Speakers

John Bachman
Fellow in Therapeutic Science, Laboratory of Systems Pharmacology, Harvard Medical School

Dr. John Bachman is a Fellow in Therapeutic Science at Harvard Medical School’s Laboratory of Systems Pharmacology. His research focuses on the development of computational tools for understanding the behavior of complex biological systems, and the application of these tools to studying problems of cellular decision-making in health and disease. In his most recent work he co-developed the Integrated Network and Dynamical Reasoning Assembler (INDRA) to automate the construction of explanatory biological models from natural language and scientific literature. John received his Ph.D. in Systems Biology from Harvard University working in the lab of Dr. Peter Sorger, where he combined wet-lab experimentation and computational modeling to address unresolved mechanistic questions in programmed cell death. Before obtaining his Ph.D. John worked as a scientist for four years at the Cambridge, MA, research software company Charles River Analytics. At CRA he worked on several projects for the Army and Air Force Research Labs using simulation and knowledge management tools to improve human decision making.

Patty Beeson
Provost and Senior Vice Chancellor, University of Pittsburgh

Patricia E. Beeson was elected provost and senior vice chancellor of the University of Pittsburgh in June 2010, following 27 years as a member of the faculty at the University.

Dr. Beeson earned a BS in economics from Oregon State University and a PhD in economics at the University of Oregon. She came to Pitt as a professor of economics in 1983. As a member of the economics faculty, she built a distinguished research career specializing in urban, regional, and labor economics, particularly the role that institutions of higher education play on local and regional economies. Her academic work led to administrative appointments, and she served the University as associate dean for undergraduate studies in the Dietrich School of Arts and Sciences (2001-2004), vice provost for graduate studies (2004-2005), and vice provost for graduate and undergraduate studies (2006-2010) before assuming her current position.

Adam Bly
Founder & CEO, AI / Data Startup

Adam led data at Spotify for the last few years. Previously, he founded and was CEO of Seed Scientific, the data analytics firm, which was acquired by Spotify in 2015. He recently founded a new purpose-driven AI startup.

Named a Young Global Leader by the World Economic Forum, Adam has lectured at the United Nations, MIT, NASA, Ars Electronica, MoMA, The National Academy of Sciences, The Royal Society, the World Economic Forum (WEF), and before the U.S. House of Representatives on the role of data and science in society. He was a Visiting Senior Fellow in Science, Technology & Society at Harvard Kennedy School, has advised Fortune 500 companies on data strategy and national political campaigns on science policy, and has served on the WEF Global Agenda Councils on Complex Systems and Data-Driven Development.
Deeply committed to modernizing and spreading science literacy, Adam founded and served as Editor-in-Chief of the award-winning science magazine, Seed; co-organized Design and the Elastic Mind, the landmark exhibition at The Museum of Modern Art; and edited Science is Culture: Conversations at the New Intersection of Science and Society (HarperCollins). He sits on the National Leadership Council of the Society for Science and the Public, the organizer of the Science Talent Search and the International Science and Engineer Fair, which he won in 1998 (Best of Category, Biochemistry), and he is a member of the Advisory Committee for Broken Nature, the XXII Triennale di Milano 2019.

For his efforts to advance the public’s understanding of science, Adam was awarded the Queen Elizabeth II Golden Jubilee Medal. Born in Montreal, he studied at McGill University and began his career researching the genetics and biochemistry of metastasis at the National Research Council of Canada. He lives in New York City.

Donald Burke
Dean, Graduate School of Public Health, University of Pittsburgh

Dr. Donald S. Burke is at the University of Pittsburgh where he is Dean of the Graduate School of Public Health and the first occupant of the UPMC-Jonas Salk Chair in Global Health. A native of Cleveland, Ohio, Dr. Burke received his BA from Western Reserve University and his MD from Harvard Medical School. He served 23 years as an active duty Army medical officer at the Walter Reed Army Institute of Research and then 9 years as a professor at the Johns Hopkins Bloomberg School of Public Health. He joined the University of Pittsburgh in 2006 where as Dean he founded the Pitt Public Health Dynamics Laboratory, an academic team that develops computational models and simulations of epidemic infectious diseases and other dynamic public health problems, and uses these simulations to evaluate prevention and control strategies. He has been a member of the Board of Health of Allegheny County since 2008. For the past two years he has led a school-wide initiative on opioid epidemiology research. Dr. Burke has published over 300 peer reviewed papers and is an elected Member National Academies of Medicine.

Carolyn Byrnes
Special Assistant to the Secretary of Health, Pennsylvania Department of Health

Carolyn currently serves as a Special Assistant to the Secretary of Health Dr. Rachel Levine at the Pennsylvania Department of Health. In this position Carolyn advises the secretary on public health matters; coordinates initiatives across the agency, as well as other agencies and private-sector stakeholders; and plans and executes special projects designed to advance the goals of the department. Carolyn’s experience in public health is varied, having worked in both research and public health practice. Prior to this position Carolyn worked at Roswell Park Cancer Institute in Buffalo, New York, as a clinical research associate for the Department of Cancer Prevention and Control. She holds a B.S. degree in biology from Loyola University Chicago and a Master of Public Health degree in epidemiology from the University of Pittsburgh.

