

**NSF Advisory Committee for Business and Operations
Electronic Book
Spring 2020 Meeting
June 29, 2020**

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National Science Foundation
Advisory Committee for Business and Operations
Spring 2020 Virtual Meeting

June 29, 2020
Zoom

Monday, June 29, 2020

1:00 pm

Welcome/Introductions/Recap

Co-Chairs: Chuck Grimes and Pamela Webb

1:15 pm

Updates: Annual Conflicts of Interest; BFA; OIRM; Budget/OLPA

Presenters: Teresa Grancorvitz, BFA; Wonzie Gardner, OIRM; Caitlyn Fife, BFA; Amanda Greenwell, OLPA

1:45 pm

Understanding the Top Five Impacts of the COVID-19 Pandemic on the National Research Community and the NSF Response

Presenters: Keith Boyea, BFA; Alex Wynnyk, BFA

Panel: Sylvia James, EHR; Steve Meacham, OIA; Joanne Tornow, BIO

Discussants: David Mayo, Kim Moreland, Pamela Webb

The rapid outbreak of COVID-19 has had a tremendous impact on the way research institutions are conducting their daily business. With some exceptions, research institutions/facilities have severely curtailed their research activities to reduce the risk of faculty, staff, and students to COVID-19. This rapidly evolving and highly unusual interruption of research and related loss of operations has challenged the viability of the research enterprise.

During these unprecedented times, institutions and individuals funded on grants and other mechanisms faced many unknowns and uncertainties. For example, how do you determine allowability of certain costs (e.g., effort reporting, travel, conferences) and compensation challenges while ensuring safety of the research community and accountability of federal funds? How do you conduct audits based on rapidly emerging policies/guidance exceptions, such as the Coronavirus Aid, Relief, and Economic Security (CARES) Act (P.L. 116-136)?

Since the beginning of the COVID-19 crisis, NSF was open for business working quickly and collaboratively across NSF directorates/divisions, as well as very closely with the Office of Management and Budget (OMB), the research community, and other grant-making partners in assessing the situation. NSF received \$76 million in 2020 to support NSF's ongoing RAPID grant response to coronavirus. NSF developed new policies, procedures, mechanisms and issued timely guidance in response to NSF's Implementation of OMB Memorandum M-20-20 and OMB Memorandum M-20-17 and the CARES Act. Many administrative flexibilities were put in place by NSF for research to continue while keeping its workforce and researchers safe while furthering the fight against COVID-19 on behalf on the American public. For more information, see: [nsf.gov/coronavirus](https://www.nsf.gov/coronavirus).

Presentation:

NSF's immediate responses to the pandemic have been focused on working with our awardees providing them near-term policy guidance in the areas of grants, cooperative agreements and contracts. The Foundation has also used existing mechanisms to fund dozens of research projects on COVID-19 to mobilize the scientific community to better understand and develop measures to respond to the virus.

As our response to the crisis progresses, NSF can benefit from BOAC advice, particularly hearing directly from committee members on the top five impacts of COVID-10 on the researcher community, at least in the near-term and medium-term future. Understanding longer-term impacts is also important, although we recognize that COVID-19 related-issues are dynamic and rapidly evolving.

This session will include:

- An NSF overview of our COVID-19 related responses to date, including how NSF has worked with our grantee, facilities and contractor communities.

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- Joanne Tornow, AD in the BIO Directorate and Sylvia James and Steve Meacham, co-chairs of the Research Recovery Planning Task Force, will also provide program's perspectives on COVID-19 impacts and the agency response to date.
- Feedback from the FDP or COGR meetings where some conversations have taken place broadly across disciplines and with the research administration community.
- Insight from BOAC members listing the top 5 COVID-19 impacts affecting their institutions in the short and medium term as context for NSF as the agency progresses into out next phases of COVID-19 response. Insight/projections on the long-term outlook are welcome.

This session may serve as a prelude for a future BOAC meeting where we can examine our "lessons learned" and what we might choose to do differently if there were to be a future crisis. Given the scope of the COVID-19 crisis, the session may also serve as a Part I to an ongoing conversation on understanding the impacts.

Committee Action/Feedback:

1. What are the top five COVID-19 impacts on federal and NSF grant awards, sponsored activities at research institutions? Short term (pandemic inception to the start of fall semester), medium term (~18 months after that) and, if relevant, long term?
2. What were the major impacts on researchers and faculty (including early-career faculty), administrators, postdoc researchers/students as a result of on severely curtailed research and related activities due to COVID-19?
3. What was the impact and what measures were put in place for institutional operations to quickly shut down and then safely restart laboratory research and other related activities?
4. How has the NSF response addressed the impacts to date and what future needs are anticipated?

2:30 pm

Break

2:45 pm

Understanding the Top Five Impacts of the COVID-19 Pandemic on the National Research Community and the NSF Response (continued)

3:30 pm

Enterprise Risk Management in the COVID-19 Environment

Presenter: Mike Wetklow, BFA

Discussant: Larry Koskinen

NSF's Data Analytics & Assurance Program (DAAP) supports the NSF mission by:

- Dealing with the proliferation of data;
- Leveraging artificial intelligence and automation;
- Managing and reducing the cost of compliance efforts; and
- Building even stronger organizations.

As with all NSF efforts and operations, the focus of the DAAP shifted as the agency worked through the COVID-19 response and started looking ahead to recovery planning and transformation for increased resiliency. The DAAP team, working in concert with the NSF Risk Captains Community of Interest, identified an opportunity for NSF to leverage and expand Enterprise Risk Management (ERM) in its day-to-day decision making to better respond to the significant risk presented by the COVID-19 outbreak and position the agency to identify and address other "black swan" risk events in the future. ERM can help NSF pinpoint the most valuable business drivers; identify, prioritize, and respond to challenges triggered by COVID-19; and assess damage and rebuild for the future.

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Committee Action/Feedback

1. Do you have feedback on NSF's approach to ERM and / or COVID-19 considerations?
2. What lessons learned or best practices have you seen in practice during COVID-19 that might benefit our organization?
3. Have you encountered successful approaches to collaborating with universities and grantees to manage the impacts of COVID-19 that you would recommend to NSF?
4. Do you have any additional suggestions about how NSF can use ERM to leverage / integrate the results of its COVID-19 crisis management efforts?

4:30 pm

Preparation for Meeting with Dr. Droegemeier and Dr. Crim/Break

4:45 pm

Meeting with Dr. Droegemeier and Dr. Crim

5:30 pm

Adjourn



NATIONAL SCIENCE FOUNDATION
Business and Operations Advisory Committee

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*** Committee Co-chairs**

NSF Business and Operations Advisory Committee Member Biographies ~ Spring 2020



Dr. Tilak Agerwala

*IBM Emeritus and
IBM Vice President (Retired)*

Tilak Agerwala's career has focused on developing advanced research programs and game-changing strategic initiatives and on bringing innovative computing technologies to market. With the rapid "digitalization" of our world and the transformative impact this is having, Tilak is interested in applying big data, modeling, simulation, analytics, and augmented intelligence technologies to world class science and engineering, education, and leadership development. He is an IBM Emeritus, Executive-in-Residence, Grove School of Engineering, City College of New York, Adjunct Associate Professor, Pace University, New York, Adjunct Professor, National Institute for Advanced Studies, Bangalore, and Member, TKMA Consulting.

In his IBM career, spanning 35 years, Tilak held executive positions in research, strategy, advanced development, marketing, and business development. He was part of and led teams that developed and delivered leadership cyberinfrastructure technologies and supercomputers to industry, academia, and the national labs. As vice president, Systems, (2002 to 2013), he was responsible for IBM's research and advanced technology activities worldwide in future systems hardware and software technologies, including the BlueGene supercomputer. As vice president of Data Centric Systems (2013-2014) his team established a new paradigm for scalable systems leading to the delivery of the powerful supercomputer, Summit, to Oakridge National Lab.

Tilak is a member of the NSF Advisory Committees on Engineering, Advanced Cyber Infrastructure, and Business and Operations. He was the 2019 Dr. S. Radhakrishnan Chair Visiting Professor at the National Institute of Advanced Studies, Bangalore India. He is a Life Fellow of the IEEE and a recipient of the W. Wallace McDowell Award from the IEEE Computer Society. He has given well over a hundred invited presentations, keynotes, and distinguished lectures at conferences, universities and national laboratories worldwide.

Tilak has a Bachelor of Technology degree in electrical engineering from the Indian Institute of Technology, Kanpur, India and a Ph.D. in electrical engineering from The Johns Hopkins University. From 1975 to 1978, he was an assistant professor of Electrical Engineering at The University of Texas, Austin.

Member Biographies



Dr. Benjamin L. Brown

Acting Facilities Division Director and ESnet Program Manager
U.S. Department of Energy, Office of Science

Dr. Benjamin L. Brown is the Acting Facilities Division Director in the Office of Advanced Scientific Computing Research and the program manager for ESnet, DOE's high-performance network user facility that provides tens of thousands of researchers—both in and outside DOE—with the ability to efficiently transmit extreme scale research data flows and to access unique Department of Energy research infrastructure. Ben is also the program manager for the Department's Project Leadership Institute, a leadership development program in project management. Ben has extensive knowledge and expertise in policy development and analysis related to large scale scientific research infrastructure and project management. A common focus in each of these roles is the strategic advancement of science and the DOE mission through cross-institutional knowledge-sharing, strategic planning, and partnership development.

Immediately prior to joining the Office of Science in 2008, Ben worked on energy and climate policy in the U.S. Senate as an American Association for the Advancement of Science (AAAS) Congressional Fellow. Ben is a physicist with experience working in U.S. government laboratories and academic institutions in both the U.S. and U.K; his research focused on optical control of quantum systems and quantum information science. He received his Ph.D. in optics from the University of Rochester and his bachelor's degree in physics from Harvard University.



Dr. Lee Cheatham

Director, Office of Technology Deployment and Outreach
Pacific Northwest National Laboratory

Lee Cheatham has focused his career on leadership in research management and operations, especially in the translation of that research into high-impact commercial products. Lee currently leads the Office of Technology Deployment and Outreach (TDO) at Pacific Northwest National Laboratory (PNNL), a Department of Energy national laboratory focused on making fundamental scientific discoveries and using its foundational capabilities to address key challenges in energy resiliency and national security. TDO's mission is to engage the Laboratory with industry, federal agencies, and state/regional organizations in developing and licensing PNNL's technology as a basis

Member Biographies

for commercial products and to realize the greater impact of science and technology for economic growth.

Previously Lee served as Director of Strategic Partnerships at Brookhaven National Laboratory, and as Chief Operating Officer and General Manager of Commercialization for The Biodesign Institute at Arizona State University. For twelve years prior to Biodesign, Lee led the Washington Technology Center (WTC), an organization chartered by the State of Washington to accelerate growth and expand economic impact of small and medium-sized businesses. WTC funded these companies' collaborations with university researchers and provided programs to ease their access to growth capital.

Lee has private-sector experience as Vice President of Worldwide Product Engineering for a market-leading library software company and founder of a real estate technology and services company. He has served in scientific, engineering, and development positions, as well research program management roles, for energy systems modeling, large-scale environmental and military information systems, and medical device development programs. Lee received his Ph.D. from Carnegie-Mellon University, MS from Washington State University, and BS from Oregon State University, all in electrical engineering.



Dr. Robert M. Dixon

Consultant, Higher Education Management

Robert M. Dixon is a consultant with the Registry for College and University Presidents, which is based in Peabody, MA. As a consultant with this organization, he takes on interim leadership assignments at universities that need senior level management while in transition. Among his assignments, he has served as Interim Provost and Vice President for Academic Affairs at Cheyney University and as Vice President for Academic Affairs at the University of Maine at Fort Kent. He is currently serving as Interim Chair of the Department of Industrial and Systems Engineering at North Carolina A & T State University. During the last decade he has developed research interests in Number Theory. His career has involved dual paths of work in teaching and research, and in administrative leadership positions.

He received the baccalaureate degree in mathematics and physics with high honors from Morehouse College; the Master of Science degree in nuclear physics from Rutgers University; and the doctorate in theoretical nuclear physics from the University of Maryland. Dr. Dixon formerly served as the Dean of the School of Science at Hampton University. Prior to his work at Hampton he was Provost and Vice President for Academic Affairs at Grambling State University. During a period of sixteen years he was Chair of the Department of Physics at Morehouse College, a period that was characterized by considerable success in the production of graduates in the dual-degree engineering program with the Georgia Institute of Technology, in the production of graduates in physics and mathematics, and the acquisition of funded grants from foundations and federal agencies. In this period, he received funding from the Air Force Office of Scientific Research, the Army Research Office, the Office of Naval

Member Biographies

Research, the AMOCO Foundation, the General Electric Fund, the William Penn Foundation, and the Sherman Fairchild Foundation. His background includes appointments at Morgan State University, Southern Polytechnic University, and Bishop College. Notably, Dr. Dixon is the founding chair of the M. S. degree program in physics at Atlanta University (now Clark Atlanta University). Upon graduation from Morehouse College, he began a long relationship with the Woodrow Wilson National Fellowship Foundation. He received a Woodrow Wilson Fellowship to attend Rutgers University. His first academic appointment was as a Woodrow Wilson Teaching Intern at Hampton Institute (now Hampton University). During his career he has contributed as a consultant to several programs sponsored by the Foundation. After some years in academe he served as a Director with an engineering firm. He developed and managed research projects supported by contract with the Department of Energy on nuclear waste disposal.

Throughout his career he has remained active in teaching and research. He has taught at the undergraduate and graduate levels. He has taught and mentored many students who have obtained the doctorate in physics or engineering. More than fifty of his former students have obtained advanced degrees in engineering, mathematics, or physics. He has maintained an active interest in research in applied mathematics. He is the author of several books and laboratory manuals in physics and articles on many-body scattering theory. He has served as a consultant to many public-school systems and universities on a wide variety of topics, such as diversity, improving the teaching and learning of science and mathematics, the preparation of mathematics teachers, expanding opportunities and increasing diversity in engineering, and improving retention. He is a member of the American Physical Society, the American Association of Physics Teachers, the American Association for the Advancement of Science, and the Mathematical Association of America.



