## 2017 NSF Cybersecurity Summit for Large Facilities and Cyberinfrastructure

Bios for Speakers, Authors, Program Committee Members, Organizers, and Student Awardees

In alphabetical order by surname

**Susie Adams** is the Chief Technology Officer for Microsoft's Federal Government business and brings with her over 30 years of IT experience. Susie joined Microsoft in 1999 and has held several leadership positions in Microsoft including the Director of the Microsoft Reston Virginia Technology Center and most recently the CTO of the Federal Civilian Business.

Prior to joining Microsoft, she spent 16 years in the consulting arena working with customers in both the commercial and government sectors. She held a variety of management and leadership roles including practice manager, systems analyst and software developer. Susie is a past Fed100 award winner and has authored several books on the topics of software integration and web development. Susie is a graduate of George Mason University where she received a BS in Information Systems.

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**Steve Barnet** has specialized in supporting scientific and academic computing for nearly 20 years. During that time, he has worked in multiple domains including storage, networking, high-throughput computing, and security. He handled his first incident in 1995, a compromised Solaris system providing several important infrastructure services.

Steve currently works for the IceCube project, a kilometer scale neutrino detector located at the geographic South Pole. He began collaborating with CTSC in 2013 to develop a Cybersecurity plan for the IceCube facility.

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**Tom Barton** is Sr Consultant for Cyber Security & Data Privacy at the University of Chicago and a consultant to Internet2. Previously he was Senior Director and Chief Information Security Officer at UChicago, and had earlier assignments as Director of IT Infrastructure and Director of Network Services at the University of Memphis, where he was a member of the mathematics faculty before turning to administration. He's a member of the Center for Trustworthy Scientific Cyberinfrastructure's Advisory Committee, the InCommon Federation's Technical Advisory Committee, the TIER Community Investors Council, the REFEDS Steering Committee, chaired the TIER Ad Hoc Advisory committee obsoleted by CACTI, and for many years led the Internet2 Grouper project.

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**Dr. Jim Basney** is a senior research scientist in the cybersecurity group at the National Center for Supercomputing Applications at the University of Illinois at Urbana-Champaign. Jim's area of expertise is

identity management for scientific collaborations. He is PI of the CILogon and SciTokens projects and co-PI of the Center for Trustworthy Scientific Cyberinfrastructure and the Software Assurance Marketplace. Jim also contributes to the LIGO, LSST, and XSEDE projects. Jim received his PhD in computer sciences from the University of Wisconsin-Madison.

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**Tony Baylis** is the senior management advocate for diversity and inclusion for the Laboratory. Tony is responsible for overseeing the laboratory's interactions and successful execution in building, partnering and collaborating with governmental, educational, industrial, community interests and other stakeholders. LLNL has had a long history in working with Minority Serving Institutions, specifically relationships with American Indian Institutions, Hispanic Institutions, and Historically Black College and Universities. He represents the Laboratory on the subjects of Diversity and Inclusion, STEM, Outreach Efforts, and Student Programs.

Tony's career represents 30 years of administrative, project, program, technical, and organizational management. He has worked in a scientific and technical environment for over 22 years and has worked as a consultant in industry as well. Tony has extensive experience networking with a broad range of academic, industry, government and non-profit organizations that has educated him and helped him in his career. He is a DOE Minorities in Energy Champion for the department and also serves on a number of conference program committees and advisory boards that promote STEM and diversity in science and technical careers.

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Marjorie Blumenthal is a senior policy analyst and director of RAND's Science, Technology, and Policy Program. Prior to joining RAND, she served as executive director of the President's Council of Advisors on Science and Technology (PCAST) within the White House Office of Science and Technology Policy. Blumenthal's PCAST projects addressed how systems engineering can improve the delivery of health care, the challenge of protecting privacy in the context of big data, new directions for cybersecurity, how information technology can improve education and training, the implications of new technologies for cities, and more.

Previously Marjorie was an associate provost, academic at Georgetown University, developing academic strategy, strengthening the sciences and the overall research program, and promoting innovation in areas from international engagement to teaching and learning. Before starting at Georgetown, Blumenthal was the founding executive director of the National Academies' Computer Science and Telecommunications Board (CSTB). She convened and teamed with technologists, social scientists, and other experts, producing over 60 influential books and reports that addressed the full range of information technologies and their societal impacts. Blumenthal holds an M.P.P. from Harvard University.

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**Leslee A. Bohland** serves as the Administrative & Finance Director at Indiana University's Center for Applied Cybersecurity Research (CACR). She is a graduate of the IU School of Business (B.S. '93). Leslee comes to the CACR and CTSC from a background in Management, Finance and Accounting. She has worked with government divisions, as well as in the private sector.