CB Bhattacharya
Zoffer Chair of Sustainability and Ethics, Katz Graduate School of Business, University of Pittsburgh

CB Bhattacharya is the H.J. Zoffer Chair in Sustainability and Ethics at the Katz Graduate School of Business, University of Pittsburgh. He is currently on leave from ESMT, the European School of Management and Technology in Berlin, Germany. He is a world renowned expert in business strategy innovation aimed at increasing both business and social value. His research and teaching focuses specifically on how
companies can use underleveraged “intangible assets” such as corporate identity, reputation, corporate social responsibility and sustainability to strengthen stakeholder relationships and drive firm market value.

Bruce Childers
Associate Dean for Strategic Initiatives, Professor, School of Computing and Information, University of Pittsburgh

Bruce Childers is the Associate Dean for Strategic Initiatives in the School of Computing and Information, and a Professor in the Computer Science (CS) Department at the University of Pittsburgh. He graduated from the University of Virginia with a PhD (CS, 2000) and from the College of William and Mary with a BS (CS, 1991). His research spans the software-hardware boundary for improved energy, performance and reliability, with an emphasis on embedded systems. Childers is a passionate advocate of increasing accountability in computer systems research for more reproducible and open experimentation. Try our prototype for actively curating experiments with computer system simulators! He has developed techniques at both the software layer (dynamic binary translation, compiler optimization, debugging and software testing) and the hardware layer (asynchronous custom processors, speed scaling, reliable cache design, and storage class memory). Childers participates in numerous international and national activities, including past chair of the ACM SIGPLAN and SIGBED Conference on Languages, Compilers, and Tools for Embedded Systems (2012-2015), program chair for LCTES (2010) and PPPJ (2014), member of the Editorial Advisory Board for the Computer Languages, Systems and Structures Journal, member of the organizing committee for the Workshop on Modeling and Simulation of Systems and Applications, and member of the steering committee for the International Conference on the Principles and Practice of Programming in Java. He participates in ACM task forces on issues about scientific reproducibility in computer science research. He is a former co-director of the Computer Engineering graduate program at Pitt.

Paul R. Cohen
Founding Dean and Professor, School of Computing and Information, University of Pittsburgh

Dr. Paul Cohen is the founding Dean of School of Computing and Information. Prior to becoming the Dean, Dr. Cohen was a Program Manager at the Information Innovation Office at DARPA. There he promoted AI techniques to help people to model and manage complicated, interacting systems. Cohen was a professor and founding director of the University of Arizona's School of Information: Science, Technology and Arts. He also served as the head of the university's department of computer science. He has held research and faculty positions at the University of Southern California's Information Sciences Institute and at the University of Massachusetts. Much of Cohen's earlier research was about algorithms to find patterns in time series, with the intent of modeling human conceptual development on robot platforms. Dr. Cohen holds a Doctor of Philosophy degree in Computer Science and Psychology from Stanford University, a Master of Science degree in Psychology from the University of California, Los Angeles and a Bachelor of Science degree in Psychology from the University of California, San Diego.

Gregory Cooper
Professor, Vice Chairman, Department of Biomedical Informatics, School of Medicine; Professor, Intelligent Systems Program, School of Computing and Information, University of Pittsburgh

Gregory Cooper, MD, PhD is UPMC Professor of Biomedical Informatics at the University of Pittsburgh and Director of the Center for Causal Discovery. He has been a faculty member at the University since 1990. His research focuses on the application of probabilistic modeling, machine learning, Bayesian statistics, and artificial intelligence to address biomedical informatics problems. Current research projects include causal modeling and discovery of biomedical knowledge from large datasets, learning electronic medical record systems, machine-learning-
based clinical alerting, computer-aided medical diagnosis and prediction, and methods for detecting and characterizing infectious disease outbreaks. He received a BS in Computer Science from MIT, a PhD in Medical Information Sciences from Stanford University, and an MD from Stanford.

Alexandra Cosman
Director of Active Performance Management, Social Finance

Alexandra Cosman is the Director of Active Performance Management at Social Finance. She is responsible for ongoing project oversight, reporting, and performance management once Pay for Success projects have launched. Alexandra works with project partners to ensure that data collection systems are efficient and effective, and that evaluation protocols are practical and implemented appropriately. She conducts data analysis to guide project tracking, course correction, and rapid feedback, and facilitates close engagement and information sharing with investors.

Prior to joining Social Finance, Alexandra was a consultant specializing in data management and evaluation protocols. Earlier in her career, she worked on cost-effectiveness, fidelity monitoring, and sustainability during the scale-up of two rigorously-evaluated public health programs in sub-Saharan Africa. Alexandra began her career at the UN Refugee Agency, where she worked with implementing partners to provide services to refugees in various developing country contexts. Alexandra holds a MSc in Mathematics from University College London (1st Class Honors), and an MPP from the Harvard Kennedy School.

Lt. Colonel Matthew Dabkowski
Director, Operations Research Center, United States Military Academy

LTC Matthew Dabkowski is an Academy Professor in the United States Military Academy's (USMA's) Department of Systems Engineering (DSE), currently serving as the Director of the Operations Research Center. A 1997 graduate of USMA, LTC Dabkowski received his commission as an Infantry Officer, and his first assignment was with the 1-508th Airborne Battalion Combat Team (Vicenza, IT), where he served as a rifle platoon leader, an anti-tank/heavy weapons platoon leader, and a company executive officer. He subsequently commanded rifle and headquarters and headquarters companies in the 5-20th Infantry Regiment (Fort Lewis, WA), the first battalion in the Army to field the Stryker combat vehicle. In this capacity, he deployed between November 2003 and November 2004 in support of Operation IRAQI FREEDOM.