Mr. Adam Goldberg

Director and Executive Architect

Department of the Treasury, Office of Financial Innovation and Transformation

Adam Goldberg is the Executive Architect at the Office of Financial Innovation and Transformation (FIT) at the Treasury Department's Bureau of the Fiscal Service. Within FIT, Adam supports financial management transformation initiatives that lead to government-wide efficiencies. He also serves as a Treasury Advisor to the Minister of Economy and Finance in the Republic of Guinea where he supports the Minister's efforts to improve cash management. Adam joined Treasury after spending six years at the Office of Management and Budget (OMB) as the Chief of the Financial Analysis and Systems Branch where he was responsible for policy development and oversight to implement financial systems, reduce improper payments, and right-size real property. Prior to OMB, he held senior leadership positions at Unisys and Andersen supporting financial management and system improvement efforts at Federal agencies. Adam began his career at the Defense Logistics Agency. Adam holds a BA in Political Science and History from the University of Rochester and an MPA from the Maxwell School of Citizenship and Public Affairs at Syracuse University.

Member Biographies



Mr. Charles D. Grimes III
Consultant

Charles (Chuck) Grimes is an independent consultant on HR policy and administration. He has worked with MTCI, a human capital management, training support and delivery, and program management firm; *The Public Manager*, a quarterly journal for public sector learning professionals; and the Departments of Justice, Defense, and Homeland Security. Chuck is active in the Partnership for Public Service's Strategic Advisors to Government Executives (SAGE) program in the COO and CHCO communities.

Chuck recently retired from Federal service, having served as the Chief Operating Officer for the U.S. Office of Personnel Management (OPM). In that role, he was responsible for managing OPM's human, financial, and other resources to achieve intended program results efficiently, economically, and effectively.

Previously, Mr. Grimes served as the Deputy Associate Director, Employee Services, and Acting Associate Director, Employee Services and Chief Human Capital Officer at OPM. In those roles, he managed governmentwide staffing, compensation, employee and labor relations, employee development, and executive resources policies; agency outreach and veterans support; and OPM's internal human resources operation. He also headed the Performance and Pay Systems center at OPM.

Prior to joining OPM, Mr. Grimes served as the Assistant Director, Compensation Policy, in the Internal Revenue Service's Strategic Human Resources Division. He spent most of his career in the Department of Defense (DOD), where he last served as the Director, Wage and Salary Division, in DOD's Civilian Personnel Management Service. Mr. Grimes received his B.A. in Biology from the University of Virginia and an M.A. in Management and Supervision from Central Michigan University.



Mr. John M. Kamensky
Senior Fellow

IBM Center for The Business of Government

Mr. Kamensky is a Senior Fellow with the IBM Center for The Business of Government in Washington, DC, which sponsors research on management challenges facing government leaders.

Member Biographies

During 24 years of public service, he had a significant role in helping pioneer the U.S. federal government's performance and results orientation. He is passionate about creating a government that is results-oriented, performance-based, customer-focused, and collaborative in nature. Prior to 2001, Mr. Kamensky served for eight years as deputy director of Vice President Gore's National Partnership for Reinventing Government. Before that, he worked at the U.S. Government Accountability Office for 16 years where he played a key role in the development and passage of the Government Performance and Results Act of 1993.

During his time with the IBM Center, he has edited or co-authored eight books and writes and speaks extensively on leadership, performance management, collaborative governance, and government reform.

Mr. Kamensky is a fellow of the National Academy of Public Administration and a senior fellow with the Administrative Conference of the United States.

He received a Masters in Public Affairs from the Lyndon B. Johnson School of Public Affairs at the University of Texas at Austin, and a Bachelors of Arts in Government at Angelo State University, in San Angelo, Texas.



Dr. Alicia J. Knoedler
Director of Team Innovation
Exaptive, Inc.

Dr. Alicia J. Knoedler is Director of Team Innovation at Exaptive, Inc. Exaptive is an innovation and software solutions startup company based in Oklahoma City, Oklahoma with a platform (Cognitive City) to bring together people, data, and analysis tools to form collaborative communities and encourage boundary crossing behavior in an actively-supported environment. Dr. Knoedler designs and implements the composition and engagement of teams within Exaptive's Cognitive Cities. She also identifies and characterizes unique roles within research teams to determine how role contributions can be measured and attributed within virtual teams.

Prior to joining Exaptive, Dr. Knoedler was the Executive Associate Vice President for Research and Executive Director of the Center for Research Program Development and Enrichment at the University of Oklahoma. Within these roles, she worked with university leaders, faculty, students, and other investigators to significantly enhance the research enterprise, focusing on changing the research culture as well as assisting investigators in their efforts to develop more competitive research programs and proposals for external funding. Dr. Knoedler is a member of the NSF Business and Operations Advisory Committee as a liaison from the NSF Committee on Equal Opportunities in Science and Engineering (CEOSE), drawing a connection between the Foundation's commitment to broadening participation and the commitment to broadening participation from external audiences across the nation.

Member Biographies

Dr. Knoedler holds a B.A. in psychology from Trinity University (San Antonio), and an M.S. and Ph.D. in cognitive psychology from Purdue University. Her research expertise focused on various memory processes and optimal conditions for remembering. She taught quantitative research methodology, statistics, and grant writing for many years at Purdue University, San Jose State University, University of California Santa Cruz, Indiana University, University of Notre Dame, and Penn State University and had an appointment as Adjunct Associate Professor in the Department of Psychology at OU. Dr. Knoedler has over 19 years of experience in developing grant proposals for a variety of funding sources, including federal sources, private foundations, and corporations and is a Certified Research Administrator (CRA). From 2014-2018, Dr. Knoedler was is the Co-PI of Oklahoma's NSF EPSCoR Research Infrastructure Improvement Track 1 award, which focuses on the socio-ecological approaches to studying climate variability in Oklahoma.

In service and leadership to research development and the national research enterprise, Dr. Knoedler is a founding member, former member of the Board of Directors, and has been president (2013-2014) and immediate past-president (2014-2015) of the National Organization of Research Development Professionals (NORDP). She is also a member of APLU's Council on Research, through which she develops and offers training, professional development, and leadership opportunities for senior research leaders across the nation.



Larry Koskinen

Chief Risk Officer

US Department of Housing and Urban Development

Larry Koskinen has served the public interest for more than forty years through executive positions in the federal government, commercial professional services firms, and non-profit organizations—both within the United States and abroad. He is a member of the Federal Senior Executive Service, and is currently serving as Chief Risk Officer at the United States Department of Housing and Urban Development, where he leads HUD's departmental enterprise and fraud risk management programs. During his tenure HUD has earned a positive reputation for innovative approaches to the use of advanced data analytics and computational linguistics to identify, understand and remediate program and administrative control weaknesses.

He recently led the Business Transformation Team for NewCore, HUD's administrative shared services partnership with the Treasury Administrative Resource Center, and, at the invitation of the United States Office of Management and Budget, led the project team that drafted the government-wide playbook for federal shared services adoption. Prior to joining HUD, he served as an executive in the federal Inspector General community, managing data analytics, finance, human capital, information technology, strategic planning and support operations at the Treasury Inspector General for Tax Administration and the U.S. Postal Service Office of Inspector General. He has been involved in multiple federal-level government reform efforts, notably the Reagan-era Grace Commission, and the Clinton-era National Performance Review.

Member Biographies

Koskinen was a Vice President at the non-profit Council for Excellence in Government (programs of which are now absorbed into the non-profit Partnership for Public Service), and a Vice President at the international development consultancy Development Alternatives, Inc. Prior to that he was Director of Administration and Finance at the non-profit Regional Environmental Center for Central and Eastern Europe in Budapest. He was Management Officer for Peace Corps International Operations and also Chief Business Architect. He served as a Peace Corps Volunteer in the Philippines.

He holds a Bachelor of Science in photography from the Rochester Institute of Technology, and a Juris Doctorate from American University's Washington College of Law.



Robert J. Lavigna

Director

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Bob Lavigna has more than 30 years of experience leading government organizations and programs. He is the Director of the *Institute for Public Sector Employee Engagement*, a division of CPS HR Consulting, an independent and self-supporting government agency. The *Institute* helps public-sector and nonprofit organizations measure and improve employee engagement as a key to improving performance and service delivery.

Bob's book, *Engaging Government Employees: Motivate and Inspire Your People to Achieve Superior Performance* (American Management Association), is the first book to focus exclusively on employee engagement in the public sector.

Before joining CPS, Bob served as Assistant Vice Chancellor and Director of HR for the University of Wisconsin. He is an adjunct Associate Professor in the La Follette School of Public Affairs at Wisconsin.

Bob was also Vice President - Research for the Partnership for Public Service, a nonpartisan nonprofit dedicated to revitalizing the public service by inspiring new generations to serve and helping to transform government. He directed research projects, including "Best Places to Work in the Federal Government," that found new ways for government to attract, develop and retain talent.

Bob also previously served as Director of the state of Wisconsin merit system. He began his career with the U.S. Government Accountability Office (GAO) as an auditor, program evaluator, HR Director of GAO's largest field office, and Assistant to the Assistant Comptroller General.

Bob is an elected Fellow of the National Academy of Public Administration, and was selected as a "Public Official of the Year" by *Governing* magazine. The organizations Bob has led also received innovation awards from the Ford Foundation, Society for Human Resource Management, Council of

Member Biographies

State Governments, International Public Management Association for HR (IPMA-HR), Urban League, and others.

He is a past president of IPMA-HR, and is also a past national chair of the American Society for Public Administration Section on Personnel and Labor Relations. In addition to his book, Bob writes frequently for professional publications and has authored three book chapters on HR. He has spoken across the U.S. and in Canada, Europe, Asia, South America, the Caribbean, Africa, and the Middle East.

He has a B.A. in Public Affairs from George Washington University, an M.S. in HR from Cornell University and has done Ph.D. work at the University of Wisconsin.



Ms. Rachel Elizabeth Levinson

Executive Director, National Research Initiatives
Arizona State University

A twenty five-year veteran of science policy at the national level, Rachel Levinson is the Executive Director of National Research Initiatives for Arizona State University, operating in the university's Washington, D.C. office. She came to ASU in 2005 as the director of the Government and Industry Liaison Office for the Biodesign Institute at Arizona State University. Levinson heads an office responsible for developing policies and strategies that advance the University's research agenda.

Prior to coming to ASU, Levinson was with the Office of Science and Technology Policy in the Executive Office of the President of the United States, where she was the assistant director for life sciences, while on detail from the Office of the Director of the National Institutes of Health. In this capacity, she identified science and technology priorities, developed and advocated Administration objectives, and resolved policy issues in life sciences focusing on laboratory biosecurity, bioterrorism preparedness, biotechnology, biomedical research and technology development and transfer.

Levinson began her career as a biologist for the National Cancer Institute within the National Institutes of Health (NIH) and later moved into the policy arena. She advanced to positions at NIH including deputy director of the NIH Office of Recombinant DNA and senior policy advisor in the Office of Technology Transfer.

Levinson earned her B.S in Zoology from the University of Maryland at College Park, and her M.A in Science, Technology and Public Policy from George Washington University, School of Public and International Affairs.

Member Biographies



David Mayo

Director, Office of Sponsored Research
California Institute of Technology

David Mayo is the Director of the Office of Sponsored Research at the California Institute of Technology. In this capacity he is responsible for pre-award and post-award non-financial services supporting \$390M in research awards annually. David is directly responsible for review and interpretation of existing and emerging government policies and regulations, development of institutional policies and procedures, and development and implementation of training programs for campus staff in the area of research administration. Prior to his appointment at Caltech in 2002, David led the pre-award office at the University of California, Santa Barbara, where he worked in research administration in various capacities since 1981.

David has been a member of his professional association, the National Council of University Research Administrators (NCURA) since 1988 and currently serves on its Board of Directors. David served as NCURA President in 2008, received its *Distinguished Service Award* in 2009, and received NCURA's highest honor in 2012, the *Outstanding Achievement in Research Administration Award*. David has served on numerous NCURA working groups and committees. He is a content creator for NCURA's on-line and in-person training programs, as well as a frequent presenter at its national and regional conferences on topics such as: federal and industry contracting, regulatory compliance, subcontracting, subrecipient monitoring and award management. David currently participates in the Federal Demonstration Partnership, for which he co-chairs its Contracts Subcommittee and is a member of its Subawards Subcommittee. David also participates in the Council on Governmental Relations as a member of its COVID-19 Federal Award Impact Workgroup.



Dr. Joseph P. Mitchell, III

Director of Strategic Initiatives
National Academy of Public Administration

Joe Mitchell is Director of Strategic Initiatives at the National Academy of Public Administration—an independent, nonpartisan, and nonprofit organization chartered by the U.S. Congress to improve government performance. In this role, Dr. Mitchell leads the organization's Grand Challenges in

Member Biographies

Public Administration program, which is identifying and developing ways to address the most challenging issues facing government today. He also advances cutting edge thought leadership and develops partnerships with other good government groups, American universities, and universities in other countries.

Over the course of his career, he has worked with a wide range of federal cabinet departments and agencies to develop higher-performing organizations, implement organizational change, and strengthen human capital and teams. Most recently, he was at the General Services Administration to stand up its new Office of Shared Solutions and Performance Improvement within the Office of Government-wide Policy. As an Associate Director of this new office, he built and led a team to manage multi-functional and cross-agency projects and initiatives in support of the President's Management Agenda. His team established governance and accountability mechanisms for federal Cross-Agency Priority Goals, revamped performance.gov to become more user-friendly and provide additional information to the public, upgraded and expanded the White House Leadership Development Program and CXO Fellows program, provided technical and management support to the federal executive management councils, and established a procurement vehicle that federal agencies can use to acquire commercial software-as-a-service capabilities for their payroll and work schedule/leave management.

