

NATIONAL MEETING OF THE AMERICAN CHEMICAL SOCIETY
March 26-30, 2006
Atlanta, Georgia

Two symposia describing outcomes of the summit report will be offered through the Chemical Education Division of the American Chemical Society.

A symposium/workshop for graduate students and postdoctoral associates interested in a career at a predominantly undergraduate institution will also be held in conjunction with the meeting. This session is offered through the Younger Chemists Committee.

Session 1

Designing a Research-supportive Undergraduate Curriculum

Session Organizer and Moderator: Thomas J. Wenzel, Bates College

Although the independent research project has become widely embraced and broadly implemented as a capstone experience for the chemistry major, it should not be the only exposure to research that a student receives. Many elements of an academic department's curriculum can be designed to: 1) expose students earlier to research experiences that go beyond the traditional laboratory course; 2) support and promote participation of undergraduates in research; 3) create more time for students and faculty members to participate in research, and 3) ultimately enhance the experience of the capstone project and the research culture within a department. Speakers in this symposium will present examples of departmental curricular designs that have been developed specifically to help promote research and research-like activities. The session will end with a panel discussion involving all of the presenters and will focus on ways to develop and implement a research-supportive undergraduate curriculum.

Speakers:

Role of research in the undergraduate curriculum: comments from the Committee on Professional Training (CPT), Nancy Mills, Trinity University

Successful practices to design, implement, and sustain a research-supportive undergraduate curriculum, Kerry Karukstis, Harvey Mudd College

A research based model for organic chemistry laboratory, Caryn Prudente, University of Southern Maine

A sophomore level inorganic/organic research experience as a foundation for an immersive undergraduate research experience, Kevin Caran, James Madison University

CASPiE: A program to include research as part of the mainstream first and second year laboratory curriculum, Gabriela Weaver, Purdue University

A two-semester integrated chemistry laboratory experience at Duquesne University, David Seybert, Duquesne University

Creating chemists: a research-supportive approach to the undergraduate curriculum, Lisa Lewis, Albion College

Preparing students for a successful research experience throughout the undergraduate curriculum, J. A. Nikles, University of Alabama Birmingham

Retention Through Research: The Basis of an Undergraduate Chemistry Scholars Program, Lindsey Peaden, Georgia College & State University

Components of a research-supportive curriculum, Thomas Wenzel, Bates College

Session 2

Conducting Research at a Predominantly Undergraduate Institution: Faculty Strategies for Success

Session Organizer and Moderator: Thomas J. Wenzel, Bates College

At predominantly undergraduate institutions (PUIs), individual faculty members bear primary responsibility for initiating and sustaining active and productive research programs. This can be a difficult process at a PUI given the substantial classroom and laboratory teaching responsibilities that are often involved and the emphasis on being available to help students with advising and other activities. Faculty members should pursue external grants to support their research. They need to pursue activities designed to generate and refine ideas for research projects. Also, faculty members must prioritize research so that they devote the necessary time to it. This session will involve talks by faculty members representing a diversity of institutional types and career stages, and speakers will provide tips and insights from their own experiences as to how to successfully integrate research into the teaching responsibilities at a PUI. The session will end with a panel discussion involving all of the presenters and will focus on ways that individual faculty members can successfully maintain a research program at a PUI.

Speakers:

Research at predominantly undergraduate institutions: what can we faculty learn from Kudzu?, Peter Chen, Spelman College

Ready, set, go: transitioning from a research intensive university's postdoc to the predominantly undergraduate institution's tenure track, Takita Sumter, Winthrop University

Joys and rewards of undergraduate research: a success strategy, Kimberly Frederick, College of the Holy Cross

Cal State LA: a research intensive undergraduate institution, Carlos Gutierrez, California State University Los Angeles

Making progress on quality science while (almost) never turning away students seeking research experiences: an unachievable balance?, Ronald Brisbois, Macalester College

Research at a comprehensive university: working with and around your environment, Andrienne Friedli, Middle Tennessee State University

Achieving a balance: establishing and maintaining successful research programs at PUIs, James Vyvyan, Western Washington University

Tips, ideas, and models for success strategies in undergraduate research, Radha Pyati, University of Colorado, Colorado Springs

Workshop: Starting a Successful Research Program at a Predominantly Undergraduate Institution

