

Integrating Domain Repositories into the National Data Infrastructure:

Meeting Participants and Bios

Inter-university Consortium for Political and Social Research
(ICPSR)

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Karen Adolph	Databrary, New York University	kea1@nyu.edu
George Alter	Inter-university Consortium for Political and Social Research, University of Michigan	altergc@umich.edu
Florio Arguillas	Cornell Institute for Social and Economic Research, Cornell University	foa2@cornell.edu
Brian Athey	Department of Computational Medicine & Bioinformatics, University of Michigan	bleu@med.umich.edu
Chris Bader	Association of Religion Data Archives, Chapman University	bader@chapman.edu
Helen Berman	RCSB Protein Data Bank, Rutgers, the State University of New Jersey	berman@rcsb.rutgers.edu
Robert Chen	Center for International Earth Science Information Network, Columbia University	bchen@ciesin.columbia.edu
Christopher Cieri	Linguistic Data Consortium, University of Pennsylvania	ccieri@ldc.upenn.edu
Jonathan Crabtree	Odum Institute, University of North Carolina at Chapel Hill	Jonathan_Crabtree@unc.edu
Stephen Diggs	CLIVAR and Carbon Hydrographic Data Office, University of California, San Diego	sdiggs@ucsd.edu
Ruth Duerr	National Snow and Ice Data Center	rduerr@nsidc.org
Colin Elman	Qualitative Data Repository, Syracuse University	celman@maxwell.syr.edu
Carol Ember	Human Relations Area Files, Yale University	carol.ember@yale.edu
Catherine Fitch	Minnesota Population Center, University of Minnesota	fitch@umn.edu
Rick Gilmore	Databrary, Pennsylvania State University	rogilmore@psu.edu
Joshua Greenberg	Alfred P. Sloan Foundation	greenberg@sloan.org
Robert Hanisch	National Institute of Standards and Technology	robert.hanisch@nist.gov
Margaret Hedstrom	Sustainable Environment Actionable Data, University of Michigan	hedstrom@umich.edu
Eva Huala	Arabidopsis Information Resource, Phoenix Bioinformatics Corporation	evahuala@gmail.com

Diana Kapiszeski	Qualitative Data Repository, Georgetown University	dk784@georgetown.edu
Rebecca Koskela	DataONE, University of New Mexico	rkoskela@unm.edu
Elaine Kuttner	Cambridge Concord Associates	ekuttner@cambridgeconcord.com
Carl Lagoze	School of Information, University of Michigan	clagoze@umich.edu
Jennie Larkin	National Institutes of Health	larkinj2@nhlbi.nih.gov
Jared Lyle	Inter-university Consortium for Political and Social Research, University of Michigan	lyle@umich.edu
Clifford Lynch	Coalition for Networked Information	clifford@cni.org
Ron Margolis	National Institutes of Health	margolisr@mail.nih.gov
David Martinsen	Clearinghouse for the Open Research of the United States	D_Martinsen@acs.org
Maryann Martone	National Center for Microscopy and Imaging Research, University of California, San Diego	maryann@ncmir.ucsd.edu
Marc Maynard	Roper Center	mmaynard@ropercenter.uconn.edu
Francis McManamon	Center for Digital Antiquity, Arizona State University	fpmcmanamon@asu.edu
William Michener	DataONE, University of New Mexico	william.michener@gmail.com
Tom Murphy	Inter-university Consortium for Political and Social Research, University of Michigan	tomurphy@umich.edu
Gilbert Omenn	Center for Computational Medicine & Bioinformatics, University of Michigan	gomenn@umich.edu
Beth Plale	Research Data Alliance, Data to Insight Center and Pervasive Technology Institute, Indiana University, Bloomington	plale@cs.indiana.edu
Ray Plante	National Data Service	rplante@illinois.edu
Ryan Scherle	DRYAD	ryan@datadryad.org

Libbie Stephenson	Social Science Data Archive, University of California, Los Angeles	libbie@ucla.edu
Paul Uhler	National Academies of Science	puhler@nas.edu
Mary Vardigan	Inter-university Consortium for Political and Social Research, University of Michigan	vardigan@umich.edu

Karen Adolph—Databrary.org

Karen Adolph is Professor in the Department of Psychology and Neural Science at New York University. She also is Director of the Databrary.org project, which aims to create the cyber-infrastructure and community to enable open video data sharing among developmental scientists. The NSF- and NIH-funded project is a digital data library for sharing, managing, tagging, and preserving videos and associated data and metadata. Dr. Adolph is a Fellow of the American Psychological Association and American Psychological Society and President of the International Society for Infant Studies. She received a James McKeen Cattell Sabbatical Award, the APF Robert L. Fantz Memorial Award, the APA Boyd McCandless Award, the ISIS Young Investigator Award, FIRST and MERIT awards from NICHD, and four teaching awards from NYU. She chaired the NIH study section on Motor Function and Speech Rehabilitation and is on the Advisory Board of the McDonnell Foundation and the editorial board of *Developmental Psychobiology*. Adolph's research examines learning and development in the context of motor skill acquisition in infants and children. She is especially interested in effects of body growth, exploratory activity, environmental and social supports, and culture on perceptual-motor learning and development. Adolph received her B.A. from Sarah Lawrence College and her Ph.D. from Emory University, and completed a postdoctoral fellowship at the Albert Einstein College of Medicine.