Previously, Dr. Mitchell led and managed the National Academy of Public Administration's organizational studies program, overseeing all of its congressionally-directed and agency-requested reviews and consulting engagements. He has served as project director for studies of the Government Publishing Office, the U.S. Senate Sergeant at Arms, the U.S. Agency for International Development, the National Park Service's Natural Resource Stewardship and Science Directorate, and the Natural Resources Conservation Service at the U.S. Department of Agriculture.

He holds a Ph.D. from the Virginia Polytechnic Institute and State University, a Master of International Public Policy from the Johns Hopkins University School of Advanced International Studies, a Master of Public Administration from the University of North Carolina at Charlotte, and a B.A. in History from the University of North Carolina at Wilmington. He is a member of Phi Kappa Phi, the national academic honor society; Pi Alpha Alpha, the national honor society for public affairs and administration; and the American Society for Public Administration.



Ms. Kim Moreland

Associate Vice Chancellor, Director
University of Wisconsin - Madison

Member Biographies

Kim Moreland is the Associate Vice Chancellor for Research and Sponsored Programs at the University of Wisconsin - Madison. She has an MBA from the University of Kansas.

Kim is on the Board of Directors of the Council on Governmental Relations and serves as chair of the Costing Policies Committee. She is also on the Board of the Federal Demonstration Partnership and serves as chair of the Finance Committee. She is a lecturer for Johns Hopkins University in the Master's degree program in Research Administration.

Kim has served as a member of the National Council of University Research Administrators (NCURA) national and international teaching faculty and the national peer review faculty. She is a recipient of NCURA's national Award for Distinguished Service in Research Administration and the Award for Outstanding Achievement in Research Administration. She is a former president of NCURA, and she currently chairs the NCURA Select Committee on Global Affairs.



Dr. Theresa A. Pardo

Director, Center for Technology in Government
University at Albany

Theresa A. Pardo, Ph.D., serves as Director of the research institute CTG UAlbany at the University of Albany, State University of New York. She is also a full research professor in Public Administration and Policy at Rockefeller College of Public Affairs and Policy. Under her leadership, CTG UAlbany works closely with multi-sector and multi-disciplinary teams from the U.S. and around the world to carry out applied research and problem solving projects focused on the intersections of policy, management, and technology in the governmental context. CTG UAlbany has broken ground in information and knowledge sharing, smart cities, open government and open data, e-government, social media policy, and mobile technologies and human services delivery.

Dr. Pardo serves as OpenNY Adviser to New York State's Governor Andrew Cuomo and is Chair of the U.S. Environmental Protection Agency's National Advisory Committee. She serves as a member of the User Working Group of the NASA Socioeconomic Data and Applications Center (SEDAC), the Business and Operations Advisory Committee of the U.S. National Science Foundation and the Steering Committee of the U.S. National Science Foundation funded North East Big Data Innovation Hub. Dr. Pardo is founder of the Global Smart Cities Smart Government Research Practice Consortium and has served on numerous UN Expert Groups on a range of digital government and sustainable development related issues.

In 2019 Dr. Pardo was elected a Fellow of the National Academy of Public Administration. She serves as an International Advisor to the E-Government Committee for the China Information Association and in 2016, served as the first female Chair of Oman's Excellence in E-Government Award Jury. Dr. Pardo is also a member of the Series Steering Committee for the International Conference on Theory and Practice of Electronic Governance (ICEGOV), a United Nations University initiative. She is a Past-President of the Digital Government Society.

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Dr. Pardo serves on a number of editorial boards for top journals in the fields of digital government and public administration including *Government Information Quarterly* and *Public Management Review*. She is co-developer of the top ranked academic program in Government Information Strategy and Management offered by Rockefeller College at the University at Albany, has published over 200 articles, research reports, practice guides, book chapters and case studies and is ranked among the top five scholars in her field in terms of productivity and citations to her published work.

In 2018 and 2019, Dr. Pardo was named as one of the Top 100 Influencers in Digital Government globally. In 2019 she received the Distinguished Service Award from the Digital Government Society. She is a recipient of *Government Technology Magazine's* Top 25 Doers, Drivers, and Dreamers Award which recognizes individuals throughout the U.S. who exemplify transformative use of technology that is improving the way government does business and serves its citizens. Dr. Pardo is a recipient of the University at Albany's Distinguished Alumni Award, the University at Albany's Excellence in Teaching Award, and the Rockefeller College Distinguished Service Award.

Pardo holds a Ph.D. in Information Science from the University at Albany, SUNY.



Dr. Joel Parriott

Deputy Executive Officer and Director of Public Policy
American Astronomical Society

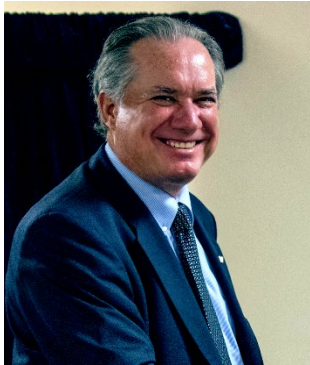
Dr. Joel Parriott is the Deputy Executive Officer and Director of Public Policy at the American Astronomical Society (AAS). In this capacity, he leads the Society's public policy and advocacy efforts and serves on the senior management team having overseen the scholarly journal, scientific conference, and membership departments.

Joel brought to the AAS a decade of experience at the White House Office of Management and Budget (OMB), where he was responsible for overseeing the budgets and management initiatives for the National Science Foundation (NSF) and the Department of Energy's Office of Science (DOE/SC) and on behalf of the President. He also represented OMB on numerous National Science and Technology Council working groups and subcommittees under the Council's Committee on Science.

Prior to his service at OMB, Joel was a senior program officer at the National Academies of Science, Engineering, and Medicine, where he staffed numerous high-level advisory committee studies on policy issues in physics and astronomy for NSF, DOE/SC, and NASA.

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Joel earned his doctorate in astronomy and astrophysics at the University of Michigan. He also holds a Certified Association Executive (CAE) designation from the American Society of Association Executives.



Bill Valdez

President

Global Innovation Associates LLC

Bill Valdez is a recognized science and technology thought leader who has successfully led science and technology programs in the Federal government and made significant contributions to the effectiveness of government programs to deliver improved mission value to American taxpayers.

Bill retired from the Federal government in 2014 and became an adjunct faculty at American University's Key Leadership Program, and began consulting with public and private sector organizations to provide strategic advice on a wide ranging set of issues, including science policy and government modernization/improvement.

Most recently, Bill was the President of the Senior Executives Association (SEA), where he focused on strengthening the Senior Executive Service (SES) through legislative and policy initiatives, building a leadership pipeline for the Executive Branch, working with a broad range of good government groups to modernize the civil service, and restoring a public service ethic to the Federal government.

Bill was a co-editor/author of the *Handbook of Federal Government Leadership and Administration: Transforming, Performing, and Innovating in a Complex World*, and was an author of the IBM Center for the Business of Government's recent report, *Preparing the Next Generation of Federal Leaders: Agency-Based Leadership Development Programs*.

His career with the Department of Energy spanned over 20 years and he held the positions of Director, DOE Office of Economic Impact; DOE's Chief Diversity Officer; Director of Business Services, Office of Energy Efficiency and Renewable Energy; and Director of Planning and Analysis, and Director for Workforce Development within DOE's Office of Science. During this time, Bill became expert in the both programmatic and policy development, along with the operational side of the house including HR, procurement and IT.

From 2005-2014 Bill was the Co-Chair of the Science of Science Policy Interagency Working Group. This IWG sparked a government-wide effort to understand the impact of Federal government S&T programs and to develop tools, data and analytical techniques that are in common use at Federal science agencies today. Agencies are also using those tools and data to provide Congress with

Member Biographies

better budget proposal analyses and to inform taxpayers about the important benefits S&T programs bring to our Nation.

In addition, Bill was a senior advisor at the White House Office of Science and Technology Policy (OSTP) in the 1990s. Bill was awarded the Presidential Rank Award (meritorious) in 2007 and was elected as a Fellow of the American Association for the Advancement of Science (AAAS) in 2006.

Prior to working at DOE, Bill worked as a Senior Project Manager in private industry where he provided strategic planning services to Asian and European multinational corporations. He also was a reporter in Austin, Texas.

Bill received a Bachelor of Arts from the University of Texas and his Master of Arts in International Economics and Energy Policy from the Johns Hopkins School of Advanced International Studies.



Ms. Pamela A. Webb

Associate Vice President for Research
University of Minnesota

Pamela A. Webb is the Associate Vice President for Research at the University of Minnesota. In this capacity, she is responsible for pre-award and post-award non-financial services supporting about \$863M in research awards annually, as well as negotiation of F&A rates, effort reporting, and research policy and education. Prior to her appointment at the University of Minnesota in 2007, Pamela led pre-award and post-award administration in the Office of Sponsored Research at Stanford University. Pamela has been involved in research administration for 36 years, including 12 years at the University of California-Los Angeles as well as UC Santa Barbara, Northwestern University, and Stanford.

Pamela has served as a national officer of her professional association (the National Council of University Research Administrators, NCURA) and served two terms on NCURA's Board of Directors. In 2009, she received NCURA's *Distinguished Service* award, and in 2016, she received NCURA's highest honor, the *Outstanding Achievement in Research Administration Award*.

She currently chairs the Council of Governmental Relations Board of Directors, and previously served as chair of their Research Compliance and Administration Committee. She has co-chaired a national conference on Electronic Research Administration; serves as a reviewer for NCURA's Peer Review program; and as faculty for their national Leadership Workshop. Pamela previously served on the Federal Demonstration Partnership Executive Committee and currently co-chairs their Expanded Clearinghouse initiative (an institutional profile system designed to expedite subaward risk assessment and monitoring.) Pamela is a frequent presenter at the national and regional level, specializing in subawards, policy development and deployment, as well as helping research administrators learn the complex regulatory environment.



Maureen E. Wylie

*Federal Chief Financial Officer
(Retired)*

Maureen Wylie currently serves on the Board of Directors for SquashWise, which focuses on academics, athletics, and opportunity for Baltimore's youth, as a part of the Squash and Education Alliance. She is also a member of the Partnership for Public Service Senior Advisors to Government Executives (SAGE) program.

Ms. Wylie served as Chief Financial Officer of the U.S. Nuclear Regulatory Commission from July 2014 to December 2019, when she retired and ended her nearly 35-year career in the federal government. She was responsible for all budgeting and financial management for the agency, as well as a critical leader for its Project Aim and Transformation efforts.

While at NRC, Ms. Wylie spear headed efforts to create authoritative data not just for financial management, but also for nuclear reactor and materials program management. She conducted multi-year business process change initiatives that transformed how the agency charged fees to licensees and made the application of data analytics possible. As a member of the government-wide Chief Financial Officers' Council, Ms. Wylie served as its representative on the Technology Business Management Executive Steering Committee (ESC), leading the first full adoption of information technology cost transparency in support of that Cross-Agency Priority (CAP) goal. She was also integral to the Financial Data Transformation (ESC), bringing together the Council's data and information efforts associated with several CAP goals and with efforts to improve transparency in budgeting, financial management, and performance goals.

She previously served as the Chief, Resource and Operations Management for the National Oceanic and Atmospheric Administration (NOAA) in the Department of Commerce from January 2012 through July 2014. She was the principal executive for all matters related to the NOAA's Corporate Services. Prior to that assignment, she also served as NOAA's Chief Financial Officer from 2004. During that period, she led financial management and budgeting for the largest bureau of the Commerce Department as it responded to increasing mission demands in its critical weather, satellites, and fisheries regulatory functions.

Ms. Wylie also served as the G8, Resources Army National Guard (ARNG), responsible for resource management for the Army National Guard from October 2001, capping nearly twenty years as a Department of the Army civilian in a variety of resource management, base realignment and closure, and facilities management roles. Special assignments during this period included stints at HQ, US European Command J-5, the Congressional Research Service, and the House Armed Services Committee Staff.

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A recipient of many awards while with the Army, including the Pace Award for leadership in 1994, she received a Distinguished Executive Presidential Rank Award in 2009 and the NOAA Administrator's award in 2011. Ms. Wylie is the recipient of the Association of Government Accountants 2020 Elmer Staats Award, which recognizes a federal leader who exemplifies excellence in government financial management, outstanding leadership, high ethical standards, and innovative management.

She began government service in 1985 as an Army Presidential Management Intern. Ms. Wylie graduated with honors from Rutgers University with a BA in Political Science in 1982, from Yale University with an MA in International Relations in 1984; and was a 1999 Distinguished Graduate of the Industrial College of the Armed Forces, with an MS in National Resource Strategy. She is also a member of the 1997 class of the Defense Leadership and Management Program and a 2003 graduate of the Federal Executive Institute.