Session Organizers: Merle Schuh, Davidson College; Thomas Wenzel, Bates College

Session Moderator: Merle Schuh, Davidson College

Starting a successful research program at a predominantly undergraduate institution poses unique challenges for a beginning faculty member. Yet, many such members of the college professoriate have little, if any, preparation for what to expect in establishing an undergraduate research program. To help such beginning faculty a half-day symposium, entitled “Starting a Successful Research Program at a Predominantly Undergraduate Institution,” is being sponsored by the Young Chemists Committee and the Council on Undergraduate Research (CUR) and will be presented at the national ACS spring meeting in San Diego.

Several experienced faculty speakers (Julio de Paula, Kerry Karukstis, Mel Druelinger, Diane Husic, and Tom Wenzel), who have had success in maintaining undergraduate research programs, and program officers from PRF (Robert Rich) and Research Corporation (Silvia Ronco) will be the facilitators at the workshop. The setting of the workshop will be relatively informal so that attendees will be able to learn from these experienced faculty as well as have the opportunity to ask questions and take part in discussions of the following topics:

1. Why is there an expectation for successful research at predominantly undergraduate institutions?
2. What type of research topics should a new faculty member choose?
3. Selection of and working with undergraduate students.
4. Interacting with the department chair and other administrators and understanding the institution’s research expectation.
5. Grantsmanship and seeking external research grants.
6. Writing successful grant proposals.
7. Establishment and enhancement of a favorable institutional research atmosphere.
8. Research across academic department boundaries.

UNIVERSITY OF MASSACHUSETTS AT AMHERST

Succeeding at a Faculty Position at an Predominantly Undergraduate Institution

Thomas J. Wenzel, Bates College, Lewiston Maine

July 19, 2005

A half-day workshop for graduate students and postdoctoral associates that incorporates many of the topics from the Summit report. Topics to be covered include:

- Getting/selecting a suitable position at a predominantly undergraduate institution
- Balancing the demands of teaching, research and service
- Tips for getting tenure
- Establishing a research program at a predominantly undergraduate institution
- Funding for instructional and research activities

COUNCIL ON UNDERGRADUATE RESEARCH DIALOGUE

April 17-19, 2005

Washington, DC

One workshop session will be held.

Outcomes from the Undergraduate Research Summit: Supporting Undergraduate Research through Extramural Grants

Thomas J. Wenzel, Bates College

The Undergraduate Research Summit was an initiative that brought together a group of people to examine and make recommendations on enhancing research in the chemical sciences at predominantly undergraduate institutions. Even though the initiative was targeted toward chemistry, almost all of the recommendations apply across all disciplines. Many items in the Summit report are directed toward activities that individuals, departments, and institutions can do to promote the activity of proposal writing and the pursuit of extramural grants. The items in the report aimed at promoting the pursuit of extramural grants will be discussed in this session.

NATIONAL MEETING OF THE AMERICAN CHEMICAL SOCIETY

March 13-17, 2005

San Diego, California

Two symposia describing outcomes of the summit report will be offered through the Chemical Education Division of the American Chemical Society.

A symposium/workshop for graduate students and postdoctoral associates interested in a career at a predominantly undergraduate institution will also be held in conjunction with the meeting.

Session 1

Research at Predominantly Undergraduate Institutions: Establishing a Departmental Culture of Research

Session Organizer and Moderator: Thomas J. Wenzel, Bates College

Maintaining a research program at a predominantly undergraduate institution is not a trivial matter. Most departments are relatively small in size so that a handful of faculty members who are not active in research can significantly impact the overall scope of research taking place within a department. One way to help keep all of the faculty members active in research is to establish a departmental culture in which research permeates the life of the department and becomes an established and valued tradition. There are a number of activities that a department can undertake to establish a culture of research. Several examples of departments that have established a culture of research will be presented in this symposium. Departments at both public and private institutions will be featured. The session will end with a panel discussion involving all of the presenters and will focus on ways to implement activities at the departmental level aimed at promoting participation in research.