In 2007, LTC Dabkowski obtained an MS in Systems Engineering from the University of Arizona (UA), and he transitioned to the Army's Operations Research / Systems Analysis Functional Area (FA49). His first FA49 tour was in USMA's DSE as an instructor and assistant professor. Following this teaching assignment, LTC Dabkowski was assigned to the Army Training and Doctrine Command Analysis Center (TRAC; Fort Leavenworth, KS), where he deployed in support of Operation ENDURING FREEDOM as the Chief of TRAC's Data Cell Forward. In 2016, LTC Dabkowski received a PhD in Systems and Industrial Engineering from the UA, where he deployed in support of Operation FREEDOM'S SENTINEL as the Military Assistant to the Commanding General of Combined Joint Task Force – Horn of Africa.

In recognition of his contributions to military operations research over the past decade, LTC Dabkowski has received the Army's Dr. Wilbur B. Payne Award, TRAC's LTC Paul J. Finken Memorial Award, the Military Operations Research Society's (MORS) Wayne P. Hughes Junior Analyst Award, and MORS' David Rist Prize.
Major General Jody Daniels  
*Chief of Staff, U.S. Army Forces Command*

Dr. Jody Daniels is currently the Chief of Staff at US Army Forces Command. She has previously served as the Assistant Deputy Chief of Staff G-2, Department of the Army and as the Deputy Director and Director, Intelligence (J2) for U.S. Africa Command. She has over 35 years of active and reserve military service and has commanded at multiple echelons and served in numerous military leadership positions. She has completed a Civil Affairs deployment to Kosovo and a deployment to Iraq where she served as the Chief of Plans and Integration and then as the Director for Intelligence (J2) for the Multi-National Security Transition Command – Iraq (MNSTC-I). In her civilian career, Dr. Daniels was previously the Director of Advanced Programs for Lockheed Martin's Advanced Technology Laboratories. Prior to that, she was the Director of the Contextual Systems Laboratory where she led a research and development laboratory of 30 personnel in two technology software areas. MG Daniels holds a B.S. in Applied Mathematics (Computer Science) from Carnegie Mellon University, a M.S. and Ph.D. in Computer Science from the University of Massachusetts (Amherst), and a M.S. in Strategic Studies from the U. S. Army War College. She has a typical set of military awards and decorations for her rank.

*The views expressed in this speech and materials do not necessarily represent the views of the U.S. Army or the United States.*

Jim Donlon  
*Program Manager, Directorate for Computer and Information Science and Engineering, National Science Foundation*

Mr. James J. Donlon is a Program Director at the National Science Foundation, in the Directorate for Computer and Information Science and Engineering (CISE), Division of Information and Intelligent Systems (IIS). Mr. Donlon manages grants in artificial intelligence technologies including cognitive systems, knowledge representation and reasoning, automated planning, machine learning, search and optimization, agents, and game theory. His programs include Robust Intelligence, Smart and Autonomous Systems, and the National Robotics Initiative.

Prior to NSF, Jim Donlon was a Program Manager at the Defense Advanced Research Projects Agency (DARPA), where his programs included the Computer Science Study Group, Mind's Eye, Software Producibility, and Application Communities.

Mr. Donlon is a retired Army Lieutenant Colonel, with service on the International Staff at NATO Headquarters, Brussels, Belgium as Executive Officer (deputy director) of Information, Communications, and Technology Management; Combined Forces Command, Republic of Korea as both chief information officer and operations officer for the Army's largest simulation center; and Director of the Knowledge Engineering Group at the U.S. Army War College. Prior to his service as a computer scientist, Jim held a range of leadership and staff assignments in field units including platoon leader, company executive officer, and brigade plans officer.

Mr. Donlon holds a B.S. from the University of Delaware, M.S. in Computer Science from Northwestern University, and the Master of Military Arts and Science from the U.S. Army Command and General Staff College.

Joshua Elliot  
*Program Manager, Information Innovation Office, DARPA*

Dr. Joshua Elliott joined DARPA in September 2017. His research interests include modeling and prediction of complex natural and socio-economic systems and how computational technologies can be leveraged to improve all aspects of science and modeling from data discovery to analysis.
Elliott joins DARPA from the University of Chicago Computation Institute, where he led research projects related to socio-technical change, optimal decision- and policy-making under uncertainty, and environmental variability and its impact on food security. Elliott has also held positions with the Argonne National Lab, the London School of Economics and Political Science, and Columbia University.

Elliott holds doctorate and Master of Science degrees in physics from McGill University and a Bachelor of Science, with high honors, in physics from the University of Texas, Austin. He has over 50 peer-reviewed journal articles, book chapters, and reports.