**Evan Bollig**, is a senior scientific computing consultant with the Minnesota Supercomputing Institute at the University of Minnesota. Evan is the lead architect, developer, and evangelist for Stratus, a research compute cloud for NIH controlled-access data. Since 2012, Evan has been integral to the creation of a number of cloud-based, clinically-certified (i.e., CLIA) data analysis pipelines used by Fairview Hospital's personalized medicine program. His other areas of interest include algorithm design on evolving HPC architectures (e.g., GPUs, FPGAs, and other accelerators), meshless numerical methods, and data visualization. Evan is a graduate of Florida State University (M.S. '09, Ph.D. '13), and proud alumnus of the NSF-funded SIParCS internship at the National Center for Atmospheric Research.

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**Diana Borecky** serves as a Senior Administrative Asst. at Indiana University's Center for Applied Cybersecurity Research (CACR). She has worked for IU for 19 years in the IU UITS Finance office, before joining CACR staff.

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**Michael Corn** is the CISO of the University of California at San Diego where he manages the Security Office as well as the Identity and Access Management. His areas of interest include privacy, identity management, and cloud services. He has been an active speaker and author on security and privacy and has participated in numerous Educause and Internet2 initiatives.

He is a member of the Internet2 Netplus Product Advisory Board and is the current co-chair of the Educause HEISC. Prior to joining UCSD he was the CISO & CPO and Deputy CIO of Brandeis University and was formally the CISO and Chief Privacy and Security Officer of the University of Illinois at Urbana-Champaign. He is a graduate of the University of Colorado at Boulder and the University of Illinois at Urbana-Champaign.

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Robert (Bob) Cowles is a principal in BrightLite Information Security performing cybersecurity assessments and consulting in research and education about information security. He served as CISO at SLAC National Accelerator Laboratory (1997-¬2012); participated in the development of security policies and procedures for the LHC Computing Grid (2001-¬2008); and was an instructor at the University of Hong Kong in information security (2000¬-2003). A contributor to Indiana University's CACR since 2013, he participated in the XSIM project on identity management and has been working with CTSC since 2015. In 2017, he was honored to be named as a CACR Senior Fellow.

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**Dominique Dalanni** is a senior attending George Washington University majoring in computer science, with a specialization in information assurance and cybersecurity. In addition to her studies, Ms. Dalanni is currently a participant in the Federal Pathways Internship Program, and interning with NIST. She is a CyberCorps scholarship recipient at George Washington University, the president of the Women in Stem Club, vice president and student advocate for the Com participant in the puting Alliance of Hispanic Serving Institutions (CAHSI) Club CSUDH chapter. She also served as a research assistant in a project

funded by the Nuclear Regulatory Commission and in 2015 was selected to represent her university as a CSU Trustee Award recipient and scholar.

After completing her undergraduate education, Ms. Dalanni hopes to pursue a graduate degree at George Washington University in Computer Science with a specialization in Cybersecurity. Once she has received her graduate degree, Ms. Dalanni would like explore job opportunities which focus on threat analysis, governance, or on the overall security of industrial control systems.

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**Rion Dooley** is principal investigator on the Agave Project a Science-as-a-Service API platform allowing researchers worldwide to manage data, run code, collaborate freely, and integrate their science anywhere. His previous projects span areas of identity management, distributed web security, full-stack application development, data management, cloud services, and high performance computing. Rion earned a Ph.D. in computer science from Louisiana State University. Rion actively puts his wife and two daughters at the top of his list of accomplishments. He hopes his work can someday edge out dancing teddy bears and smear-proof lipstick on their lists of favorite inventions.

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**William Drake** is the overnight supervisor for Indiana University's Data Center Operations department. He leads a team that is tasked with ensuring physical security at both of IU's data center facilities as well as monitoring the infrastructure that supports IU's enterprise and research computing systems. William is currently a student at IU pursuing a bachelor's degree at in informatics with a cognate in security informatics.

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**Barbara Fossum** is a senior executive with over 25 years of leadership and management experience in higher academic and government sectors including high performance computing, data visualization, engineering and academic research. Barbara contributed several federally funded grants including the Network for Engineering Simulations where she successfully directed all operations and the development of a curated data repository for all earthquake engineering data. She is currently the CEO of BMF Consulting, providing extensive experience in human resource planning and operations, organizational change, team building, organizational effectiveness and facilitative leadership.