George Alter—Inter-university Consortium for Political and Social Research (ICPSR)

George Alter is Director of ICPSR, an international consortium of more than 700 academic institutions and research organizations, which provides leadership and training in data access, curation, and methods of analysis for the social science research community. One of the world's largest archives of digitized social science research data, ICPSR is a unit within the Institute for Social Research at the University of Michigan in Ann Arbor. Alter is also Professor of History and Research Professor in the Population Studies Center at the University of Michigan. His research grows out of interests in the history of the family, demography, and economic history. He is particularly interested in methods for reconstructing and analyzing life histories from longitudinal data. Alter has recently participated in two cross-national comparative research projects. The "Eurasia Project" examines demographic responses to economic stress in five societies in Europe and East Asia. The "Early Life Conditions" project asks whether experiences

in childhood have long-run effects on health in old age. He received his B.A. in History from the University of Pennsylvania, his M.A. in Applied Economics from the University of Michigan, and his Ph.D. in History from the University of Pennsylvania.

Florio Orocio Arguillas—Cornell Institute for Social and Economic Research (CISER)

Florio Arguillas is a Research Associate at the Cornell Institute for Social and Economic Research (CISER), where he is engaged in data integration and harmonization projects such as the Cornell National Social Survey (CNSS) and Census Summary Files 1 and 2. He consults with individuals and several project teams working with quantitative and/or qualitative data in identifying the best approaches to managing and organizing their data in preparation for data analysis. He also spearheads CISER's data curation and replication service and is actively engaged in promoting CISER's Data Archive as an external repository of social science research institutions in Southeast Asia. Dr. Arguillas began his career as a Research Associate at the University of the Philippines Population Institute (UPPI), where he played various roles covering the entire life cycle of research data, and where he established his own research data management consultancy firm providing data management and processing services to private consultants and research firms.

Brian Athey—Department of Computational Medicine and Bioinformatics, University of Michigan Medical School

Brian Athey is the Michael A. Savageau Collegiate Professor and Chair, Department of Computational Medicine and Bioinformatics, and Professor of Psychiatry and Internal Medicine, University of Michigan Medical School. He also serves as a co-director of the University of Michigan Data Science initiative. A national leader in translational biomedical informatics, Dr. Athey is the founding Principal Investigator of the NIH Roadmap National Center for Integrative Biomedical Informatics (NCIBI), one of eight NIH National Biomedical Computing Centers (2006-2012). He currently serves as co-founder and Chief Scientific Officer of the tranSMART Foundation, a non-profit company founded to coordinate the development of the open source tranSMART community and its code base. The tranSMART platform supports an integrated open data sharing and analytics platform used world-wide to accelerate clinical and translational research. Academically active in the field of psychiatric pharmacogenomics, Dr. Athey is Chair of the Scientific Advisory Board of Assurex Health; he also serves on the SAB of One Mind for Research. He has led the National Library of Medicine (NLM) Next-Generation Internet (NGI) Visible Human Project and the DARPA Virtual Soldier Project. He is a key national leader in the NIH Clinical and Translational Scientists (CTSA) Informatics Community. He is a highly sought after national informatics lecturer and advisor, with over 100 papers and conference proceedings, 170 invited talks, and numerous advisory boards related to bioinformatics and computational medicine. He has served as a special advisor to the Defense Sciences Office (DSO), DARPA (1994-1999); and to the NIH Office of the Director (OD) and to the NIH Chief Information Officer (CIO) (2007-2010). He was awarded a "Peace Fellowship" from the Federation of American Scientists (FAS) in 2000-2004 for his work countering Bioterrorism in the 1990s.

Chris Bader—Association of Religion Data Archives (ARDA)

Christopher D. Bader is a Professor of Sociology in the Sociology Department at Chapman University. Bader is also Associate Director of the Association of Religion Data Archives (www.theARDA.com) based at Pennsylvania State University. The ARDA has been in operation since 1998 and currently houses a collection of over 800 surveys and data files related to religion, along with a collection of related features. The ARDA has been funded by grants from the Templeton Foundation and Lilly Foundation, with additional support from Penn State and Chapman University. Bader helps to find datasets, train students to prepare those datasets for inclusion on the ARDA, and has programmed many of the features on the ARDA website.

Helen M. Berman—RCSB Protein Data Bank

Helen M. Berman is the director of the RCSB Protein Data Bank – one of the member organizations of the Worldwide Protein Data Bank, and a Board of Governors Professor of Chemistry and Chemical Biology at Rutgers University. Dr. Berman's crystallographic studies have focused on nucleic acids, protein-nucleic acid complexes, and collagen. She has also done systematic analyses of the hydration patterns of biological molecules, including nucleic acids and collagen. Since the earliest days of her career, she has been interested in establishing methods to collect and archive structural data so that systematic studies of the data could be facilitated. She was part of the original team that developed the PDB at Brookhaven National Laboratory in 1971, and in 1991 she founded the Nucleic Acid Database (NDB; <http://ndbserver.rutgers.edu/>). In 1998, she led the team of Research Collaboratory for Structural Bioinformatics (RCSB) members that won the contract to manage the PDB. A structural biologist, her work includes structural analysis of protein-nucleic acid complexes, and the role of water in molecular interactions. She has served as President of the American Crystallographic Association (ACA) and has also held leadership positions in the Biophysical Society and the International Union of Crystallography (IUCr). She received the 2000 Biophysical Society Award for Distinguished Service and is a Fellow of the Biophysical Society and of the American Association for the Advancement of Science.

