



2016 APLU Council on Research Summer Meeting

Waterfront Place Hotel, 2 Waterfront Place, Morgantown, WV

Sunday, July 31

7:00 AM – 9:00 AM **Workshop Registration** **Foyer E**

(Workshop registrants only.)

8:00 AM – 4:30 PM **New and Future VPR Workshop** **Salon E**

(Workshop registrants only.)

[Unpacking the Position of Vice President/Provost/Chancellor for Research](#)

Speaker: Kelvin Droegemeier, Vice President for Research at the University of Oklahoma, Past Vice Chair of the National Science Board

3:30 PM – 5:30 PM **General Registration** **Foyer E**

5:30 PM – 7:00 PM **Opening Reception** **Foyer F-H**

(All registrants and guests welcome.)

Monday, August 1

7:00 AM - 1:00 PM **General registration** **Foyer E**

7:30 AM – 8:30 AM **Concurrent Breakfasts**

Breakfast (General) **Salon A-C**

(All CoR attendees welcome.)

Associate SRO Breakfast **Wharf AB**

(Breakfast meeting for Associate SROs.)

Executive Committee Breakfast **Salon D**

(Executive Committee members only.)

8:30 AM – 8:45 AM

Welcoming Remarks **Salon E-H**

Richard Marchese, Chair of the Council on Research and Vice President for Research, University of Alabama, Birmingham

8:45 AM – 10:00 AM

Session I **Salon E-H**

On Open and Public Access: What does this mean for your university?

Organizer:

Sandra Brown, Vice President for Research, University of California, San Diego

Speakers:

[Philip Bourne](#), Associate Director for Data Science, National Institutes of Health

[James Kurose](#), Assistant Director for Computer and Information Science and Engineering, National Science Foundation

[Brian Schottlaender](#), Audrey Geisel University Librarian, University of California, San Diego

[Carrie Wolinetz](#), Associate Director for Science Policy and Director of the Office of Science Policy, National Institutes of Health

Moderator: Sandra Brown, Vice President for Research, University of California, San Diego

Abstract

The national movement toward open and public access to research data has important implications for universities. This session focuses on the new policies and framework for open access implementation, Big Data examples from national experts, as well as data management, curation and cost considerations will be provided.

Compliance with the Office of Science and Technology Policy mandate (“Increasing Access to Results of Federally Funded Scientific Research”) is an institutional obligation, not an individual researcher’s obligation. As such, it presents research universities with a massive project management challenge, requiring evaluation

and clarification of roles in order to ensure coordination amongst various campus stakeholder groups.

Speakers will describe this challenge in more detail, and strategies for addressing it. Included will be a detailed consideration of two of those strategies in particular, ORCID and SHARE, the latter a joint initiative of APLU, the Association of Research Libraries (ARL), and the Association of American Universities (AAU). This talk will provide real-world examples of successful implementations.

10:00 AM – 10:15 AM	Break	Salon E-H
10:15 AM – 11:30 AM	Session II – Laboratory Safety	Salon E-H

Organizers:

Taylor Eighmy, Vice Chancellor for Research and Engagement,
University of Tennessee, Knoxville

Mark McLellan, Vice President for Research, Utah State University

Speakers:

[Lorne Babiuk, Vice President/Research, University of Alberta](#)

[Michael Brantmayer, AECOM ES&H Director for NETL](#)

[Andrés Gil, Vice President for Research and Economic
Development, Florida International University](#)

[Mark McLellan, Vice President for Research, Utah State University](#)

Caroline Whitacre, Vice President for Research, The Ohio State
University

Moderator: Kacy Redd, Director, Science and Mathematics
Education Policy, APLU

Abstract

The Task Force on Laboratory Safety released A Guide to Implementing a Safety Culture in Our Universities in the Spring of 2016. The guide included 20 recommendations with associated tools and resources to help campuses advance each recommendation. We will ask VPRS to share recent changes on their campus that have had a positive impact on safety.

