

Program at a Glance

Saturday, June 19th

5:00 - 6:30 p.m. - Dinner

6:30 - 7:30 p.m. - Plenary I – Dr. Robert Full, University of California, Berkeley "*The Value of Interdisciplinary Research-based Instruction*"

8:00 - 10:00 p.m. - Welcome Reception

Sunday, June 20th

8:30 - 9:30 a.m. - Plenary II – Dr. P. Gabrielle Foreman, Occidental College "*Activating the Archive: Transformative Practices and Community Partnerships*"

9:45 - 11:00 a.m. - Interactive Session One

11:15 a.m. - 12:30 p.m. - Interactive Session Two

12:45 - 2:30 p.m. – Lunch

2:30 - 4:30 p.m. - Workshops Session I

4:30 - 6:30 p.m. – 1st Poster Presentation

7:00 - 10:00 p.m. – Jazz @ the Junction

Monday, June 21st

8:30 - 9:45 a.m. - Interactive Session Three

10:00 - 11:15 a.m. - Interactive Session Four

11:30 a.m.-12:30 p.m. - Plenary III – Dr. Mary Alice Morgan & Andrew Silver, Mercer University “*Research as Activism: The University and Anti-Trafficking Community Movement-Building*”

12:45 - 2:00 p.m. – Lunch

2:30 - 4:30 p.m. - Workshops Session II

4:45 - 6:30 p.m. – 2nd Poster Presentation

7:00 - 9:30 p.m. - Banquet Dinner

Tuesday, June 22nd

8:30 - 10:00 a.m. – CUR Fellows Addresses

- **Thomas E. Goodwin**, Professor of Chemistry, Hendrix College
- **Gilles Einstein**, Professor of Psychology, Furman University

10:30 - 11:45 a.m. - Interactive Session Five

12:00 - 1:30 p.m. - Lunch and Closing Session

Meeting Program

Building Key

SU = Shepherd Union

EH – Elizabeth Hall

AL = Lindquist Alumni Center

WB = Wattis Business Building

LI = Stewart Library

HC = Hurst Center

BC = Browning Center

KA = Kimball Visual Arts Center

ST = Stewart Bell Tower

Saturday, June 19, 2010

Dinner & Welcome

Remarks

5:00 p.m. – 6:30 p.m. SU - Ballroom

Welcome Remarks

Elizabeth Paul

President, Council On Undergraduate Research

Provost and Vice President for Academic Affairs, Stetson University

Mary Boyd, Dean, College of Arts & Sciences, University of San Diego

Michael Vaughan

Provost, Weber State University

Plenary I

6:30 p.m. - 7:30 p.m. SU - Ballroom

Introduction – **Mary Boyd**, Dean, College of Arts & Sciences, University of San Diego

Dr. Robert Full, University of California, Berkeley "*The Value of Interdisciplinary Research-based Instruction*"

Welcome Reception HC/AL – Legacy/ Garden Room

8:00 p.m. – 10 p.m.

Sunday, June 20, 2010

Breakfast

7:00 a.m. – 8:30 a.m. SU – Ballroom

Plenary II BC – Austad Auditorium

8:30 a.m. – 9:30 a.m. Introduction – **Greg Young**, Vice Provost for Undergraduate Education, Montana State University - Bozeman

Dr. P. Gabrielle Foreman, Occidental College "*Activating the Archive: Transformative Practices and Community Partnerships*"

Interactive Session One

9:45 a.m. – 11:00 a.m.

Bringing undergraduate research together with other high-impact, engaged-learning practices

Community Based Undergraduate Research – Designed for High-Impact - EH115

Mary Ann Studer, Associate Dean, McMaster School for Advancing Humanity, Defiance College

This presentation will outline the structural model for the community based undergraduate research that is sponsored by the McMaster School for Advancing Humanity at Defiance College. The presenters will provide the audience with specifics about model implementation, assessment, and the transformational synergy that takes place as students apply their academic expertise in partnership across cultural boundaries.

Merging undergraduate research experience and study abroad courses: Models designed to benefit student and faculty - EH117

David Osgood, Associate Professor, Albright College

Undergraduate research and study abroad courses can be successfully merged in a manner to benefit both student and faculty through valuable experiences and tangible outcomes that even transcend the travel component. We describe potential models for student preparation and optimization of in situ experiences and post-trip benefits using examples from study abroad courses offered in the Peruvian Amazon and Australia.

Examining the policy and practice implications of our research

Implementation Strategies to Address New Responsible Conduct of Research Training Requirements - SU305

Janice DeCosmo, Associate Dean/Director, University of Washington

Jennifer Harris, Associate Director, University of Washington

Patricia J. Pukkila, Director, University of North Carolina at Chapel Hill

The America COMPETES Act sets in place new requirements for the training of students working on NSF-sponsored projects in the responsible conduct of research. This session provides strategies for meeting this new requirement as well as ways in which the requirement can stimulate meaningful learning about the ethical choices researchers face in the planning, execution, and publication of their work.

Making research experiences a universal practice for undergraduate students

Fostering a Campus-wide climate for Undergraduate Research - SU312

Gloria Cox, Dean, University of North Texas

Diana Adams Elrod, Director, McNair Program, University of North Texas

Susan Eve, Prof. & Associate Dean, Honors College, University of North Texas

This interactive session explores the question of how to create a climate favorable to undergraduate research across an institution, including all departments, majors and faculty of an institution. Models will be discussed, and participants will be asked to share their own experiences in creating such a campus-wide program.

Ensuring a Quality Student Research Experience - SU321

Billi F. Copeland, Director, McNair Program, The University of Akron

Ensuring a quality research experience depends upon a structured approach. This talk will focus on improving the quality of research experiences for undergraduate students. Undergraduate students require training and guidance in selecting projects and mentors that match their academic needs while ensuring a firm understanding on how scientific research is conducted. Forms will be shared and we will discuss approaches.

Is a research experience for all undergraduates a sound, achievable and sustainable goal for higher education institutions? - SU331

Pam B. Kleiber, Associate Director, Center for Undergraduate Research Opps, University of Georgia

To what extent is a research experience for all undergraduates an achievable and sustainable goal for higher education institutions? The presenter/moderator, a veteran focus group researcher will pose this question to no more than twelve participants in an authentic focus group experience. Participants will learn the ground rules and actively engage with one another in dialogue during the remaining hour.

Encouraging more student researchers to complete a research thesis. - LI231

Helene Cweren, Program Manager, The Ohio State University

Allison A. Snow, Director, Undergraduate Research Office, The Ohio State University

Undergraduate research is not completed until it is communicated to a receptive audience, often in the form of a poster presentation or senior thesis. The goals of this session are to discuss perceived barriers to participation in thesis-writing, how these barriers can be overcome, and the relative value of writing and defending a thesis as compared to presenting a poster.

Using undergraduate research to help students engage with the world

Cultivating Student Research to Generate a Transformative Community Impact - SU404B

Lynne C. Cary, Assistant Professor of Life Sciences, Bethel College

Kiev S. Gracias, Assistant Professor of Life Sciences, Oakland City University

John L. McKillip, Associate Professor of Biology, Ball State University

Lindsey M. Steiner, Ball State University

This interactive session will directly address practical day-to-day challenges in implementing outward-focused undergraduate research programs at small-to-medium sized colleges and universities, and how these obstacles can be turned into 'teaching moments' in and of themselves. First-hand examples of successful research accomplishments will be offered that vary in content and scope.

Assessing Interdisciplinary, Community-based Research Outcomes for Course Development, Implementation and Improvement - SU312

David Dunbar, Associate Professor, Cabrini College

Caroline Nielsen, Assistant Professor, Cabrini College

Melissa Terlecki, Assistant Professor, Cabrini College

Developing community partnerships focused on addressing social concerns is more prevalent within many institutions of higher learning, as is embedding undergraduate research in learning experiences across the curricula. Assessing outcomes of undergraduate research experiences, both formative and summative, is a challenging yet necessary part of creating meaningful experiential learning for undergraduates across the disciplines.