Recommendations made in the Fall 2019 Business and Operations Advisory Committee

Title	Meeting Date	Fiscal Year	Recommendation	NSF Contact(s)	Status	Explanation/Outcome	Theme
Results from the 2019 Federal Employee Viewpoint Survey (FEVS)	Fall 2019	FY20	Field visits to other agencies (NASA specifically pointed out) who are good at improving employee engagement; Find a way to increase response rates - look at organizational response rates and address the lowest organizations. Further promote participation rate by linking actions taken to the survey results, running promotional events, and getting the buy-in of first level supervisors. In response to how organizations successfully deal with increasing workplace demands when staff already see their workload as being difficult to complete, BOAC members suggested three things to consider: 1) look at how to automate menial tasks to lessen workload, 2) take a critical look at processes, and 3) engage division by division on workload issues rather than holding out to the entire NSF that the workload problem can be solved.	Curtin, Patrick; Forgacs, Lauren	OPEN - Partially Implemented	Field visit to NASA and/or other agencies is currently on hold due to Covid-19, and will be revisited in the coming months. NSF's Robotic Process Automation (RPA) initiative is looking at ways to automate menial tasks to lessen workload and through this initiative is taking a critical look at processes in collaboration with selected Directorates/Offices. As part of NSF's annual Engagement Action Planning, workload and other issues are being examined at the Directorate/Office level and Division level, where appropriate. NSF already has one of the highest response rates across the entire federal government. Nevertheless, we have met with individual directorates and offices to discuss how to boost response rates by communicating how the FEVS is used in those directorates and offices to improve the workplace and work/life.	Change Management; Human Resources
Balancing Risk, Mission and Compliance	Fall 2019	FY20	Focus on stakeholder value, rather than simply mission performance, e.g.: results - What am I going to do for you; return - resources needed; and risk - the balancing act between stewardship and results. Suggestion to implement an oversight incentive structure to address the problem of excessive oversight.	Wynnyk, Alex; Bell, Mark; Korsmo, Fae	CLOSED - Not Implemented	NSF, in collaboration with the OIG, will continue to focus its oversight activities on its highest risk recipients. NSF will also continue its work with OSTP in its efforts to reduce administrative burden.	Audit and Oversight
Balancing Risk, Mission and Compliance	Fall 2019	FY20	An alternative approach (implemented by NIH) may be fixed amount grants tied to acquisition thresholds of \$250K, which may reduce administrative burden to PI's and NSF processing and tracking staff.	Wynnyk, Alex; Bell, Mark; Korsmo, Fae	CLOSED - Partially Implemented	NSF selects the most appropriate award instrument based on several factors. NSF grants fixed price awards to all SBIR and STTR Phase I & II recipients. NSF will continue to assess the viability of using fixed price awards in the future.	Award Administration/Oversight
Blockchain	Fall 2019	FY20	Agencies are afraid to embrace technology because of a fear that they will be audited and lose money. To address this, NSF should consider bringing in the IG to show them how it works.	Wetklow, Mike; Aronson, Dorothy	CLOSED - Fully Implemented	NSF briefed the NSF OIG at an all hands meeting on our approach for disruptive technologies and we recently established a BFA innovation lab to help with related change management. In addition NSF is planning an additional deeper dive with senior leaders of the NSF OIG at a Stewardship Collaborative Meeting. Finally NSF also held a governmentwide innovation demonstration with OMB and the nationwide grant community to help with blockchain myth busting.	Information Technology; Financial Management; NSF, BFA or OIRM Operations.
Blockchain	Fall 2019	FY20	FDP is interacting with Treasury, universities, and this is a dry run for blockchain. PIs need to be on board or there will not be grants to manage. PIs may be doubtful that proposals would be evaluated fairly. Chezian [NSF] responded that right now this is just between agencies at a high level. Before we take this to PIs we need to develop new terminology. There needs to be a governance process that is actually built on top of this external community.	Wetklow, Mike; Aronson, Dorothy	OPEN - In Review	NSF will consider this recommendation when we are further along and we have been including University reps and soliciting ideas from NSF program offices for potential future use cases.	Information Technology; Financial Management; NSF, BFA or OIRM Operations.
Blockchain	Fall 2019	FY20	Members wondered if blockchain facilitates problem solving where individual agencies have more information individually than the federal government at a high level, and whether blockchain could reduce reviewer burden. Instead of sending something out for multiple reviews, perhaps coordination through blockchain would allow one review instead of multiple ones. Disciplines that have multiple places to apply within the federal government are healthier than those that have just one. It would be useful in this case to make sure to be super clear as to what efficacy is being sought and what value is being provided.	Wetklow, Mike; Aronson, Dorothy	OPEN - Partially Implemented	Treasury, NSF, and NIST are about to launch a second follow on demonstration project with Universities and OMB to develop a blockchain lab for Universities to experiment with Blockchain and learn more about how it can help with problem solving and burden reduction.	Information Technology; Financial Management; NSF, BFA or OIRM Operations.
State of the BOAC: business intelligence	Fall 2019	FY20	Building business intelligence is something NSF really needs to look at moving forward. The BOAC could stand to use a sub-committee to verify implementation of things surfaced by following up in a regular way.	Rich, Jeff; Carney-Nunez, Charisse	CLOSED - Partially Implemented	NSF is making a significant technology investment over the next few years in area such as artificial intelligence, data analysis and intelligent automation of its grant systems. In addition, NSF has devoted resources to evaluation and assessment in the Office of Integrative Activities. No consideration has been given to this point to a business intelligence subcommittee---this is out of the Committee's scope.	NSF, BFA or OIRM Operations
State of the BOAC: value based management	Fall 2019	FY20	Think about not continuing on ERM but lead the Federal Government in Value-Based Management (VBM).	Rich, Jeff; Carney-Nunez, Charisse	CLOSED - Not Implemented	NSF continues to direct its efforts toward ERM, especially in light of COVID-19 and the increased risk brought to many of its business processes. Moving to a federal leader in VBM is not likely in this environment.	NSF, BFA or OIRM Operations
State of the BOAC: building entry	Fall 2019	FY20	Change will be the focus of many future discussions, and in order to prepare for change management discussions NSF should consider: Reviewing building entry process. (Background: The process of entering this building is absurd and invasive. Once we are naked and afraid, we are prodded to get our stuff and get out of the way. It is concerning how invited guests are treated in security.)	Rich, Jeff; Carney-Nunez, Charisse	CLOSED - Not Implemented	NSF's resources in regards to building management have been and will be focused on the COVID-19 effects on operations. The building entry process will likely be changed in many ways due to the pandemic. Thus, this recommendation has essentially been overtaken by events.	NSF, BFA or OIRM Operations; Change Management

Recommendations made in the Fall 2019 Business and Operations Advisory Committee

Title	Meeting Date	Fiscal Year	Recommendation	NSF Contact(s)	Status	Explanation/Outcome	Theme
NSF's Leadership Development Program -soft skill development	Fall 2019	FY20	NSF needs to research the soft skills that need to be developed in the candidates selected for the LDP. It is difficult to train soft skills, but it is absolutely necessary to train them. For LDP candidates to have a successful experience, NSF needs a clear definition of requirements for success and a path to reach those requirements. What does high potential mean to NSF? NSF must select the coaches and mentors that embody the soft skills that NSF has identified. "Coaching is unilateral - it is all about you." It is said that those we want to follow are the ones that embody soft skills we want to follow.	Cox, Macey; Deis, Doug; Bojko, Tracy	CLOSED - Partially Implemented	All of this was done as part of the program; either as selection criteria or provided as skill-based learning activities during the program. The Academy continues to evaluate the competency model and specific emphasis placed on both the Aspiring Supervisor and Aspiring Executive programs. The comprehensive LDP evaluation and additional feedback from participants and senior leaders via leadership interviews conducted by the graduates of the first Aspiring Executive program will inform the minor revisions we plan to make to the curriculum in the next iteration. The Academy recognizes the significant role that the mentor plays in the developmental process of the LDP participants and is considering ways to further improve the mentor/mentee matching process. This may include a separate mentor/mentee matching timeline and training (outside of the agency-wide program) specific to the needs of these individuals.	Human Resources
NSF's Leadership Development Program - experiential activities	Fall 2019	FY20	Leadership development programs must adapt to include experiential learning activities, such as business simulations or gaming, to drive engagement and meaningful skill development. Skills needed for leadership have also changed and more complex and adaptive thinking abilities are needed.	Cox, Macey; Deis, Doug; Bojko, Tracy	CLOSED - Partially Implemented	Most of this was done as part of the comprehensive set of learning activities included in the program. The Academy is currently exploring ways in which the program can be enhanced through the addition of experiential learning activities such as a capstone project.	Human Resources
NSF's Leadership Development Program - matching detailee	Fall 2019	FY20	Look at formal progression, an important tool on how to build capacity within the Agency. Also, participants must understand that the skill set gained is going to help them even if there is not subsequent upward movement. The detailee component is important and there needs to be tracking to understand the relationships and how to connect the right people to the details that benefit the future of NSF and Science Policy. The return to the individuals in the Program is incredibly important but also need to look at the Program side and how they are positioning the Agency.	Cox, Macey; Deis, Doug; Bojko, Tracy	CLOSED - Fully Implemented	All of this was made clear to participants from the outset. All were able to find meaningful details and contribute to NSF's mission. Participants report that they continue to use the skills developed during the program in all of their roles.	Human Resources
NSF's Leadership Development Program - candidate selection	Fall 2019	FY20	NSF must manage expectations, select people rather than relying on self-identification, and review applications to make sure candidates are aligned with future organizational needs. noted the importance of succession planning, and the challenge of moving from outside hiring to developing and hiring internal candidates. Many leaders are reluctant leaders - Make sure to identify the reluctant individuals. Consider creating an alumni association.	Cox, Macey; Deis, Doug; Bojko, Tracy	CLOSED - Partially Implemented	This was a competitive program, and while managers encouraged high potential staff members to apply, the individuals still needed to be willing to apply and go through the selection process. The two cohorts continue to meet and work together as a de facto alumni association and they are strongly committed to supporting each other's growth and development.	Human Resources

Office of Budget, Finance, and Award Management (BFA) Update
B&O Advisory Committee Meeting Spring 2020
(as of June 15, 2020)

Topics:

- BFA Senior Staff Changes
 - BFA Response to COVID-19 Pandemic
 - FY 2020 Financial Statement Audit
 - Advanced Monitoring and Audit Resolution
 - FY 2020 Management Challenges
 - Digital Accountability and Transparency Act
 - Government Accountability Office Review of Projects Funded from NSF's MREFC Account
 - Program Management Improvement Accountability Act
 - Enterprise Risk Management
 - Government Invoicing
 - Unique Entity Identifier Initiative
 - Performance
 - Budget Summary
-

➤ **BFA Senior Staff Changes**

- *Division of Acquisition and Cooperative Support (DACs)* – In March 2020, Keith Boyea was selected as the Deputy Division Director/Head of the Contracting Activity, a new position in DACs. Keith previously served as the Contracts Branch Chief.
- *Division of Financial Management (DFM)* – In March 2020, Jesse Simons was hired as Branch Chief, Cash Management Branch. Prior to coming to NSF, Mr. Simons led KPMG's Financial Information and Technology Management federal service offering, which focuses on helping agencies integrate their financial data with critical business processes to enhance financial reporting capabilities and increase regulatory compliance.

➤ **BFA Response to COVID-19 Pandemic**

The following is a list of BFA's activities to address issues arising from the COVID-19 pandemic:

- As of June 14th, NSF has awarded 481 RAPID/EAGER grants totaling \$68,881,600, or about 90 percent of NSF's Coronavirus Aid, Relief, and Economic Security Act (CARES Act) FY 2020 supplemental funding. In addition, \$2,377,600 is committed, but not yet awarded.
- Led by NSF's Policy Office in BFA, NSF published [guidance](#) to implement flexibilities authorized by [OMB Memorandum M-20-17](#), *Administrative Relief for Recipients and Applicants of Federal Financial Assistance Directly Impacted by the Novel Coronavirus (COVID-19) due to Loss of Operations*. The guidance addressed the significant volume of

COVID-19-related inquiries from the NSF community. NSF implemented time-limited administrative relief flexibilities applicable to NSF proposers and awardees affected by the loss of operational capacity and increased costs due to the COVID-19 pandemic. Provided input to OMB, through CFO Council channels, recommending the extension of flexibilities until September 30, 2020. See Appendix A for this guidance.

- Also led by the Policy Office, NSF has issued [guidance](#) on NSF's implementation of OMB Memorandum ([M-20-20](#)), entitled, *Repurposing Existing Federal Financial Assistance Programs and Awards to Support the Emergency Response to the Novel Coronavirus (COVID-19)*. This guidance helps address questions regarding donations of items/resources from NSF awards.
- Engaged NSF partners to create and disseminate FAQs for [NSF Proposers and Awardees](#) and [NSF Panelists](#), as well as [Guidance for Major Facilities and Contracts](#). These FAQs are updated regularly.
- Supported NSF program offices in drafting, editing, and clearing three Dear Colleague Letters related to [Research on Coronavirus \(COVID-19\)](#).
- Conducted virtual outreach to assure grantees of continued payments, through grantee email blasts, updates to NSF's interpretation of M-20-17, and ACM\$ system notifications, as well as to engage on other important policy-related topics.
- Conducting planned annual grant monitoring activities with additional flexibilities afforded to grantees under the pandemic.
- Monitoring daily payment activities for trends under reduced grantee operating capacity, and reporting numbers to BFA leadership. DFM has continued to process an average of 83 payments per day, with daily volumes ranging from \$10 million to \$43 million.
- Developed the 'BFA Financial Indicators – COVID-19' dashboard to assist with oversight, decision-making, and reporting around award obligations and outlays for COVID-19 research funded under the CARES Act and NSF base appropriations. The dashboard allows NSF users to explore COVID-19 grant data and analyze financial metrics related to these awards and their recipients.
- Collaborated with OIRM to expedite loading new COVID-19 funding codes into iTRAK and eJacket to accelerate RAPID Awards.
- Communicate on a periodic basis with NSF's Contracting Officer's Representative community to ensure consistent and coordinated information is provided to NSF contractors during the quarantine period.

➤ **FY 2020 Financial Statement Audit**

In March 2020, the Office of Inspector General's (OIG) audit firm, Kearney & Company, held an entrance conference to begin the FY 2020 financial statement audit. Management and the auditors emphasized the need for collaboration and flexibility in executing the audit during the COVID-19 pandemic, while prioritizing the health and safety of staff and the mission support work of the agency.

The financial statement audit is underway and proceeding on schedule.

➤ **Advanced Monitoring and Audit Resolution**

BFA continues to carryout planned FY 2020 advanced monitoring and audit resolution activities that provide support and oversight to awardees. As of June 9, 2020, 21 of 30 advanced monitoring site visits have been completed. Of the remaining nine previously scheduled site visits, visits to four institutions have been cancelled and will be reassessed in the next fiscal year. The other five visits have been rescheduled for June and July as virtual site visits. BFA will continue to provide flexibility with due dates for awardees impacted by COVID-19.