Robert S. Chen—Center for International Earth Science Information Network (CIESIN)

Robert Chen is director of CIESIN, the Center for International Earth Science Information Network, a research unit of the Earth Institute at Columbia University. He manages the NASA Socioeconomic Data and Applications Center (SEDAC), part of NASA's network of earth science data centers. Dr. Chen is a member of the U.S. National Research Council (NRC) Board on International Scientific Organizations, the Board of Directors of the National Ecological Observatory Network (NEON), and the governing council of ICPSR. He co-manages the Intergovernmental Panel on Climate Change (IPCC) Data Distribution Center and is a member of the Scientific Leadership Team of Terra Populus, an NSF Datanet project led by the University of Minnesota. He has recently served on the United Nations Independent Expert Advisory Group on the Data Revolution for Sustainable Development. At Columbia, Dr. Chen is an ex officio member of the Earth Institute Faculty and a member of its Practice Committee. His research areas include data access and stewardship, disaster risk assessment, and climate change adaptation and indicators. He received his Ph.D. in geography from the University of North

Carolina at Chapel Hill and holds B.S. and M.S. degrees from the Massachusetts Institute of Technology.

Christopher Cieri—Linguistic Data Consortium (LDC)

Christopher Cieri is Executive Director of the Linguistic Data Consortium (LDC), an open consortium of universities, companies and government research laboratories. It creates, collects and distributes speech and text databases, lexicons, and other resources for research and development purposes. The University of Pennsylvania is the LDC's host institution. The LDC was founded in 1992 with a grant from the Advanced Research Projects Agency (ARPA), and is partly supported by grant IRI-9528587 from the Information and Intelligent Systems division of the National Science Foundation. Cieri provides oversight for the Linguistic Data Consortium including planning, operations, project management, external relations and financial performance.

Jonathan Crabtree—Odum Institute for Research in Social Science

Jonathan Crabtree is Assistant Director of Computing and Archival Research at the Odum Institute for Research in Social Science at University of North Carolina Chapel Hill. The institute's social science data archive is one of the oldest and most extensive in the country. As assistant director, Crabtree completely revamped the institute's technology infrastructure and has positioned the institute to assume a leading national role in information archiving. His current efforts include working with the University of Michigan, the Harvard-MIT Data Center, and preservation partners across the country to create a national preservation strategy for social science data and developing policy based auditing systems for LOCKSS-based preservation systems. Crabtree's experience in information technology and networking as well as his engineering background bring a different perspective to his current role. He joined the institute nineteen years ago and is responsible for designing and maintaining the technology infrastructure that supports the institute's wide array of services. Before moving to the social science side of campus he was an information systems technologist for the University of North Carolina at Chapel Hill School of Medicine. His grounding in medical information technology adds to his education and training in electrical engineering, library and information science, digital preservation, computer science, economics, geographic information systems, hydrology and geomorphology.

Stephen Diggs—Scripps Institution of Oceanography

Stephen Diggs is Lab Director and Manager of the Hydrographic Data Group at the Scripps Institution of Oceanography. He has spent the majority the past four decades at Scripps dealing with data associated with GEOSECS, SAVE, WOCE and CLIVAR. His group also manages data for DIMES, iAnZone/SASSI, US Repeat Hydrography and GO-SHIP. His primary interests relate to the design and operation of enterprise-level information systems that deliver useful data from sensors in the field to the users in the lab. He does his best to be involved in the consolidation, curation, and interoperability of in situ ocean observation data through his on-going participation in the data management teams for the Argo Observing Array and the OceanSITES project. He currently chairs the Data Management Subcommittee (DMSC) for the Southern

Ocean Observing System and leads the Information Technology Group for the EarthCube Commons.

Ruth Duerr—National Snow and Ice Data Center (NSIDC)

Ruth Duerr is Principal Investigator and/or Project Manager for several ongoing and recent data management and cyberinfrastructure projects at the National Snow and Ice Data Center (NSIDC), funded by NSF, NASA and NOAA. In addition, she has been acting as a Product Owner on several NSIDC agile development projects, including one involving a distributed agile team in coordination with Johns Hopkins, Cornell, and other partners. Duerr has many years' experience as a systems/software engineer and project manager. She was the software manager for the space and ground systems for the SOLSTICE instrument that flew on the Upper Atmosphere Research Satellite. This included instrument planning, platform pointing, flight software, engineering analysis, and data processing components. As the Alaska SAR Facility's first Project System Engineer, she was responsible for establishing systems engineering as a discipline at that facility and had overall responsibility for all ASF data systems.

