in 2001, and the ONR YIP award in 2002. Dr. Hasler has been involved in multiple startup companies, including GTronix, founded in 2002 and acquired by Texas Instruments in 2010. Dr. Hasler received the Paul Rapphorst Best Paper Award, IEEE Electron Devices Society, 1997, a Best paper award at SCI 2001, Best Paper at CICC 2005, Best Sensor Track paper at IS-CAS 2005, Best paper award at Ultrasound Symposium, 2006, Best Demonstration paper award, ISCAS 2010, Best paper award at SCI 2001, 2nd Place, Student Paper Award, IEEE Sensors Conference. Dr. Hasler has been an author on over 400 journal and refereed conference papers.</p>

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<p>Dhiressha Kudithipudi, Ph.D. Professor The University of Texas at San Antonio</p> 	<p>Dr. Kudithipudi, PhD is Professor of Electrical and Computer Engineering and Computer Science; Robert F McDermott Chair in Engineering; and Director of the Neuromorphic AI(NuAI) lab at UTSA. She is also the Director of the MATRIX AI Consortium through which she serves the diverse population of San Antonio, Texas. Her research interests are in brain-inspired AI, neuromorphic computing, energy efficient ML, and AI accelerators. She received the Clare Booth Luce Scholarship in STEM for women in higher education (2018), Rochester’s Technology Women of the Year (2018), ELATES Fellowship (2022), and San Antonio Lights Award (2022). Her teams’ research work has been recognized with multiple best paper awards (CVPR-W, NICE, AI Summit) and featured in several outlets such as Nature Outlook. She actively leads Project Lovelace, supported by Xilinx Foundation among other initiatives. Kudithipudi is a first-generation and first PhD graduate from UT San Antonio’s Electrical Engineering program.</p>
<p>Session 4 (Decoding/Technology)</p>	
<p>Gina Adam, Ph.D. Associate Professor George Washington University</p> 	<p>Dr. Adam’s lab develops novel hardware foundations at the intersection of materials, devices, and circuits to enable new ways of computing. Her research interests are focused on emerging nanoelectronic and nanoelectromechanical devices and their integration in beyond von Neumann systems such as computation-in-memory and neuromorphic platforms. Her group innovates at the design, simulation and nanofabrication level with a vision of system-level experimental demonstrations. Recent work has been investigating two-terminal non-volatile memory devices called memristors that have an electrical behavior similar to that of an artificial synapse and can be used for both data storage and processing.</p>
<p>Chiara Bartolozzi, Ph.D. Senior Researcher Istituto Italiano Di Tenologia</p> 	<p>Dr. Bartolozzi is Researcher at the Italian Institute of Technology. She earned a degree in Engineering at University of Genova (Italy) and a Ph.D. in Neuroinformatics at ETH Zurich, developing analog subthreshold circuits for emulating biophysical neuronal properties onto silicon and modelling selective attention on hierarchical multi-chip systems. She is currently leading the Event-Driven Perception for Robotics group, with the aim of applying the “neuromorphic” engineering approach to the design of robotic platforms as enabling technology towards the design of autonomous machines.</p>
<p>Ralph Etienne-Cummings, Ph.D. Professor Johns Hopkins University</p> 	<p>A pioneer for the past three decades in mobile robotics and legged locomotion, Dr. Etienne-Cummings’ innovations have the potential to produce computers that can perform recognition tasks as effortlessly and efficiently as humans. He has developed prosthetics that can seamlessly interface with the human body to restore functionality after injury or to overcome disease. Etienne-Cummings is the Julian S. Smith Professor of electrical and computer engineering and is the vice provost for faculty affairs at Johns Hopkins University. He holds a secondary appointment in computer science. He previously served on JHU’s Homewood Academic Council and is the former chair of the department of electrical and computer engineering.</p>