➤ **FY 2020 Management Challenges**

In February 2020, NSF kicked off its annual initiative to report progress on the OIG's Management Challenges with a meeting with the Chief Financial Officer, Management Challenge Owners, and other senior agency staff members. This year's initiative has been incorporated as a subset of NSF's rapidly maturing Enterprise Risk Management (ERM) activities and is being coordinated with that work to reduce the possibility of additive work for NSF staff. BFA is working with Deputy Challenge Owners and other staff to support risk-based analyses required for successful progress reporting. NSF activities relating to several of the Management Challenges have been adjusted or reprioritized due to pandemic response actions. Deputy Challenge Owners will ensure coordination with ERM on broad activities and COVID-19 considerations, as appropriate. BFA staff are currently reviewing submitted draft progress reports from the Management Challenge teams and will engage in a period of comment, coordination, and updating to finalize the progress reports for submission to OIG in July.

The FY 2020 Management Challenges are:

- 1) Managing Major Multi-User Research Facilities
- 2) Meeting *Digital Accountability and Transparency Act of 2014* (DATA Act) Reporting Requirements
- 3) Managing the *Intergovernmental Personnel Act* (IPA) Program
- 4) Managing the Antarctic Infrastructure Modernization for Science (AIMS) Project
- 5) Encouraging the Responsible and Ethical Conduct of Research
- 6) Mitigating Threats Posed by Foreign Government Talent Recruitment Programs

Emerging:

Managing the Enterprise-wide Internal Control Environment

(Note: an "Emerging" challenge is an issue raised by the OIG as an "area to watch" that could be elevated to a formal Management Challenge in future years.)

➤ **Digital Accountability and Transparency Act (DATA Act)**

NSF is currently working on implementing the requirements of OMB Memorandum M-20-21 and the DATA Act Information Model Schema 2.0. With these requirements, NSF will transition to providing the monthly DATA Act submission starting in July 2020, including detailed reporting around COVID-19 grants and contracts funded under the CARES Act. NSF's DATA Act Working Group is in the process of updating its policies, procedures, and controls to continue to report high quality data to the public under the new monthly process.

In April 2020, NSF also received a memo from OIG resolving all recommendations in OIG Report No. 20-2-003, “Fiscal Year 2019 Implementation of the Digital Accountability and Transparency Act of 2014 Performance Audit.” The memo represents OIG’s acknowledgement that the actions NSF described in its CAP will sufficiently address four recommendations in the audit report relating to the three findings. OIG will not close the recommendations until it can validate NSF completion of these actions after the next OIG audit in FY 2021. The resolution memo is the result of consistent and successful effort by NSF and OIG staff to reach concurrence and common understanding.

➤ **Government Accountability Office (GAO) Review of Projects Funded from NSF’s Major Research Equipment and Facilities Construction (MREFC) Account.**

FY 2019/2020 GAO Review

The engagement with GAO on major facilities oversight continues based on Congressional report language (Senate Report 115-275 and House Report 114-605) and will evaluate the following:

- Comparison of the cost and/or schedule estimates for one or more large facilities projects under construction with GAO best practices for cost or schedule estimating.
- Assessment of the earned value management data for one or more large facilities projects under construction.
- Review NSF plans for mid-scale research infrastructure investments under the MREFC account.

The April 2020 GAO report entitled *National Science Foundation: Cost and Schedule Performance of Major Facilities Construction Projects and Progress on Prior GAO Recommendations (GAO-20-268)* had no new recommendations. GAO’s evaluation of NSF’s revised policies and procedures on cost analysis led them to conclude in the report that they consider GAO’s good practices to be fully implemented. NSF continues to make progress on the remaining corrective actions from previous reports.

FY 2020/2021 GAO Review

The FY 2020/2021 engagement letter from GAO is still pending.

➤ **Program Management Improvement Accountability Act (PMIAA)**

NSF remains engaged with the Office of Management and Budget (OMB), the Office of Personnel Management (OPM), and other agencies on implementation of PMIAA. Earned Value Management metrics for NSF’s major facilities projects in construction are being routinely provided to the Office of Federal Procurement Policy (OFPP) in support of a federal project status dashboard pilot. NSF has developed competency and proficiency level definitions specific to NSF’s use of Integrated Project Teams for oversight. The resulting workforce analysis, which will help identify and address any competency gaps for the major acquisition and major facilities portfolio, is planned for completion in August 2020. The entire effort, including the development of training plans, will be completed in FY 2021. NSF is considering use of OPM’s proposed program/project management job “identifier.” This

entire effort aligns with GAO report recommendations from its 2018/2019 review of major facilities oversight, [GAO-19-227](#). Once the major facility/acquisition portfolio has been addressed, the agency will begin considering application of PMIAA to other significant programs based on OMB and agency priorities.

NSF's 2020 Strategic Review has completed an evaluation of strategic elements related to the Development and Design Stages in support of improved long-term portfolio planning as part of PMIAA's annual portfolio review requirement. Implementation strategies for the recommendations are being developed.

Background: In December 2016, the PMIAA was signed into law, and NSF submitted its implementation plan in November 2018. PMIAA aims to improve program and project management practices within the Federal Government. PMIAA requires that agencies conduct annual portfolio reviews to ensure major programs are being managed effectively, and that OMB conducts reviews of areas identified by GAO as "high risk." OMB's current portfolio focus is on major acquisitions, and NSF currently has no "high risk" portfolios.

➤ **Enterprise Risk Management (ERM)**

During FY 2020, NSF continues to mature its ERM community of practice. The agency formalized its ERM governance structure and practices, and, in February, NSF kicked off its first "Risk Captains" meeting. The Risk Captains are leveraging NSF's improved ERM organizational governance structure to support consistency in how risk information flows up through programs and offices to NSF leadership for collaboration on enterprise-level risks.

With the advent of COVID-19, the agency's ERM community of practice is applying ERM concepts to organize NSF's thinking about the threats and opportunities to its mission. The Risk Captains have also started looking beyond the current crisis, to consider future risks to NSF's mission. The Agency will be issuing guidelines for risk profiles that will incorporate key COVID-19 areas. In addition, due to the potential risks caused by the increase in funding through the CARES Act, NSF is developing a new baseline for improper payment risk assessment.

➤ **Government Invoicing (G-Invoicing)**

G-Invoicing is the Government's long-term sustainable solution to improve the management and accounting of Interagency Agreements (7600 A/B, MIPR, 1611). G-Invoicing impacts NSF's Incoming and Outgoing Interagency Agreements, and will provide an online, user-friendly platform to support the management and transparency of these agreements. G-Invoicing aligns with the Renewing NSF initiative's pillars: making information technology work for all; and streamlining, standardizing, and simplifying processes and practices.

Treasury revised the mandated G-Invoicing implementation date from June 30, 2021 to October 1, 2022. The extension provides additional time for:

- Agencies to prepare for change management and prioritize competing initiatives and resource adequately (e.g., new COVID-19 requirements);

- Treasury to implement G-Invoicing enhancements;
- Software providers to develop agency identified enhancements and for agencies to prepare for consumption; and
- Treasury to explore potential conversion tools to assist agencies' conversion of open agreements into G Invoicing.

NSF's G-Invoicing project team continues to work with Treasury and our iTRAK system integrator to design an implementation strategy for NSF, as well as engage NSF stakeholders throughout the project.

➤ **Unique Entity Identifier (UEI) Initiative**

All organizations that do business with the government register with a centralized system called the System for Award Management (SAM). All federal agencies use SAM for managing awards, reporting information, and making payments. Currently, SAM uses the proprietary Dun & Bradstreet Data Universal Numbering System (DUNS number) to organize this information. GSA is replacing the proprietary DUNS number with a government-owned number called the UEI. The transition to the UEI was slated for December 2020, but it has been delayed to a date to be determined. NSF and most Federal agencies support a December 2021 implementation date. UEI will impact centralized systems, like SAM, and agencies' systems that use organization identifiers. NSF is working closely with the federal community on how to meet this challenging deadline.

➤ **Performance**

In mid-February, as part of the FY 2021 Budget Request to Congress, NSF published two of its annual deliverables under the Government Performance and Results Act: the [FY 2019 Performance Report and the FY 2021 Performance Plan](#). One thread running through both documents is the Agency Priority Goal (APG) on Partnerships. The Partnership APG successfully completed its first two-year period of performance in FYs 2018-2019, and the agency decided to renew it for a second performance cycle during FYs 2020-2021. The current version of the Partnerships APG is milestone-oriented, unlike the 2018-2019 version which aimed to increase formal partnerships by 5 percent. The 2020-2021 goal aims to develop an agency-wide partnerships strategy, combining the efforts of the Renewing NSF (internal process improvement) team on Partnerships with the previous APG team. The team aligns closely with the Office of the Director and the National Science Board to ensure a coherent partnership approach across NSF.

Two Strategic Reviews took place in the spring of 2020, with only slight delays due to the agency's transition to full-time telework. NSF submits the Summary of Findings to OMB on June 26, 2020 and expects to receive written OMB feedback over the summer in advance of the 2022 OMB Submission in September.

➤ **Budget Summary**

FY 2020 Appropriations

- The full year appropriations bill supporting NSF was passed on December 20, 2019.
- NSF received \$8.278 billion, an increase of \$1.212 billion compared to the FY 2020 Request and \$203 million above the FY 2019 Enacted level.
- NSF’s FY 2020 Current Plan, which provides allocations below the account level was submitted on February 12, 2020.
- The Current Plan includes a transfer to AOAM from R&RA and EHR, illustrated in the table below, in order to fund increased Personnel Compensation and Benefits costs and other administrative accounts that were not known at the time of the FY 2020 Request.
- Both the House and Senate approved the FY 2020 Current Plan.

FY 2019 and FY 2020 NSF Account Summary Table

(Dollars in Millions)

Account	FY 2019 Plan	FY 2020 Enacted	FY 2020 Plan	FY 2020 Plan change over	
				FY 2020 Enacted	FY 2019 Plan
R&RA	\$6,504.5	\$6,737.2	\$6,719.8	-\$17.4	\$215.3
EHR	922.0	940.0	937.6	-2.5	15.6
MREFC	295.7	243.2	243.2	-	-52.5
AOAM	333.0	336.9	356.8	19.9	23.7
NSB	4.4	4.5	4.5	-	0.1
OIG	15.4	16.5	16.5	-	1.2
Total	\$8,075.0	\$8,278.3	\$8,278.3	-	\$203.3

NSF Appropriations: Research & Related Accounts (R&RA), Education & Human Resources (EHR), Major Research Equipment & Facilities Construction (MREFC), Agency Operations and Award Management (AOAM), National Science Board (NSB), and Office of Inspector General (OIG)

CARES Act FY 2020 Supplemental Appropriations

- Emergency funding provided, “to prevent, prepare for, and respond to coronavirus.”
- NSF received \$76 million in supplemental funding as part of the CARES Act, illustrated in the table below. Using existing authorities, \$5 million of the R&RA supplemental appropriation was transferred to the EHR account.
- Funding is available through September 30, 2021.
- Research supported by the CARES Act is intended to align with the following research areas:
 - Improving our understanding of SARS-CoV-2, the coronavirus causing COVID-19
 - Developing a predictive understanding of the spread of the virus
 - Enabling approaches that mitigate the negative impacts of COVID-19 on public health, society, and the economy

CARES Act Supplemental Appropriations

(Dollars in Millions)

NSF Appropriations by Account	Amount
Research & Related Activities	\$75
<i>Fast-Track & Transformational Research</i>	<i>70</i>
<i>Approved Transfer to Education & Human Resources Account</i>	<i>5</i>
Agency Operations & Award Management	1
Total	\$76

FY 2021 Budget Request to Congress

- NSF total for FY 2021 is \$7.741 billion
 - \$675.4 million or 9.6 percent above the FY 2020 Request
 - -\$537 million or 6.5 percent below the FY 2020 Plan
 - -\$408.8 million or 5 percent below the FY 2019 Actual
- In February, NSF briefed staff from the House and Senate Appropriations Subcommittees on Commerce, Justice, and Science Appropriations.
- In March, NSF hosted briefings with House Committee on Science, Space, and Technology staff.
- Currently, no hearings have been scheduled on the FY 2021 Budget Request.
- *Budget Request highlights*
 - Continues NSF’s commitment to basic research that contributes to human knowledge and provides the scientific understanding necessary to spur innovation across all fields of science and engineering (S&E).
 - In FY 2021, NSF expects that over 90 percent of the annual budget will be used to fund research and education grants and research infrastructure in the science and education communities.
 - In FY 2021, NSF expects to invest \$5.02 billion dollars or 65 percent of NSF’s total budget, in basic research.
 - Supports approximately 8,100 new research grants.

- Prioritizes the Administrations’ Industries of the Future (IoT) initiative that supports breakthrough discoveries and workforce development in the following areas: Artificial Intelligence, Quantum Information Science, Advanced Manufacturing, Advanced Wireless, and Biotechnology.
- Continues to support the [Big Ideas](#), research agendas that identify areas at the frontiers of S&E that promise to be among the most transformative in the coming decade. Nearly \$350 million will be invested across the agency to support the development of the foundational science and technology that will be necessary to propel the Big Ideas forward.
- In FY 2021, the Convergence Accelerator(CA) will initiate new CA track projects and continue support for existing tracks that focus on *Harnessing the Data Revolution for the 21st-Century Science and Engineering* and the *Future of Work at the Human-Technology Frontier*. The CA framework rewards high-risk, innovative thinking by multidisciplinary teams of researchers who want to accelerate discovery and innovation.
- Provides ongoing support for MREFC projects including the Antarctic Infrastructure Modernization for Science project to modernize major facilities at McMurdo Station, construction of the High Luminosity – Large Hadron Collider Upgrade, and construction of the newly named Vera C. Rubin Observatory, previously referred to as the Large Synoptic Survey Telescope (LSST).
- Supports investments in students and a future-focused workforce by funding CyberCorps®: Scholarship for Service (\$52 million) and Advanced Technical Education (\$71 million).