Civic Engagement and Elementary Science Teaching Methods - EH406

Annette Nelson, Education Department Chair, Northland College

This session will discuss ways in which students in elementary teaching methods courses use civic engagement as a basis for K-8 classroom research. Students research and design a civic engagement project that could be carried out by a classroom of K-8 pupils. Students' projects are developed to address a community problem, issue, or concern. Previous student projects will be presented.

Drawing underrepresented students into our fields

Creating Hispanic Scientists: Transformation of a technician-oriented science program through undergraduate research - EH407

Anthony Carpi, Professor, CUNY- John Jay College of Criminal Justice

Nathan H Lents, Associate Professor, CUNY- John Jay College of Criminal Justice

Initiation of an undergraduate research program in the sciences at John Jay College was a transformative experience: contributing to an increase in student retention rates and graduation numbers, an increase in the number of students moving on to post-graduate study, and a reevaluation of the very mission of the Department itself.

Undergraduate research at community colleges: taking it to the next level - SU316

Craig Longtine, Professor, North Hennepin Community College

The next challenge to undergraduate research, scholarly and creative activities on community college campuses will be to increase the richness and quality of those opportunities. This highly interactive session will engage participants from community colleges and four-year universities interested in working with community colleges in the exchange of experiences and perspectives, ideas and challenges, and to explore collaborative relationships.

Funding Opportunities

Submitting a successful MRI proposal - EH105

Samuel A. Abrash, Associate Professor of Chemistry, University of Richmond

Myriam Cotten, Associate Professor, Hamilton College

Kraig Wheeler, Associate Professor, Eastern Illinois University

Presenters will discuss strategies for successful MRI proposals, and will then open the floor to questions from the audience. Approximately 45 minutes will be devoted to the presentations and the remaining time to the discussions. Successful proposal writers in several MRI areas will be part of the panel.

Non-Themed Presentations

Enhancing Undergraduate Research in the Humanities - SU220

Joyce Kinkead, Assoc. VP for Research, Utah State University

This session offers information about enhancing undergraduate research in the humanities through grants, fellowships, research assistantships, Honors, and a state humanities council. Participants will share information about various approaches to undergraduate research in the

The golden thread: How to sustain an undergraduate research laboratory using peer mentoring and clear expectations - EH118

Susan J. Larson, Associate Professor of Psychology, Concordia College Moorhead

G. Andrew Mickley, Professor & Director FSCS, Baldwin - Wallace College

This session will focus on how to sustain a productive undergraduate research laboratory. The presenters will share some of their experiences and the audience will have the opportunity to offer ideas and suggestions for maintaining a productive undergraduate research lab. Topics addressed will include student selection, peer mentoring, team building, lab orientation and lab management.

So you are going to be a new chair? Some thoughts from those who 've been there. - SU301

Michael P. Castellani, Professor of Chemistry, Marshall University

David Howard, Associate Professor, University of Wisconsin – La Crosse

Vicki J. Martin, Professor of Biology, Appalachian State University
Gubbi Sudhakaran, Professor and Chair, University of Wisconsin – La Crosse

This session is designed for incoming or new department chairs who have questions about situations they may face and how some veteran chairs would handle (or have handled) those situations. Advantages and disadvantages of serving as chair can also be discussed.

Interactive Session Two

11:15 a.m. – 12:30 p.m.

Bringing undergraduate research together with other high-impact, engaged-learning practices

Understanding Undergraduate Research - *EH217*

Connie K. Varnhagen, University of Alberta

Supporting an inquiry-based learning environment to engage undergraduate students can take many forms. In this interactive session we present a set of dimensions for characterizing and reflecting on different types of undergraduate research. Participants will apply them to their own situations and we will present some preliminary data on their use in a wide range of disciplines.

International Research Experience in the Sciences: IRES at Emory - *SU301*

Leah A Roesch, Director, SIRE Program, Emory University

In order to help science students gain international experience, we created the IRES program to support students working in international labs over the summer. As the summer of 2010 marks the 5th year of our program, please join us to discuss our program goals, outcomes, lessons learned, issues of sustainability as well as share advice from your programs.

Service Learning in Neuroscience – A Cooperative Program among the Undergraduate Institutions in the Lehigh Valley of Pennsylvania - *EH407*

Cecilia M. Fox, Associate Professor of Biological Sciences, Moravian College

Lehigh Valley Brain Awareness Service Learning Programs designed by neuroscience undergraduates and faculty, offer interactive activities and educational programs to engage a diverse audience about the brain and benefits of brain research. This session will demonstrate innovative ways of connecting a service learning curriculum with increased public confidence in scientific research while enhancing student personal development and facilitating cultural/racial understanding.

Making research experiences a universal practice for undergraduate students

So, You Are Thinking About the Dark Side: Opportunities and Challenges in Academic Administration - *SU404B*

Mark L. Biermann, Dean, School of Natural Sciences, Taylor University

Mary K. Boyd, Dean, College of Arts & Sciences, University of San Diego

Beth A. Cunningham, Provost and Dean of the Faculty, Illinois Wesleyan University

Jeffrey M. Osborn, Dean, School of Science, The College of New Jersey

This highly interactive session will focus on the decision to enter academic administration, and on the daily activities associated with such a position. The session will address the important role that research-supportive administrators can play in advancing undergraduate research on campus. Mid-career faculty members in particular could benefit from this session.

Universalizing the Senior Thesis in Humanities and Social Sciences: How to Build a Research-Across-the-Curriculum Program - EH117

Sara Orel, Associate Professor of Art, Truman State University

Julio Rivera, Associate Professor, Carthage College

Jenny Olin Shanahan, Honors Program Director, Associate Professor, Saint Mary's University of Minnesota

Presenters from Art History, Geography, and English will discuss the research skills needed for successful capstone projects, and where those skills might be introduced, developed, and mastered in each level of the curriculum. All students can conduct UR and complete a senior thesis in a scaffolded, research-across-the-curriculum program that builds UR skills from the first through fourth year.

The Research-Rich Undergraduate Experience: Successes, Challenges and Lessons Learned - EH115

Susan P. Slattery, Chair, Department of Mathematics, Stevenson University

Susan T. Gorman, Division Director, Stevenson University

Ellen M. Roskes, Chair, Department of Chemistry and Physical Sciences, Stevenson University

Stevenson University's experience in building a research-rich environment will form the basis of an interactive presentation. Participants will share their own successes and failures and brainstorm strategies to overcome obstacles to implementing inquiry-based learning and research into all levels of the curriculum.

Challenges and Obstacles in Supporting Undergraduate Research - EH317

Dale A. Ostlie, Dean, College of Science, Weber State University

Mike B. Vaughan, Provost, Weber State University

There are numerous challenges and obstacles that exist for institutions wishing to establish a culture in which undergraduate research can thrive. In this session issues such as steady sources of funding, scholarship and fellowship opportunities for students, appropriate recognition of the investment of faculty time, modifications in tenure documents that reward faculty mentorship, and change management will be discussed.

Using undergraduate research to help students engage with the world

Linking Undergraduate Research, Service Learning, and Community Partnerships Through Work at Regional Contaminated Sites - EH316

Michael Deibel, Associate Professor of Chemistry, Earlham College

Diane Husic, Chairperson and Professor of Biological Sciences, Moravian College

Faculty and students from Earlham College, Seattle University, and Moravian College are involved with interdisciplinary research and service-learning opportunities at sites close to the campuses that have suffered serious industrial contamination and ecosystem damage. The different models for how each of these campuses have incorporated research, volunteerism, course work, summer research, and service learning opportunities will be shared.

No Lab Required: Engaging First Year students in research through strategic partnerships - EH105

Elaine OLoughlin, Drexel University

Suzanne Rocheleau, Associate Dean, Pennoni Honors College, Drexel University

Drexel freshmen participate in summer research programs outside of laboratories and classrooms through local and international partnerships that engage them in real-world experiences.

Programs to be highlighted include: digital media projects at Independence National Historical Park, education research with Physics in Philadelphia, environmental studies at Barnegat Light, NJ and energy sustainability in Santiago, Chile.