Howard Fineman
News Analyst, NBC News

Howard Fineman is an admired journalist and political commentator who taps into unrivaled knowledge of the political and media landscapes to present vivid insights into Washington, presidents, Congress, and national and international affairs. Known for his wit as well as his work, Fineman is a political analyst and contributing writer for NBC News and MSNBC, a regular on Meet the Press, and the former Global Editorial Director of HuffPost. He regularly covers elections and is currently covering the 2018 midterms, having traveled in and reported on 49 of the 50 states. Fineman possesses unrivaled ground-level knowledge of the country outside the Beltway and an encyclopedic knowledge of the entire country's electoral politics. He has vast experience covering Presidential, Congressional, and local elections. Fineman's decades-long journalistic experience is wide-ranging: He has covered seven presidents and reported in personal depth on the most recent five, including Donald J. Trump and Barack Obama. He has known Trump for years, interviewed him during the campaign, covered his rallies, and reported and written extensively about his White House. Having held senior roles in digital media, broadcast television, cable television, magazines, books, newspapers, podcasts, social media and political comedy, Fineman is expertly positioned to discuss the political landscape and the many personalities driving it, the rise of digital media, and the relationship between the media and the White House.

In his former role as global editorial director, Fineman oversaw 17 global editions of HuffPost and an audience of over 200 million unique visitors per month. Prior to joining HuffPost in 2010, Fineman was chief political correspondent and deputy Washington Bureau Chief of Newsweek, where he pioneered online offerings in the early 1990s. He began his reporting career at The Courier-Journal in Louisville, Kentucky, where his coverage of the historic 111-day coal miner's strike was a finalist for the Pulitzer Prize. He began his TV career as a regular on PBS' Washington Week and later CNN before joining NBC/MSNBC in 1998, where he became one of the first contributors to MSNBC.com.

Toren Finkel
Director, Aging Institute; Professor of Medicine, Division of Cardiology; G. Nicholas Beckwith III and Dorothy B. Beckwith Chair in Translational Medicine, University of Pittsburgh/UPMC

Toren Finkel, MD, PhD, a physician-scientist renowned for his research on the basic science of aging, is the Director of the UPMC-University of Pittsburgh Aging Institute and a Professor of Medicine in the Pitt Department of Medicine's Division of Cardiology and Geriatrics. After earning a bachelor's degree in physics from the University of Maryland, Finkel obtained his MD and PhD degrees from Harvard Medical School in 1986. He completed residency training in internal medicine at Massachusetts General Hospital in Boston, and followed it with a fellowship in cardiology at Johns Hopkins Medical School. Finkel began his 25-year career with the National Institutes of Health in 1992 when he joined the National Heart, Lung, and Blood Institute as an investigator in its Cardiology Branch. He eventually became Chief of that branch, and later, chief of the NHLBI's Translational Medicine Branch. His lab's research focuses on the role of cellular metabolism and oxidative stress in aging and age-related diseases. In his new role at the Aging Institute, Finkel will direct and support research to identify signaling pathways and therapies that target the process of aging. He is the author or coauthor of more than 200 publications. According to Google Scholar, Finkel ranks as the 12th most highly cited author in aging and the 11th most cited in cardiovascular disease. Among his many recognitions is his 2013 induction as a Fellow of the American Association for the Advancement of Science.
Benjamin M. Gyori is a Research Associate in Therapeutic Science at the Laboratory of Systems Pharmacology, Harvard Medical School. His research is at the intersection of systems biology and artificial intelligence, and aims to understand complex biological systems using computational models. Ben co-developed INDRA, a software tool which automatically assembles mechanisms extracted from the cancer biology literature into explanatory models, and is currently being generalized to other domains. Ben completed his PhD at the National University of Singapore, where he developed probabilistic approaches to modeling the dynamics of biochemical systems. Ben has been an active performer in several DARPA programs including Big Mechanism, Communicating with Computers, and World Modelers.

Patrick Gallagher
Chancellor, University of Pittsburgh

As the University of Pittsburgh's 18th chancellor, Patrick Gallagher directs one of the nation's premier public institutions for higher education and research. In this role, Gallagher oversees a community of more than 34,000 students at 16 undergraduate and graduate schools across five distinct campuses. He also supports the work of more than 13,000 faculty and staff members who are committed to advancing the University's legacy of academic excellence, community service and research innovation.

Prior to his installation at Pitt, Gallagher spent more than two decades in public service. In 2009, President Barack Obama appointed him to direct the National Institute of Standards and Technology. While in this role, Gallagher also served as acting deputy secretary of commerce before leaving for Pitt in the summer of 2014.

Today, Gallagher serves as the chair of Internet2 and is active on a number of boards and forums, including the NCAA Division I Presidential Forum, the Allegheny Conference on Community Development and the United Way of Southwestern Pennsylvania. He has also completed terms on a wide range of community boards and committees, including President Obama's 12-person Commission on Enhancing National Cybersecurity in 2016.

Gallagher holds a PhD in physics from the University of Pittsburgh and a bachelor's degree in physics and philosophy from Benedictine College in Kansas.

D. Tyler Gourley
Vice President, Hillman Family Foundation

D. Tyler “Ty” Gourley is currently Vice President of the Hillman Family Foundations in Pittsburgh, PA. In this capacity, he carries out diverse grantmaking and administrative functions for the 18 foundations associated with the family of the late Henry and Elsie Hillman. He has been with the foundations since February 2013.