Colin Elman—Qualitative Data Repository

Colin Elman is Associate Professor of Political Science in the Maxwell School at Syracuse University, and Director of the Center for Qualitative and Multi-Method Inquiry. He is a co-founder of both the International History and Politics and the Qualitative and Multi-method Research organized sections of the American Political Science Association, and a co-founder and Executive Director of the Consortium for Qualitative Research Methods. He co-directs (with Diana Kapiszewski, Georgetown University) the Qualitative Data Repository, and (with John Gerring, Boston University) the Methods Coordination Project, and co-chairs (with Arthur Lupia, University of Michigan) the APSA Data Access and Research Transparency Committee. He is currently engaged on a book project on Regional Hegemony: The United States and Offensive Realism, which investigates America's rise to dominance in the Western Hemisphere. Elman is (with Miriam Fendius Elman) the co-editor of *Progress in International Relations Theory: Appraising the Field*; and *Bridges and Boundaries: Historians, Political Scientists, and the Study of International Relations* (MIT Press); (with John Vasquez) of *Realism and the Balancing of Power: A New Debate* (Prentice Hall), and (with Michael Jensen) of the *Realism Reader* (Routledge). Elman has published articles in the *American Political Science Review*, *International Organization*, *International Security*, *Comparative Political Studies*, *International Studies Quarterly*, the *International History Review*, and *Security Studies*.

Carol Ember—Human Relations Area Files (HRAF)

Carol Ember is President of the Human Relations Area Files (HRAF) at Yale University. HRAF is an internationally recognized organization in the field of cultural anthropology founded in 1949 at Yale University. A not-for-profit membership consortium of universities, colleges, and research institutions, HRAF's mission is to encourage and facilitate the cross-cultural study of human culture, society and behavior in the past and present. Dr. Ember is also the editor of the journal *Cross-Cultural Research*, the Past-President of the Society for Anthropological Sciences, and she currently serves on the Board of the Evolutionary Anthropology Society. She has served as

President of the Society for Cross-Cultural Research and co-directed the Summer Institutes for Comparative Anthropological Research, which were supported by the National Science Foundation. Most of her research career has been devoted to cross-cultural research on variation in marriage, family, kin groups, gender roles, predictors of war and other forms of violence. She is interested in research that integrates the fields of anthropology with other disciplines. She is the first author (with Melvin Ember) of *Cultural Anthropology*, now in its 13th edition and *Anthropology* (with Melvin Ember and Peter N. Peregrine), now in its 13th edition. She and Melvin Ember also wrote a primer on how to do cross-cultural research (*Cross-Cultural Research Methods*), now in its 2nd edition. Ember received her Ph.D. in Social Anthropology from Harvard University.

Catherine Fitch—Minnesota Population Center

Catherine Fitch is the Associate Director of the Minnesota Population Center (MPC) and founding Co-Director of the Minnesota Research Data Center (MnRDC). A Census Bureau Research Data Center (RDC), the MnRDC provides access to restricted and confidential data. Throughout her career, she has been closely involved in the creation of several MPC databases, including IPUMS (USA and International) and Terra Populus. Her own research focuses on historical demography and marriage formation in the United States from the nineteenth century to the present. Recently she has extended her research into understanding the implications of recent trends in family formation for children's well-being.

Rick O. Gilmore—Databrary.org

Rick Gilmore is Associate Professor of Psychology at Penn State and Associate Director of the Databrary Project (databrary.org), a digital data library focusing on storing and sharing video and related metadata associated with research in developmental science. Rick is a neuroscientist with special interests in perceptual development.

Joshua Greenberg—Alfred P. Sloan Foundation

Joshua Greenberg is Director of the Alfred P. Sloan Foundation's Digital Information Technology program. Greenberg received his Bachelor of Arts in History of Science, Medicine and Technology from the Johns Hopkins University, and both Masters and Doctoral degrees from Cornell University's Department of Science & Technology Studies. His dissertation work on the early history of the consumer videocassette recorder and the invention of the video rental industry was published as "From Betamax to Blockbuster" by the MIT Press (2008). The research was notable for the extensive use of online media to collect oral histories of early video store owners, employees and customers. After completing his graduate work, Greenberg worked as Associate Director for Research Projects at George Mason University's Center for History and New Media, as well as Research Assistant Professor in the University's Department of History and Art History. At CHNM, he co-founded the Zotero project, developed and promoted ways of using the Internet to further historical research, and helped build several systems that eventually evolved into the content management platform Omeka. Immediately prior to joining the Foundation, Greenberg was the New York Public Library's first Director of Digital Strategy and Scholarship, where he developed and led a digital strategy centered on

building online visitors and deepening engagement through access to collections both on Library websites and third-party platforms and increased exposure to staff expertise via blogs and other social media.

Robert J. Hanisch—National Institute of Standards and Technology (NIST)

Robert J. Hanisch is the director of NIST's Office of Data and Informatics (ODI). Dr. Hanisch was previously a Senior Scientist at the Space Telescope Science Institute (STScI), Baltimore, Maryland, and the Director of the U.S. Virtual Astronomical Observatory, a program funded by the National Science Foundation and the National Aeronautics and Space Administration. Over the past twenty years Dr. Hanisch has led many efforts in the astronomy community in the area of information systems and services, focusing particularly on efforts to improve the accessibility and interoperability of data archives and catalogs. He was the first chair of the International Virtual Observatory Alliance Executive Committee (2002-2003) and continues as a member of the IVOA Executive. From 2000 to 2002 he served as Chief Information Officer at STScI, overseeing all computing, networking, and information services for the Institute. Prior to that he had oversight responsibility for the Hubble Space Telescope Data Archive and led the effort to establish the Multimission Archive at Space Telescope—MAST—as the optical/UV archive center for NASA astrophysics missions. He completed his Ph.D. in Astronomy in 1981 at the University of Maryland, College Park.