Speakers:

Building and advancing programs of research in primarily undergraduate institutions, Jack R. Pladziewicz, Research Corporation, jrp@rescorp.org

Undergraduate research culture at Northern Arizona University, Jani C. Ingram, Northern Arizona University, jani.ingram@nau.edu

The Value of the Strategic Plan in Initiating and Sustaining a Departmental Culture of Undergraduate Research, Ricardo E. Rodriguez, Texas Wesleyan University, rickyviper@aol.com

Simple Suggestions for Improving the Undergraduate Research Programs, Kate J Graham, College of St. Benedict/St. John's University, kgraham@csbsju.edu, and Brian J. Johnson, St. John's University and the College of St. Benedict

Undergraduate research in chemistry at Trinity University: The value of enlightened self-interest, Nancy S. Mills, Trinity University, nmills@trinity.edu

Departmental five-year plan: Conversations that bolster departmental unity and focus, Timothy E. Elgren, Hamilton College, telgren@hamilton.edu

Session 2

Undergraduate Research as a Way to Recruit and Retain Students in Chemistry

Session Organizer and Moderator: Thomas J. Wenzel, Bates College

Recruitment and retention of students in chemistry is an area of active interest. This is especially so for groups such as women and minorities who have been historically underrepresented in chemistry. Many people advocate student involvement in undergraduate research early in their studies as a way of enhancing student interest in the discipline. Funding agencies such as the National Science Foundation and National Institutes of Health support bridge and other programs aimed at involving undergraduates in research as a way of retaining them in chemistry. Some departments have excellent records of success in attracting underrepresented groups to chemistry through their involvement of students in research experiences. Representatives of funding

agencies and departments with a record of success in this area will give presentations on their program. The session will end with a panel discussion involving all of the presenters and will focus on ways to implement research programs aimed at recruiting and retaining students in chemistry early in their undergraduate studies.

Speakers

Beyond the lily pond: An experience with undergraduate research, Phoebe K. Dea, Occidental College, dea@oxy.edu

Programs for Preparing Future Researchers, Derrick C Tabor, National Center on Minority Health and Health Disparities, National Institutes of Health, tabord@mail.nih.gov

Undergraduate research at Texas State: A success story in recruitment and retention of all students, Linette M. Watkins, Texas State University-San Marcos, LW09@txstate.edu

Engaging community college students in authentic undergraduate research, Thomas B. Higgins, Harold Washington College, tbhiggins@ccc.edu

Connecting undergraduate research with instruction: practical means for recruitment and retention, Duncan A. Quarless Jr., State University of NY College at Old Westbury, quarlessd@oldwestbury.edu

MARC U*STAR Program at Xavier University of Louisiana, Teresa T. Birdwhistell, Xavier University of Louisiana, tbirdwhi@xula.edu

Research internships for deaf and hard of hearing students: Polymer-based nanocomposites Peggy Cebe, Daniel Cherdack, Robert Guertin, Terry Haas, James O'Leary, and Regina Valluzzi, Tufts University, peggy.cebe@tufts.edu

Workshop: Starting a Successful Research Program at a Predominantly Undergraduate Institution

Starting a successful research program at a predominantly undergraduate institution poses unique challenges for a beginning faculty member. Yet, many such members of the college professoriate have little, if any, preparation for what to expect in establishing an undergraduate research program. To help such beginning faculty a half-day symposium, entitled "Starting a Successful Research Program at a Predominantly Undergraduate Institution," is being sponsored by the Young Chemists Committee and the Council on Undergraduate Research (CUR) and will be presented at the national ACS spring meeting in San Diego.

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opportunity to ask questions and take part in discussions of the following topics:

1. Why is there an expectation for successful research at predominantly undergraduate institutions?
2. What type of research topics should a new faculty member choose?
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5. Grantsmanship and seeking external research grants.
6. Writing successful grant proposals.
7. Establishment and enhancement of a favorable institutional research atmosphere.
8. Research across academic department boundaries.

The symposium will be held on Tuesday, March 15 from 1:00-4:45 pm at a location to be specified in the meeting program.

There is no charge for attending the CUR workshop. However, to help plan the event, it will be helpful for attendees to email the following information to Merle Schuh no later than March 4 (meschuh@davidson.edu).

1. Name of attendee
2. Present institution
3. Position or educational level (e.g. graduate student, postdoc, or beginning faculty)

The success of the workshop will depend on our ability to notify the target audience of its existence. Thus, we will very much appreciate your help in notifying any chemistry teachers (or prospective teachers) whom you feel would benefit from attending this workshop.