Prior to this position, he was Principal of Gourley Consulting where he specialized in public policy and project management work for diverse nonprofit and government organizations in southwestern Pennsylvania. His clients included the Shale Gas Roundtable, Allegheny County Health Department, United Way of Allegheny County, Grantmakers of Western Pennsylvania, Jewish Healthcare Foundation, Local Government...
Gourley previously served as Director of Development and External Affairs at Renewable Manufacturing Gateway and earlier as Senior Policy Strategist at the University of Pittsburgh Institute of Politics. While at the Institute of Politics, he helped to manage the activities of eight policy committees, was Managing Editor of all Institute publications, and served as Project Director for the Regional Water Management Task Force.

Gourley is a board member of 3 Rivers Wet Weather. He holds a Masters of Public Administration from the Graduate School of Public & International Affairs at the University of Pittsburgh. He also earned his Bachelor of Arts from the University of Pittsburgh (History, Political Science, Africana Studies Certificate) and was active in the University Honors College throughout his undergraduate career.

---

John Grefensette
Professor, Graduate School of Public Health, University of Pittsburgh; Senior Scientist, Public Health Dynamics Lab, University of Pittsburgh

John J. Grefenstette, PhD, is a Professor of Health Policy and Management in the Graduate School of Public Health at the University of Pittsburgh. He was the inaugural Director of the Public Health Dynamics Laboratory at the University of Pittsburgh and previously served as Professor and Chair of the Department of Bioinformatics and Computational Biology and Assistant Dean for the School of Computational Sciences at George Mason University, and as Head of the Machine Learning Section at the Navy Center for Applied Research in Artificial Intelligence at the U.S. Naval Research Laboratory. Dr. Grefenstette's research activities span many areas on the boundary between computation and biology, including modeling and simulation of infectious diseases, public health databases, data mining, evolutionary algorithms, machine learning, computational models of biological networks, and high-performance computing applications to public health. His current major projects include the University of Pittsburgh's National Center of Excellence for Models of Infectious Diseases Agent Study (MIDAS), funded by NIH/NIGMS, and the Vaccine Modeling Initiative, funded by the Bill and Melinda Gates Foundation. Dr. Grefenstette was the founding Associate Editor for the journal Evolutionary Computation, serves on the editorial board for the journal Adaptive Behavior and has been Associate Editor for the journal Machine Learning. Dr. Grefenstette received his BS in Mathematics and Philosophy from Carnegie Mellon University and his PhD in Computer Science from the University of Pittsburgh. In 2010, Dr. Grefenstette was honored with the Evolutionary Computation Pioneer Award from the IEEE Computational Intelligence Society.

---

John Greer
Lead, Analytic Modeling Program, National Geospatial-Intelligence Agency

John Greer leads the Analytic Modeling Program in the Research directorate of the National Geospatial-Intelligence Agency (NGA). Since joining NGA in 2007, John has worked in areas including image processing, hyperspectral imaging, compressive sensing, predictive analytics, and pattern-of-life modeling. He earned a BA from Columbia University in 1999, and a PhD in mathematics from Duke University in 2003.

---

David Hickton
Founding Director, Institute for Cyber Law, Policy, and Security

David J. Hickton is the founding director of the University of Pittsburgh Institute for Cyber Law, Policy, and Security. Hickton was nominated for United States Attorney for the Western District of Pennsylvania by President Barack Obama on May 20, 2010, and was confirmed by the U.S. Senate on Aug. 5, 2010. He was sworn in as the District's 57th U.S. Attorney on Aug.12, 2010.

Prior to becoming U.S. Attorney, Mr. Hickton engaged in the private practice of law, specifically in the areas of transportation, litigation, commercial and white collar crime. Mr. Hickton began his legal career serving as a Law Clerk for the Honorable United States District Judge Gustave Diamond from 1981 to 1983. For more than a decade, Mr. Hickton was an Adjunct Professor of Law at Duquesne University School of Law where he taught antitrust.
Mr. Hickton is a Fellow in the American College of Trial Lawyers, and a Fellow of the Academy of Trial Lawyers of Allegheny County. Mr. Hickton has been admitted before the United States Supreme Court, the Pennsylvania Supreme Court, the United States District Court for the Western District of Pennsylvania and several of the U.S. Circuit Courts.

Previously, Mr. Hickton was involved in a wide range of community activities, and has long been an active supporter of and participant in organizations which benefit children and the arts. He is a past Executive Board Member of the Pittsburgh Public Theater, and served as its President. Mr. Hickton also was a longtime member of the Pittsburgh Cultural Trust, a non-profit organization that uses arts and culture to reinvigorate the Downtown.

His nomination as United States Attorney marks Mr. Hickton's second Presidential appointment. From 1999 to 2001, Mr. Hickton served on the President's Advisory Committee on the Arts for the John F. Kennedy Center for the Performing Arts at the request of then-President Bill Clinton. Mr. Hickton is a 1978 graduate of the Pennsylvania State University and a 1981 graduate of the University of Pittsburgh School of Law.

---

**Annie Knickman Plancher**  
**Director of Advisory Services, Social Finance**

Annie Knickman Plancher is a Director of Advisory Services at Social Finance, where she is doing a one-year Residency through the Doctorate of Education Leadership program at Harvard Graduate School of Education. In her doctorate studies, Annie has focused on: funding flows in U.S. K-12 education, connecting funding with outcomes, and thinking about how to better prepare secondary and post-secondary students for fruitful and fulfilling careers. At Social Finance, Annie is focused on exploring the role of Pay-for-Success in education, career and technical education, and workforce development.