FY 2021 NSF Account Summary Table

(Dollars in Millions)

Account	FY 2019 Actual	FY 2020 Request	FY 2020 Plan	FY 2021 Request	FY 2021 Request change over		
					FY 2020 Plan	FY 2020 Request	FY 2019 Actual
RRA	\$6,578.1	\$5,663.0	\$6,719.8	\$6,213.0	-\$506.8	\$550.0	-\$365.1
EHR	934.5	823.5	937.6	930.9	-6.7	107.4	-3.6
MREFC	285.3	223.2	243.2	229.8	-13.4	6.6	-55.5
AOAM	332.7	336.9	356.8	345.6	-11.2	8.7	12.9
NSB	4.3	4.1	4.5	4.2	-0.3	0.1	-0.1
OIG	15.3	15.4	16.5	17.9	1.4	2.6	2.6
Total	\$8,150.2	\$7,066.0	\$8,278.4	\$7,741.4	-\$537.0	\$675.4	-\$408.8

Totals may not add due to rounding.

FY 2021 Appropriations

The House and Senate Appropriations Subcommittees on Commerce, Justice, and Science have not taken action on the FY 2021 bills.

Revised April 1, 2020

NSF Implementation of [OMB Memorandum M-20-17](#), entitled, “*Administrative Relief for Recipients and Applicants of Federal Financial Assistance Directly Impacted by the Novel Coronavirus (COVID-19) due to Loss of Operations*” dated March 19, 2020

As we face new and unique challenges in confronting the COVID-19 epidemic, NSF is prioritizing the health and safety of the research community. NSF understands the effects this challenge will have on NSF-funded research and facilities, and we are committed to providing the greatest flexibilities to support your health and safety as well as your work. NSF is continually updating guidance and our online resources to keep you informed. NSF is also accepting proposals for non-medical, non-clinical-care RAPID research on coronavirus—our ability to better understand the virus and how to effectively respond will be crucial to public health efforts. The latest information is available on our website at: [nsf.gov/coronavirus](https://www.nsf.gov/coronavirus).

The purpose of this guidance is to implement flexibilities authorized by Office of Management and Budget (OMB) Memorandum [M-20-17](#) from specific administrative, financial management, and audit requirements contained in 2 CFR Part 200, *Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards*, without compromising accountability requirements. NSF recipients are reminded of the requirement to maintain appropriate records and documentation necessary to support charges to NSF awards.

Please note that, pursuant to OMB guidance, these administrative relief flexibilities are intended to be time limited. OMB plans to reassess their applicability within 90 days and NSF will update our guidance, as needed, at that time. Except where noted below, the following flexibilities are applicable to NSF proposers and awardees affected by the loss of operational capacity and increased costs due to the COVID-19 crisis.

1. Flexibility with SAM registration. (2 CFR § 200.205)

Current registrants in the System for Award Management (SAM) with active registrations expiring before May 16, 2020, automatically will be afforded a one-time extension of 60 days.

2. Flexibility with application deadlines. (2 CFR § 200.202)

NSF has extended the deadline dates for specific funding opportunities. A [listing](#) of these extensions is available on the Foundation’s [COVID-19 webpage](#). Deadline dates for funding opportunities that do not appear on the list remain unchanged. Recipients who are unable to meet stated deadlines should contact the cognizant NSF Program Officer to discuss the issue. NSF will consider extensions on a case by case basis.

3. Waiver for Notice of Funding Opportunities (NOFOs) Publication. (2 CFR § 200.203)

This flexibility is not applicable to NSF. NSF funding opportunities with deadline dates are normally published a minimum of 90-days prior to the proposal due date.

4. No-cost extensions on expiring awards. (2 CFR § 200.308)

Recipients must follow standard policies and procedures specified in the NSF *Proposal and Award Policies and Procedures Guide* (PAPPG) [Chapter VI.D.3](#), and applicable award conditions regarding submission of grantee and NSF-approved no-cost extensions.

5. Abbreviated continuation requests. (2 CFR § 200.308)

For purposes of NSF, a continuation request consists of submission of the requisite annual project report in Research.gov, as well as any award specific requirements. See item 10 below for additional information.

6. Allowability of salaries and other project activities. (2 CFR § 200.403, 2 CFR § 200.404, 2 CFR § 200.405)

Recipients are authorized to continue to charge salaries, stipends, and benefits to currently active NSF awards consistent with the recipients' policy of paying salaries (under unexpected or extraordinary circumstances) from all funding sources, Federal and non-Federal. The recipient also is authorized to charge other costs to NSF awards that are necessary to resume activities supported by the award, consistent with applicable Federal cost principles and the benefit to the project. Recipients must not assume that supplemental funding will be available should the charging of such costs or other fees result in a shortage of funds to eventually carry out the project. If a shortfall is anticipated, recipients must contact the cognizant NSF Program Officer to discuss the situation. NSF will evaluate the grantee's ability to resume the project activity in the future and the appropriateness of future funding, as done under normal circumstances—based on subsequent project reports and other communications with the recipient. Recipients are required to maintain appropriate records and cost documentation as required by 2 CFR § 200.302 – *Financial management* and 2 CFR § 200.333 - *Retention requirement of records* to substantiate the charging of any salaries and other project activities costs related to interruption of operations or services.

7. Allowability of Costs not Normally Chargeable to Awards. (2 CFR § 200.403, 2 CFR § 200.404, 2 CFR § 200.405)

Recipients who incur costs related to the cancellation of events, travel, or other activities necessary and reasonable for the performance of the award, or the pausing and restarting of grant funded activities due to the public health emergency, are authorized to charge these costs to their award without regard to 2 CFR § 200.403, *Factors affecting allowability of costs*, 2 CFR § 200.404, *Reasonable costs*, and 2 CFR § 200.405, *Allocable costs*. Recipients may charge the full cost to the award when the event, travel, or other activities is conducted under the auspices of the grant. Recipients must not assume that supplemental funding will be available should the charging of cancellation or other fees result in a shortage of funds to eventually carry out the event or travel. If a shortfall is anticipated, recipients must contact the cognizant NSF Program Officer to discuss the situation. Recipients are required to maintain appropriate records and cost documentation as required by 2 CFR § 200.302 – *Financial management* and 2 CFR § 200.333 - *Retention*

requirement of records, to substantiate the charging of any cancellation or other fees related to interruption of operations or services.

8. Prior approval requirement waivers. (2 CFR § 200.407)

Recipients are only required to obtain NSF prior approval for the following program or budget-related reasons specified in 2 CFR § 200.308(c):

- Change in the scope or the objectives of the project;
- Change in a Principal Investigator (PI) or co-PI specified in an NSF award;
- The transfer of funds budgeted for participant support costs to other categories of expense;
- Unless described in the proposal and funded in the approved NSF award, the subawarding or transferring out of any work under an NSF award; and
- The need arises for additional NSF funding to complete the project.

The above requests for prior approval must be submitted via Research.gov. All other prior approvals specified in the applicable Prior Approval Matrix are waived. Recipients are reminded that they are to ensure that all costs charged to NSF awards must be consistent with Federal cost policy guidelines and the terms of the award, except as specified in this guidance.

In addition to the prior approval requirements specified above, Major Facility Recipients who are subject to the *Modifications and Supplemental Financial & Administrative Terms and Conditions for Major Multi-User Research Facility Projects and Federally Funded Research and Development Centers* (dated February 12, 2019) should note that, with the exception of Article 60, Contract Requirements, prior approval requirements are waived.

9. Exemption of certain procurement requirements. (2 CFR § 200.319, 2 CFR § 200.321)

NSF has waived the procurement requirements contained in 2 CFR § 200.319(b) regarding geographical preferences and 2 CFR § 200.321 regarding contracting with small and minority businesses, women's business enterprises, and labor surplus area firms.

10. Extension of financial and other reporting. (2 CFR § 200.327, 2 CFR § 200.328)

NSF does not require recipients to submit Federal Financial Reports for each award as financial data is extracted from NSF's Award Cash Management Service. NSF will continue to process daily grant payments to recipients from the Award Cash Management Service without interruption.

Additionally, NSF has automatically extended the due date for submission of all annual project reports due between March 1 and April 30, 2020, by 30 days. These project reports must continue to be submitted via Research.gov. Recipients are reminded that NSF cannot make any new award or supplement any existing award, if the principal investigator (PIs) or any co-PI(s) has an overdue annual project report; therefore, it is vital that annual reports are submitted by the revised due date.

11. Extension of currently approved indirect cost rates. (2 CFR § 200.414)

Recipients may continue to use the currently approved indirect cost rates (i.e., predetermined, fixed, or provisional rates) to recover their indirect costs on Federal awards. Recipients may request an extension on the use of the current rates for one additional year without submission of an indirect cost proposal. Recipients also may submit a request to its cognizant agency for an extension of the indirect cost rate proposal submission to finalize the current rates and establish future rates.

12. Extension of closeout. (2 CFR § 200.343)

NSF has automatically extended the due date for submission of all final project reports and Project Outcomes Reports due between March 1 and April 30, 2020, by 30 days. These final reports must continue to be submitted via Research.gov. Recipients are reminded that NSF cannot make any new award or supplement any existing award if the PI or any co-PI(s) has an overdue final report; therefore, it is vital that final reports be submitted by the revised due date.

NSF also has automatically extended the closeout period for awards that ended between November 30, 2019 and April 30, 2020 to 180 days.

13. Extension of Single Audit submission. (2 CFR § 200.512)

Recipients and subrecipients that have not yet filed their single audits with the Federal Audit Clearinghouse as of the date of the issuance of the OMB Memorandum that have fiscal year-ends through June 30, 2020, are authorized to delay the completion and submission of the Single Audit reporting package, as required under Subpart F of 2 CFR § 200.501 – *Audit Requirements*, to six (6) months beyond the normal due date. No formal approval for this extension is required; however, recipients and subrecipients must maintain documentation of the reason for the delayed filing. Recipients and subrecipients who currently qualify as a “low-risk auditee” under the criteria of 2 CFR § 200.520(a), and who take advantage of this extension will continue to qualify as a “low-risk auditee”, absent other reasons for a change in qualification.

Any questions about the guidance described above should be directed to policy@nsf.gov. Any questions specific to a particular award should be directed to the cognizant NSF Program Officer.

OIRM Update
for the B&O Advisory Committee Meeting (Spring 2020)

OIRM Senior Staff Changes

- Changes to OIRM Senior Staff since we last saw you in December.
 - In the Division of Administrative Services (DAS), Maren Williams was appointed as the Deputy Division Director.
 - In the Division of Human Resource Management (HRM), Nathan Wells was appointed as the Deputy Division Director.

OIRM Supports the Transition to Virtual Work During the Pandemic

- As the agency pivoted to support virtual work during the COVID-19 response, NSF focused on ensuring remote access capabilities and collaboration services would be available for agency staff. DAS collaborated with the Division of Information Systems to expedite the rollout of Zoom for Government, the new virtual meeting platform for the agency that facilitates video meetings and content sharing. NSF also strengthened its infrastructure to support remote work, taking steps to optimize, balance, and monitor the use of remote technology solutions to ensure increased capacity could be met, and expanded the use of software-based tokens to provide expanded opportunities for secure remote access to agency systems.
- The Divisions developed a Virtual Connections Support page on the NSF intranet, which offers instruction on activating accounts, scheduling video conference calls, improving the user experience, and more. It provides resources to optimize the telework experience and tips for moderating online panels. In addition, DAS has provided Zoom training for over 1,200 NSF staff. DAS provided pre-event, live production, and post-event virtual meeting support for the first-ever 100% virtual National Science Board meeting on May 5 and 6. The event included NSF and public attendees, breakout sessions, and live YouTube streaming. DAS also provided support for the Director's online Town Hall on May 7 and live assistance to conduct online panels, Committee of Visitor and Advisory Committee meetings, and scientific community outreach programs.
- During this period of remote work, NSF continues to provide secure, reliable day-to-day operations for our IT systems and services. During the NSF Headquarters building closure, DIS staff and contractors have shifted to offsite work including 100% virtual IT Help Central support for internal and external customers, as well as remote monitoring and maintenance of NSF's network infrastructure, systems, and services. DIS also supported the development and implementation of COVID-19 visualization work, including the design and deployment of an internally-facing dashboard that provides summary metrics on COVID-19 related awards, as well as a publicly-facing visual clustering tool that provides a graphical view of COVID-19 related NSF RAPID awards.
- The NSF mailroom has continued to operate on site and expanded its services to support others in completing their work remotely. For example, the mailroom is supporting remote offboarding

for separating staff, IPAs, and contractors by coordinating the turn-in of equipment, credentials, and passports by FedEx.

- DAS collaborated with the Division of Acquisition and Cooperative Support on a process to reduce the risk of onboarding contractors during this period of COVID-19. Social distancing resulted in the inability to fingerprint candidates, leading NSF to incur a risk if it onboarded contractor employees with fingerprinting deferred until a later time. DAS and DACS mitigated that risk by establishing criteria and a waiver request process for identifying mission-critical contractor employees eligible for immediate onboarding and requiring onboarding for all others be delayed.
- The Division of Human Resource Management (HRM) services were able to convert to serving customers virtually with the exception of onboarding mission critical appointments. HRM has been able to continue offering Employee Assistance Program (EAP) services, back-up care services, wellness services and more during this time as a way to help ease the effects of the pandemic and virtual workforce on employees.
- Pulse Surveys: HRM implemented a series of short surveys to assess the impact of the pandemic on staff. To date, there have been two pulse surveys. Overall, staff seem to be adapting quite well to the new environment. The second survey was distributed in early June and results will be used to implement additional support for employees during this time. A few key points from the first survey are below:
 - Of those who responded, the great majority provided a positive response to the seven scaled items with the highest being 96% of all respondents believing NSF has responded to the situation the best way possible; and the lowest being 48% believing that COVID-19 has had little impact on their ability to do their job (with 37% of respondents neutral on this item).
 - 88% of all respondents indicated feeling strongly supported by NSF.
 - 86% of all respondents indicated feeling that the communication about COVID-19 have been helpful.
 - 82% of all respondents indicated feeling that they have the resources they need to support their health, safety, and well-being.
 - 50% of respondents indicated having caregiving responsibilities. There was no correlation between caregiving responsibilities and ability to complete work.