**SOUTHEAST REGIONAL MEETING OF THE AMERICAN CHEMICAL SOCIETY
November 10-13, 2004
Raleigh, North Carolina**

Half-day workshop, Friday, November 12

Thomas Wenzel, Bates College – Goals and Assessment of Undergraduate Research

Kerry Karukstis, Harvey Mudd College – Designing a Research-Supportive Curriculum

Sibrina Collins, Claflin University – The Value of Partnerships in Promoting Undergraduate Research

Bernadette Donovan-Merkert, University of North Carolina Charlotte – Initiating and Sustaining an Undergraduate Research Program

Merlyn Schuh, Davidson College – Creating a Department Culture to Support Research

The Chemistry Division of the National Science Foundation sponsored a summit meeting in the summer of 2003 at which participants examined the issues involved in undertaking and sustaining chemistry research at predominantly undergraduate institutions (PUIs). The summit was attended by an array of stakeholders from the chemistry community, ranging from those with a long history of success in undergraduate research to beginning faculty members who have started on a trajectory of success. Participants represented a variety of constituencies including public and private undergraduate institutions (faculty members and administrators), doctoral-granting institutions, industry, national laboratories, and funding agencies. A report on the outcomes of the summit has been published and provides recommendations on how to enhance the number, quality, productivity, and visibility of chemistry research programs at PUIs. The summit meeting was particularly timely because of the changing landscape of higher education and the research community over the past few decades.

Issues addressed in the report include how faculty members at PUIs can continue to generate cutting-edge ideas for research; how undergraduate research is defined; what the outcomes of undergraduate research ought to be for student participants; how PUIs can respond to the changing student and faculty demographics; how the growth and development of faculty members at PUIs are promoted over the entire career; how faculty members at PUIs foster collaborations so that they can contribute to the complex scientific topics under investigation today; how curricula that support undergraduate research throughout are developed; what is the appropriate infrastructure for support of research at PUIs; and how should undergraduate research be assessed, including who should do the assessment.

Each of the authors listed for the workshop will provide a brief presentation on a particular aspect of the report. The second half of the session will involve a panel discussion with all the presenters and those in attendance.

SOUTHWEST REGIONAL MEETING OF THE AMERICAN CHEMICAL SOCIETY
September 29-October 2, 2004
Fort Worth, Texas

Half-day workshop, Friday, October 1

Thomas Wenzel, Bates College
Luis Martinez, University of Texas, El Paso
Nancy Mills, Trinity University
Ricardo Rodriguez, Texas Wesleyan University
Linette Watkins, Texas State University, San Marcos

The Chemistry Division of the National Science Foundation sponsored a summit meeting in the summer of 2003 at which participants examined the issues involved in undertaking and sustaining chemistry research at predominantly undergraduate institutions (PUIs). The summit was attended by an array of stakeholders from the chemistry community, ranging from those

with a long history of success in undergraduate research to beginning faculty members who have started on a trajectory of success. Participants represented a variety of constituencies including public and private undergraduate institutions (faculty members and administrators), doctoral-granting institutions, industry, national laboratories, and funding agencies. A report on the outcomes of the summit has been published and provides recommendations on how to enhance the number, quality, productivity, and visibility of chemistry research programs at PUIs. The summit meeting was particularly timely because of the changing landscape of higher education and the research community over the past few decades.

Issues addressed in the report include how faculty members at PUIs can continue to generate cutting-edge ideas for research; how undergraduate research is defined; what the outcomes of undergraduate research ought to be for student participants; how PUIs can respond to the changing student and faculty demographics; how the growth and development of faculty members at PUIs are promoted over the entire career; how faculty members at PUIs foster collaborations so that they can contribute to the complex scientific topics under investigation today; how curricula that support undergraduate research throughout are developed; what is the appropriate infrastructure for support of research at PUIs; and how should undergraduate research be assessed, including who should do the assessment.

Each of the authors listed for the workshop will provide a brief presentation on a particular aspect of the report. The second half of the session will involve a panel discussion with all the presenters and those in attendance.