Prior to pursuing her doctorate, Annie worked for McKinsey & Company as a management consultant working with education organizations in the public and private sectors, as well as healthcare companies. Her work focused on a range of topics, including organizational and product strategy, organization design, and operational effectiveness. In her last two years with McKinsey, Annie launched and led an independent nonprofit, McKinsey Social Initiative, focused on leveraging McKinsey's resources to address global social issues. The nonprofit's first effort, Generation, aimed to support unemployed young people in five countries in building workforce skills and securing jobs. Annie graduated summa cum laude from Harvard College, where she studied psychology and economics.

---

**Alexandros Labrinidis**  
**Professor, School of Computing and Information, University of Pittsburgh**

Dr. Alexandros Labrinidis received his Ph.D degree in Computer Science from the University of Maryland, College Park in 2002. He is currently an associate professor at the Department of Computer Science of the University of Pittsburgh and co-director of the Advanced Data Management Technologies Laboratory (ADMT Lab). He is also an adjunct associate professor at Carnegie Mellon University (CS Dept).

Dr. Labrinidis' research focuses on user-centric data management for scalable network-centric applications, including web-databases, data stream management systems, sensor networks, and scientific data management (with an emphasis on big data). He has published over 70 papers at peer-reviewed journals, conferences, and workshops; he is the recipient of an NSF CAREER award in 2008. Dr. Labrinidis served as the Secretary/Treasurer for ACM SIGMOD and as the Editor of SIGMOD Record. He is currently on the editorial board of the Very Large Databases Journal and of the Parallel and Distributed Databases Journal. He has also served on numerous program committees of international conferences/workshops; in 2014, he was the PC Track-Chair for Streams and Sensor Networks for the ICDE conference.
**Sera Linardi**  
*Associate Professor, Graduate School of Public and International Affairs, University of Pittsburgh*

Sera Linardi is an Associate Professor at the Graduate School of Public and International Affairs (GSPIA) at the University of Pittsburgh. She received her PhD in Social Science at the California Institute of Technology after working as a computer scientist at Adobe Systems. She bridges academic research and practical challenges in public/social services provision, specifically around prosocial behavior, information aggregation, and behavior economics of the poor. Her field and lab experiments have been published in leading economics and political science journals and won research awards. Her work is currently supported by the National Science Foundation (NSF) and Heinz Endowment.

**Jeremy Levy**  
*Distinguished Professor, Department of Physics and Astronomy, University of Pittsburgh; Director, Pittsburgh Quantum Institute*

Dr. Jeremy Levy is a Distinguished Professor of Condensed Matter Physics at the University of Pittsburgh in the Department of Physics and Astronomy, and Director of the Pittsburgh Quantum Institute. He received an A.B. degree in physics from Harvard University in 1988, and a Ph.D. degree in physics from UC Santa Barbara in 1993. After a postdoctoral position at UC Santa Barbara, he joined the University of Pittsburgh in 1996. His research interests center around the emerging field of oxide nanoelectronics, experimental and theoretical realizations for quantum computation, semiconductor and oxide spintronics, quantum transport and nanoscale optics, and dynamical phenomena in oxide materials and films.

Dr. Levy is Director of the Pittsburgh Quantum Institute, the Center for Oxide-Semiconductor Materials for Quantum Computation, a Multidisciplinary University Research Initiative (MURI) on Quantum Preservation, Simulation and Transfer in Oxide Nanostructures, and a NSF Nanoelectronics for 2020 and Beyond program, and a Class of 2015 National Security Science and Engineering Faculty Fellow (NSSEFF). He is a Fellow of the American Physical Society, and is the recipient of the 2008 Nano50 Innovator Award, and the NSF Career Award. He has received the University of Pittsburgh's Chancellor's Distinguished awards for research (2004, 2011) and teaching (2007).

**Graham MacMillan**  
*Senior Program Officer, Impact Investing and Inclusive Economies, Ford Foundation*

Graham serves as Senior Program Officer for Impact Investing at the Ford Foundation. In this role, he is responsible for developing the team's grant-making strategy and coordinating it closely with our program-related investment.

Prior to joining Ford, Graham was Director of Corporate Citizenship Partnerships at Citigroup. As director, Graham worked with Citi's myriad businesses to drive economic and social impact with clients and other key stakeholders while contributing to Citi's broader citizenship reporting requirements.
Christina Mair
Assistant Professor, Graduate School of Public Health, University of Pittsburgh

Christina Mair is a social epidemiologist and an Assistant Professor in the Department of Behavioral and Community Health Sciences. Her research focuses on the social ecology of substance use, model-based approaches to study drinking behaviors and related problems, and population-based analyses of alcohol-related problems such as violence. She is the Principal Investigator of an NIH R21 grant focused on the extent to which high-risk sexual behaviors and sexual assault victimization and perpetration vary in relation to selection of drinking contexts, use of alcohol in contexts, and level of use in contexts; and an NIAAA-funded R01 that uses small scale multi-methods approaches, including local survey and archival data, to assess four specific social mechanisms that may link over-concentrations of off-premise alcohol outlets in neighborhood areas to alcohol-related problems (e.g., violence and heavy drinking). Dr. Mair also studies the spatial and social patterns of opioid use in Pennsylvania with my collaborator Dr. Jessie Burke.

