Council on Undergraduate Research (CUR)  
Institutionalizing Undergraduate Research (IUR)  
Workshop Report  

to Susan Henrichs, Provost, University of Alaska Fairbanks  

March 2011  

Jenn Wagaman (Team Leader) Sue Hills, Gary Holton, Channon Price,  
Barbara Taylor, Denise Thorsen, Pips Veazey  
and Mark Myers Vice Chancellor for Research, UAF  

1. Executive Summary  

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2. Report
3. Appendix A – CUR IUR Meeting Book
4. Appendix B – CUR IUR Self-Study
5. Appendix C – URC Final Report
6. Appendix D - Alaska Economic TRENDS report

This report presents the results of UAF’s participation in the Council for Undergraduate Research Workshop: *Institutionalizing Undergraduate Research*. Participation in CUR workshops such as this one was a recommendation from the Undergraduate Research Committee’s Final Report on the promotion and development of Undergraduate Research and Scholarly Activity at UAF.

**Executive Summary**

February 4 – 6, 2011 a team from the University of Alaska Fairbanks attended the Council for Undergraduate Research Workshop: *Institutionalizing Undergraduate Research (CUR IUR)*. The aims of the workshop were that each team would develop an implementation plan for institutionalizing undergraduate research and learn of support for faculty development through additional CUR programs, services and meetings. The latter was accomplished through the plenary sessions. The former was accomplished in group-work sessions. The plenary sessions also presented direct information and examples about developing, promoting and assessing undergraduate research in a variety of institutional settings.

The draft implementation plan for institutionalizing undergraduate research and scholarly activity at UAF that resulted from our participation in CUR IUR outlines the following short-term goals. It is suggested that these actions be undertaken in the immediate future as part of the steps taken by the institution toward creating a viable undergraduate

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research program at UAF:

1. Create an outreach document that will stress to all stakeholders the importance of an organized program for undergraduate research and scholarly activity by connecting the program purpose to educational outcomes and to the Alaska economy.

2. Create an Undergraduate Research and Scholarly Activity (URSA) Office charged with operating an URSA program, and to staffed by a half-time faculty director and a full-time staff program coordinator, ideally assisted by other part-time staff members, including a fiscal specialist and an assessment/evaluation specialist.

3. Pilot a UAF summer research institute for undergraduate students by combining students from existing programs (i.e., INBRE, ASGP, EPSCoR, REU) in collaborative peer- and group-oriented activities to create a community of learning that will enhance educational outcomes for each program.

4. Initiate curriculum reform to formally support the academic emphasis of undergraduate research and scholarly activity by: standardizing individual study, undergraduate research and undergraduate thesis course designators across campus, establishing a degree designation that recognizes substantive effort and achievement in undergraduate research, and developing a research/scholarly activity core designator and/or an URSA course designator that can be attached to both existing and new courses that furnish opportunities for undergraduate research and scholarly activity.

5. Working with the Office of Faculty Development, the URSA office should assist in creating a sequence of faculty workshops that will increase the opportunities for undergraduate research and scholarly activity across the institution by providing training in identifying suitable undergraduate research projects, in mentoring undergraduates pursuing research and scholarly activity, and in writing funding proposals that include support for undergraduate students and their projects.

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Workshop: Institutionalizing Undergraduate Research at Stetson University, DeLand, FL. Team members included: Jenn Wagaman (Team Leader), Sue Hills, Gary Holton, Mark Myers, Channon Price, Barbara Taylor, Denise Thorsen and Pips Veazey. The aims of the workshop, as articulated by CUR Coordinator Mitch Malachowski in his opening address, were that each team would develop a “customized and action-oriented plan to institute an undergraduate research program” at their institution and “learn of support for faculty development through additional CUR programs, services and meetings.”

The workshop was attended by 12 teams from: Binghamton University, Coppin State University, Edgewood College, Georgia Southern University, Gustavus Adolphus College, Metropolitan State College of Denver, Sacred Heart University, Schreiner University, Simmons College, University of Alaska Fairbanks, University of Washington Bothell and Young Harris College. (See Appendix A CUR IUR Meeting Book for complete listing of individual participants.) While there was limited interaction between teams, we did learn at the final presentations that most participating institutions had similar situations: undergraduate research/scholarly activity was taking place on their campuses but in an unorganized and unquantified manner. The majority of teams reported that either faculty or administration intended to create an office of undergraduate research/scholarly activity with responsibility to oversee, promote, and track of undergraduate research/scholarly activity as an academic activity.

The program for the workshop consisted of plenary sessions alternated with small group work sessions with facilitators. The afternoon of the second day of the workshop was devoted to smaller parallel sessions about more specific topics. (See Appendix A CUR IUR Meeting Book for complete schedule of presentations.) Plenaries were given by two CUR Coordinators (Mitch Malachowski and Jill Singer) and the topics included: “Perspectives on Undergraduate Research Culture and Institutional Change”; “Undergraduate Research: A Toolbox of Strategies, Programs, and Models”; and “More Issues: Evaluation, Assessment and Curriculum”. Appendix A, the CUR IUR Meeting Book, includes the powerpoint slides of the plenary sessions. The second and third plenaries were the most useful, providing case studies and identifying undergraduate research program elements that lead to success and explaining the benefits of such elements. CUR Coordinator Jill Singer (director of the office of undergraduate research at Buffalo State College) was particularly

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helpful in sharing her 13 years of experience with setting up a program, assessing it, and automating most of the functions. Dr. Singer is willing to share her materials and programs, which can be viewed at http://www.buffalostate.edu/undergraduateresearch/index.xml.