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<p>Joseph Hays, Ph.D. Robotics Research Engineer Naval Research Laboratory</p> 	<p>Dr. Hays is a research scientist at the U.S. Naval Research Laboratory (2011-present) in Washington, DC. His research efforts focus on advancing Edge Intelligence capabilities for robotic systems through neuromorphic processing and low power AI accelerators, event-based sensing, artificial and spiking neural network algorithm development, and high-performance digital twins based modeling and simulation. Prior to NRL, Dr. Hays was a senior engineering manager at National Instruments in Austin, TX, (1998-2007) where he led software development efforts for technologies related to dynamical system hardware-in-the-loop simulation (HIL), control system design, system identification, dynamic system simulation, and real-time embedded computing. He received his PhD degree from Virginia Tech (2007-2011), his MS degree from the University of Washington, Seattle (1996-1997) and a BS degree from Brigham Young University, Provo (1992-1996).</p>
<p>Giacomo Indiveri, Ph.D. Professor University of Zurich</p> 	<p>Dr. Indiveri is a Professor at the Faculty of Science at the University of Zurich, Switzerland. He obtained an M.Sc. degree in electrical engineering and a Ph.D. degree in computer science from the University of Genoa, Italy. Indiveri was a post-doctoral research fellow in the Division of Biology at Caltech and at the Institute of Neuroinformatics of the University of Zurich and ETH Zurich. In 2006 he attained the “habilitation” in Neuromorphic Engineering at the ETH Zurich Department of Information Technology and Electrical Engineering. He won an ERC Starting Grans on “Neuromorphic processors” in 2011 and an ERC Consolidator Grant on neuromorphic cognitive agents in 2016. His research interests lie in the study of neural computation, with particular interest in spike-based learning and selective attention mechanisms, and in the hardware implementation of real-time sensory-motor systems using analog/digital neuromorphic circuits and emerging VLSI technologies.</p>
<p>Kai Miller, Ph.D., M.D., Ph.D. Pediatric and Epilepsy Neurosurgeon Mayo Clinic</p> 	<p>Kai Miller is a pediatric and epilepsy neurosurgeon at Mayo Clinic in Minnesota. He attended the University of Washington for graduate school, obtaining a PhD in Physics, an MD, and a second PhD in Neuroscience. After completing his neurosurgery residency at Stanford University in California, Kai was named as the 2018 Van Wagenen fellow. He completed clinical fellowships at Stanford and Utrecht (Netherlands) in epilepsy, deep-brain stimulation, and tumor resection in children and adults. Dr. Miller joined the neurosurgery staff at Mayo Clinic in Rochester in 2019. In addition to his clinical practice, he studies basic human neurophysiology and clinical translation for cybernetics, epilepsy and functional neurosurgery. His group, the Cybernetics and Motor Physiology Laboratory, is focused on the creation of new tools to 1) control cybernetic prostheses, 2) induce brain plasticity after injury, and 3) intervene with distributed circuits in neuropsychiatric disease and movement dysfunction.</p>
<p>William Nourse, Ph.D. Postdoctoral Scholar Case Western Reserve University</p> 	<p>Dr. Nourse received his PhD in Electrical Engineering from Case Western Reserve University in 2024 and is currently a postdoctoral scholar at that same institution. Dr. Nourse’s research aims to understand the fundamentals of neural control and decision-making in animals of different dynamic scales and how to translate these principles to neuromorphic control of legged robotic locomotion. He also acts as the Project Manager for the C3NS: Communication, Coordination, and Control in Neuromechanical Systems (https://c3ns.org/) network, funded under the NSF NeuroNex program and the BRAIN Initiative.</p>