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**Nikita Golubets** is a Student at Eastern Michigan University with a major in Information Assurance & Cyber Defense, Nikita Golubets finished his internship with the Security Solutions team at Cisco and will be graduating Spring of 2018. He had a chance to work with the TIP, CIRA, and Talos team and created an Automated Customer Attack Surface tool that gathers threat intelligence. He is a part of the National Cybersecurity Student Association that provides students with resources, mentors, as well as training in the field. Having a passion for the field, he attends Blackhat and Defcon security conferences and takes part in ISTS/ CCDC competitions.

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**Dr. David Halstead** is the CIO for the National Radio Astronomy Observatory. After obtaining a PhD in the computational simulation of surface catalysis in 1990, he moved to HPC research at the DOE Scalable Computing Laboratory in Ames Lab, implementing commodity parallel processing cluster solutions to benefit research in surface science, chemistry, physics and biology. In 2002 he moved into industry with Celera Genomics to drive the Strategic Platform Initiative; transitioning away from the costly leased computer systems used to sequence the human genome, to scalable HPC systems supporting proteomics and therapeutics research. Since joining NRAO in 2008, his responsibilities are divided between Data Management for the Observatory's HPC infrastructure in support of the national radio telescopes, and the general IT support for NRAO's 500+ employees. He has served on the committees for SC94, SC99, SC05, SC10; SC13; SC14; SC16 and is a founding member of the ACM's SIGHPC Education Chapter.

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**Ardoth Hassler** retired in May as Associate Vice President of University Information Services at Georgetown University. Her work focused on policy, planning and research, including being the PI for NSF CC-NIE and CC-IIE awards. In addition, she served as Interim Director of the Student Information Systems group.

Ardoth was on loan to the National Science Foundation 2007–2011 where she served as Senior Information Technology Advisor in the Office of the Chief Information Officer in the NSF Office of Information and Resource Management, Division of Information Systems. Her activities included work related to cybersecurity best practices for large research facilities, working on technology policies for the Foundation and large research facilities, assisting NSF in joining the InCommon Federation and introducing concepts of single sign-on logon to Research.gov, leading the "SSN Be Gone" project to remove SSNs from FastLane and other systems where there was no business need, working on NSF's "Got Green", initiative, etc. She has prior experience serving on the program committees of the NSF Cybersecurity Summit, EDUCAUSE Annual Conferences, etc. She has a BS in Math (CS minor) from Oklahoma State University and an MS in Biostatistics from the University of Oklahoma.

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**Elisa Heymann** is a Senior Scientist at the Computer Sciences Department of the University of Wisconsin-Madison, and an Associate Professor in the Computer Architecture and Operating Systems Department at the Autonomous University of Barcelona (UAB). She co-directs the MIST software vulnerability assessment project in collaboration with her colleagues at the University of Wisconsin. Heymann is part of CTSC, the NFS cyber security center for excellence, where she works on Software Assurance training and engagements.

Heymann carries out training in universities, companies, and conferences around the world. Heymann's research interests include security and resource management for Grid and Cloud environments, and cyber-security in transportation. Her research is supported by NSF, the Spanish government, the European Commission, and NATO. Heymann received her M.S. and Ph.D. degrees in Computer Science from the Autonomous University of Barcelona (Spain) in 1995 and 2001 respectively.

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Paul Howell is Chief Cyberinfrastructure Security Officer at Internet2. Joining Internet2 in July, 2014, Paul oversees and coordinates all security efforts across the Internet2 infrastructure and is responsible for setting organizational policies and approaches while engaging with the Internet2 member community. He is responsible for the creation and implementation of Internet2's information security program, advising on risk management and infrastructure; conducting security education, training, and awareness activities; monitoring compliance with security programs and applicable laws; and coordinating investigation and reporting of security incidents. Paul has more than 30 years of experience in IT security. In 2004, Paul was named The University of Michigan's Chief Security Officer. This was an inaugural role for the university, with Paul leading the development and implementation of the university's information assurance program.

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Craig Jackson is Chief Policy Analyst at the Indiana University Center for Applied Cybersecurity Research (CACR), where his research interests include information security program development and governance, legal and regulatory regimes' impact on information security and cyber resilience, evidence-based security, and innovative defenses. He is a Co-PI of the NSF Cybersecurity Center of Excellence, and leads CACR's collaborative efforts with Naval Surface Warfare Center Crane Division. He is a graduate of the IU Maurer School of Law, IU School of Education, and Washington University in St. Louis. In addition to his litigation experience, Craig's research, design, project management, and psychology background includes work at the IU Center for Research on Learning and Technology and the Washington University in St. Louis School of Medicine.

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**Ryan Kiser** is the Technology Specialist at the Indiana University Center for Applied Cybersecurity (CACR). Ryan comes to CACR from a system administration and small business consulting background. His current responsibilities include HIPAA compliance and risk assessment for university and external IT systems, managing the center's technical resources, as well as technical coordination and event planning.