Oscar C. Marroquin
Chief Clinical Analytics Officer, UPMC Health Services Division; Associate Professor of Medicine and Epidemiology, School of Medicine, University of Pittsburgh

Oscar C. Marroquin, M.D., FACC, is the Chief Clinical Analytics Officer, UPMC Health Services Division. He is also a practicing cardiologist at the UPMC Heart and Vascular Institute and an associate professor of Medicine, Epidemiology, and Clinical and Translational Sciences at the University of Pittsburgh. His academic career has been focused on outcomes research in interventional cardiology and heart disease in women, and his research has been rewarded in the form of grants and numerous publications. In his current role, he leads UPMC's clinical analytics activities, where he oversees a team of analysts, statisticians, and data scientists focused on applying “big data” approaches to measure and predict clinical outcomes. Dr. Marroquin completed his internship and residency in internal medicine at the Presbyterian Medical Center of the University of Pennsylvania and did his general cardiology and interventional cardiology fellowships at UPMC. He is a member of the American Medical Association, the American College of Physicians and a fellow of the American College of Cardiology and the Society of Cardiac Angiography and Interventions.

Andrew W. Moore
Dean, School of Computer Science, Carnegie Mellon University

Andrew W. Moore, a distinguished computer scientist with expertise in machine learning and robotics, became dean of the Carnegie Mellon University School of Computer Science in August 2014. He had previously served as a professor of computer science and robotics before taking a leave of absence to become founding director of Google's Pittsburgh engineering office in 2006.

Moore's research interests broadly encompass the field of “big data”—applying statistical methods and mathematical formulas to massive quantities of information, ranging from Web searches to astronomy to medical records, in order to identify patterns and extract meaning from that information. His past research has also included improving the ability of robots and other automated systems to sense the world around them and respond appropriately.

Christian Racicot
Founder and CEO, Quebec City Conference; Founder and CEO, Institutional Investors Roundtable
Christian Racicot is the co-founder and CEO of the Quebec City Conference (“QCC” - www.quebeccityconference.com/en), a not-for-profit corporation founded in 2003 whose mission is to contribute to the identification and resolution of capital market inefficiencies that lead to underinvestment in activities or sectors that generate societal benefit.

He is also the founder and CEO of the Institutional Investors Roundtable (“IIR” - www.iiroundtable.com), a not-for-profit community created in 2010 composed of the senior investment executives of over 40 of the world’s leading asset owners (mainly pension and sovereign wealth funds) interested to collaborate around long-term, large scale private market investment. The IIR’s mission is to: (i) explore ways of improving collaboration amongst them; (ii) consider tangible and innovative ways to invest through leveraging one another’s expertise and maximizing efficiencies; (iii) foster relationships of trust that are key to their long-term collaboration; and (iv) interact more efficiently with governments wishing to attract long-term and sustainable investments in their national economies.

Christian received a Bachelor of Laws from Laval University in 1983 and an MBA from the Richard Ivey School of Business (University of Western Ontario) in 1989. He has been practicing commercial and corporate law since 1985. Christian was the founder of the Quebec City’s office of BCF LLP, a leading business law firm with 200 professionals based in Montreal and Quebec City, of which he is now a consulting partner.

---

Raj Rajkumar
Director, USDOT T-SET National University Transportation Center; Co-Director, General Motors-Carnegie Mellon Connected and Autonomous Driving Collaborative Research Lab; Director, Real-Time and Multimedia Systems Lab, Carnegie Mellon University

Raj Rajkumar is an expert in embedded real-time systems and wireless/sensor networks. He serves as the Director of USDOT T-SET National University Transportation Center, Co-Director of the General Motors-Carnegie Mellon Connected and Autonomous Driving Collaborative Research Lab (CAD-CRL), and the Director of the Real-Time and Multimedia Systems Lab.

---

Mark Roberts
Professor and Chair, Department of Health and Public Policy, Graduate School of Public Health, University of Pittsburgh

Mark S. Roberts, MD, MPP is Professor and Chair of Health Policy and Management, and hold secondary appointments in Medicine, Industrial Engineering, and Clinical and Translational Science. A practicing general internist, he has conducted research in decision analysis and the mathematical modeling of disease for over 25 years, and has expertise in cost effectiveness analysis, mathematical optimization and simulation, and the measurement and inclusion of patient preferences into decision problems. He has used decision analysis to examine clinical, costs, policy and allocation questions in liver transplantation, vaccination strategies, operative interventions, and the use of many medications. His recent research has concentrated in the use of mathematical methods from operations research and management science, including Markov Decision Processes, Discrete Event Simulation and integer programming to problems in health care.

---

Rob A. Rutenbar
Senior Vice Chancellor for Research, University of Pittsburgh

---
Rob A. Rutenbar serves as the Senior Vice Chancellor for Research. In this role, he leads the University's strategic vision for research and innovation, works to expand technological and corporate partnerships, and manages all compliance and contract operations.