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Funder's Panel

<p>Moderator: Terrence Sejnowski, PhD, Professor and Laboratory Head of the Computational Neurobiology Laboratory – University of California at San Diego & The Salk</p> 	<p>Dr. Sejnowski is a Professor and Laboratory Head of the Computational Neurobiology Laboratory. He is a pioneer in computational neuroscience and his goal is to understand the principles that link brain to behavior. He received a PhD in Physics from Princeton. He is a Distinguished Professor at the University of California at San Diego and holds the Francis Crick Chair at The Salk Institute. He is a member of the National Academy of Sciences, the National Academy of Medicine and the National Academy of Engineering. In 2024, Dr. Sejnowski was awarded the Lundbeck Foundation's Brain Prize, alongside Larry Abbott and Haim Sompolinsky, for pioneering contributions to computational and theoretical neuroscience.</p>
<p>Hal Greenwald, PhD, Program Officer – Air Force Office of Scientific Research</p>	<p>Dr. Greenwald has been a program officer at the Air Force Office of Scientific Research (AFOSR) since 2018. He manages the Cognitive & Computational Neuroscience program, funding basic research on perception, cognition, and behavior at the intersection of neuroscience and AI. Since 2021, he also oversees the Computational Cognition & Machine Intelligence program, supporting AI research on machine intelligence, autonomy, and human-machine teaming. Previously, Dr. Greenwald spent 10 years at MITRE, leading neuroscience and AI research, advising federal programs, and helping government agencies leverage neuroscience. He also worked for three years as a computer scientist/software engineer at Johns Hopkins University Applied Physics Laboratory. Dr. Greenwald holds a PhD in Brain & Cognitive Sciences from the University of Rochester and dual bachelor's degrees in computer science and psychology from the University of Pennsylvania.</p>
<p>Chou Hung, PhD, Program Manager – Army Research Office</p> 	<p>Dr. Hung is the Program Manager for Neurophysiology of Cognition at the DEVCOM ARL Army Research Office. Since 2015, he has been a researcher at the DEVCOM Army Research Laboratory, focusing on human cognition, human-machine interfaces, and bio-inspired AI development. Previously, he was a professor of neuroscience at Georgetown University and National Yang-Ming University in Taiwan, where he investigated neural circuits underlying visual perception. Dr. Hung's research interests span living neurons, circuits, mechanisms, and behaviors related to real-world and augmented perception and performance. His research has explored biological and AI-aided learning and decision-making as well as brain-inspired computational principles for novel AIs capable of complex reasoning. Dr. Hung obtained his PhD in neuroscience from Yale University (2002) and completed a DARPA/ONR-funded BMI postdoctoral fellowship at MIT (2002-2005).</p>
<p>Robinson Pino, PhD, Program Manager – Department of Energy</p> 	<p>Dr. Pino is a Program Manager for the Advanced Scientific Computing Research (ASCR) program office in the U.S. Department of Energy's Office of Science. He previously served as Senior Advisor to the CHIPS Program Office at the National Institute of Standards and Technology, U.S. Department of Commerce. His portfolio focuses on revolutionary basic research and development in high performance computing, edge computing, neuromorphic computing, machine learning, artificial intelligence, photonics, microelectronics, and advanced wireless technologies. These efforts aim to maintain U.S. leadership in exascale computing and beyond, as well</p>

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	<p>as in energy-efficient technologies. Prior to his current role, Dr. Pino was Director of Cyber Research at ICF International. He has a BE in Electrical Engineering, summa cum laude, from the City University of New York, City College, and obtained a MSc with honors and PhD in Electrical Engineering from Rensselaer Polytechnic Institute.</p>
<p>Christine Edwards, PhD, NSA Representative – DARPA Information Innovation Office</p> 	<p>Dr. Edwards has served in diverse roles as a developer, researcher, leader, and technical advisor. As Deputy Chief of the National Security Agency’s (NSA) Adaptive Cyber-Defense Systems Research Office, she led an interdisciplinary team investigating trustworthy AI-powered solutions. Previously, as Chief of Multimedia Processing Research, her team was recognized as the NSA Research Team of the Year. Dr. Edwards holds a BS in Electrical Engineering from the University of Maryland and MS degrees in Electrical and Computer Engineering and Applied Biomedical Engineering from Johns Hopkins University. She conducted graduate research at the Mayo Clinic Neural Engineering Laboratory and Department of Neurologic Surgery and obtained a PhD from the Deakin University School of Engineering in Australia. Dr. Edwards’ research interests focus on artificial intelligence and neuroscience, exploring their intersection for innovative solutions across multiple application domains.</p>
<p>Grace Hwang, PhD, Pro- gram Director – National Institutes of Health</p> 	<p>Dr. Hwang is a Program Director at the National Institute of Neurological Disorders and Stroke, where she manages BRAIN Initiative projects in the Technologies for Neural Recording and Modulation portfolio. Before joining NIH, she was a Program Director at the National Science Foundation while based at Johns Hopkins University with appointments at the Applied Physics Laboratory and Kavli Neuroscience Discovery Institute. At NSF, Dr. Hwang managed the Disability and Rehabilitation Engineering program while spearheading cross-agency initiatives including the Emerging Frontiers in Research and Innovation’s Brain-Inspired Dynamics for Engineering Energy-Efficient Circuits and Artificial Intelligence (BRAID) program topic. Her research at Johns Hopkins spanned neuroscience, artificial intelligence, neuro-modulation, and brain-machine interfaces. She served as a Principal Investigator on an NIH BRAIN award to investigate neural stimulation using sonogenetics and on an NSF award to develop a brain-inspired algorithm for multi-agent robotic control. She is a co-organizer of the NIH BRAIN NeuroAI Workshop.</p>
<p>Stephanie Gage, PhD, Program Director – National Science Foundation</p> 	<p>Dr. Gage is a Program Director in the Division of Computing and Communication Foundations (CCF) in the Computer and Information Sciences and Engineering directorate at the National Science Foundation (NSF). In 2021, she joined NSF as an AAAS Science and Technology Policy Fellow in the Division of Information and Intelligent Systems, focusing on neuroscience and artificial intelligence initiatives across the agency. In 2023, she became a cluster leader in the Division of CCF, supporting the Foundations of Emerging Technologies program and managing the biological systems portfolio. Before joining the NSF, Dr. Gage’s research centered on neuromodulation and behavior in insects. She also completed fellowships with the Agricultural Research Service of the U.S. Department of Agriculture and the Georgia Institute of Technology. She holds a BS in Chemistry from Beloit College and obtained a PhD in Neuroscience from the University of Arizona.</p>