Connecting faculty-student research to the greater community: opportunities to engage in service and deepen learning - EH306

He Len Chung, Assistant Professor of Psychology, The College of New Jersey

Janet A. Morrison, Associate Professor of Biology, The College of New Jersey

Collaborative faculty-student research focused on the greater community offers students an unparalleled opportunity for a deep intellectual experience while also fostering a lasting commitment to community service. Community engaged projects that have been part of The College of New Jersey's Mentored Undergraduate Summer Experience will be the platform upon which participants develop their own approach to such projects.

Drawing underrepresented students into our fields

Reflecting Global Diversity in an Undergraduate Research Program - LI231

Bethany Usher, Associate Director, Center for Teaching Excellence, George Mason University

Deirdre Moloney, Director, Fellowships & Undergraduate Apprentice Program, George Mason University

Erica Renee Porter, George Mason University

This interactive panel, consisting of two faculty members and an undergraduate research program participant, will discuss strategies for broadening the participation of traditionally underrepresented groups, including transfer students, in undergraduate research programs.

Funding Opportunities

Using Small Grant Opportunities to Jump-Start your Research - SU220

Bridget L. Gourley, Professor and Chair of Chemistry and Biochemistry, DePauw University

Often small pockets are available from internal sources, state science academies, local industry, local and regional granting agencies, etc. that can help get a new project off the ground.

Examples of small pockets of funding will be described and strategies will be suggested for learning about other opportunities in your area.

Non-Themed Presentations

How to Organize and Benefit from a Program Review - SU305

Roger Rowlett, Professor of Chemistry, Colgate University

A CUR Program Review Committee member will review the program review process and offer insights to ensure that the process produces the maximum benefits.

How to Get Started in Research with Undergraduates - SU312

Michael P. Castellani, Professor of Chemistry, Marshall University
Melvin L. Druelinger, Prof. of Chemistry and Director-Research and Sponsored Programs,
Colorado State University

This interactive session will give pre-tenured faculty the opportunity to learn from and discuss with experienced faculty how to establish and manage a research program with undergraduate students primarily in the natural sciences. Topics will include: choosing appropriate research projects, interacting with administrators and department chair, grantsmanship, and choosing and working with students.

Good to Great in Academics: Effective strategic planning - SU316

Sabrina A. Hessinger, Associate Professor and Coordinator STEM, Armstrong Atlantic State University

George C. Shields, Dean, College of Science & Technology, Armstrong Atlantic State University

In this session we will outline a faculty driven strategic planning process that has been used to transform a chemistry department at a private liberal arts college, and applied to a college of science and technology at a predominately undergraduate state institution.

GeoCUR at 25: How working with undergraduate researchers has changed with time - SU321

Laura A. Guertin, Associate Professor, Penn State Brandywine

Elizabeth Heise, Assistant Professor, University of Texas at Brownsville

Meagen Pollock, Assistant Professor, College of Wooster

Jeffrey Ryan, Professor and Chair, University of South Florida

The Geosciences Division of CUR is celebrating 25 years of mentoring faculty engaged with undergraduate researchers. Over the years, the range of undergraduate research projects and types of student researchers has notably changed with technological advances. This session will be an exchange and reflection upon where undergraduate geosciences research has been, where it is now, and the anticipated future directions.

The Possibility Scholarship and Global Laboratory at SUNY Oswego - SU331

Shashi M Kanbur, SUNY Oswego

Able Students from under-represented groups and financially disadvantaged backgrounds are given a completely free STEM undergraduate degree at SUNY Oswego. However there are two research experiences which make this even more exciting.

Lunch **SU - Ballroom**

12:45 p.m. – 2:30 p.m.

Workshop Session I

2:30 p.m. – 4:30 p.m.

Bringing undergraduate research together with other high-impact, engaged-learning practices

Undergraduate Research in the Classroom: How to Engage Freshman in a University and a Liberal Arts College Setting - EH407

David Dunbar, Associate Professor, Cabrini College

Melinda A Harrison, Assistant Professor of Chemistry, Cabrini College

Louise M. Temple -- Rosebrook, Professor, James Madison University

Teaching introductory biology using primarily research based pedagogy is currently underway in a nationwide research experiment sponsored by the Howard Hughes Medical Institute. In this program students capture, isolate and analyze bacterial viruses from soil as well as annotate the sequenced genomes.

Communication Courses in Support of Georgia Tech's Research Option: An Interactive Session on Interdisciplinary Preparation of Research Proposals, Theses, and Other Communication Techniques - SU220

Jeffrey A. Donnell, Georgia Institute of Technology

Karen Harwell, Director, Undergraduate Research, Georgia Institute of Technology

We describe transformative aspects of Georgia Tech's Undergraduate Research Option Program, focusing on document sections where student authors show their understanding of their disciplines and of the impact their projects may have on their discipline's body of knowledge and practices. Participants will be actively involved in example classroom activities demonstrating document design, peer review and visual display of information.

GeoPhoto Adventure: Applying GPS Data in Humanities Research - EH307

Jenny Olin Shanahan, Honors Program Director, Associate Professor, Saint Mary's University of Minnesota

Joseph Tadie, Assistant Professor of Philosophy, Saint Mary's University of Minnesota

In this outdoor workshop we'll read from Leopold's Almanac, and then hike with GPS units, cameras, and notebooks, collecting data on Ogden's ecosystem. Using GeoPhoto™ for uploading photographs and GPS data and spatially referencing the images, participants will "take away" an interactive map with photos and text boxes. (GPS and cameras supplied; bring notebook and camera if you have one.)

Utilizing a Summer Research Launch Tool Kit for Undergraduates Seeking Research Sites - EH105

Kathleen Cargill, Director, McNair Scholars Program, The College of Saint Scholastica

Carrie Taylor Kemp, Assistant Director, McNair Scholars Program, The College of Saint Scholastica

The workshop demonstrates two things to advisors of undergraduates seeking research sites: (1) to utilize a one-day intensive workshop model; and (2) to incorporate a simple Tool Kit containing: overview for applying to research opportunities; application spreadsheet/cover sheet; recommender contact list/checklist; developing/evaluating a personal statement/resume. The

SRL model saves time, streamlines applications, facilitates submission, and improves student productivity and student confidence.

Making research experiences a universal practice for undergraduate students

Finding the Fit of Undergraduate Research in Early Faculty Career Development - EH317

Douglas Armstead Assistant Professor, Westminster College

Susan J. Larson, Associate Professor of Psychology, Concordia College Moorhead

Karen K Resendes, Assistant Professor, Westminster College

Paul Seifert, Assistant Professor, Concordia College Moorhead

Sandra K. Webster, Faculty Development Officer, Westminster College

Issues that are particularly salient for early career faculty members will be presented and discussed in small groups of faculty members with similar perceived needs and at different levels of experience. By the end of the workshop participants should have some new strategies to fit undergraduate research into their teaching and scholarship activities.

Research Skill Development and Assessment (1) in STEM, Health Science, Business and the Humanities - SU316

John Willison, University of Adelaide

The Research Skill Development (RSD) framework has been successfully utilized by faculty in Australia, Canada & Ireland in numerous contexts as a model to facilitate and assess all students' discipline-specific research skills in content-rich courses. Participants will have opportunity to form collaborative small groups that pursue emerging lines of interest, including applying the RSD to their own contexts.

Supervising Undergraduate Research: A Workshop in Developing Tools and Techniques - EH117

Joanne D Altman, Professor of Psychology, Washburn University

Kathleen Morgan, Williams Associate Professor, Wheaton College

This workshop will bring dedicated mentors together to share best practices and greatest challenges associated with managing undergraduate researchers. Each participant will leave with at least one technique developed in the session to apply to his/her own undergraduate research mentoring practices to make these practices more efficient and productive.

Capitalizing on the Transformative Power of a Quality Enhancement Plan focused on Undergraduate Research - SU321

Veronique Tran, University of Houston – Main Campus

This workshop will help participants capitalize on the transformative power of a Quality Enhancement Planning (QEP) focused on undergraduate research. By learning about our experience at the University of Houston and through small and large group activities, participants will be equipped with tools to begin mapping an action plan for developing a transformative QEP at their own institutions.