Dr. Rutenbar possesses nearly 40 years of experience in innovation and technology. His research focuses on three broad categories: tools for a wide variety of integrated circuit design issues, methods for managing the statistics of nanoscale chip design and custom computer architectures for perceptual and data analytics problems.

Prior to coming to the University of Pittsburgh, Dr. Rutenbar served as the Abel Bliss Professor of Engineering and head of the Department of Computer Science at the University of Illinois at Urbana-Champaign. In this role, he oversaw a department composed of 70 faculty members and nearly 2,500 students that is consistently ranked as the No. 5 Computer Science program in the nation by U.S. News and World Report. Prior to assuming that position in 2010, Dr. Rutenbar held the Stephen J. Jatras Chair in Electrical and Computer Engineering at Carnegie Mellon University, where he served on the engineering faculty for 25 years.

Costa Samaras
Assistant Professor, College of Engineering, Carnegie Mellon University

Costa Samaras is an assistant professor in the Department of Civil and Environmental Engineering at Carnegie Mellon University. He directs the Center for Engineering and Resilience for Climate Adaptation and his research spans energy, climate change, automation, and defense analysis. He is a fellow in Carnegie Mellon's Scott Institute for Energy Innovation, and by courtesy, a faculty member in the H. John Heinz III College. He is also an Adjunct Senior Researcher at the RAND Corporation, and a Non-Resident Fellow of the Payne Institute for Earth Resources at the Colorado School of Mines. He was previously a Senior Engineer at RAND, and a megaprojects engineer for Parsons Brinckerhoff. He received a PhD from Carnegie Mellon, and a MPA in Public Policy from New York University.

Steven Shapiro
Executive Vice President, Chief Medical and Scientific Officer, UPMC; President, Health Services Division, UPMC

Steven D. Shapiro, MD, leads the Health Services Division as an executive vice president of UPMC, along with his overarching responsibility as chief medical and scientific officer for this integrated delivery and finance system. Dr. Shapiro works with colleagues across UPMC and the division, which includes more than 30 hospitals and more than 4,600 employed physicians. In collaboration with the University of Pittsburgh Schools of the Health Sciences and the UPMC Insurance Services Division, Dr. Shapiro is promoting evidence-based care pathways and population health models that position UPMC to provide the highest value and quality to patients.

During his first five years at UPMC and Pitt, Dr. Shapiro served as the Jack D. Myers Professor and chair of the Department of Medicine. He was named UPMC's chief medical and scientific officer in 2010.

Dr. Shapiro received his undergraduate and medical degrees from the University of Chicago. He then completed an internal medicine residency, chief residency and fellowship in respiratory and critical care at the Washington University School of Medicine in St. Louis. Prior to his move to Pittsburgh, Dr. Shapiro was the Parker B. Francis Professor of Medicine at Harvard Medical School and the chief of the Division of Pulmonary and Critical Care at Brigham and Women's Hospital.
Aaron Sisto  
*Technology Architect, In-Q-Tel*

Aaron is a technologist at In-Q-Tel, the independent strategic investment arm of the US Defense and Intelligence Communities. His investments focus on breakthrough technologies in artificial intelligence and quantum computing.

Prior to IQT, Aaron directed research in quantum simulation, data science and public policy as a research fellow at Sandia, Lawrence Berkeley and Lawrence Livermore National Labs. He has advised and founded a number of AI-focused startups, and is an avid martial artist and writer in his spare time. Aaron holds a PhD in quantum simulation & machine learning from Stanford University.

---

Stephen Smith  
*Research Professor, Carnegie Mellon University*

Dr. Stephen F. Smith is a Research Professor of Robotics at Carnegie Mellon University, where he heads the Intelligent Coordination and Logistics Laboratory. Dr. Smith's research focuses broadly on the theory and practice of next-generation technologies for automated planning, scheduling, and coordination. He pioneered the development and use of constraint-based search and optimization models, and has successfully fielded Artificial Intelligence (AI)-based planning and scheduling systems in a range of application domains. In recent years, Dr. Smith has turned his attention to the growing problems of traffic congestion and mobility faced by cities. His work on smart traffic signals, which combines concepts from AI and traffic theory, has produced the Surtrac system for real-time traffic signal control, which has yielded significant improvements in traffic flow efficiency and air quality in operation in Pittsburgh PA and is currently being deployed in a number of other US cities. His current work focuses on broader smart traffic infrastructure capabilities that follow from integration with direct vehicle-to-intersection communication. Dr. Smith received his MS and Ph.D. degrees in Computer Science from the University of Pittsburgh. He has published over 280 technical papers in AI and related areas. He is a Fellow of the Association for the Advancement of Artificial Intelligence (AAAI), and recipient of the 2018 AAAI Robert S. Engelmore Memorial Award.

---

Gary Way  
*Senior Vice President, PNC Bank*

Gary C. Way is a Senior Vice President at PNC Bank. He is responsible for the setting of credit strategy and risk appetite for PNC's portfolio of $220B in loan balances, and leads a team of credit portfolio managers in maximizing the risk/return profile of commercial loans and portfolios. Among his responsibilities, he is currently leading the development of PNC's outlook on threats and opportunities arising from secular trends related to climate change. He is an active member of the International Association of Credit Portfolio Managers, and has been in credit portfolio management across both consumer and commercial asset classes since 2009.