11:30 AM – 12:00 PM	Transit to the National Energy Technology Lab, Morgantown
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12:00 PM - 3:45 PM	Field Trip - Visit and Tour of the National Energy Technology Laboratory (NETL)
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Organizer: Fred King, Vice President for Research, West Virginia University

1:00 PM - 1:15 PM Welcome and NETL Overview B26-G51 A,B,C

Dr. Cynthia Powell, Deputy Director of Science & Technology
Strategic Plans & Programs

1:15 PM - 2:35 PM Safety Video and Tour of Research and Innovation Center Facilities

Multiphase Computational Fluid Dynamics Modeling

Dr. Chris Guenther

B2, Visualization Laboratory

With the help of science-based simulations, NETL is accelerating fossil energy technology development. This is achieved through atomistic scale modeling, computational multiphase flow, process systems engineering, data science, and high performance computing. Simulations generate information beyond the reach of experiments alone, predicting for example the properties and performance of materials yet to be synthesized or devices yet to be built. Speeding up discovery of new materials, increasing performance of novel devices, and reducing risk in scale-up will help NETL to reduce the cost and time of technology development. All three NETL laboratory sites are connected to its SuperComputer, which is one of the world's fastest high-performance computers.

Solid Oxide Fuel Cells Research

Dr. Harry Abernathy

B4, SOFC Test Laboratory

These laboratories provide researchers access to fundamental and applied performance data as well as models and simulations that describe the structure, operation, and evolution of solid oxide fuel cells. The laboratories are equipped to test solid oxide fuel cells and component materials at temperatures up to 1000 °C, and under various gas atmospheres and operational conditions. The laboratories include conventional SOFC fabrication and analysis devices, an advanced manufacturing electrode infiltration device, a mobile fuel cell test array, and contaminant exposure test facilities.

Chemical Looping for Clean Power Generation

Dr. Doug Straub/Dr. Justin Weber Chemical Looping Reactor Facility

Chemical looping systems produce oxygen internal to the process, eliminating the large capital, operating, and energy costs associated with oxygen generation. Chemical looping combustion (CLC) is considered a “transformational” technology with the potential to meet program cost and performance goals. This lab includes a pilot-scale chemical looping reactor that is used to develop and refine oxygen carriers with sufficient oxygen capacity, durability to withstand harsh CLC environments, and acceptable cost; develop effective and sustainable solids circulation and separation techniques; improve reactor design to support fuel and oxygen carrier choices; develop effective heat recovery and integration; and test and optimize overall system design.

Geomaterial Characterization

Dr. Dustin Crandall B17, Geological Sciences Laboratory

This laboratory is home to NETL’s Computer-Aided Tomography (CT) capability, which are used to obtain data of flow dynamics and internal structure of geologic media. The lab’s three CT scanners— medical, industrial and micro — enable researchers to examine different phenomena: from dynamic fluid-floods within rocks at in-situ conditions to the isolation complex of pore structures and material features. Research in this facility is focused on examining the fundamental physical phenomena that control flow in the subsurface, including geologic carbon storage, gas/oil production, well bore integrity, and flow through fractured rock. Researchers work to develop quantifiable relationships of fluid-rock interactions under relevant subsurface conditions so they can be applied to improved models describing the behavior of larger natural systems.

2:45 PM - 3:45 PM

NETL’s Role in Natural Gas

B26-G51 A,B,C

Mr. Albert Yost, Senior Technical Advisor, NETL Natural Gas Team
Toward Transformational Carbon Capture Systems

Dr. David Miller, Senior Fellow, Systems Engineering & Analysis

Tuesday, August 2

8:00 AM – 9:00 AM **CoR Business Meeting and Breakfast** **Salon A-E**

(All CoR attendees welcome.)

9:00 AM – 9:15 AM **Break** **Salon A-E**

9:15 AM – 10:30 AM **Session III** **Salon A-E**

Opportunities and Challenges of Federal SBIR and STTR Grant Programs at Public Universities

Organizers:

Andrés Gil, Vice President for Research and Economic Development, Florida International University

David Norton, Vice President for Research, University of Florida

Gary K. Ostrander, Vice President for Research, Florida State University

Speakers:

[James Greenwood, President, Greenwood Consulting Group, Inc.](#)

Edward Knobbe, President and CEO, Spectrum Photonics, Inc.

Timothy Morey, Professor of Anesthesiology; Chairman, Department of Anesthesiology, College of Medicine, University of Florida

David Norton, Vice President for Research, University of Florida

[Gary K. Ostrander, Vice President for Research, Florida State University](#)

Abstract

The Federal Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs expand opportunities for public-private partnerships in research, and strengthen the lab to market pipeline. This session will explore SBIR/STTR issues specific to universities, including management of conflicts of interest, intellectual property, space, and other concerns. Following a robust introduction to the programs, an expert panel will present the perspectives of faculty and administrators who have directly engaged with them.