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**Scott Koranda**, PhD, specializes on identity management architecture for research organizations. Since 2008, Scott Koranda has designed, deployed, and supported production SAML infrastructures including both the Shibboleth Identity Provider (IdP) and Service Provider (SP) software, for the research and education sectors.

A member of the Laser Interferometer Gravitational Wave Observatory (LIGO) collaboration for over 10 years, Scott has served as the lead architect for the LIGO Identity and Access Management project since 2007. He was co-principal investigator on the NSF grant that funds COmanage development, and is a consultant with Spherical Cow Group.

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Mark Krenz is the Lead Security Analyst at Indiana University's Center for Applied Cybersecurity Research with over two decades of experience in information security and system administration spread across multiple sectors. His interests at CACR include policy development, operational security development, security auditing and security education. He studied Computer Science and Mathematics at Indiana University.

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**Steven Lee** joined Cornell University Center for Advanced Computing in 2007 as a systems consultant. In 2011, Steven helped to bring Red Cloud, a private research cloud with AWS-compatible API, into production to better accommodate workloads that do not fit into batch queues of HPC clusters.

He is currently working on Aristotle Cloud Federation, a federation of 3 research clouds at Cornell, University at Buffalo, and University of California Santa Barbara, to support scientists with flexible workloads and analysis tools for large scale data sets. Prior to Cornell, Steven worked as a systems and embedded software engineer in the telecommunications industry. He has a B.A. in computer science from Cornell University.

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**Leslie Leonard** is the Cybersecurity Research Lead for the Department of Defense (DoD) High Performance Computing Modernization Program's (HPCMP) security team. The mission of the DoD HPCMP is to accelerate technology development and transition to superior defense capabilities, which provide DoD scientists and engineers with the resources necessary to solve the most demanding problems through the strategic application of high performance computing, high speed networks, and computational expertise.

Leslie leads Research and Development (R&D) for new technologies, tools, and techniques that enable the HPCMP to defend, mitigate, and secure five Defense Supercomputing Resource Centers (DSRCs) and the Defense Research and Engineering Network (DREN). She received her B.S./M.S. degrees in Computer Science from Jackson State University and a Ph.D. in Computer Science from the University of Maryland.

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James A. Marsteller, Jr. is the Pittsburgh Supercomputer Center Chief Information Security Officer. He has extensive security leadership experience with the TeraGrid and XSEDE security operations team and is a Co-PI for the Center for Trustworthy Scientific Cyberinfrastructure, the NSF Cybersecurity Center of Excellence. James also has served as the program chair for annual NSF Cybersecurity Summit for Large Facilities and Cyberinfrastructure since 2007. He has also served on the board of directors for the Pittsburgh chapter of the FBI Infragard program for many years. He holds a Master of Information Technology Management from Carnegie Mellon University and is a Certified Information Systems Security Professional.

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**Kim Milford** began serving as Executive Director of REN-ISAC in April 2014. She works with members, partners, sponsors, and advisory committees to direct strategic objectives in support of members, providing services and information that allow higher educational institutions to better defend local technical environments and is responsible for overseeing administration and operations.

Since joining Indiana University in June 2007, Ms. Milford has served in several roles leading strategic IT initiatives. As Chief Privacy Officer, she coordinated privacy-related efforts while serving on IU's Assurance Council, chairing the Committee of Data Stewards, and directing the work of the University Information Policy Office including IU's IT incident response team. From 2005 – 2007, Ms. Milford worked as Information Security Officer at the University of Rochester leading an information security program that included disaster recovery planning, identity management, incident response, and user awareness. In her position as Information Security Manager at University of Wisconsin-Madison from 1998 - 2005, she assisted in establishing the university's information security department and co-led in the development of an annual security conference.

Ms. Milford provides cybersecurity, information policy, and privacy expertise and presentations at national and regional conferences, seminars and consortia. Ms. Milford has a B.S. in Accounting from Saint Louis University in St. Louis, Missouri and a J.D. from John Marshall Law School in Chicago, Illinois.

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Barton Miller the Vilas Distinguished Achievement Professor and the Amar and Belinder Sohi Professor in Computer Sciences at the University of Wisconsin-Madison. He is Chief Scientist for the DHS Software Assurance Marketplace research facility. He co-directs the MIST software vulnerability assessment project in collaboration with his colleagues at the Autonomous University of Barcelona. He also leads Paradyn Parallel Performance Tool project, which is investigating performance and instrumentation technologies for parallel and distributed applications and systems. His research interests include systems security, binary and malicious code analysis and instrumentation extreme scale systems, parallel and distributed program measurement and debugging, and mobile computing.