Required undergraduate research experience: How it can help a growth of a small physics department at a liberal arts college, a case study. - EH118

Sasha Dukan, Associate Professor of Physics, Goucher College

In this workshop I will share my experience as the departmental chairperson with regard to how the required undergraduate research experience can help a) to build a sense of community within the department; b) to raise the profile of the department on campus; and c) to double the number of faculty members and majors in the department.

What Next? Positioning Established Undergraduate Research Programs for the Future - EH304

Anne Boettcher, Associate Professor, University of South Alabama

Laura Damuth, Director of Undergraduate Research, University of Nebraska – Lincoln

Julio Turrens, Associate Dean, College of Allied Health Professions, University of South Alabama

Stephanie Wallach, Director, Undergraduate Research Office, Carnegie Mellon University

Now that your undergraduate research program is established, what are some possible “next steps” to consider? This session, offered by seasoned program directors, focuses on how undergraduate research programs can support institutional priorities, develop funding opportunities, help define where undergraduate research takes place on each campus, and how undergraduate research can play a role with national fellowship competitions.

Promoting Student Research in the University of the 21st Century - EH305

Scott Perkins, Director of Research, Abilene Christian University

Thomas Winter, Abilene Christian University

Despite being faced with a number of transitional issues and challenges, 21st century universities are increasingly recognizing the educational and developmental value of involving undergraduate students in research. This workshop identifies the major issues confronting such an initiative and offers strategies for enhancing and expanding research opportunities for students in order to better prepare them for the professional marketplace.

Using undergraduate research to help students engage with the world

Developing public-private partnerships to enhance undergraduate research opportunities. - EH406

Melvin Carr, Weber State University

John F. Cavitt, Director, Office of Undergraduate Research, Weber State University

This session will describe a successful model for a sustainable community-based research program that involves funding from governmental agencies, industry and nongovernmental organizations. In addition, this session will discuss how faculty can develop and sustain partnerships as well as secure, and leverage funding from a variety of sources.

Drawing underrepresented students into our fields

Engaging new audiences in research by teaching the process of science - EH115

Anne E Egger, Undergraduate Program Coordinator, Stanford University

Anthony Carpi, Professor, CUNY- John Jay College of Criminal Justice

Learning about the way science really works helps lower the barriers for students to get involved in research. Participants in this workshop will explore new resources for integrating the process

of science into their teaching and discuss strategies and develop activities to help open the door to research for more students and continue to support them through the process.

Broadening Participation in Undergraduate Research: Practical Strategies for Building Sustainable Programs - EH316

Mary K. Boyd, Dean, College of Arts & Sciences, University of San Diego

Jodi L. Wesemann, Assistant Director, Department of Higher Education, American Chemical Society

Undergraduate research is a high-impact practice that can be expanded to support the success of students, faculty, disciplines, and institutions that have not traditionally been involved. By incorporating the design principles from Building Science and Engineering Talent and using strategies from Making Excellence Inclusive, participants will develop a framework for fostering institutional change and building effective and sustainable programs.

Diverse Students in Research: the role of undergraduate research in student retention and academic success - SU312

Sandra Gregerman, Director, Undergraduate Research Opportunity Program, University of Michigan – Ann Arbor

Sheila Pedigo, Director, SOURCE, Case Western Reserve University

John Vasquez, Assistant Director, Undergraduate Research Opportunity Program, University of Michigan – Ann Arbor

This session will discuss the engagement of diverse students in undergraduate research including community college transfer students through a specific program model and then engage participants in an institutional assessment of the adaptability of such a program on their own campuses. Assessment and evaluation strategies will also be covered.

Funding Opportunities

Novel Funding Exploration - EH306

Jim Amen, LI-COR, Inc.

Kristin Feese, LI-COR, Inc

Explore novel funding opportunities. Specifically, we will focus on industry matching grants similar to LI-COR Bioscience's LEEF and GEMF programs.

Non-Themed Presentations

Advocating for Undergraduate Research: Skills and Tools - SU301

Kris Andrews, Assistant Vice President, University of Wisconsin - System Administration

Vicki J. Martin, Professor of Biology, Appalachian State University

The CUR Government and External Relations Committee and our advocacy partner, Washington Partners, will offer a workshop targeted towards encouraging and empowering CUR members to advocate for undergraduate research in a variety of situations.

Meaningful Feedback – Creating Student and Advisor Surveys - EH217

Alan R. Peterfreund, SageFox Consulting Group

This workshop will take attendees through the process of creating surveys to gather information from students and research advisors to support summative and formative evaluation. Attendees will go through the whole process of survey development, from defining objectives to creating a finished project, using their own ideas as the source of the exercise.

Transforming Students ' Sense of Identity through Reflexive Research Experiences - SU305
Kurt P. Kearcher, Associate Professor, California University of Pennsylvania

Including "reflexivity" as an element of undergraduate research projects in a variety of disciplines can transform students' research experiences by encouraging them to consider how their sense of identity (particularly as student-scholars) shapes and is shaped by their research. Participants will discuss and practice developing simple but effective reflexive elements for undergraduate research projects.

Poster Session 1

4:30 p.m. – 6:30 p.m. KA – Gallery

For a list of presenters please see page **XX**

Jazz at the Junction Party

7:00 p.m. – 10:00 p.m. Union Station (Downtown Ogden)

Monday, June 21, 2010

Breakfast

7:00 a.m. – 8:30 a.m. SU – Ballroom

Interactive Session Three

8:30 a.m. – 9:45 a.m.

Bringing undergraduate research together with other high-impact, engaged-learning practices

Integrated Science: Training Future Scientists in Science 100 - SU220
Connie K. Varnhagen, University of Alberta

Science is changing: The solutions to most of the significant scientific challenges today and in the future will often lie beyond the scope of any single discipline. In this presentation, we describe Science 100, a unique learning opportunity designed to help students think beyond disciplinary boundaries as they research answers to complex problems.

Developing intradepartmental collaborations as a means to stimulate high impact research at an undergraduate institution. - SU301
Robert J LeSuer, Assistant Professor of Chemistry, Chicago State University

Kristy Mardis, Assistant Professor of Chemistry, Chicago State University

Hear how the Department of Chemistry at Chicago State University has used an intradepartmental research collaborative to enhance involvement of undergraduate students in high quality research. This workshop will highlight the benefits and challenges faced, and provide an opportunity to brainstorm other potential intradepartmental research programs.

Using undergraduate research to help students engage with the world

Students' Understanding of the Scientific Process: Transformation or Stagnation? - *WB116*

Adam Johnston, Weber State University

Eric Amsel, Professor, Weber State University

Although a great deal of evidence suggests many benefits for science students involved in undergraduate research, our own research sees a divide between what is learned by undergraduate researchers and what is hoped for by faculty mentors. We offer a review of current research and an interactive discussion about our goals for undergraduate research.

Developing Citizen-Scholars through Undergraduate Research Experiences - *WB119*

Juliette Niemi, Michigan State University

Jennifer Auchtung, Faculty, Michigan State University

This session focuses on how undergraduate research engages students and connects their scholarship to society. We will discuss results from a recent survey of students engaged in undergraduate research and describe the Honors Research Seminars, which engage students as citizen-scholars. Through group discussion, participants will examine the challenges, benefits, and feasibility of implementing similar programs at their institutions.

Ethics in Community-Based Research - *WB103*

Andrea Chapdelaine, Provost and Vice President of Academic Affairs, Albright College

Herb Childress Dean of Research and Assessment, Boston Architectural College

Interactive session on ethical issues involved in community-based undergraduate research. Guidelines and an ethical framework will be presented, followed by group discussions regarding hypothetical ethical issues that may arise and possible resolution. Such discussion facilitates the learning, research and service goals of these projects.

Drawing underrepresented students into our fields

Using Cognitive Pedagogy in the Developmental Writing Course - *LI231*

Gail Fensom, University of New Hampshire at Manchester

Students deemed unready for introductory college courses pose a significant pedagogical challenge. This session will explore the use of cognitive principles in a developmental composition course.