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Steven Zehnder, PhD,
Program Director – National
Science Foundation



Dr. Zehnder is the Integrative Activities Program Director in the Division of Chemical, Bioengineering, Environmental, and Transport Systems (CBET) at the U.S. National Science Foundation. Previously he was the Associate Program Director for Engineering Biology and Health Programs in CBET and served as the Program Lead for Cellular and Biochemical Engineering, Biophotonics, and Disability and Rehabilitation Engineering. Steven received his PhD in Mechanical Engineering from the University of Florida, studying cellular biomechanics and mechanobiology.

Jean-Luc Cambier, PhD,
Director of Technical
Programs – Office of the
Under Secretary of Defense,
Research & Engineering
(OUSD(R&E))



Dr. Cambier is a Program Director at the Office of the Under Secretary of Defense, Research & Engineering (OUSD(R&E)). He oversees the Vannevar Bush Faculty Fellowship (VBFF), the tri-service Laboratory-University Collaboration Initiative (LUCI), and serves as a technical advisor for a range of scientific fields of interest to the Basic Research Office, from mathematics, AI, quantum materials to biology and neuroscience. Prior to that, he was Program Officer, then Technical Advisor at the Air Force Office of Scientific Research (AFOSR). He started his professional career at NASA, the Aeronautical Research Institute in Sweden, and the US Air Force (USAF), and joined the civil service in 2001 at the Air Force Research Laboratory. Initially trained as a theoretical physicist, Dr. Cambier has conducted and directed research in many fields, including applied mathematics, quantum physics, plasma physics, hypersonics and combustion, and computer science.

Alyssa Picchini Schaffer,
PhD, Vice President and
Senior Scientist, Neurosci-
ence Collaborations, Simons
Foundation



Dr. Schaffer is a vice president and senior scientist at the Simons Foundation, directing the Neuroscience Collaborations and Pivot Fellowship. She has diverse expertise in neural stem cell biology, pharmacology, policy, and media across business, government, and academic sectors. Picchini Schaffer is passionate about fostering collaboration among multidisciplinary teams to address significant neuroscience questions and promote effective science communication. Previously, she was the scientific director of TEDMED, a TED division focused on science, health, and medicine. She earned her Ph.D. from Columbia University and is an alumna of the AAAS Science and Technology Policy Fellowship. Picchini Schaffer serves on the board of The IDEAL School of Manhattan, an inclusive independent school in NYC, and as board treasurer for the Heartbeat Music Project, which offers music education for Navajo (Diné) K-12 students on the Navajo Reservation in New Mexico.