10:30 AM – 10:45 AM **Break** **Salon A-E**

10:45 AM – 12:00 PM

Session IV

Salon A-E

[Making a Difference: Effective Execution of Transdisciplinary Research](#)

Organizers:

Taylor Eighmy, Vice Chancellor for Research and Engagement,
University of Tennessee, Knoxville

Mridul Gautam, Vice President for Research and Innovation,
University of Nevada, Reno

Howard Gobstein, Executive Vice President, APLU

Chris Keane, Vice President for Research, Washington State
University

Speakers:

Dan Carder, Director, Center for Alternative Fuels, Engines and
Emissions, West Virginia University

Taylor Eighmy, Vice Chancellor for Research and Engagement,
University of Tennessee, Knoxville

Chris Keane, Vice President for Research, Washington State
University

Robert McGrath, Director, Renewable and Sustainable Energy
Institute, University of Colorado, Boulder

Abstract

Many U.S. and international universities have launched efforts to address large, transdisciplinary research problems with broad societal impacts. These may be referred to as “Grand Challenges,” “Strategic Research Initiatives,” or “Research Themes.” CoR discussed how to formulate these “Grand Challenges” and assemble the associated transdisciplinary teams, at the 2015 APLU Annual Meeting. The current session builds on that discussion and provides university research leaders practical actions to improve the execution of transdisciplinary research projects. Much of the discussion will focus on university research centers and how they facilitate transdisciplinary research, including industrial involvement. University and federal leaders involved in

transdisciplinary research will describe key “lessons learned” on topics including:

- *Leadership and organization*: Identifying and building leaders for multidisciplinary teams; organizing and managing multidisciplinary activities; and building partnerships with industry, government, foundations, and other collaborators
- *Resources*: The impact of multidisciplinary research on university funding priorities and infrastructure, faculty hiring and promotion, and fundraising
- *Communications*: Enhancing communication between units; external communications; and integrating multidisciplinary research goals with the university’s broader communication strategy

12:00 PM – 1:15 PM **Lunch and Break** **Salon F-H**

1:15 PM – 2:15 PM **Joint CoR/CGA Session 1** **Salon A-E**

Congressional Perspective

Introduction:

Rob Alsop, Vice President for Legal and Governmental Affairs and Entrepreneurial Engagement, West Virginia University

Speaker:

U.S. Representative **David McKinley** (R-WV)

2:15 PM – 3:00 PM **Joint CoR/CGA 2** **Salon A-E**

Why Should I Care About EPSCoR/IDeA?

Moderator:

Eric King, Director of Federal Relations, University of Kentucky

Speakers:

Kelvin Droegemeier, Vice President for Research at the University of Oklahoma, Past Vice Chair of the National Science Board

Fred King, Vice President for Research, West Virginia University

Tom Quinn, Associate Vice President, Van Scoyoc Associates, Member of the EPSCoR/IDeA Foundation

David Shaw – Vice President for Research & Economic

Development, Mississippi State University, Member of APLU

CoR Executive Committee, Member of EPSCoR/IDeA
Coalition Board

Abstract

To help inform attendees from non-EPSCoR/IDeA states about what the EPSCoR/IDeA programs are all about and why they are important beyond the borders of eligible states. The panel will discuss the benefits of the program within EPSCoR/IDeA jurisdictions and how that translates to non-EPSCoR/IDeA states and universities. Strong academic research centers are important to every state in order to provide sound education and research opportunities for students (most students attend college within 50 miles of home), a trained workforce, and support for both existing and emerging businesses. Science and technological research cannot be limited to a few states if the nation is to maintain world leadership and reach its full potential. Researchers in EPSCoR/IDeA states are needed in an era when different regions have unique issues and expertise involving natural resources, health, energy, security, and the environment.

3:00 PM – 4:00 PM

Joint CoR/CGA Session 3

Salon A-E

Science and Research Initiatives for the New Administration and Congress (small group discussion)

Facilitators:

Mike Frame, Director of Federal Relations, Florida State University

Howard Gobstein, Executive Vice President, APLU

Jennifer Poulakidas, Vice President, Congressional & Governmental Affairs, APLU

Abstract

The current presidential administration has launched many signature initiatives that stimulate and build on research and scientific capacity. These include national initiatives on nanotechnology, advanced manufacturing, precision medicine, the microbiome, neuroscience, cancer, and others. What current presidential, or national, research initiatives would you want to ensure carry over into the next administration and the next Congress? In this discussion-based session, CGA and CoR members

will collaborate to identify those initiatives deemed most critical for continued support. These discussions will also help inform APLU's developing "Framework for the next Administration" – a view of federal priorities for the next administration and new Congress, from public research universities.