Building on successful undergraduate research programs to create a gateway to science careers for underrepresented students - *SU404B*

Donald L. Lovett, Professor of Biology, The College of New Jersey

Janet A. Morrison, Associate Professor of Biology, The College of New Jersey

Participants will explore strategies for building on successful undergraduate research programs in order to increase recruitment and retention of underrepresented students to the programs, and ultimately to careers in science. Using two NSF-funded mentoring programs at The College of New Jersey as springboards to initiate discussion, participants will develop strategies for increasing opportunities for underrepresented students at their own institutions.

Where do we belong? Examining the Inconsistent Administration of Undergraduate Research Across Postsecondary Institutions - EH316

Natalie A Lupton, Assistant Professor and Director of Undergraduate Research, Central Washington University

This interactive session will focus on the discussion of where the administration of undergraduate research belongs within the organizational structure of a postsecondary educational institution. Attendees will engage in discussion concerning the structural organization of undergraduate research activities within their own organization and evaluate how this structure can be improved to best serve the students.

Three undergraduate programs aimed at first year students: variations on a theme - WB114

Joyce Fernandes, Miami University

Linda Dixon, Miami University

Multiple pathways and strategies may be required to engage first-year students in research experiences. In addition to the contact with faculty members, effective programming should consider a range of common experiences.

Nuts & Bolts: Undergraduate Research Conference - EH306

Jacqueline Smith – Mason, Director of Undergraduate Research, Virginia Commonwealth University

Learn about the nuts and bolts of planning an undergraduate research symposium. This session is geared towards undergraduate research directors, particularly those who are planning their first symposium.

Expanding Humanities Undergraduate Research Visibility across Campus - EH304

Susan G Cosby Ronnenberg, Assistant Professor of English and Co-Director of Honors, Viterbo University

This session will generate strategies for increasing Humanities participation in showcasing undergraduate research. While undergraduate research in the Humanities takes place on college campuses on a regular basis, much of it remains invisible outside the students' specific program.

Funding Opportunities

Funding Opportunities at Research Corporation for Science Advancement - EH407

Silvia Ronco, Program Officer, Research Corporation

Research Corporation for Science Advancement's Cottrell College Science Award (CCSA) Program has been supporting fundamental research in the physical sciences at primarily

undergraduate institutions (PUIs) for over forty years. The Cottrell College Science Awards program supports early career faculty to conduct research in the physical sciences, in collaboration with undergraduates. Guidelines for single- and multi-investigator submissions, as well as other current initiatives, will be outlined and discussed. This presentation will place special emphasis on new and revised programs.

Non-Themed Presentations

Two Years at the NSF: Serving as a Rotator in the Division of Undergraduate Education (DUE) - SU305

Jill Singer, Director, Office Undergraduate Research, Buffalo State

Bert E. Holmes, Program Director, NSF-DUE and Carson Distinguished Chair of Science, University of North Carolina – Asheville

Duncan McBride, Section Head, Lead Program Director, NSF-DUE

Have you ever considered serving as a program director at the National Science Foundation? This session will provide practical information about the process of applying to serve as a program director, the benefits accrued by serving as a program director, and anecdotes from current and past DUE program directors and rotators.

Developing Leadership Skills to Effect Postive Change - EH317

Diane Erickson, Assistant Professor, Honors College, University of Alaska - Anchorage

Undergraduate students are critical stakeholders holding an expertise and perspective to share about the experience of being a student. The Participatory Action Research for Student Success (PASS) Project at the University of Alaska Anchorage builds leadership skills by actively engaging undergraduate students in research regarding student achievement and the student experience at UAA in collaboration with faculty and staff.

Integrating off campus students into a summer research program - SU312

Mary L. Crowe, Director, Office of Undergraduate Research, University of North Carolina at Greensboro

Chris Hughes, Associate Professor of Chemistry, James Madison University

Many campuses offer NSF REU programs that bring off campus students to their home campus each summer for an intensive research experience. NSF calls these individuals "participants in training programs". There are legal and procedural issues that are impacted by this classification. In this session we will talk about the various ways campuses have found to handle REU participants.

Oh No! All That Work And We Can't Afford The Project! - SU316

Arthur J Lidsky, President, Dober Lidsky Mathey

Your university has gone through the planning and design process for a new or renovated science building but the financial resources are insufficient to proceed., , Drawings, model, site plans indicate that the proposed construction will result in a distinguished project – if only it were feasible. We will discuss a systematic review to identify how to make the project viable.

So I 've Got Tenure - Now What? - SU321

Samuel A. Abrash, Associate Professor of Chemistry, University of Richmond

Michelle Bushey, Professor of Chemistry, Trinity University
Myriam Cotten, Associate Professor, Hamilton College

A panel of three presenters will discuss the critical period immediately following the awarding of tenure. Discussion will take place from the point of view of an administrator, a department chair, and a newly tenured faculty member.

Undergraduate Research “Ambassador” programs at the University of Missouri & University of Central Florida - SU331

Brian Booton, University of Missouri -- Columbia

Kimberly R. Schneider, Director, Office of Undergraduate Research, University of Central Florida

Undergraduate Research "Ambassador" programs successfully engage students as ambassadors to provide peer outreach, assist with public relations, and help organize and staff events. Information on selection and training, typical tasks and responsibilities, public relations opportunities, and program costs will be presented.

Interactive Session Four

10:00 a.m. – 11:00 a.m.

Bringing undergraduate research together with other high-impact, engaged-learning practices

Advancing Cognitive Neuroscience Through A Hands-On Laboratory-Based Learning Community: The C-NERVE Experience - EH407

Desiree Budd, Professor, University of Wisconsin – Stout

This workshop will introduce participants to C-NERVE (Cognitive Neuroscience Education and Research-Valued Experience) which is a three-year, laboratory-based program which was originally funded by the National Science Foundation. Assessment data will be presented followed by a discussion of what made C-NERVE successful.

Active-Learning in Cancer Biology Courses for Non-Science Majors - SU301

Pamela Hanson, Assistant Professor, Birmingham – Southern College

Jonathan M King, Associate Professor, Trinity University

Strategies that promote scientific-thinking among non-science majors will be highlighted in this discussion of cancer biology courses which use investigative labs, molecular modeling, GIS, and story-telling assignments to engage students. Participants will complete abbreviated versions of some of these activities and brainstorm about how these or similar exercises could be used to promote active-learning in courses at their home institutions.

STEP Freshman Curriculum: Streamlining students into undergraduate research - SU305

Michael Braunstein, Associate Professor of Physics, Central Washington University

Michael Jackson, Professor, Central Washington University

In this interactive session participants will consider the curriculum that the session leaders have implemented as part of an NSF funded project at Central Washington University. The curriculum is designed to engage freshman STEM-discipline students in a learning environment similar to that of an undergraduate research experience and prepare them to take advantage of ongoing undergraduate research opportunities.

Implementing and Sustaining a College-wide Summer Undergraduate Research Program with few resources - SU312

Sabrina A. Hessinger, Associate Professor and Coordinator STEM, Armstrong Atlantic State University

George C. Shields, Dean, College of Science & Technology, Armstrong Atlantic State University

In this session we will lead a discussion on how to start and maintain a college-wide summer undergraduate research program at a predominately undergraduate state institution with few financial resources. An incentive system was used to increase the number of grant submissions to Federal Agencies to make the program self-sustaining.

Making research experiences a universal practice for undergraduate students

Making universal undergraduate research feasible in the current financial climate - SU331

Janet McGlynn, Director of Communication and Outreach, University of Maryland Baltimore County

This session will offer practical, low-cost methods to expand undergraduate research with limited staff and faculty time.

Evaluating Undergraduate Research: Measuring Student Outcomes - LI231

Jill Singer, Director, Office Undergraduate Research, Buffalo State

Bridget Zimmerman, Buffalo State

At Buffalo State we have undertaken a multi-year effort aimed at developing and field-testing a methodology for measuring student outcomes for an 8-week long summer research program. This session will explain how the instruments were developed, how they are being used by students and mentors, and our preliminary findings on a range of outcomes for science and non-science disciplines.