Margaret Hedstrom—SEAD

Margaret Hedstrom is a Professor at the School of Information, University of Michigan, where she teaches in the areas of archives, electronic records management, and digital preservation. She is Principal Investigator for the SEAD (Sustainable Environment/Actionable Data) DataNet project funded by the National Science Foundation. SEAD is a collaboration among researchers at the University of Michigan, Indiana University, and University of Illinois Urbana-Champaign that is providing data management, digital preservation and access tools and services for researchers in the field of sustainability science. Before joining the University of Michigan faculty in 1995, Hedstrom was Chief of state records advisory services and Director of the Center for Electronic Records at the New York State Archives and Records Administration (1985-1995). In fall 2003, she was an author of "It's About Time: Research Challenges in Digital Archiving and Long-Term Preservation," sponsored by the Digital Government Research Program and the Digital Libraries Program Directorate for Computing and Information Sciences and Engineering at the National Science Foundation (NSF) and the Library of Congress National Digital Information Infrastructure and Preservation Program. She also headed the CAMiLEON project with the University of Leeds. In that project, researchers were devoted to the use of emulation tools as part of a strategy for long-term preservation of digital records.

Eva Huala—Arabidopsis Information Resource

Eva Huala is Adjunct Staff Scientist at the Carnegie Institution for Science, Department of Plant Biology, and Director of the Arabidopsis Information Resource, a model organism database for the reference plant *Arabidopsis thaliana* with over 25,000 registered users and accessed by

over 50,000 scientists worldwide each month. Dr. Huala also participates in the Gene Ontology Consortium as a subcontract PI and is co-PI and leader of the Plant Working group within the Phenotype Ontology Research Coordination Network. Dr. Huala is also the Founder and Executive Director of Phoenix Bioinformatics (<http://www.phoenixbioinformatics.org/>), a nonprofit dedicated to finding ways to combine wide availability with long term sustainability for scientific databases and software serving the research community. Her interests include structured representation of scientific data and the intersection of scientific databases and scientific publishing.

Diana Kapiszeski—Qualitative Data Repository

Diana Kapiszewski is co-director of the Qualitative Data Repository (www.qdr.org) located at Syracuse University, and is Assistant Professor in the Department of Government at Georgetown University. Her research interests include comparative legal institutions with a regional focus on Latin America, and research methods. She has published two books on comparative judicial politics, and has co-authored a book on field research methods forthcoming with Cambridge University Press. She has also published various articles in *Latin American Politics and Society*, *Law and Social Inquiry*, *Law & Society Review*, *Perspectives on Politics*, *PS: Political Science and Politics*, and *Security Studies*. She also is a co-editor of the Cambridge University Press book series “Methods of Social Inquiry.”

Rebecca Koskela—DataONE

Rebecca Koskela is the Executive Director of the Data Observation Network for Earth (DataONE). One of the first NSF-funded DataNets, DataONE tries to ensure the preservation, access, use and reuse of multi-scale, multi-discipline, and multi-national Earth observational data via three primary cyberinfrastructure elements and a broad education and outreach program. Prior to this, Koskela was the Life Sciences Informatics Manager for Alaska INBRE and the Biostatistics and Epidemiology Core Manager for the Center for Alaska Native Health Research at the University of Alaska Fairbanks. In addition to her bioinformatics experience, she has over 25 years’ experience in high performance computing including positions at Sandia National Laboratories, Los Alamos National Laboratory, Cray Research, and Intel.

Elaine Kuttner—Cambridge Concord Associates

Elaine Kuttner, Principal at Cambridge Concord Associates, has consulted for twenty years with the leadership of colleges and universities and their related research organizations, and with health and education-related foundations and professional societies. She also provides consulting services to public health and human services organizations and the arts. Kuttner completed both her undergraduate and graduate work at the University of Michigan, Ann Arbor, and early in her professional career became interested in strategic planning as a mechanism for change in the nonprofit sector and in higher education. Working closely with faculty, staff, and Board leadership, she helps shape essential questions, address challenges, and plan for the future. She also helps her clients assess and evolve their own governance systems in order to more effectively carry out their missions. Kuttner has significant experience working within complex systems and with multiple institutions as they plan together. She

presents on topics related to both planning and governance. She also has a strong leadership consulting practice, providing counsel to not-for-profit leaders concerning matters of strategy and governance effectiveness and design. She is often invited to speak on those topics.