IMPLICATIONS OF THE NIH ROADMAP FOR UNDERGRADUATE LIFE SCIENCES EDUCATION: A RESEARCH SCIENTIST SPRINGBOARD PROGRAM

August 9-10

Juniata College, Pennsylvania

Outcomes from the Undergraduate Research Summit Meeting

Thomas Wenzel, Bates College

CUR 2004, THE TENTH NATIONAL CONFERENCE OF THE COUNCIL ON UNDERGRADUATE RESEARCH

June 23-26

La Crosse, Wisconsin

Two Chemistry Division workshop sessions will be held at the Conference. The Chemistry Council has decided to devote both sessions to aspects of the summit meeting and the report.

Two other related workshops involving Summit participants and Summit topics are planned as well.

Undergraduate Research in Chemistry Involving Partnerships

Thomas Wenzel, Bates College

Establishment of partnerships will be an increasingly important way in which faculty members at undergraduate institutions participate in research. One reason is that many problems in chemistry are complex and do not fall neatly within subdisciplinary areas, such that multidisciplinary teams of individuals with different areas of expertise are often needed. Another is that faculty members at PUIs may have difficulty keeping abreast of the rapidly changing knowledge base in chemistry, and collaborations provide a means of doing so. Collaborations and partnerships also provide access to highly specialized pieces of equipment that may be difficult to obtain at a PUI. Finally, research partnerships with institutions with higher numbers of underrepresented minorities such as community colleges will increasingly provide PUIs the opportunity to contribute to the diversification of science. This session will examine successful partnerships involving faculty members at PUIs with investigators from a range of other types of academic institutions, national laboratories, and industry both in the US and abroad.

Outcomes from the Undergraduate Research Summit on Chemistry

Thomas Wenzel, Bates College

The Chemistry Division of the National Science Foundation supported a workshop in the summer of 2004 to examine the research enterprise at primarily undergraduate institutions. The workshop brought together various stakeholders in undergraduate research to examine the current situation and make a series of recommendations to individuals, departments, institutions, and funding agencies designed to enhance the scope and quality of undergraduate research opportunities in chemistry departments. Topics covered at the workshop included a research-supportive curriculum; the infrastructure needed to support research in a chemistry department including the unique problems that often confront public comprehensive universities; how to facilitate the generation of new ideas for research projects; how to keep faculty active in research throughout all stages of their career; ways to increase the diversity of undergraduates participating in chemistry; and aspects of assessing the value of undergraduate research. In this session, members of the CUR Chemistry Council will report out on the recommendations from the summit meeting.

Curricular Elements that Enhance Undergraduate Research

Diane Husic, East Stroudsburg University

Tim Elgren, Hamilton College

Thomas Wenzel, Bates College

Although the independent research project has become widely embraced and broadly implemented as a capstone experience for the science major, it should not be the only exposure to research that a student receives. Many elements of an academic department's curriculum can be designed to: 1) expose students earlier to research experiences that go beyond the traditional laboratory course; 2) specifically support and promote participation of undergraduates in research; and 3) that will ultimately enhance the experience of the capstone project and the research culture within a department. Participants in this workshop will discuss curricular elements that foster the development of important research skills including utilization of the

scientific literature and databases, experimental design, data interpretation, science communication, and a strong appreciation for scientific ethics and laboratory safety.

Ongoing Challenges Faced by Research-Active Faculty at Primarily Undergraduate Institutions: Generating New Ideas and Sustaining Research Productivity

Diane Husic, East Stroudsburg University

Julio dePaula, Haverford College

Kerry Karukstis, Harvey Mudd College

Maintaining a vibrant and productive research program in collaboration with undergraduates is a challenging task for even the most experienced faculty member. For those faculty at primarily undergraduate institutions, the obstacles are even more daunting given the significant time spent on traditional classroom and laboratory instruction of undergraduates. In this workshop we will explore some of the unique challenges that faculty at PUIs must face to generate new ideas in a rapidly changing research environment. We'll also identify some of the impediments that limit the time and resources available for professional development and thereby constrain research productivity. Through an exchange among workshop leaders and participants, we will suggest specific ways that both faculty and institutions can create and sustain a community of teacher-scholars through the generation of new ideas and the maintenance of faculty vitality.

NATIONAL MEETING OF THE AMERICAN CHEMICAL SOCIETY

March 28-April 1

Anaheim, California

Three symposia describing outcomes of the summit report will be offered through the Chemical Education Division of the American Chemical Society.

