Toward an Open Science Enterprise

Committee

Alexa T. McCray

Chair

Alexa T. McCray (Chair) (NAM) is Professor of Medicine at Harvard Medical School and the Department of Medicine, Beth Israel Deaconess Medical Center. She conducts research on knowledge representation and discovery, with a special focus on the significant problems that persist in the curation, dissemination, and exchange of scientific and clinical information in biomedicine and health. Dr. McCray is the former director of the Lister Hill National Center for Biomedical Communications, a research division of the National Library of Medicine at the National Institutes of Health (NIH). While at the NIH, she directed the design and development of a number of national information resources, including ClinicalTrials.gov. Before joining the NIH she was on the research staff of IBM's T.J. Watson Research Center. She received a Ph.D. from Georgetown University and for three years was on the faculty there. She conducted pre-doctoral research at the Massachusetts Institute of Technology. Dr. McCray was elected to the National Academy of Medicine in 2001. She is a fellow of the American Association for the Advancement of Science and a fellow of the American College of Medical Informatics (ACMI). She is past president of ACMI and is a past member of the board of both the American Medical Informatics Association and the International Medical Informatics Association. She is past Editor-in-Chief of Methods of Information in Medicine, and she is a past member of the editorial board of the Journal of the American Medical Informatics Association.

Francine Berman

Member

Francine Berman is the Edward P. Hamilton Distinguished Professor in Computer Science at Rensselaer Polytechnic Institute. Dr. Berman was the inaugural recipient of the ACM/IEEE-CS (Association for Computing Machinery/IEEE Computer Society) Ken Kennedy Award for “influential leadership in the design, development, and deployment of national-scale cyberinfrastructure.” She is U.S. lead of the Research Data Alliance, a community-driven international organization created to accelerate research data sharing world-wide, and has served as Director of the San Diego Supercomputer Center and as Vice President for Research at Rensselaer Polytechnic Institute. She currently serves as Chair of the Anita Borg Institute Board of Trustees, as a member of the National Science Foundation (NSF) Advisory Committee for the Computer and Information Science and Engineering Directorate, as a member of the National Council on the Humanities, and as a member of the Board of Trustees of the Sloan Foundation. She has previously served on the NSF’s Engineering Advisory Committee, the National Institutes of Health’s (NIH’s) National Institute of General Medical Sciences (NIGMS) Advisory Committee, and the U.S. President's Council of Advisors on Science and Technology NITRD (Networking and Information Technology Research and Development) Review Working Group. She served as co-chair of the National Academies Board on Research Data and Information (BRDI), as co-chair of the US-UK Blue Ribbon Task Force for Sustainable Digital Preservation and Access, and chair of the Information, Computing and Communication Section (Section T) of the American Association for the Advancement of Science (AAAS). She is a Fellow of the Association of Computing Machinery, the Institute of Electrical and Electronics Engineers, and the AAAS. Dr. Berman received her Ph.D. in Mathematics from the University of Washington in 1979.

Michael W. Carroll

Member

Michael Carroll is Professor of Law and the Director of the Program on Information Justice and Intellectual Property (2009- present) at American University Washington College of Law. He teaches and writes about intellectual property law and cyberlaw. Professor Carroll's research focuses on the search for balance in intellectual property law over time in the face of challenges posed by new technologies. He is also recognized as a leading advocate for open access over the Internet to the research that appears in scholarly and scientific journals. In addition, he speaks about and promotes publication of open educational resources and open scientific data. Professor Carroll is a founding member of Creative Commons, Inc., a global organization that provides free, standardized copyright licenses to enable and to encourage legal sharing of creative and other copyrighted works. He also serves on the Board of the Public Library of Science and recently on the National Academies Board on Research Data and Information (BRDI). He is a member of the Editorial Board of I/S Journal of Law and Policy for the Information Society, a Non-Resident Fellow at the Center for Democracy and Technology, and a member of the Advisory Board of Public Knowledge. Professor Carroll served as a law clerk to Judge Judith W. Rogers, U.S. Court of Appeals for the D.C. Circuit, and Judge Joyce Hens Green, U.S. District Court for the District of Columbia. He practiced law at Wilmer, Cutler & Pickering (now WilmerHale) in Washington, DC. Professor Carroll received his J.D. from the Georgetown University Law Center in 1996.