Carl Lagoze— University of Michigan, School of Information

Carl Lagoze is an Associate Professor of Information at the University of Michigan School of Information, and he serves on the governing council of ICPSR. He is a leader in research on digital libraries and interoperability in information systems, contributing to key developments in the field, including the Flexible Extensible Digital Object Repository Architecture (Fedora); the Warwick Framework for the Dublin Core Metadata Initiative; the ABC Metadata Ontology; Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH); and the Open Archive Initiative Object Reuse and Exchange (OAI-ORE). Dr. Lagoze spent most of his career at Cornell University, where he received a BA in Urban Planning and a Ph.D. in Information Science. He was a faculty member in the Computing and Information Sciences Department, and a Digital Library Scientist and Research Specialist. Dr. Lagoze also holds an MSE in Software Engineering from the Wang Institute of Graduate Studies.

Jennie Larkin—National Institutes of Health

Jennie Larkin is a Health Scientist Administrator with the Bioengineering and Genomic Applications Scientific Review Group in the Division of Cardiovascular Diseases at the National Heart Lung and Blood Institute (NHLBI), part of the National Institutes of Health (NIH). Dr. Larkin's research has spanned fields from physiological ecology, comparative physiology and neurophysiology, neuroendocrinology, and functional genomics. She currently oversees a portfolio of research in computational biology, informatics, and systems biology. Prior to her work at NHLBI, Dr. Larkin was a staff scientist at The Institute for Genomic Research (TIGR) in Rockville, Maryland, working with Dr. John Quackenbush. She also worked for a time at Silicon Graphics (SGI). Prior to that, Dr. Larkin was a post-doctoral fellow at Stanford University and University of California, Berkeley. At UC Berkeley, Dr. Larkin worked with Dr. Irving Zucker performing research in the field of circadian rhythms, melatonin and torpor. She received her Ph.D. in Biological Sciences from Stanford University in 1996, studying in the laboratory of Dr. H. Craig Heller. She received an M.S. degree in Zoology from the University of Washington in 1991. She received her B.A. degree, cum laude with Honors in Biology, from Wellesley College in 1987.

Jared Lyle—Inter-university Consortium for Political and Social Research (ICPSR)

Jared Lyle is an Associate Archivist at ICPSR, where he is responsible for developing and maintaining a comprehensive approach to data management and digital preservation policy.

Clifford Lynch—SHared Access Research Ecosystem (SHARE)

Clifford Lynch is a member of the Steering Committee of the Shared Access Research Ecosystem (SHARE), a partnership of the Association of Research Libraries (ARL), the Association of American Universities (AAU), and the Association of Public and Land-grant Universities (APLU),

which is an initiative to ensure the preservation of, access to, and reuse of research outputs to make the inventory of research assets more discoverable and more accessible, and to enable the research community to build upon these assets in creative and productive ways. Dr. Lynch has been the Executive Director since 1997 of the Coalition of Networked Information (CNI), which is jointly sponsored by the Association of Research Libraries and EDUCAUSE and includes about 200 member organizations concerned with the intelligent uses of information technology and networked information to enhance scholarship and intellectual life. Dr. Lynch is also an adjunct Professor at the University of California Berkeley's School of Information, and is co-chair of the National Academies Board on Research Data and Information (BRDI). Prior to joining CNI, Lynch spent 18 years at the University of California Office of the President, the last ten as Director of Library Automation. Lynch holds a Ph.D. in Computer Science from the University of California, Berkeley.

Ronald N. Margolis—National Institutes of Health

Ronald N. Margolis is Program Director at the Division of Diabetes, Endocrinology, and Metabolic Diseases at the National Institutes of Health, where he is responsible for several programs dedicated to accruing and communicating information about the Nuclear Receptor superfamily (www.nursa.org), specifically, and more broadly through the NIDDK Information Network (www.dknet.org). Dr. Margolis has taken the lead for a Common Fund project to "Illuminate the Druggable Genome" as a means for expanding the potential scope of the drug discovery pipeline. In addition, he is the NIDDK lead representative for NIH Big Data to Knowledge and is co-lead for the Data Discovery Index, a trans-NIH program to facilitate easy discovery, access, and citation of biomedical big data. Dr. Margolis did his doctoral training at the Health Sciences Center in Syracuse, NY, followed by post-doctoral training at the University of Virginia, Charlottesville. His work focused on the physiological implications of biochemical pathways in response to hormonal signals.

David Martinsen—CHORUS: Clearinghouse for the Open Research of the United States

David Martinsen serves on the Technical Working Group at CHORUS: Clearinghouse for the Open Research of the United States, which is a suite of services and best practices that provides a sustainable solution for agencies and publishers to deliver public access to published articles reporting on funded research in the United State. Powered by CrossRef's FundRef and other open technologies, CHORUS is interoperable with other public-access delivery solutions, agency search portals, publisher platforms, and scholarly repositories and archives. Dr. Martinsen has been at the American Chemical Society (ACS) for over 25 years, working in various capacities in the Publications Division and in IT. In his current role, he is responsible for tracking new technologies and planning for their incorporation into the scholarly publishing environment. Prior to joining ACS, he worked for a chemical software/database company, with responsibilities in database curation and in the development and maintenance of online search/retrieval systems for chemical data. He received a Ph.D. degree in physical chemistry from the University of Minnesota. He is a past Chair of the Committee for Printed on Electronic Publications of the International Union of Pure and Applied Chemistry (IUPAC), was co-Chair of

the NISO/NFAIS Supplementary Journal Article Technical Working Group, and serves on the STM Future Lab Committee and Research Data Group.