Miller's research is supported by the U.S. Department of Homeland Security, U.S. Department of Energy, National Science Foundation, NATO, and various corporations. In 1988, Miller founded the field of Fuzz random software testing, which is the foundation of many security and software engineering disciplines. In 1992, Miller (working with then-student, Prof. Jeffrey Hollingsworth, founded the field of dynamic binary code instrumentation and coined the term "dynamic instrumentation". Dynamic instrumentation forms the basis for his current efforts in malware analysis and instrumentation.

Miller was the chair of the IDA Center for Computing Sciences Program Review Committee, a member of the Los Alamos National Laboratory Computing, Communications and Networking Division Review Committee, and has been on the U.S. Secret Service Electronic Crimes Task Force (Chicago Area), the Advisory Committee for Tuskegee University's High Performance Computing Program, and the Advisory Board for the International Summer Institute on Parallel Computer Architectures, Languages, and Algorithms in Prague. Miller is an active participant in the European Union APART performance tools initiative. Miller received his Ph.D. degree in Computer Science from the University of California, Berkeley in 1984. He is a Fellow of the ACM.

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**Sinjoni Mukhopadhyay** is a second year PhD student pursuing a degree in Computer Science, with specialization in storage system security. She is a research assistant at the University's Center for Research in Storage Systems. Sinjoni is currently working on possible alternatives to encryption for long term archives. Ongoing work includes efficient computations on secret-split datastores like patterns in reconstruction and secure searching. She is looking for internships for the summer of 2018, with

opportunities that will enhance her experience in the field of long-term secure archives. After completion of her program she hopes to explore job opportunities that will help her apply her expertise in providing better security alternatives for archival data.

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**Nicholas J. Multari** provides programmatic and technical guidance to cybersecurity research programs at the Pacific Northwest National Lab (PNNL) including the multi-year lab directed research and development (LDRD) initiative focusing on Asymmetric Resilient Cybersecurity (ARC). In that role, he led the development of the multi-disciplinary research agenda required to provide a theoretical basis for, and the application of, technologies that reduce or eliminate a cyber-attacker's current asymmetric advantage. Prior to joining PNNL, he was the manager for trusted cyber technology at Boeing Research and Technology in Seattle, Washington. In that position, Nick directed and led a group of researchers conducting research, development, and technology assessment of cyber and cybersecurity technologies in support of Boeing Business Unit needs. In 2008, he served as a consultant to the USAF Scientific Advisory Board (SAB) investigating the effects of the contested cyber environment on the USAF mission.

Other positions held include five years as a Senior Security Engineer with Scitor Corporation in Northern Virginia, and 20 years as a computer scientist in the Air Force retiring as a Lt. Col. He is a member of external advisory boards at University of Washington and Iowa State University. He received a bachelor's degree in mathematics from Manhattan College, New York; a master's degree in computing and information science from Trinity University, Texas; and a PhD in computer science from the University of Texas at Austin.

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Anita Nikolich is Program Director for Cybersecurity in the Division of Advanced Cyberinfrastructure at the National Science Foundation (NSF). Prior to her work at the NSF she served as the Executive Director of Infrastructure at the University of Chicago. Past assignments include Director of Global Data Networking at Aon and Director of Security for Worldcom. She has explored how information technology and secure networking can best support the creation and sharing of scientific knowledge in virtual, mobile and physical contexts. She holds a Master of Science from The University of Pennsylvania and a Bachelor of Arts from the University of Chicago.

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**Matthew O'Connor** specializes in Security, Compliance, and (Anti)Abuse Products, on the Google Cloud Platform at Google. He serves in a CTO role for the Google Cloud Compliance Program, developing partnerships with Federal and private customers, and overseeing Managed Services. He attended Haas School of Business at UC Berkeley and obtained a BS in Computer Science Engineering from Santa Clara University.

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**Imani Palmer** is a Ph.D. Candidate in the Department of Computer Science at the University of Illinois at Urbana-Champaign. Imani's areas of interest include cyber & systems security, digital forensics, and data analysis. She is a member of the Systems Research Group under the advisement of Roy Campbell. She

received her B.S. in computer science from the University of Pittsburgh. After graduation, she is interested in a research position that allows her to continue to explore her interest in security.

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**Rodney Petersen** is the director of the National Initiative for Cybersecurity Education (NICE) at the National Institute of Standards and Technology (NIST) in the U.S. Department of Commerce. He previously served as the Managing Director of the EDUCAUSE Washington Office and a Senior Government Relations Officer. He founded and directed the EDUCAUSE Cybersecurity Initiative and was the lead staff liaison for the Higher Education Information Security Council.