The group-work portion of the program gave the teams an opportunity to develop a customized and action-oriented implementation plan for short-term goals that would begin the process of institutionalizing undergraduate research on their campuses. In preparation for this task, each team completed a self-study prior to the workshop. The UAF CUR IUR Self-Study is included in this report as Appendix B. The self-study asked that the team identify 1) key issues associated with undergraduate research at UAF and 2) short-, medium- and long-term goals that would serve as steps toward institutionalizing undergraduate research at UAF. The self-study was prepared by drawing extensively from the UAF Undergraduate Research Committee Final Report (see Appendix C), in particular the Recommendations and Suggestions for an Implementation Plan. Developing goals (as done in the pre-workshop self-study) and identifying strategies for the implementation plan (as done during the workshop) are two elements of Mitch Malachowski’s Action Plan for Institutionalizing Undergraduate Research:

- Develop mission statement
- Develop short-, medium- and long-term goals
- Identify strategies for implementing the plan
- Identify the responsible office
- Identify benchmarks for assessing success of the program
- Develop a plan to communicate with stakeholders

Developing a mission statement and identifying a responsible office were also deliverables associated with the workshop. Identifying benchmarks for assessing success of the program and developing a plan to communicate with stakeholders and effect a change in the culture of undergraduate research were elements introduced in the plenary sessions but not intended to be addressed specifically by the team during group-work sessions.

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The concluding section to this report captures the workshop worksheet assembled by the UAF team. This was the primary workshop exercise toward developing an implementation plan for institutionalizing undergraduate research and scholarly activity at UAF.

**Draft Implementation Plan for Institutionalizing Undergraduate Research of UAF**

*Institution Name: University of Alaska  Who reports to key administrators? Program Director*

**Mission Statement:** The Undergraduate Research and Scholarly Activity program (URSA) supports, develops and institutionalizes a broad-based and robust undergraduate research program. At all levels, URSA aims to improve skills in critical thinking and communication and to engender a culture of life-long learning among all students, as well as enhance preparation and training of students who will fill the needs of Alaska’s 21st century workforce and society. URSA is UAF’s resource for the development and promotion of experiential learning activities that engage undergraduate students to support UAF’s goal to become a leading student-focused research university. Building on existing efforts and capacities, the program enables UAF students to pursue varying levels of research engagement from a single credit of first-year seminar to an undergraduate thesis.

<table>
<thead>
<tr>
<th>Desired Outcomes/Goals</th>
<th>Due</th>
<th>Strategies to Achieve Outcomes</th>
<th>Who is Responsible?</th>
<th>How Will Achievement of Outcomes be Assessed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach (legislative) document to connect how purpose of undergraduate research affects educational outcomes and connects to Alaska economy, show relevance.</td>
<td>3/2011</td>
<td>Investigate workforce needs of Alaska, acquire real statistics, economy</td>
<td>Undergraduate research committee, V-C R</td>
<td>Report to committee to drive linkage to 21st century skills</td>
</tr>
</tbody>
</table>

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<table>
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<tr>
<th>Date</th>
<th>Event Description</th>
<th>Responsible Party</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/2011</td>
<td>Link undergraduate research to learning outcomes, strategic plan, legislative needs.</td>
<td>Undergraduate research</td>
<td>Presentation of document to Chancellor/President/Regents Legislature.</td>
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<tr>
<td></td>
<td>Create an Office of Undergraduate Research and Scholarly Activity</td>
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<tr>
<td>6/2011</td>
<td>Allocate space’2</td>
<td>Provost</td>
<td>Directory listing,</td>
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<tr>
<td>7/2011</td>
<td>Hire a program director and coordinator</td>
<td>Provost</td>
<td>Print business cards</td>
</tr>
<tr>
<td>5/2011 - Research Day</td>
<td>Announce formation of office: Chancellor remarks on research day, press release</td>
<td>UMC/CRS</td>
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As reported in the (URC Final Report; Appendix C), we feel strongly that the URSA office needs to include at minimum a program director and a program coordinator. We recommend that the program director be a half-time faculty position. This type of workload division allows the faculty to maintain active research, contact with students, and credibility with other faculty. The program director needs to be a successful grant writer, be able to work with departments and students across campus, etc. At minimum the office requires a full-time program coordinator (a draft job description follows). This office will also need fiscal support (this can potentially be part-time i.e. a fiscal person that is distributed across a few programs).
Define faculty development sequence in support of faculty involvement in undergraduate research, beg. 2011, ongoing | Training in mentoring, URSA project selection for students, proposal writing including student support | OFD, URSA

Outreach Document
The UAF team feels that communication with stakeholders must be an early priority. We made the development of an outreach (legislative) document our first priority. This outreach document will stress the importance of an undergraduate research program by connecting the program purpose to educational outcomes and to the Alaska economy. In particular, the mission statement which was developed in the course of discussions among the whole team reflects the shared continuity of the missions of the undergraduate research program and the University of Alaska and the needs of a vibrant 21st-century Alaska.

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