New Emergency Response Resources Developed

- DAS completed several initiatives to improve employees' ability to respond to emergencies. They developed an Emergency Planning and Procedures Guide to highlight the most important information in the Occupant Emergency Plan for staff and contractors to know and practice in the event of an emergency. They launched an Emergency Preparedness and Response Training course that helps staff and contractors recognize and respond to potential emergencies and

hazards. They also improved the agency's emergency notification system by upgrading to InformaCast Fusion.

Number of Unseated Panels Significantly Reduced

- As a result of recommendations by the Panel Reservation Working Group, the total number of unseated panels in FY 2020, as of Quarter Three, has been reduced to nine (9). This is down from a total of 260 at the same time in FY 2018 and 113 in FY 2019. The Panel Reservation Working Group was initiated by DAS in collaboration with the Directorate Liaison Group in mid-2019 and consists of cross-Directorate representation. The group was formed to re-assess and explore continuous improvement options for panel room reservations and equitable Directorate room assignments in the conference center. After assessing the historical usage data, the group agreed to limit a Directorate's panel room requests to 110% of the five-year average of actual room usage by the Directorate. This accommodates program changes and anomalies while enabling all Directorates to receive the panel rooms they need to meet their mission requirements. As the results for FY 2020 demonstrate, the change has been a huge success. DAS will continue to work with the Panel Reservation Working Group on further improvements.

Proposal Processing Unit Closed

- In an effort to streamline and modernize operations, DAS stopped printing proposals centrally and closed the Proposal Processing Unit on March 31, 2020. Program staff, panelists and ad hoc reviewers are encouraged to use electronic versions of proposals but can print hard copies themselves if needed.

Federal Employee Viewpoint Survey (FEVS) 2020

- The 2020 Federal Employee Viewpoint Survey was delayed this year due to the pandemic. The survey administration will be the same as with prior years, with a 6 week field period and specific launch and close dates. NSF's FEVS will launch on Tuesday, July 21 and close on Tuesday, September 1.

Personnel Manual (PER)

- The first round of updates, all Collective Bargaining Agreement (CBA) impacted, were completed and published in May 2020. A total of 21 policies were updated. HRM is working to update the remainder of the PER chapters by October 2020.
- HRM held four live Q&A sessions for employees and managers to attend and get clarification on training or policy questions related to the PER/CBA updates.

IT News

- NSF continues to prioritize modernizing IT services to improve the external research community's interactions with NSF and to facilitate the work performed by Foundation staff. In addition to completing system updates related to the 2020 Proposal & Award Policies &

Procedures Guide (PAPPG), NSF developed and implemented a new format for Biographical Sketches and Current and Pending Support which will now become mandatory October 5, 2020 NSF also continued efforts to migrate legacy Awards functionality to MyNSF, to expand Proposal Submission Modernization (PSM) functionality in Research.gov, and to provide enhanced data analytics and reporting services. While continuing to modernize existing services, NSF is also supporting continued expansion of new technologies and capabilities such as robotics process automation (RPA).

- NSF continues to add redundancy and resiliency for agency IT services and systems through ongoing modernization and increasing deployment of cloud services. As a follow-on to NSF's multi-year Database Modernization project, completed in November 2019, NSF continues to prioritize data cleanup and modernization of legacy platforms and tools to ensure the security and reliability of agency infrastructure services. In May, NSF completed the security authorization of the agency's Amazon Web Services (AWS) cloud environment, which enables the agency to begin migrating NSF's merit review systems to the cloud, beginning with PIMS and the Institution system which were migrated to the cloud May 29, 2020 and continuing with eJacket which migrated on June 19.

Backgrounder: Spring 2020
NSF Advisory Committee for Business and Operations

Nature of Agenda Item: Understanding the Top Five Impacts of the COVID-19 Pandemic on the National Research Community and the NSF Response

Background:

The rapid outbreak of COVID-19 has had a tremendous impact on the way research institutions are conducting their daily business. With some exceptions, research institutions/facilities have severely curtailed their research activities to reduce the risk of faculty, staff, and students to COVID-19. This rapidly evolving and highly unusual interruption of research and related loss of operations has challenged the viability of the research enterprise.

During these unprecedented times, institutions and individuals funded on grants and other mechanisms faced many unknowns and uncertainties. For example, how do you determine allowability of certain costs (e.g., effort reporting, travel, conferences) and compensation challenges while ensuring safety of the research community and accountability of federal funds? How do you conduct audits based on rapidly emerging policies/guidance exceptions, such as the Coronavirus Aid, Relief, and Economic Security (CARES) Act (P.L. 116-136)?

Since the beginning of the COVID-19 crisis, NSF was open for business working quickly and collaboratively across NSF directorates/divisions, as well as very closely with the Office of Management and Budget (OMB), the research community, and other grant-making partners in assessing the situation. NSF received \$76 million in 2020 to support NSF's ongoing RAPID grant response to coronavirus. NSF developed new policies, procedures, mechanisms and issued timely guidance in response to NSF's Implementation of OMB Memorandum M-20-20 and OMB Memorandum M-20-17 and the CARES Act. Many administrative flexibilities were put in place by NSF for research to continue while keeping its workforce and researchers safe while furthering the fight against COVID-19 on behalf on the American public. For more information, see: [nsf.gov/coronavirus](https://www.nsf.gov/coronavirus).

Presentation:

NSF's immediate responses to the pandemic have been focused on working with our awardees providing them near-term policy guidance in the areas of grants, cooperative agreements and contracts. The Foundation has also used existing mechanisms to fund dozens of research projects on COVID-19 to mobilize the scientific community to better understand and develop measures to respond to the virus.

As our response to the crisis progresses, NSF can benefit from BOAC advice, particularly hearing directly from committee members on the top five impacts of COVID-10 on the researcher community, at least in the near-term and medium-term future. Understanding longer-term impacts is also important, although we recognize that COVID-19 related-issues are dynamic and rapidly evolving.

This session will include:

- An NSF overview of our COVID-19 related responses to date, including how NSF has worked with our grantee, facilities and contractor communities.
- Joanne Tornow, AD in the BIO Directorate and Sylvia James and Steve Meacham, co-chairs of the Research Recovery Planning Task Force, will also provide program's perspectives on COVID-19 impacts and the agency response to date.
- Feedback from the FDP or COGR meetings where some conversations have taken place broadly across disciplines and with the research administration community.
- Insight from BOAC members listing the top 5 COVID-19 impacts affecting their institutions in the short and medium term as context for NSF as the agency progresses into out next phases of COVID-19 response. Insight/projections on the long-term outlook are welcome.

This session may serve as a prelude for a future BOAC meeting where we can examine our "lessons learned" and what we might choose to do differently if there were to be a future crisis. Given the scope of the COVID-19 crisis, the session may also serve as a Part I to an ongoing conversation on understanding the impacts.

Committee Action/Feedback:

- What are the top five COVID-19 impacts on federal and NSF grant awards, sponsored activities at research institutions? Short term (pandemic inception to the start of fall semester), medium term (~18 months after that) and, if relevant, long term?
- What were the major impacts on researchers and faculty (including early-career faculty), administrators, postdoc researchers/students as a result of on severely curtailed research and related activities due to COVID-19?
- What was the impact and what measures were put in place for institutional operations to quickly shut down and then safely restart laboratory research and other related activities?
- How has the NSF response addressed the impacts to date and what future needs are anticipated?

Contact Persons:

Keith Boyea, BFA- kboyea@nsf.gov; 703-292-4486

Alex Wynnyk, BFA- awynnyk@nsf.gov; 703-292-4472

Top Five Impacts of COVID on the Research Community and NSF's Response

BOAC
Spring 2020 Virtual Meeting

Alex Wynnyk, Deputy Division Director, DIAS/BFA

Keith Boyea, Deputy Division Director, DACS/BFA



National Science Foundation

WHERE DISCOVERIES
BEGIN

Topics Covered

- Coronavirus (COVID-19) – Communication
- CARES Act Funding – RAPID Awards
- OMB Flexibilities
- Potential Risks to NSF
- Impacts on Contractors and Large Facilities



COVID-19: NSF Response Community Guidance

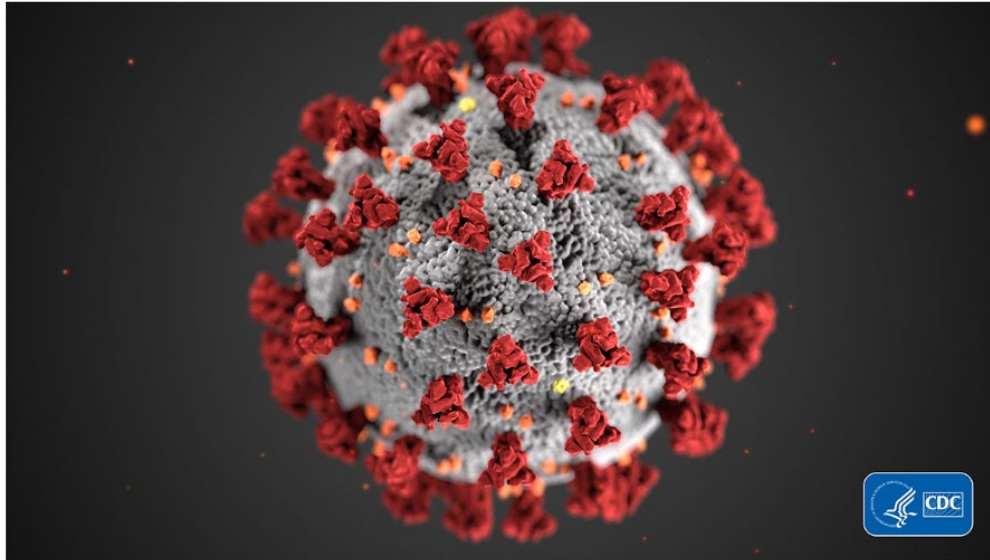


Image credit: Alissa Eckert, MS; Dan Higgins, MAM

Coronavirus Information

NSF encourages you to take extra precautions to protect yourselves and your families against COVID-19. If you are an NSF employee looking for guidance, please visit [InsideNSF](#). If you are a member of the public, please visit [cdc.gov](#).

Federal Guidance on Coronavirus (COVID-19)

- [Coronavirus.gov](#)
- [Coronavirus Disease 2019 \(COVID-19\)](#)
- [What the U.S. Government is Doing](#)

NSF Guidance

- [Important Notice No. 146 - NSF Letter to Community Regarding COVID-19](#)
- [NSF Implementation of OMB Memorandum M-20-20](#)
- [NSF Implementation of OMB Memorandum M-20-17](#)

https://www.nsf.gov/news/special_reports/coronavirus/

Additional Funding For COVID Research

- \$75M in CARES Act Funding
- Important Notice 146 – NSF Letter to the Community Regarding COVID-19
- Call for RAPID Award



COVID-19: NSF Response

NSF Implementation of OMB Flexibilities

- Flexibility with SAM registration;
- Flexibility with application deadlines;
- Allowability of salaries and other project activities;
- Allowability of costs not normally chargeable to awards;
- Prior approval requirement waivers;
- Exemption of certain procurement requirements;
- Extension of financial and other reporting;
- Extension of currently approved indirect cost rates
- Extension of closeout;
- Extension of single audit submission.

COVID-19: NSF Response

Internal NSF Response

- In-person panels moved to virtual platforms
- NSF-sponsored conferences are encouraged to move online or reschedule to a later date
- All staff are now teleworking
- All non-essential travel canceled



Potential Risk Indicators For BFA Monitoring & Oversight

- Change in institutional spending patterns
- Increase in awardee audit findings
- Indications of internal control issues
- Increase in overdue technical reports
- Significant decrease in revenue streams
- Financial viability indicators decreasing



COVID Impacts on NSF Contractors and Major Facilities

- Impact on Small Businesses, particularly through Government Purchase Card Program
- Uncertainty for contractor return to building and long-term work location
- CARES Act Section 3610 compliance and administration.
- Protection of Major Facility life and property.
- Impacts to Major Facility schedules and costs

For More Information:

Ask Early, Ask Often!

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kboyea@nsf.gov



National Science Foundation

WHERE DISCOVERIES
BEGIN

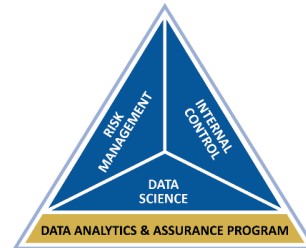
Backgrounder: Spring 2020
NSF Advisory Committee for Business and Operations

Nature of Agenda Item: Opportunity

Presentation: Enterprise Risk Management in the COVID-19 Environment

NSF's Data Analytics & Assurance Program (DAAP) supports the NSF mission by:

- Dealing with the proliferation of data;
- Leveraging artificial intelligence and automation;
- Managing and reducing the cost of compliance efforts; and
- Building even stronger organizations.

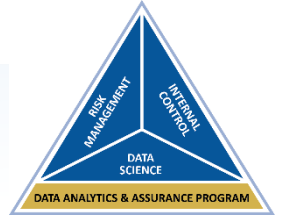


As with all NSF efforts and operations, the focus of the DAAP shifted as the agency worked through the COVID-19 response and started looking ahead to recovery planning and transformation for increased resiliency. The DAAP team, working in concert with the NSF Risk Captains Community of Interest, identified an opportunity for NSF to leverage and expand Enterprise Risk Management (ERM) in its day-to-day decision making to better respond to the significant risk presented by the COVID-19 outbreak and position the agency to identify and address other “black swan” risk events in the future. ERM can help NSF pinpoint the most valuable business drivers; identify, prioritize, and respond to challenges triggered by COVID-19; and assess damage and rebuild for the future.