Prior to joining EDUCAUSE, he worked at two different times for the University of Maryland - first as Campus Compliance Officer in the Office of the President and later as the Director of IT Policy and Planning in the Office of the Vice President and Chief Information Officer. He also completed one year of federal service as an Instructor in the Academy for Community Service for AmeriCorps' National Civilian Community Corps. He is the co-editor of a book entitled "Computer and Network Security in Higher Education". He received his law degree from Wake Forest University and bachelors degrees in political science and business administration from Alma College. He was awarded a certificate as an Advanced Graduate Specialist in Education Policy, Planning, and Administration from the University of Maryland.

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**Victor Piotrowski**, is responsible for several programs related to Cybersecurity Education and Workforce Development. In particular, he oversees the CyberCorps(R): Scholarship for Service (SFS) program with FY2014 budget of \$45 million. This program seeks to increase the number of qualified students entering the field of cybersecurity and to increase the capacity of the United States higher education enterprise to continue to produce professionals in this field to meet the needs of our increasingly technological society.

He is also a Program Officer in a NSF-wide program Secure and Trustworthy Cyberspace (SaTC) supporting projects that address cybersecurity from one or more perspectives: Trustworthy Computing Systems; Social, Behavioral and Economics; and Cybersecurity Education.

Before coming to NSF, Dr. Piotrowski served as a Professor and Chair of the Computer Science Department at the University of Wisconsin and as a faculty at the Institute of Informatics in Poland. He has a 20-year experience in research, teaching and consulting in Information Assurance and holds several cybersecurity certifications.

Dr. Piotrowski is the recipient of the Marcinkiewicz Prize by the Polish Mathematical Society and a finalist of the UW Board of Regents Teaching Excellence Award. He is a graduate of the Federal Executive Institute residency program Leadership for a Democratic Society and the Harvard Kennedy School Executive Education Cybersecurity Policy and Technology program.

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**Irene Qualters** is the Division Director of the Division of Advanced Cyberinfrastructure at NSF. As a recognized leader in cyberinfrastructure infrastructure, she represents NSF in several interagency and international efforts that span software, data, and computation. For example, she has represented NSF

in the creation of the presidential initiative, NSCI.

Prior to her NSF career, Irene had a distinguished 30-year career in industry, with a number of executive leadership positions in the technology sector, in startups as well as a long tenure at Cray Research leading R&D, and six years with Merck Research Labs leading their Global Cyberinfrastructure for Research.

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**Susan Ramsey** is a Risk Assessor and Security Engineer at the National Center for Atmospheric Research. She has over twenty years of experience building enterprise infrastructure and cloud computing. She joined NCAR in 2014 and promptly launched multiple initiatives to tackle compliance and identity management. Her latest projects include building a FISMA moderate segment and an organization wide Continuous Monitoring Plan. She has an MS in Computer Information Technology from Regis University, (thesis on Vulnerability Assessment). She is currently working towards a second Master of Science degree, in Information Security Engineering, from SANS Technical Institute.

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**Warren Raquel** is a Senior Security Engineer at the National Center for Supercomputing Applications. His duties include security operations, incident response and security awareness for NCSA, Blue Waters and XSEDE. He has given talks and taught classes on Digital Forensics and Incident Response, two fields in which has specialized in for the last decade.

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**Scott Russell** is a Senior Policy Analyst with CACR, where his work focuses on the improvement of federal cybersecurity standards. A lawyer and researcher, Scott specializes in privacy, cybersecurity, and international law, and his past research has included cybersecurity due diligence norms under international law, cybersecurity self-governance, international data jurisdiction, and constitutional issues on digital surveillance. Scott received his B.A. in Computer Science and History from the University of Virginia, received his J.D. from Indiana University, interned at MITRE, and served as a postdoctoral fellow at CACR.

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Mark Ryland is the technology leader for Amazon Web Service's Worldwide Public Sector (WWPS) team, reporting to the Vice President of WWPS. Mr. Ryland leads a team of Solutions Architects and Professional Services / Rapid Adoption Program Engineers who provide AWS technical evangelism, architectural guidance, knowledge transfer, technical training, and implementation services to government and education customers around the globe.

Mark also serves as a key interface between the WWPS team and the engineering, security, and compliance teams at AWS, ensuring that public sector customer requirements are front-and-center in product/service planning and roadmaps. Mark holds a JD from University of California Berkeley School of Law, and a BA in Philosophy from UC San Diego.