Donna Ginther

Member

Donna Ginther is Professor of Economics and Director of the Center for Science Technology & Economic Policy at the Institute for Policy & Social Research at the University of Kansas. She was a research economist and associate policy adviser in the regional group of the Research Department of the Federal Reserve Bank of Atlanta from 2000 to 2002, and taught at Washington University and Southern Methodist University. Her major fields of study are scientific labor markets, gender differences in employment outcomes, wage inequality, scientific entrepreneurship, and children's educational attainments. Dr. Ginther has advised the National Academy of Science, the National Institutes of Health, and the Sloan Foundation on the diversity and future of the scientific workforce. She is currently a member of the Board of Trustees of the Southern Economic Association and was formerly on the board of the Committee on the Status of Women in the Economics Profession of the American Economic Association. Dr. Ginther received her doctorate in economics in 1995 from the University of Wisconsin-Madison.

Robert Miller

Member

Robert Miller is the Chief Executive Officer of LYRASIS. He joined LYRASIS in June 2015, bringing more than 25 years of technology industry leadership, global business solutions, and proven executive management experience to the organization. Before joining LYRASIS, Mr. Miller served as the General Manager of Digital Libraries at Internet Archive (501 c 3), a top 200 web company that offers a library of millions of open access books, movies, software, music and more. His tenure boasts many achievements, including successfully building from the ground up the Digital Libraries Division, resulting in more than 2.5 million digitized books globally available with more than 30 million monthly downloads. His work included building key partnerships with over 1,000 state librarians, top libraries, archives and museums across North America, leading library consortia across Asia, Europe, Africa and South America. Key relationships were set up with such technology company leaders such as MSN, Adobe, and Canon. Mr. Miller is a longtime champion of innovation, entrepreneurship and global solutions. He has enjoyed a fruitful career as a senior executive in global business as evidenced by his time as founder and co-founder of five start-up companies. As CEO of an Israeli/U.S. information technology company, he led the firm focused on commercializing specialized search technology for health care. Additionally, Mr. Miller was co-founder and President of an information technology services company. In this role, he and his team developed and helped patent a consumer behavior referral technology that utilized crowdsourced data with structured metadata, and several consumer product companies that disrupted traditional product models. With a strong commitment to the community, Mr. Miller acts as a Board member of the Historically Black Colleges & Universities Library Alliance, ArchivesSpace, and CollectionSpace. Mr. Miller holds a Bachelor of Science degree in Industrial Engineering from Lehigh University and has lived in Afghanistan, Germany along with extensive time in China.

Peter Schiffer

Member

Peter Schiffer is the Vice Chancellor for Research and Professor of Physics at the University of Illinois at Urbana-Champaign, where he has leadership responsibility for the campus research enterprise. Before joining the University of Illinois, Dr. Schiffer served in a number of administrative, faculty, and research roles at Pennsylvania State University. Prior to that, he was on the faculty at the University of Notre Dame, and performed postdoctoral work at AT&T Bell Laboratories. His personal research focuses on artificial spin ice, geometrically frustrated magnets and other magnetic materials. He has co-authored more than 200 papers, and is the recipient of a NSF CAREER AWARD from the National Science Foundation, a Presidential Early Career Award for Scientists and Engineers from the Army Research Office, an Alfred P. Sloan Research Fellowship, and received the Faculty Scholar Medal in the Physical Sciences and the Joel and Ruth Spira Award for Teaching Excellence from Penn State. He is also a Fellow of the American Physical Society. He has served as the chair of the American Physical Society Topical Group on Magnetism and its Applications, the program chair of the Conference on Magnetism and Magnetic Materials, and the chair of the Division of Materials Physics in the American Physical Society. He received his Ph.D. in physics from Stanford University in 1993.