Committee Action/Feedback - *Please state a “charge” for the Committee as to questions we want them to help answer and/or provide inputs. In addition, what other feedback are we seeking from the committee? This is most important in order to maximize the time and contribution of the Committee.*

1. Do you have feedback on NSF's approach to ERM and / or COVID-19 considerations?
2. What lessons learned or best practices have you seen in practice during COVID-19 that might benefit our organization?
3. Have you encountered successful approaches to collaborating with universities and grantees to manage the impacts of COVID-19 that you would recommend to NSF?
4. Do you have any additional suggestions about how NSF can use ERM to leverage / integrate the results of its COVID-19 crisis management efforts?

Contact Person: Mike Wetklow, 703-292-4436, MWetklow@nsf.gov



Purpose:

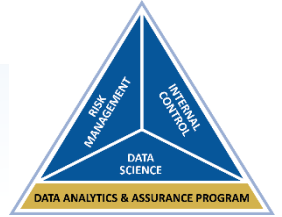
- To inform the BOAC on NSF's approach to ERM.
- Obtain BOAC input on ERM.

Outcomes:

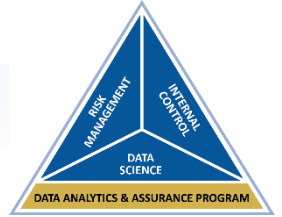
- Shared understanding of ERM progress and next steps at NSF.
- BOAC Feedback on NSF's approach to ERM.

BOAC ERM Update

ERM Background

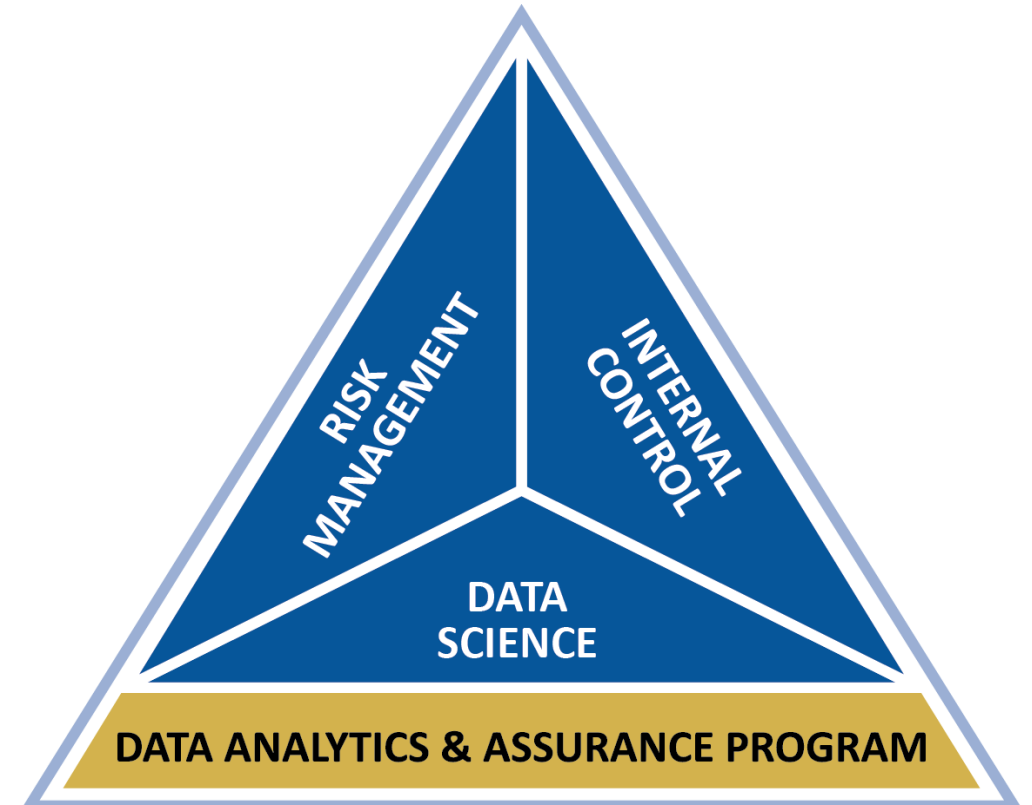


ERM is not intended to be a check the box compliance exercise



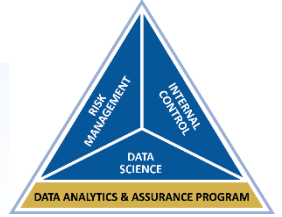
NSF's Data Analytic and Assurance Program (DAAP) supports the NSF Mission by:

- 1) Dealing with the proliferation of data
- 2) Leveraging artificial intelligence and automation
- 3) Managing and reducing the cost of compliance efforts, and
- 4) Building even stronger organizations



BOAC ERM Update

Progress to Date and Next Steps



**Start up
Functionality**

How to do a Risk Profile?

Compliance

OMB policy and guidance

Integrate

Strengthening roles and responsibilities and breaking down silos

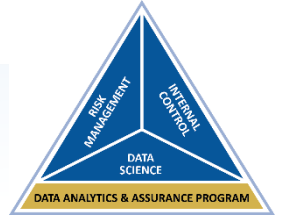
**Value &
Decision Making**

Predicting, preparing, creating value and seizing opportunities

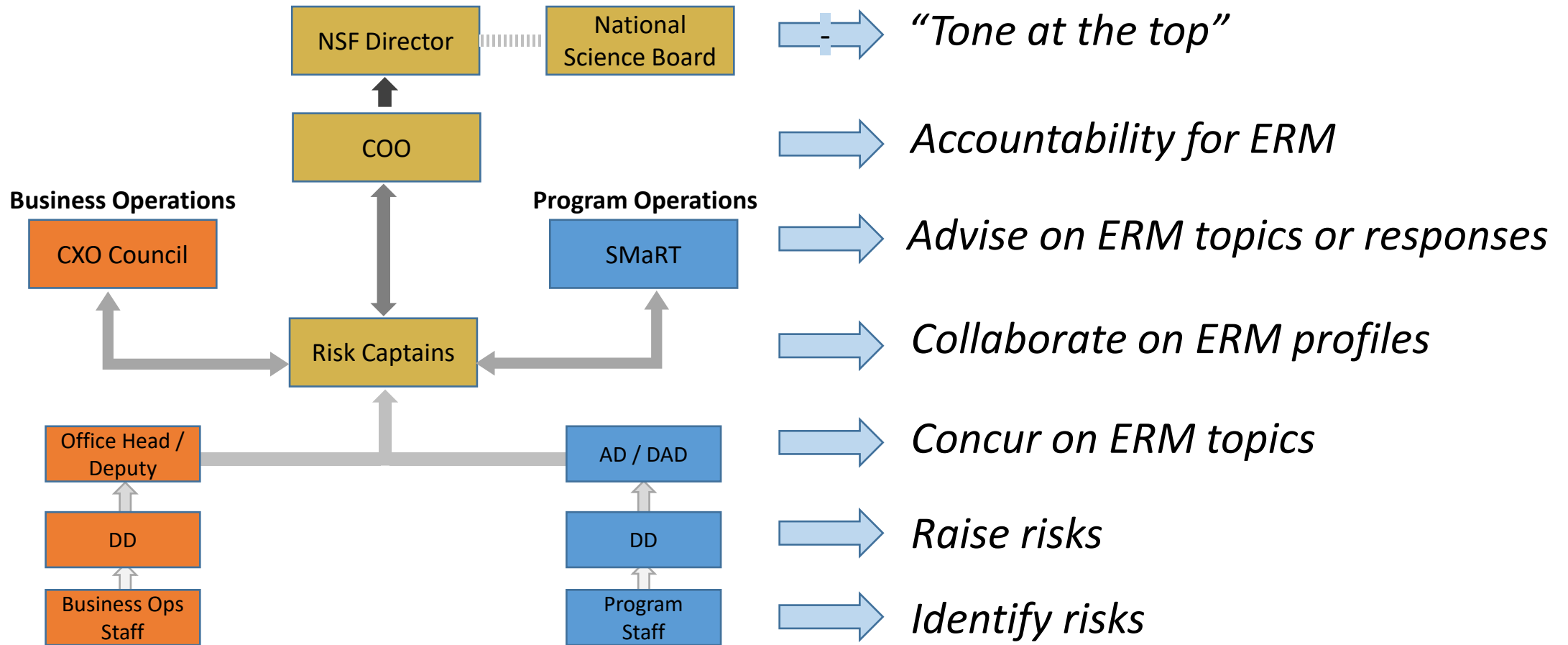
↑
Complexity
↓

Time →

BOAC ERM Update
 Developing Governance Structure

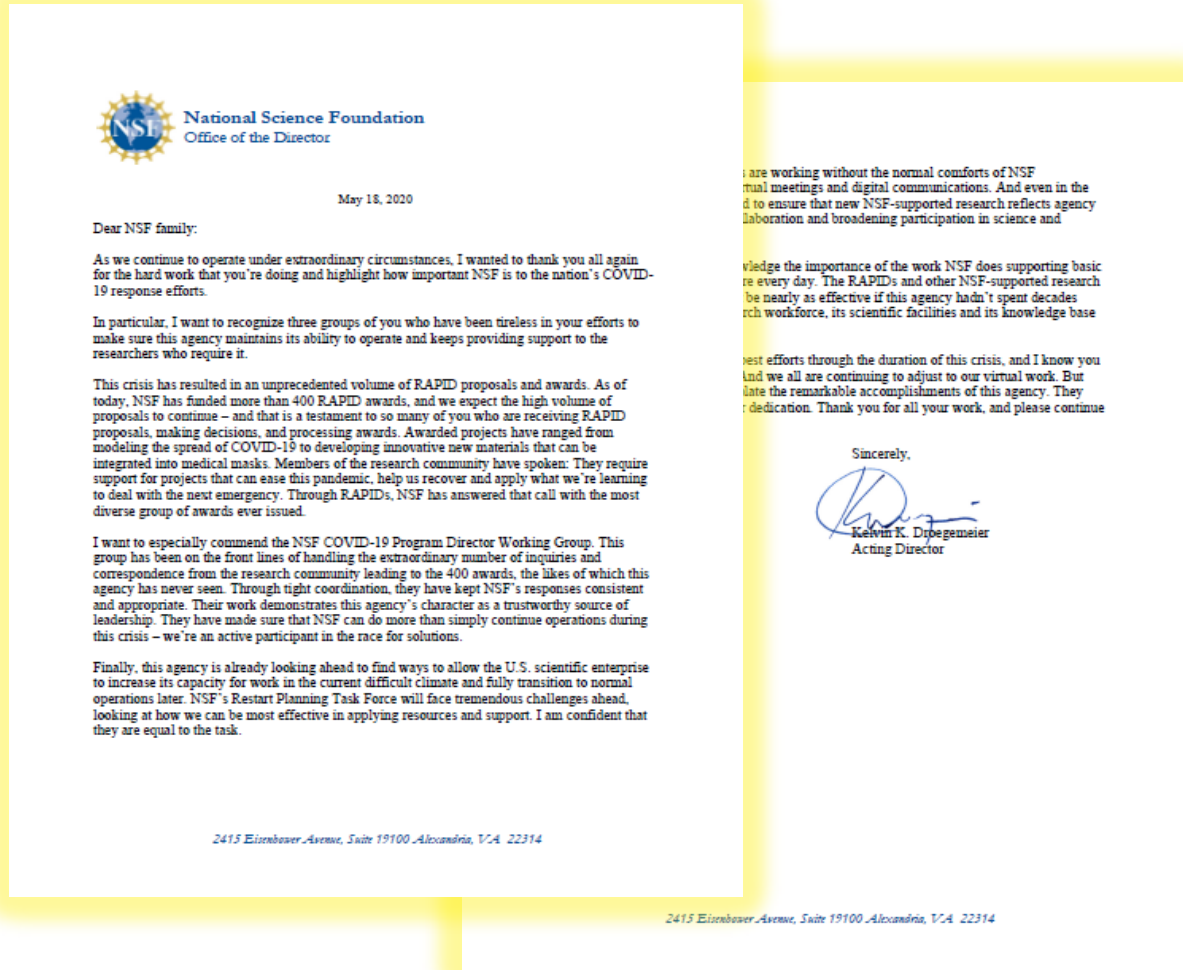
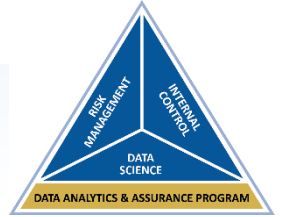


NSF ERM Organizational Governance



BOAC ERM Update

Illustrative Example of Risk Posture



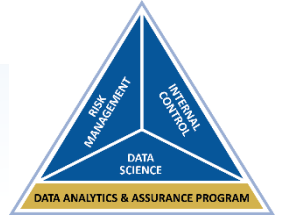
NSF Acting Director's May 18, 2020 Letter to NSF includes several examples of natural/inherent risk management:

- Employee Safety
- RAPID Proposals and Awards
- NSF COVID-19 Program Director Working Group
- NSF's Restart Planning Task Force

Risk posture can change over time.

BOAC ERM Update

Enterprise Risk Management at NSF



NSF Strategic Goals: Drive Value & Deliver the Mission	Expand knowledge in science, engineering, and learning	Advance the capability of the Nation to meet current and future challenges	Enhance NSF's performance of its mission
NSF ERM Objectives: Manage Strategic & Reputational Threats & Opportunities	Major Facilities & Mid-Scale Infrastructure	Improving Research Security Intergovernmental Personnel Act	Reporting & Data Integrity Cybersecurity Managing the USAP
NSF Internal Control Objectives: Manage Operational, Reporting, & Compliance Risks	Acquisition & Cooperative Support Human Resources & Travel Operations	Budget Management IT Management	Financial Management & Reporting Responsible & Ethical Conduct of Research GAO/OIG Audit Follow-up Merit Review
NSF Data Science Objectives: Support Innovation & Decision-Making	Data Maturity Model TBD	Grants Data Science Pilot TBD	BFA Financial Indicators Report TBD

1. Does NSF's approach to ERM make sense?
2. Do you have feedback on NSF's developing approach to ERM?