Raising the Bar Down Under: a framework for developing research skills in an Australian undergraduate program. - EH306

Catherine A Snelling, University of Adelaide

'Raising the Bar Down Under' is the story of how we have developed a program-wide approach to developing undergraduate research skills in the Bachelor of Oral Health program at The University of Adelaide, Australia. Our session will provide an opportunity for review of our approach as well as an on-line visit to the research activities our students have undertaken.

Research Intensive Course Implementation - SU404B

Thomas Kvale, Director of Undergraduate Research, University of Toledo

The newly approved Research Intensive Course Implementation process at The University of Toledo will be presented.

Building a Continuum of Research for All Students - WB114

Barbara J Speziale, Associate Dean of Undergraduate Studies, Clemson University

Clemson University 's array of diverse undergraduate research opportunities will be presented to set the stage for an interactive session in which participants will engage in small-group discussions of the value and ease of implementation of various forms of undergraduate research. Participants will receive a report on the session's findings after the conference.

Integrating Undergraduate Research into Faculty Workload - WB116

Jeffrey M. Osborn, Dean, School of Science, The College of New Jersey

Gerardo M. Gonzalez, Associate Vice President for Research, California State University – San Marcos

Elizabeth L. Paul Provost and Vice President for Academic Affairs, Stetson University

This session will explore strategies associated with integrating undergraduate research into faculty workload, as well as related forms of support for undergraduate research, scholarship, and creative work. The panel members represent a range of leaders, institution types and sizes, and disciplines.

Using undergraduate research to help students engage with the world

Leveraging externally funded interdisciplinary programs to build others on your campus - WB119

Mary L. Crowe, Director, Office of Undergraduate Research, University of North Carolina at Greensboro

Using interdisciplinary mathematics and biology as a starting point, this session will engage attendees in discussion about the costs and benefits of interdisciplinary research projects. We will talk about issues faced by faculty, students and how one might obtain funding for their program.

Engage Students with the World through Real-world Project Development - EH304

Richard Detmer, Middle Tennessee State University

Zhijang Dong, Middle Tennessee State University

In this interactive session, we will discuss benefits, suggestions and lessons we have learned in the last two years to engage undergraduate students with the local community through real-world project development.

Drawing underrepresented students into our fields

Exploring The Freshmen's Potential to Learn About and Conduct Research: The Dichotomy of Perceptions and Ways to Approach Them - EH316

Natalie A Lupton, Assistant Professor and Director of Undergraduate Research, Central Washington University

This interactive session will help participants understand the dichotomy of perceptions concerning the ability of freshmen to learn about and conduct research. Attendees will (1) evaluate their own beliefs and those of faculty in their institution, (2) brainstorm techniques to overcome negative perceptions and (3) share best practices and tactics to transform undergraduate research opportunities.

How to Attract, Involve, and Retain Underrepresented Groups - SU321

Joseph J. Horvat, Professor, Weber State University and Past-President, Psi Chi, International Honor Society in Psychology

Alvin Wang, Dean, Burnett Honors College, University of Central Florida and President, Psi Chi, International Honor Society in Psychology

Martha S Zlokovich, Executive Director, Psi Chi, International Honor Society in Psychology

An interactive session where presentations on attracting, involving and retaining underrepresented students will be followed by audience participation. Workbooks and handouts will be given to attendees relating to current successful programs and on how to make their program successful in these areas.

Funding Opportunities

Funding Opportunities at the National Science Foundation that Support Research at Predominantly Undergraduate Institutions (PUIs) - SU220

Bert E. Holmes, Program Director, NSF-DUE and Carson Distinguished Chair of Science, University of North Carolina – Asheville

John F. Mateja, Program Director, NSF-DUE and Director, URSA, Murray State University

This presentation will include a brief overview of NSF programs that support undergraduate research (REU, RUI, ROA, RET, MRI, CAREER, etc.). As well as, a brief overview of NSF programs within DUE that are of interest to faculty involved in undergraduate education.

Non-Themed Presentations

Information Management in the Undergraduate Research Laboratory - EH317

Roger Rowlett, Professor of Chemistry, Colgate University

This session will include information on training undergraduates in the research laboratory. It will include tips on information management, using students as trainers, and offer suggestions for printed and electronic laboratory resources.

Sustaining Undergraduate Research in Fiscally Challenging Times: The Wisconsin Way - SU316

Vijendra K. Agarwal, Associate Vice Chancellor for Academic Affairs, University of Wisconsin – La Crosse,

Kris Andrews, Assistant Vice President, University of Wisconsin - System Administration

Timothy Lyden, Assistant Professor, University of Wisconsin – River Falls

Gubbi Sudhakaran, Professor and Chair, University of Wisconsin – La Crosse

The presentation will focus on several innovative approaches for garnering resources to build, support and sustain undergraduate research in University of Wisconsin System institutions.

Plenary III & Remarks

11:30 a.m. – 12:30 p.m. BC – Austad Auditorium

William A. Sederburg

Utah's Commissioner for Higher Education

Introduction – **Herb Childress**, Dean of Research and Assessment, Boston Architectural College

Dr. Mary Alice Morgan, Andrew Silver and Hannah Vann, Mercer University
“*Research as Activism: The University and Anti-Trafficking Community Movement-Building*”

Lunch

12:45 p.m. – 2:00 p.m.

SU – Ballroom

Workshop Session II

2:30 p.m. – 4:30 p.m.

Bringing undergraduate research together with other high-impact, engaged-learning practices

The first frontier: High altitude ballooning as a platform for student research experiences in science and engineering - SU220

John Charles Armstrong, Assistant Professor of Physics, Weber State University

High altitude balloon platforms are ideal for providing hands-on research experiences for students in physics, atmospheric science, engineering, and other aerospace-related disciplines. During this workshop, we'll outline a basic high altitude balloon platform that can be constructed and operated by undergraduate students.

Bridging from the Classroom to Undergraduate Research using Remotely Operable Research Instrumentation: Examples with Microbeam Instruments - EH316

Jeffrey Ryan, Professor and Chair, University of South Florida

This workshop will demonstrate new approaches for bringing students to undergraduate research through flexible classroom activities with remotely operable research instrumentation, through interactive exercises with remote-access microbeam tools, and discussions of other Web 2.0-inspired interactive research tools and resources.

Courage for the Tough Questions: A Leadership Development Approach that Combines Research Service-Learning and Critical Reflection - EH407

Alma G. Blount, Director, Hart Leadership Program, Duke University

Kristin Goss, Duke University,

David Guy, Writing Instructor, Duke University,

Andrea Marston, Research Service Learning Coordinator, Duke University

Duke University's Hart Leadership Program presents a pedagogy of research service-learning with critical reflection as a case study of how to create a curriculum-based leadership development program for undergraduates. The goal is to provide participants with an understanding of how a multifaceted approach for critical reflection can accompany a sequenced research service-learning program with powerful results in student learning outcomes.

Wiki Work with Undergraduates - EH317

Sandra K. Webster, Faculty Development Officer, Westminster College

Joanne Altman, Professor of Psychology, Washburn University

This workshop will present examples of wikis used for supervision of undergraduate research and for student collaboration followed by a discussion of problems, solutions and next steps. Outcomes of the workshop include collaborative wiki for faculty support, concrete suggestions for wikis at our home institutions and an opportunity for ongoing dialogue.

Making research experiences a universal practice for undergraduate students

Research Skill Development and Assessment (2): 'What about passion?' - SU316

John Willison, University of Adelaide

'What about passion?' The question came after my presentation at a research seminar on a model for coherently and explicitly developing all students' research skills. We will collaboratively construct a version of the model, the Research Skill Development framework, which considers explicitly the affective realm.

What every undergraduate psychology major should know: The knowledge, skills and values of psychological research. - SU321

G. Andrew Mickley, Professor & Director FSCS, Baldwin - Wallace College

Lenore Szuchman, Professor and Chair, Barry University

Guillermo Wated, Assistant Professor, Barry University

In light of APA's multiple sets of guidelines for goals addressing the undergraduate curriculum (2006 learning goals and outcome; 2007 assessment benchmarks; 2009 quality principles), workshop participants will evaluate the need for additional CUR guidelines. Participants will actively engage in formulating relevant goals, objectives and standards that may be used to guide the undergraduate research experience in psychology.