Maryann Martone—National Center for Microscopy and Imaging Research (NCMIR)

Maryann Martone is a Professor in Residence in the Department of Neuroscience at the University of California San Diego, where she is also co-Director of the National Center for Microscopy and Imaging Research (NCMIR). The NCMIR provides expertise, infrastructure, technological development, and an environment in which new information about the 3D ultrastructure of tissues, cells, and macromolecular complexes may be accurately and easily obtained and analyzed. Dr. Martone is also President of FORCE 11 (the Future of Research Communications and e-Scholarship), and provides community outreach for bioCADDIE (biomedical and healthCAre Data Discovery and Indexing Ecosystem). The data discovery index (DDI) enabled through bioCADDIE aims to do for data what PubMed (and PubMed Central) did for the literature. Dr. Martone was a major contributor in the creation of the Cell-Centered Database, one of the first Internet databases for cell-level structural data. She is also a co-Principal Investigator in the NIH contract to create a Neuroinformatics Framework, a national pilot project awarded to establish terminology standards for neuroscience. She received her Ph.D. in neuroscience at the University of California San Diego.

Marc Maynard—The Roper Center for Public Opinion Research

Marc Maynard is Director of Technical Services at the Roper Center, as well as the Assistant Secretary on their Board of Directors. The Roper Center is one of the world's leading archives of social science data, specializing in data from surveys of public opinion. The data held by the Roper Center range from the 1930s, when survey research was in its infancy, to the present. Most of the data are from the United States, but over 50 nations are represented. With experience in user services and archives management, Maynard has most recently directed efforts to further develop the Roper Center's data access services. He has been primarily responsible for the development of iPOLL, the Center's question retrieval system, and RoperExpress, its data download service. He received a BS in business from the University of Connecticut and an MS in information technology from Rensselaer Polytechnic Institute.

Francis McManamon—The Digital Archaeological Record (tDAR)

Francis McManamon is the Executive Director of the Center for Digital Antiquity (Digital Antiquity), an Arizona State University center in the School for Human Evolution and Social Change (SHESC). Digital Antiquity is devoted to improving access to archaeological data and documents and ensuring their long-term preservation and availability. Digital Antiquity governs the use, development, and maintenance of the Digital Archaeological Record (tDAR), an international digital repository for the digital records of archaeological investigations. Before joining Digital Antiquity and SHESC in November, 2009, Dr. McManamon was the Chief Archeologist of the National Park Service and Departmental Consulting Archeologist for the Department of the Interior (DoI) in Washington, DC. Dr. McManamon has been involved in the development of policy, regulations, and guidance for public archaeology in the National Park system and throughout the government. He has special interests and expertise in

archaeological resource management, the long-term access to and preservation of archaeological data, laws and regulations related to cultural resource management and historic preservation, and public outreach and education about archaeology and archaeological resources. Dr. McManamon graduated from Colgate University; he received his Ph.D. degree from the State University of New York at Binghamton.

William Michener—DataONE

William (Bill) Michener, Professor and Director of e-Science Initiatives for University Libraries, University of New Mexico, is the DataONE (Data Observation Network for Earth) Principal Investigator. As such he is responsible for the overall leadership of DataONE—overseeing technical, management, reporting, and budget activities of the organization. Dr. Michener has authored four books related to ecological informatics and more than 70 journal articles and book chapters. He is a Certified Senior Ecologist and serves as Editor of *Ecological Archives* and Associate Editor of the *International Journal of Ecological Informatics*. He has directed several large interdisciplinary research programs and cyberinfrastructure projects including the National Science Foundation's (NSF) Biocomplexity Program, the Development Program for the NSF-funded Long-Term Ecological Research Network, and numerous cyberinfrastructure research and development projects.

Tom Murphy— Inter-university Consortium for Political and Social Research (ICPSR)

Tom Murphy is the Director of Computing and Network Services (CNS) at ICPSR. Along with overseeing the CNS direction and staff, he is in charge of software development, architecture, design and planning. Murphy has substantial private business IT background in finance, manufacturing, health care, energy, commercial software, and IT management consulting. Prior to joining ICPSR, he was most recently the Chief Technical Enterprise Architect for a \$125B energy company and was responsible for integrating its Cloud services for enterprise content collaboration across the 50,000 users and companies doing business with it.

Gilbert S. Omenn—Center for Computational Medicine and Bioinformatics (CCMB), University of Michigan Medical School

Gilbert S. Omenn is the director of the Center for Computational Medicine and Bioinformatics (CCMB) at the University of Michigan Medical School where he is also Professor of Molecular Medicine & Genetics and Professor of Human Genetics, as well as Professor of Public Health at the School of Public Health. Dr. Omenn served as Executive Vice President for Medical Affairs and as Chief Executive Officer of the University of Michigan Health System from 1997-2002. He chairs the Human Proteome Organization (HUPO) global Human Proteome Project (www.thehpp.org), an international project organized by the Human Proteome Organization (HUPO) that aims to revolutionize our understanding of the human proteome via a coordinated effort by many research laboratories around the world. There are datasets for application of analytical tools, and there are research teams eager to engage in collaborative studies in the Chromosome-centric HPP and Biology and Disease-driven HPP initiatives. Dr. Omenn has long-standing interests in mechanisms of genetic predispositions to risks from environmental and occupational exposures, pharmacogenetics and pharmacogenomics, and science-based risk

analyses. He is a past president of the American Association for the Advancement of Science and a member of the Institute of Medicine of the National Academy of Sciences.