A workshop for graduate students and postdoctoral associates interested in a career at a predominantly undergraduate institution will also be held in conjunction with the meeting.

Session 1

Exploring Alliances and Partnerships in Undergraduate Research

Session Organizer: Thomas J. Wenzel, Bates College

Session Moderator: Ray Kellman, Research Corporation

Establishment of partnerships will be an increasingly important way in which faculty members at PUIs participate in research. One reason is that many problems in chemistry are complex and do not fall neatly within subdisciplinary areas, such that multidisciplinary teams of individuals with different areas of expertise are often needed. Another is that faculty members at PUIs may have difficulty keeping abreast of the rapidly changing knowledge base in chemistry, and collaborations provide a means of doing so. Collaborations and partnerships also provide access to highly specialized pieces of equipment that may be difficult to obtain at a PUI. Finally, research partnerships with institutions with higher numbers of underrepresented minorities such as community colleges will increasingly provide PUIs the opportunity to contribute to the diversification of science. This session will examine successful partnerships involving faculty

members at PUIs with investigators from a range of other types of academic institutions, national laboratories, and industry both in the US and abroad.

Speakers:

Integrating the sciences at Haverford College: the role of collaborations between teacher-scholars, Julio de Paula, Haverford College, jdepaula@haverford.edu

Designing a dispersed REU site: a virtual site with real interactions, Nancy Mills, Trinity University, nmills@trinity.edu

Collaborative research at the interface of chemistry and biology: development and identify of sexually dimorphic reproductive signals and responses by African elephants, Thomas E. Goodwin, Hendrix College, goodwin@hendrix.edu

Helping build research capacity among the nation's PUIs: the University of Minnesota RSEC, John T. Roberts, University of Minnesota, roberts@chem.umn.edu

Development of centers at a primary undergraduate institution, John G. Stevens, University of North Carolina at Asheville, stevens@unca.edu

The MERCURY computational chemistry consortium, Carol A. Parish, Hobart and William Smith College, parish@hws.edu

New and old NSF programs that promote undergraduate research and partnerships in chemistry, Robert Kuczkowski, National Science Foundation, rkuczkow@nsf.gov

Session 2

Research at Primarily Undergraduate Institutions: The Vital Faculty

Session Organizer: Thomas J. Wenzel, Bates College

Session Moderator: Sibrina N. Collins, Claflin University

One of the crucial issues facing chemistry departments at PUIs is creating and maintaining an active, vital faculty. The small size of most chemistry departments at PUIs means that a vibrant research enterprise is fragile and requires special attention. Identifying faculty members with a passion for research and sustaining that passion over an entire career can be especially difficult in the environment at many PUIs. Recruiting underrepresented minorities to the faculty may prove difficult with such small departments. Success at maintaining a vital faculty will require appropriate levels of support and mentoring during the beginning of a faculty member's career, as well as leave and sabbatical programs to develop new skills and ideas. Model programs that enable faculty members to generate cutting-edge ideas and stay active in research throughout their career will be highlighted, as will programs that have success recruiting and maintaining faculty members from underrepresented groups.

Speakers:

Using synergistic relationships to sustain research productivity throughout an academic career, Kerry K. Karukstis, Harvey Mudd College, kerry_karukstis@hmc.edu

Undergraduate research at a predominantly minority institution: the incentives and the perils, D. R. Kanis, Chicago State University, dr-kanis@csu.edu

Getting by with some help from your friends: challenges and rewards of maintaining an active research program, Bernadette T. Donovan-Merkert, University of North Carolina Charlotte, bdonovan@email.uncc.edu

HBCUs: establishing research partnerships, Sibrina N. Collins, Claflin University, scollins@claflin.edu

Research at a primarily undergraduate institution: developing a sustainable program for life, Michael R. Carrasco, Santa Clara University, mcarrasco@scu.edu

Embedded in a PUI: one faculty member's perspective, Lilia C. Harvey, Agnes Scott College, lharry@agnesscott.edu

Session 3

Research at Primarily Undergraduate Institutions: Providing the Appropriate Infrastructure