Models of Undergraduate Scholarship in the Humanities: A Workshop - SU331

John R Black, Associate Professor of English, Moravian College

Julie Langford, University of South Florida

This workshop presents two successful projects that, in promoting undergraduate scholarship in the humanities, offer possible models to be adapted by other institutions.

Using your school 's reaccreditation process to expand undergraduate research - *EH306*

Joyce Kinkead, Assoc. VP for Research, Utah State University

Patricia J. Pukkila, Director, University of North Carolina at Chapel Hill

Kathryn J. Wilson, Assistant Vice Chancellor for Research, Indiana University Purdue University Indianapolis

Impending reaccreditation presents both challenges and opportunities to colleges and universities. Since CUR has led the way with assessing undergraduate research experiences and documenting their transformative value to undergraduate education, this workshop will help participants to identify appropriate ways to contribute to their reaccreditation process and also use the process to benefit undergraduate research programming on their campus.

Developing Responsible Conduct Guidelines for Undergraduate Research - *LI231*

Herb Childress, Dean of Research and Assessment, Boston Architectural College

Neither an IRB nor an IACUC is intended to address the full array of issues in the responsible conduct of research. This working session is intended to help participants develop possible policies and structures that could address the particular nature of responsible conduct in undergraduate research on their own campuses.

Creating a Collaboration to Perform Big Science at Small Schools - *SU404B*

Joseph E Finck, Professor of Physics, Central Michigan University

Bryan Luther, Associate Professor, Concordia College Moorhead

Graham Peaslee, Professor, Hope College

Scientists from all disciplines will have the opportunity to design a research project that gives significant roles to undergraduates and involves one or more major research institution and several primarily undergraduate institutions. Workshop participants will actively work to identify potential collaborators to cooperate in the project, determine if there are appropriate funding sources, and develop strategies for attracting talented undergraduates.

Using undergraduate research to help students engage with the world

Integration of Service-Learning and Research Across Disciplines - *WB114*

Anne Boettcher, Associate Professor, University of South Alabama

Sandra Gregerman, Director, Undergraduate Research Opportunity Program, University of Michigan – Ann Arbor

This workshop will focus on how undergraduate students can participate in high quality service-learning enhanced research from the planning stage through data collection and analysis to evaluation, and assessment. Workshop participants will develop their own plan based on a template we provide which they can take back to their institutions.

Hurricanes and Homelessness: Adapting Models of Community-Engaged Research - *WB116*

Jennifer Baggerly, Associate Professor, University of South Florida

Naomi Yavneh, Associate Professor, Director of Undergraduate Research, University of South Florida

Drawing on the designs of two REU programs at the University of South Florida, focused on the social aspects of hurricanes and homelessness, respectively, this workshop introduces useful models for community-engaged, undergraduate research, and engages participants in activities designed to help them in adapting and developing such programs for their own institutions.

Drawing underrepresented students into our fields

Providing Community College Students Access to Undergraduate Research Experiences (UREs) in Science - SU312

Dana Peterson, University of Alabama at Birmingham

A forum for faculty and administrators of two-year and four-year institutions to explore the challenges and rewards of research collaboratives designed to improve access and opportunity in experimental science to community college students. Workshop participants will share strategies for adapting the traditional science undergraduate research experience (URE) model to facilitate greater participation of non-traditional and community college students.

Non-Themed Presentations

How to effectively plan, design and write a research manuscript. - EH304

Nicole Bennett, Assistant Professor, Appalachian State University

Joseph Provost, Associate Professor, Minnesota State University, Moorhead

Learn how to better plan and design research projects for successful publications. Learn best practices for approaching manuscript writing and the common elements editors and reviewers look for when accepting manuscripts for publication.

Developing Undergraduate Research from Within: Transforming Faculty into Advocates for Student-Centered Research - SU301

Wei R. Chen, Assistant Dean, College of Mathematics and Science, University of Central Oklahoma

Beverly K Endicott, Director of Sponsored Programs, University of Central Oklahoma,

Charles Hughes, Associate Dean, College of Mathematics and Science, University of Central Oklahoma

Charlotte K Simmons, Professor, University of Central Oklahoma

This workshop will use the Center for Undergraduate Research and Education for Science, Technology, Engineering, and Mathematics (CURE-STEM) at the University of Central Oklahoma as a model to provide hands-on experience for participants to explore opportunities to establish similar student-centered research components at their campuses, through group discussion and other activities.

Creating Catalytic Questions and Transformative Outcomes in Undergraduate Research - SU305

Dave Joseph, Vice President, Public Conversations Project, Inc

These new teaching and learning techniques can help transform classrooms and the communities where research is conducted. Participants will leave this workshop with an expanded awareness

of how to employ these practices intentionally in their classrooms, and to energize and motivate students to apply them in their undergraduate research.

Poster Session 2

4:45 p.m. – 6:30 p.m. KA – Gallery

For a List of Presenters, please see page **XX**

Banquet Dinner

7:00 p.m. – 9:30 p.m. SU – Ballroom

Tuesday, June 22, 2010

Breakfast

8:00 a.m. – 9:00 a.m. SU – Ballroom

CUR Fellows SU – Ballroom

9am – 10am Introduction of Award – **Michael Jackson**, Professor, Central Washington University

Introduction – **Silvia Ronco**, Program Officer, Research Corporation

Thomas E. Goodwin, Professor of Chemistry, Hendrix College

Introduction – **G. Andrew Mickley**, Professor & Director FSCS, Baldwin – Wallace College

Gilles Einstein, Professor of Psychology, Furman University

Presentation of Awards – **Jim Amen**, LI-COR, Inc.

Interactive Session Five

10:30 a.m. – 11:45 a.m.

Bringing undergraduate research together with other high-impact, engaged-learning practices

Enhanced Study Abroad Experiences: Conducting Undergraduate Research in a Foreign Setting - SU301

Sara E Orel, Associate Professor of Art, Truman State University

Ashok Malhotra, SUNY Distinguished Teaching Professor, State University of New York at Oneonta

Ashley Tolman, International Field Studies Coordinator, Brigham Young University

Doing research internationally can be a powerful learning experience for an undergraduate student, but the process of setting up a program involves additional preparation on the part of the mentor. Presenters will share examples of successful programs and discuss the process of preparing both the students and the foreign setting in order to develop a successful study abroad research experience.

Creating Engaged-Learning Partnerships: Undergraduate Research and Student Affairs - SU305

Julie Morris, Director, University of South Carolina - Columbia
Ashley Schryer, University of South Carolina - Columbia

Join us as we examine partnerships with Student Affairs offices to create unique opportunities and broaden undergraduate research activities. Examples include learning communities, first-year seminars, research abroad, and community-based research.

Making research experiences a universal practice for undergraduate students

The Challenges of Requiring Research for all Students: How your Department can Make it Happen - EH304

Mitchell Malachowski, Professor, University of San Diego

Undergraduate research is not a requirement of all students in most departments. We will probe the challenges associated with making research a requirement and work with the attendees in creating a framework for their department where research is required for all.

Early Undergraduate Research Opportunities: Getting them started - EH317

David Bahr, Director of Undergraduate Research, Washington State University
Kimberly R. Schneider, Director, Office of Undergraduate Research, University of Central Florida

An interactive session on methods to introduce students to research through: short courses; concentrated camps; and traditional course formats. The results of these methods from three universities will be presented, along with discussion on adapting methods to other institutions.

Transforming Your Humanities Students into Research Assistants and Collaborators - EH217

John N. Swift, Professor, Occidental College
Bernadette McNary – Zak, Associate Professor, Rhodes College

Participants in this interactive session will have an opportunity to think about their own research and to outline points of access for possible student projects. Participants will then begin to articulate strategies and goals for preparing students to begin to do Undergraduate Research in their discipline under their guidance.