**Phil Salkie** is a computer scientist who has been working as an industrial controls and automation engineer since 1984. His software and hardware designs serve sectors as diverse as food packaging, broadcast television, emergency power generation, water purification, sewage processing, surgical suture manufacture, biopharmaceuticals, specialty chemicals, laundry transport, semiconductor equipment manufacture, and nuclear power plant infrastructure. He is managing partner of Jeneriah Industrial Automation.

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Anurag Shankar is a senior security analyst at Indiana University's Center for Applied Cybersecurity Research (CACR). His expertise includes regulatory compliance (HIPAA, FISMA, CUI) and cybersecurity risk management. He has helped numerous institutions tackle HIPAA compliance and is responsible for developing a NIST based risk management framework and using it to align IU's central research and enterprise cyberinfrastructures with HIPAA. His prior engagements include nearly twenty years with IU's central IT organization developing, delivering, and managing Unix support, massive data storage, the national Teragrid project, and supporting the research mission of the IU School of Medicine. He played a key role in building IU's research data storage environments, for supporting IU's Indiana Genomics Initiative and other life sciences efforts, and for creating information infrastructures and technology solutions for the Indiana Clinical and Translational Sciences Institute (CTSI). He is a computational astrophysicist by training (Ph.D. University of Illinois, '90).

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Rachel Shima, attending California State Polytechnic University.

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**Dr. Ambareen Siraj** is currently serving as the Director of the Cybersecurity Education, Research, and Outreach Center at Tennessee Tech. She is also a Professor at the Computer Science department. Dr. Siraj's research areas of interest include smart grid security, sensor alert fusion with alert correlation and alert clustering, security metrics, security education and workforce development. She has authored/co- authored around forty journal and conference articles in these areas. She leads National Science Foundation Projects "Tennessee CyberCorps: A Hybrid Program in Cybersecurity", "Tennessee Tech Gen-Cyber Camps", "Capacity Building in Cybersecurity: Broadening Participation of Women in Cybersecurity through Women in Cybersecurity Conference & Professional Development", "CyberWorkshops: Resources and Strategies for Teaching Cybersecurity in Computer Science", and "Security Knitting Kit: Integrating Security into Traditional CS Courses". Dr. Siraj is the Founder and Chair of the Women in Cybersecurity (WiCyS) conference. She also leads the effort in establishment of the Middle Tennessee Cybersecurity Consortium (MTCC). She serves as the faculty advisor of Tech Cybersecurity Club for students.

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**Susan Sons** serves as a Senior Systems Analyst at Indiana University's Center for Applied Cybersecurity Research, having come from a background in abuse management, software engineering, and pentesting. Susan considers herself a "generalist hacker" with specialties in ICS/SCADA security, secure software engineering, social engineering, and systems programming. Susan is President of the Internet Civil

Engineering Institute (https://icei.org), a nonprofit dedicated to supporting and securing the common software infrastructure we all depend on. Her recent publications have been with O'Reilly Publishing and Linux Journal. More on Susan's projects can be found at http://security.engineering.

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Jeffrey Spies is the co-founder and Chief Technology Officer of the Center for Open Science (COS), a non-profit technology company missioned to increase openness, integrity, and reproducibility of scholarly research. He is also the co-director of SHARE, a partnership with the Association of Research Libraries to create a free, open data set of scholarly research activity across the research lifecycle. Jeff received his Ph.D. in Quantitative Psychology from the University of Virginia, where he now holds a Visiting Assistant Professor position in the Department of Engineering and Society. His dissertation included the development of the Open Science Framework (OSF)--a free, open source workflow management system and platform as a service that is now the flagship product of COS.

Jeff has a background in computer science and has conducted research in computational and statistical modeling as well as substantive domains including autism, non-verbal communication, and motor control. He continues to apply his research on scientific incentives, workflow, and reproducibility at COS and is regularly invited to speak on these topics. Jeff recently testified at a United States House congressional hearing on the role of openness and reproducibility in science.

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Amy Starzynski Coddens serves as the Education, Outreach and Training Manager at Indiana University's Center for Applied Cybersecurity Research (CACR). She is a graduate of the IU School of Education (M.S. '06 & M.S. '09). Amy comes to the CACR and CTSC from a background in P-16 education and outreach. She has worked for the government, in industry and in academia, contributing to projects with the New England Research Institute, Harvard's PEAR Institute, the United States Department of Education's Office of Special Education Programs, NASA and the IU Kelley School of Business.