Session Organizer: Thomas J. Wenzel, Bates College

Session Moderator: Luis Martinez, University of Texas at El Paso

A thriving research enterprise requires an infrastructure to support it. This includes suitable facilities, equipment, and support staff. It also includes suitable time to do research. The importance of individual, departmental, and institutional grants in developing infrastructure will be highlighted. Another important component is designing a chemistry curriculum that supports research. In addition to providing time and credit for research in the later years of study, a curriculum that supports research will introduce students to investigations early in their studies and increase the complexity of the investigations throughout. A research-supportive curriculum should also be sensitive to the needs of a diverse student body and attract students from underrepresented groups to chemistry. The problems of providing an appropriate infrastructure can change considerably depending on the type of institution. Models of success from a range of institutions will be highlighted in this session.

Speakers:

Components of a research supportive curriculum, Thomas J. Wenzel, Bates College, twenzel@bates.edu

Build it and they will come: creating and sustaining a robust undergraduate research environment at a predominantly undergraduate institution, Roger S. Rowlett, Colgate University, rrowlett@colgate.edu

University infrastructure and faculty: the keys to successful undergraduate research programs, Gina MacDonald, James Madison University, handalgm@jmu.edu

Initiating and sustaining viable undergraduate research programs at PUIs, Luis E. Martinez, University of Texas at El Paso, luisem@utep.edu

Initiating and sustaining a successful undergraduate research program at a predominantly undergraduate institution, Kimberly A. O. Pacheco, University of Northern Colorado, Kimberly.pacheco@unco.edu

Research infrastructure at primarily undergraduate institutions: the value and impact of shared core facilities, Sean M. Decatur, Mount Holyoke College, sdecatu@mtholyoke.edu

Workshop: Starting a Successful Research Program at a Predominantly Undergraduate Institution

Sunday, March 28, 1:30-5:30 pm, President's A Room of the Radisson Hotel Anaheim, located at 1850 S. Harbor Blvd.

Starting a successful research program at a predominantly undergraduate institution poses unique challenges for a beginning faculty member. Yet, many such members of the college professoriate have little, if any, preparation for what to expect in establishing an undergraduate research program. Several experienced faculty speakers (Julio de Paula, Kerry Karukstis, Sylvia Ronco, Sibrina Collins, Tom Wenzel and Merle Schuh) who have had success in maintaining undergraduate research programs will be the facilitators at the workshop. The setting of the workshop will be relatively informal so that attendees will be able to learn from these experienced faculty as well as have the opportunity to ask questions and take part in discussions of the following topics:

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4. Interacting with the department chair and other administrators and understanding the institution's research expectation.
5. Grantsmanship and the seeking of external research grants
6. Writing successful grant proposals
7. Establishment and enhancement of a favorable institutional research atmosphere

Please note that an ACS-sponsored Presidential Colloquium entitled "Recruiting Faculty: How Is It Done? Who Gets the Job, and Why?" will be held from 9:00 am – 1:00 pm (see ACS website for details). Although the CUR workshop and ACS symposium are not cosponsored, the topics might complement each other, and attendees could benefit from attending both sessions.

There is no charge for attending the CUR workshop. However, to help plan the event, it will be **necessary for attendees to email the following information to Merle Schuh no later than March 10** (meschuh@davidson.edu).

1. Name of attendee
2. Present institution
3. Position or educational level (e.g. graduate student, postdoc, or beginning faculty)

**ASSOCIATION OF AMERICAN COLLEGES & UNIVERSITIES
2004 Annual Meeting
January 21-24, 2004
Washington, DC**

Outcomes from the Undergraduate Research Summit Meeting
Thomas Wenzel, Bates College

**GORDON RESEARCH CONFERENCE ON CHEMICAL EDUCATION
January 4-9
Ventura, California**

The Role of Research in the Undergraduate Curriculum

Session Moderator: Robert Lichter, Merrimack Consultants, LLC

Session Presenters:

Thomas Wenzel, Bates College – Goals and Assessment of Undergraduate Research

Linette Watkins, Texas State University-San Marcos – Diversification of the Chemical Sciences

Kerry Karukstis, Harvey Mudd College – A Research-Supportive Curriculum

Julio dePaula, Haverford College – The Importance of Partnerships and Collaborations

Gina MacDonald – James Madison University – Initiating and Sustaining an Undergraduate Research Program

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