4:00 PM – 4:15 PM

Break

Salon A-E

4:15 PM – 5:30 PM

Joint CoR/CGA Session 4

Salon A-E

Effectively Engaging in Research Promotion and Advocacy

Facilitators:

Richard Marchese, Vice President for Research and Economic Development, University of Alabama at Birmingham, and CoR Executive Committee Chair

Stacy Rastauskas, Vice President for Government Relations, The Ohio State University, and CGA Executive Committee Chair

Abstract

Building on joint work in 2015, this interactive session will engage CoR and CGA members in considering major challenges and successful practices to improve research promotion and advocacy. Please come prepared to share one or more best examples of how your institution promotes and advocates research. (For example: How you cultivate and amplify campus research stories or build partnerships with local businesses or effectively use social media.)

5:30 PM – 6:15 PM

Joint CoR/CGA Session 5

Salon A-E

Catalyzing Industry-University Engagement with Third Party Support

Moderator:

Steve Beckham, Director of Federal Relations, University of South Carolina

Speakers:

Anthony Boccanfuso, President, University Industry Demonstration Partnership

Lee Ellen Drechsler, Director, Corporate Research & Development, The Procter & Gamble Company

Caroline Whitacre, Vice President for Research, The Ohio State University

6:15 PM – 6:20 PM **Welcoming remarks** **Salon A-E**

WVU President Gordon Gee (video)

6:20 PM – 7:30 PM **Joint CoR/CGA Reception** **MEC Lobby**

*APLU gratefully recognizes the **University Industry Demonstration Partnership** for its sponsorship of this reception.*

Wednesday, August 3

7:30 AM – 9:00 AM **Associate SRO Breakfast Session II** **Waterfront**

(This is a concurrent session, and we invite all Associate SROs.)

8:00 AM – 9:00 AM **Breakfast** **Salon A-C**

9:00 AM – 9:15 AM **Break**

9:15 AM – 10:30 AM **Session IX** **Salon D**

Research Integrity: Best Practices

Organizers:

Jim Rankin, Vice Provost for Research and Economic Development,
University of Arkansas

David Shaw, Vice President for Research and Economic
Development, Mississippi State University

Kalliat Valsaraj, Vice Chancellor of Research and Economic
Development, Louisiana State University

Speaker:

Kathryn Partin, Director, Office of Research Integrity, U.S.
Department of Health and Human Services

Jim Rankin, Vice Provost for Research and Economic Development,
University of Arkansas

David Shaw, Vice President for Research and Economic
Development, Mississippi State University

Kalliat Valsaraj, Vice Chancellor of Research and Economic
Development, Louisiana State University

Abstract

This session examines Research Integrity and as well as the current implementation of the Responsible Conduct of Research. The session will start with a keynote presentation on ethics. The session will then transition to a review of a VPR survey on how the RCR components are implemented at APLU universities. The RCR components include human subjects, animal use, conflict of interest, and data management. Other related topics include RCR training tools and the application of FOIA to university research. The survey review will include an interactive discussion with session attendees that will highlight best practices, related issues, and anecdotal information related to research integrity.

10:30 AM – 10:45 AM	Break	Salon D
10:45 AM – 12:00 PM	Session X	Salon D

[Capitalizing on Regulatory Reform to Reduce Administrative Burden](#)

Speakers:

Anthony DeCrappeo, President, Council on Governmental Relations

Jeremy Forsberg, Assistant Vice President for Research, University of Texas, Arlington

Lisa Mosley, Assistant Vice President of Research Operations, Arizona State University

David Ngo, Assistant Vice President of Sponsored Programs Administration, University of Texas Southwestern

Abstract

The administrative burden placed on faculty and institutions performing research continues to be a major area of concern for the research enterprise at the federal and university level. Publications from the National Science Board (2014), National Academies of Sciences (2015), and the Federal Demonstration Partnership (Survey in 2005 and 2012) have reported or documented the extent in which the administrative burden placed on faculty can hinder the

affordability and facilitation of science. One intent of the Uniform Guidance (2 CFR 200) was to address these burdens by streamlining policy requirements and focusing on research outcomes. Will universities adopt the changes available to them in the Uniform Guidance to help reduce research burden?

This session will focus on the current and future landscape of regulatory reform and university initiatives to streamline and reduce administrative burden. Panelists will also discuss a funded research initiative to demonstrate and measure that by adopting best practices for policy development and using informed risk assessments, universities can reduce administrative burden, minimize audit risk and facilitate the advancement of science.