Discourse Through Multi-conceptual Processes: Teaching and Researching African Literatures. - SU316

Oumar Cherif Diop, Kennesaw State University

Dionne Blasingame, Kennesaw State University
Dhanashree Thorat, Kennesaw State University
Sera Turgut, Kennesaw State University

Our presentation focuses on how to use a constructivist approach informed by Ayers' proposition that good teachers empower their students by finding ways to activate them, for they know that learning requires discovery and invention and active engagement between the subject and the object matter. They know when it is necessary to push or to pull just like midwives.

Using undergraduate research to help students engage with the world

International Undergraduate Research: How to create a transformative experience. -
SU321

Carol Bender, Director UBRP, University of Arizona
Donna B. Brown, Director of Undergraduate Research, University of New Hampshire
Marcus Webster, Director of Undergraduate Research, College of Saint Benedict, Saint John's University

Successful experiences at University of Arizona, University of New Hampshire, and College of St. Benedict/St. John's University offer important lessons about what makes international undergraduate research a transformative experience. Program directors will discuss project planning, research preparation, cultural orientation, faculty supervision, and post-research activities. They will assist participants in identifying options and resources on their campuses for delivering similar programs.

Linking undergraduate research to community service: cases in land use planning and your discipline - *SU331*

Bryan Dorsey, Professor of Geography, Weber State University

This presentation/workshop explores strategies for identifying and undertaking undergraduate research projects with your students that are linked to government or community organizations in need of research findings, e.g., applied research in land use planning that provides community benefits. Through civic engagement or community-based, service-learning research, could your students become better prepared for both professional and volunteer roles in community service?

The global water crisis: engaging students in laboratory and international field experiences - *EH316*

Jeff R. Brown, Assistant Professor, Hope College
Paulette Chaponniere, Assistant Professor of Nursing, Hope College

Recently, Hope College has developed a multi-disciplinary program involving faculty and students from across the campus addressing clean water issues world-wide. We will discuss our current efforts to make this initiative an intentional driving force which channels specific research and field work into transformative experiences that engage undergraduate scholars on a global level.

Utilizing Centers and Institutes to Involve Undergraduates in Applied Research - *LI231*

Andrea Chapdelaine, Provost and Vice President of Academic Affairs, Albright College
James T. LaPlant, Professor and Associate Dean, Valdosta State University
Geoffrey D. Peterson, University of Wisconsin – Eau Claire

We explore the benefits and challenges of involving undergraduates in applied research coordinated by a center or institute. Disciplinary and multidisciplinary applied research projects that involve undergraduates will be discussed. Perspectives from public and private institutions will highlight how to build and sustain relationships with community actors. We note how funds from applied research projects can promote undergraduate research programs.

Drawing underrepresented students into our fields

Facilitating the advancement of senior women chemistry and physics faculty via multi-institution horizontal peer-mentoring: Transforming the professoriate for broader impacts
- *EH305*

Bridget L. Gourley, Professor and Chair of Chemistry and Biochemistry, DePauw University
Anne-Barrie Hunter, University of Colorado at Boulder

This session focuses on how to establish multi-institution horizontal peer-mentoring alliances and results of research about the needs of women science faculty at liberal arts colleges. We will present results of survey and interview tools aimed at assessing the efficacy of horizontal peer-mentoring alliances.

Funding Opportunities

Models for Funding Academic Year Undergraduate Research - *SU220*

Thomas J. Cheatham, Dean, Middle Tennessee State University
Michael Dorff, Professor, Brigham Young University

This session will first present some successful models that provide funding for students and professors to do undergraduate research during the academic year at their own institution. Then we will discuss how other institutions and disciplines could adapt these models to their own setting in an effort to fund undergraduate research.

Non-Themed Presentations

Recruiting Undergraduate Researchers from high school: where can we find future researchers? - *EH306*

Christie Fox, Honors Director, Utah State University
Sandra Wade Pauly, University and Government Liaison, International Baccalaureate

This session will discuss recruiting potential researchers who have completed an independent research experience while still in high school. We will focus on International Baccalaureate Diploma students, who complete a 4000-word work of original research in high school. The discussion will include ideas on how to find, contact, and recruit students, creating a seamless vertical integration into undergraduate research.

Success at the department level: Are we all on the same page? - *EH307*

Thomas E. Goodwin, Professor of Chemistry, Hendrix College
Silvia Ronco, Program Officer, Research Corporation

This session will explore the benefits of working in a collegial environment with a shared vision and open communication lines. While strong leadership and mentoring are important pieces for building a productive undergraduate research environment, development of a departmental

strategic plan is essential to identify new levels of success. Examples of successful science departments will be presented and discussed.

Update on BIO2010: Progress, Barriers and Next Steps - SU312

Glena Temple, Associate Professor, Viterbo University

Alix D. Fink, Associate Professor of Biology, Longwood University

Pamela Hanson, Assistant Professor, Birmingham – Southern College

Dana Harriger, Wilson College

Timothy Lyden, Assistant Professor, University of Wisconsin – River Falls,

In this panel, five members of the biology division will report on the impact of Bio2010 at their institutions and biology programs across the country, particularly as it relates to undergraduate research. The panel will also facilitate a discussion on the challenges facing biology education in the next decade.

Use of multisensory therapy by adolescents with co-occurring autism and profound mental disability - EH407

Jared Logan Leichner

The expanding utilization of sensory biofeedback devices hold the key for treating a wide range of physiological and psychological disorders. In this experiment, their use in the treatment of adolescents with a variety of early neural developmental disabilities unlocked the door to more positive learning outcomes.

Lunch & Closing Session

12:00 p.m. - 1:30 p.m.

ST

Closing Remarks

Elizabeth Paul

President, Council On Undergraduate Research

Provost and Vice President for Academic Affairs, Stetson University

Glena Temple, Associate Professor, Viterbo University

Poster Session One – Sunday, June 20, 2010

Bringing undergraduate research together with other high-impact, engaged-learning practices

Undergraduate Research Experiences in Conservation Biology, Poster #10

Patty B. Smith, Tulsa Community College

Developing Communities of Scholars: Critical to Undergraduate Research Programs, Poster #12

Carol Bender, University of Arizona

David vs. Goliath? Analysis of Biological Concept Retention in Blended Web vs Traditional Instruction, Poster #14

Karen K Resendes, Westminster College | Francisco Villa, Scripps Institution of Oceanography

Thermal Conductivity due to Magnon Heat Transport, Poster #16

Raheem Temitope Bello, University of Texas at Austin

Transforming Students with Engaged Learning - Past, Present, and Future, Poster #18

Savitri V Iyer | Jani Lewis | Rebecca Lewis, State University of New York at Geneseo

Best Practices in Undergraduate Research Journals: Examples from the University of Central Florida, Poster #20

Tison Pugh | Kimberly R. Schneider, University of Central Florida

Promoting Transformation: Supporting Student and Faculty Collaborations in Research, Creative, and Scholarly Activities at a Metropolitan University, Poster #22

Gregory M. Wilson, University of Central Oklahoma

Virtual LAB – The Experimental Platform for the future Science LABs, Poster #24

JahangirAlam, Coppin State University

Google Documents as a Collaborative Research Tool for Undergraduate Research, Poster #26

Jennifer Edwards, Tarleton State University

**Making research experiences a universal practice for undergraduate students
Institutionalizing Undergraduate Research at Brigham Young University-Idaho**, Poster #64

Dan K Moore, Brigham Young University - Idaho

'Broader Impacts' – Collaborative Research in a Capstone Course, Poster #66

Nancy Peterson | Jonathan E. Visick, North Central University

PURE@WOU: Developing and Implementing the Program for Undergraduate Research Experiences at Western Oregon University, Poster #68

Jeffrey H. Templeton, Western Oregon University

Sexism: Who will speak up?, Poster #70

Maria Lavooy, Florida Institute of Technology

Engineering Success: Undergraduate Research in the Freshman Colloquium, Poster #72

Lisa Friedenber, University of North Carolina - Asheville

Improving Directed Studies Courses by Evaluating Student and Instructor Perspectives, Poster #74

Anne-Marie Link | Janet Wesselius, University of Alberta

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