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George O. Strawn is currently the director of the Board on Research Data and Information at the National Academies of Sciences, Engineering, and Medicine (having failed at retirement). Prior to joining the Academies, Dr. Strawn was the director of the National Coordination Office (NCO) for the Networking and Information Technology Research and Development (NITRD) Program and co-chair of the NITRD interagency committee. Dr. Strawn held these positions while on leave from the National Science Foundation (NSF) to the Office of Science and Technology Policy in the Whitehouse. Prior to his NITRD responsibilities, Dr. Strawn was the NSF Chief Information Officer. And prior to that, Dr. Strawn served in a number of capacities in the NSF Directorate for Computer and Information Science and Engineering (CISE). These included the executive officer of CISE, director of the CISE Division of Advanced Networking Infrastructure and Research, where he led NSF's efforts in the Presidential Next Generation Internet Initiative, and NSFnet Program Officer where he was part of the team that transitioned the experimental ARPAnet into the global Internet. Before to coming to NSF, Dr. Strawn was a Computer Science faculty member at lowa State University (ISU) and a staff member in the Computation Center. He served terms as director of the Computation Center and as chair of the Computer Science Department. Dr. Strawn received his Ph.D. in Mathematics from Iowa State University

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**Todd Tannenbaum** is a Researcher in the Department of Computer Sciences at UW-Madison with over 19 years of experience developing production distributed computing environments. He directs the development staff and serves as the Technical Lead for the HTCondor Project, a distributed computing research group that produces the award-winning HTCondor software. Previous to his involvement with HTCondor, Todd served as the Director of the Model Advanced Facility, a high-performance computing center in the UW-Madison College of Engineering, and also as a Technology Editor for Network Computing magazine. He received B.S. and M.S. degrees in computer science from UW-Madison.

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Von Welch is the director of Indiana University's Center for Applied Cybersecurity Research (CACR) and PI for the NSF Cybersecurity Center of Excellence (CTSC). Additionally, he is the CISO of the Software Assurance Market Place, a DHS-funded facility to foster software assurance and software assurance research, and serves on the InCommon Steering Committee as an advisor for the research community. Previously he has worked with a range of high visibility projects to provide cybersecurity to the broader scientific and engineering community, including TeraGrid, Open Science Grid, Ocean Observatory Infrastructure, and GENI. His work in software and standards includes authoring two IETF RFCS and the contributing to the creation of the well-known CILogon and MyProxy projects.

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**Dr. Aurelia T. Williams** is the Chairman and Professor of Computer Science at Norfolk State University (NSU). In this capacity, Dr. Williams manages oversight of two graduate programs in Computer Science and Cybersecurity and two undergraduate programs in Computer Science and Information Technology. As department chair and a member of the Cybersecurity team she has helped Cybersecurity at Norfolk State to grow across the departments at NSU, regionally and nationally. During her stewardship as chair of the Computer Science department, the Cybersecurity initiative has received 33 million dollars in Cybersecurity funding, received re-designation as a DHS/NSA Center of Academic Excellence in Cyber Defense Education, launched a MS Cybersecurity program and hosted the Vice President of the United States of America.

Dr. Williams is a successful manager and has been actively involved in Cybersecurity. Her research has focused on the application of Digital Forensics applied to Cloud Computing via the Information Assurance – Research, Education and Development Institute (IA-REDI), located at NSU, in addition to other aspects of Information Assurance and Security. She is the Principal Investigator of the department's award of \$25M Consortium Enabling Cybersecurity Opportunities and Research (CECOR) where NSU leads a consortium of thirteen HBCUS and two DoE national laboratories to increase the workforce pipeline in Cybersecurity. She is a Co-PI of the NSF Scholarship for Service grant and has served as a mentor to students in the program. She is also a researcher on the Center of Excellence in Cybersecurity Research project. Dr. Williams uses these opportunities to serve as a research advisor to graduate and undergraduate students completing their theses, projects and capstone courses.

Dr. Williams is a member of three professional and honorary societies. She volunteers in her community

where she participates in various programs that promote the STEM (science, technology, engineering, and math) fields to students from elementary to college age. In addition to offering presentations on Cybersecurity topics to her peers and children, she was featured on the cover of BEHOLD, NSU's Alumni magazine for her work in successfully encouraging underrepresented students to pursue Computer Science and Cybersecurity. She received a bachelor's degree in Computer Science from Norfolk State University, a master's. degree in Computer Science from Johns Hopkins University and a doctoral degree from Pace University in New York.

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Nancy Wilkins-Diehr directs the NSF-funded Science Gateways Community Institute and is a co-principal investigator on the NSF XSEDE award where she co-directs the Extended Collaborative Support program. She has been with the San Diego Supercomputer Center since 1993 and has held a variety of management positions there. Prior to that she held engineering positions with General Atomics and General Dynamics in San Diego. Nancy received her Bachelor's degree from Boston College in Mathematics and Philosophy and her Master's degree in Aerospace Engineering from San Diego State University.

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