Edward Seidel

Member

Edward Seidel is the Vice President for Economic Development and Innovation for the University of Illinois System, as well as a Founder Professor in the Department of Physics and a professor in the Department of Astronomy at the University of Illinois at Urbana-Champaign. He was the director of the National Center for Supercomputing Applications (NCSA) at Illinois from 2014 to 2017. Dr. Seidel is a distinguished researcher in high-performance computing and relativity and astrophysics with an outstanding track record as an administrator. His previous leadership roles include serving as the senior vice president for research and innovation at the Skolkovo Institute of Science and Technology in Moscow, directing the Office of Cyberinfrastructure and serving as assistant director for Mathematical and Physical Sciences at the U.S. National Science Foundation, and leading the Center for Computation & Technology at Louisiana State University. He also led the numerical relativity group at the Max Planck Institute for Gravitational Physics (Albert Einstein Institute) in Germany. Dr. Seidel is a fellow of the American Physical Society and of the American Association for the Advancement of Science, as well as a member of the Institute of Electrical and Electronics Engineers and the Society for Industrial and Applied Mathematics. His research has been recognized by a number of awards. He received his Ph.D. in relativistic astrophysics from Yale University in 1988, earned a master’s degree in physics at the University of Pennsylvania, and received a bachelor’s degree in mathematics and physics from the College of William and Mary.

Alexander S. Szalay

Member

Alexander Szalay is Bloomberg Distinguished Professor and the Alumni Centennial Professor of Astronomy, and Professor of Computer Science at Johns Hopkins University. He is the Director of the Institute for Data Intensive Science. Dr. Szalay is a cosmologist, working on the statistical measures of the spatial distribution of galaxies and galaxy formation, an interdisciplinary institute to tackle cross-cutting challenges in sciences related to the data deluge. He was heavily involved in the Data Conservancy, an National Science Foundation (NSF)-funded DataNet project, researching the long term curation and preservation of scientific data. For 4 years he was part of the U.S. CODATA Council and presented at the 2012 Networking and Information Technology Research and Development (NITRD) meeting, commemorating the 20 years of the Internet. He is a Fellow of the American Academy of Arts and Sciences. Dr. Szalay received his Ph.D. in Astrophysics from Eötvös University at Budapest in 1975.

Lisa Tauxe

Member

Lisa Tauxe (NAS) is a Distinguished Professor of Geophysics in the Geosciences Research Division at Scripps Institution of Oceanography, University of California, San Diego. Her studies concentrate on paleomagnetism, the study of remanent magnetism in geological and archaeological materials. Dr. Tauxe has received the George P. Woollard Award of the Geological Society of America (GSA), Outstanding Academic Title in Earth Science from the American Library Association for Essentials of Paleomagnetism, the Antarctic Service Medal, the Benjamin Franklin Medal, the Arthur L. Day Medal. She has served as President of the Geomagnetism/Paleomagnetism Section and as the General Secretary/Treasurer of the American Geophysical Union (AGU). Dr. Tauxe is an elected fellow of the American Association for the Advancement of Science, of the GSA, and of the AGU. She has also been a member of the American Academy of Arts and Sciences since 2016. Dr. Tauxe received her Ph.D. in geology from Columbia University and was elected to the National Academy of Sciences in 2015.

Heng Xu

Member

Heng Xu is Associate Professor of Information Sciences and Technology at the Pennsylvania State University. She leads the Privacy Assurance Lab, an inter-disciplinary research group working on a diverse set of projects related to understanding and assuring information privacy. From 2013 to 2016, Dr. Xu served as a Program Director at the U.S. National Science Foundation for Secure and Trustworthy Cyberspace (SaTC) Program in the Directorate for Social, Behavioral, and Economic Sciences. Her research themes emerge from her interests in the fields of information privacy, data analytics, information systems and human-computer interaction. She approaches research issues through a combination of empirical, theoretical, and technical research efforts. Dr. Xu was a recipient of an NSF CAREER AWARD (2010) and the endowed PNC Technologies Career Development Professorship (2010-2013). Dr. Xu received her Ph.D. in Information Systems from National University of Singapore in 2005.