Beth Plale— Research Data Alliance; Data to Insight Center, and Pervasive Technology Institute, Indiana University

Beth Plale oversees the research mission of the Pervasive Technology Institute at Indiana University, and serves as director of the Data to Insight Center and director of the Center for Data and Search Informatics. She is also co-PI on the NSF DataNet Sustainable Environments – Actionable Data (SEAD) project, as well as a steering group member of Research Data Alliance, an international organization that aims to enable researchers and innovators to openly share data across technologies, disciplines, and countries. A full Professor in the School of Informatics and Computing at IU, she has broad research and governance interest in long-term preservation and access to scientific data, and enabling computational access to large-scale data for broader groups of researchers. Her specific research interests are in tools for metadata and provenance capture, data repositories, cyberinfrastructure for large-scale data analysis, and workflow systems. Plale is deeply engaged in geoinformatics research and education and has substantive experience in developing stable and useable scientific cyberinfrastructure. She is a past Fellow of CIC Academic Leadership Program, a DOE Early Career awardee, and is on the editorial board for Journal of Concurrency and Computation Practice and Experience.

Ray Plante—National Data Service

Raymond Plante is Senior Research Scientist at the National Center for Supercomputing Applications (NCSA) at the University of Illinois Urbana-Champaign. He is also affiliated with the National Data Service (NDS), an emerging vision for a national infrastructure that will allow scientists and researchers across all disciplines to find, reuse, and publish data. The NDS Consortium is a broad assembly of scientists, data providers, community federations, national labs and projects, academic publishers, and cyberinfrastructure providers. NDS seeks to build on the data archiving and sharing efforts already under way within specific communities and disciplines and link them with a common set of tools. Dr. Plante also has led the Infrastructure and Middleware effort for the Large Synoptic Survey Telescope (LSST) project, as well as the registry development for the US National Virtual Observatory (NVO). He received his Ph.D. in Astronomy from the University of Illinois in 1995 and has since worked at NCSA, developing archive and data processing systems for radio and optical telescopes. Plante specializes in data management and automated processing of astronomical data, with a special interest in astronomical digital archives.

Ryan Scherle—Dryad Digital Repository

Ryan Scherle is Repository Architect at Dryad Digital Repository for the National Evolutionary Synthesis Center at Duke University. A researcher/programmer, he is devoted to improving users' access to electronic information. Specific topics of interest include: federated/distributed search, automatic metadata extraction, case-based reasoning, automatic thesaurus construction, and combining metadata generated by novices, experts, and automatic systems.

Elizabeth (Libbie) Stephenson—UCLA Social Science Data Archive

Libbie Stephenson has been manager and director of the University of California Los Angeles' Social Science Data Archive since 1977. The Data Archive's mission is to provide a foundation for social science research and teaching support, with a focus on the management of research output throughout the entire life cycle of a project. In her role as archivist at UCLA, she oversees collection development, bibliographic content, and reference services. Stephenson has served as a lecturer in the UCLA department of Information Studies and in many social science departments and professional schools. She has written numerous articles on data and library topics and has participated on committees for several organizations and associations, including ICPSR, the Association of Public Data Users, and the California Digital Library. Stephenson served as President of the International Association for Social Science Information Service and Technology (IASSIST) from 1995-1997. She is a frequent presenter at national and international conferences including the American Library Association, the International Federation of Library Associations, and the Society of American Archivists. She received a B.A. in Fine Arts from the University of California, Riverside in 1975, and went on to obtain a Master's Degree in Library Science from UCLA in 1977.

Paul F. Uhlir— The National Academies

Paul Uhlir is Director of the Board on Research Data and Information, and the US CODATA, at The National Academies in Washington, D.C. His current area of emphasis is on S&T data management and policy, and on the relationship of intellectual property law in digital data and information to R&D policy. Uhlir has been employed at The National Academies since 1985, first as a senior staff officer for the Space Studies Board, where he worked on solar system exploration and environmental remote sensing studies for NASA, and then as associate executive director of the Commission on Physical Sciences, Mathematics, and Applications. Before joining The National Academies, he worked in the general counsel's office at the National Oceanic and Atmospheric Administration in the Department of Commerce.

Mary Vardigan—Inter-university Consortium for Political and Social Research (ICPSR)

Mary Vardigan is Assistant Director of ICPSR. She holds the position of Archivist and directs the ICPSR Collection Delivery Unit, which involves oversight of activities in the areas of Metadata, Publications, Web Site Development, User Support, and Membership Development. She also serves as Director of the Data Documentation Initiative (DDI), an international effort to establish a metadata standard for the social and behavioral sciences. She is involved in other international projects related to data stewardship, including the Data Seal of Approval, the Research Data Alliance, and various efforts to promote data citation.