2nd ANNUAL FLORIDA STATEWIDE SYMPOSIUM:
ENGAGEMENT IN UNDERGRADUATE RESEARCH

September 25-26, 2009
Orlando, Florida
http://researchsymposium.ucf.edu
THE OFFICE OF UNDERGRADUATE RESEARCH PRESENTS:

Perspectives of Undergraduate Research Programs: Exploring Differences and Similarities Between Universities

September 25, from 1:30 p.m. - 2:30 p.m.
Student Union, Key West Ballroom

Panelists include:

Dr. Laura Blasi, Evaluation Specialist, Saint Leo University

Dr. Maribeth Clark, Associate Provost, New College of Florida

Dr. Kimberly Reiter, Associate Professor, Stetson University

Dr. Naomi Yavneh, Director of Undergraduate Research, University of South Florida
FRIDAY, September 25th

11:00 am – 1:00 pm  | Registration (Student Union)
Key West Foyer

1:00 pm – 1:30 pm  | Welcome and Orientation (Student Union)
Key West 218 AB
Dr. Alison Morrison-Shetlar, Vice Provost and Dean of Undergraduate Studies

1:30 pm – 2:30 pm  | Keynote Address: Perspectives of Undergraduate Research Programs: Exploring Differences and Similarities Between Universities
Key West 218 AB

2:45 pm - 3:05 pm  | PRESENTATIONS
K. Teter; What Comes After Undergraduate Research? (218C)
T. Fine, D. Dobson; A Model for Engaging Citizenship Through Public Policy Research (218D)

3:10 pm - 3:30 pm  | R. Turner, E. Haddad; The Florida Academy of Sciences and Undergraduate Research (218C)
M. Strawser; Applying Creativity to Research in Ethics (218D)

3:30 pm – 3:45 pm  | BREAK

3:45 pm - 4:05 pm  | J. Zalewski; Developing Infrastructure for Undergraduate Research in Computer Science and Software Engineering (218C)
P. Lancey and K. Schneider; Evidence of Impact: The Use of Engagement Data in Undergraduate Research Program Planning (218D)

4:10 pm - 4:30 pm  | S. Behel, B. Hunnicutt; Building a Continuum to Educate Future Generations of Scientists and Engineers (218C)
A. Puig; Research on Undergraduate Research: Overview of Evaluation Research Outcomes from the Science for Life Program at the University of Florida (218D)

4:35 pm - 4:55 pm  | B. Mair; USP @ UF: The University Scholars Program (218C)
R. Schlaf, A. Cain, M. Labrador, P. Stroot; Undergraduate Research at the University of South Florida College of Engineering (218D)

5:15 pm – 6:45 pm  | Wine and Cheese Reception and Poster Session
(Burnett Honors College)

7:00 pm  | Dinner on your own
(See suggestions on page 19)
SATURDAY, September 26 (Burnett Honors College)

8:00 am – 9:00 am Directors’ Breakfast (BHC 130)

WORKSHOPS

9:00 am - 9:45 am
C. Batsche, K. Moore, R. Boothroyd, P. Stiles; Building Communities Through Science: Engaging Undergraduates in Community Based Research (BHC 126)
K. Bell and K. Schneider; Research Rewards: A Video Mentoring Program (BHC 128)

9:50 am - 10:35 am
L. Jeffries; These are the People in Your Neighborhood: Social Matters, Community Interviews, and the First Research Paper (BHC 126)
T. Moore, J. Shivamoggi; Student-Faculty Collaborative Scholarship Program at Rollins College (BHC 128)

10:35 am - 10:45 am BREAK

10:45 am - 11:30 am
K. Reiter; Building a SURCAS: How to Organize a Campus-Wide Research and Creative Arts Symposium (BHC 126)
C. Leone, L. Hawkins; When Traditional Mentoring Won’t Work: An Alternative Model for Mentoring Undergraduates (BHC 128)

11:35 am - 12:20 pm
C. Greer and T. Pugh; Best Practices in Undergraduate Research Journals (BHC 126)
C. Efthimiou and M. Georgiopoulos; Math & Physics REU and Machine Learning REU: Program Overviews (BHC 128)

12:20 pm - 1:15 pm LUNCH

1:20 pm - 2:05 pm
R. Ersing and N. Yavneh; Engaging Undergraduate Students as Scholars: The Hurricane REU Model (BHC 126)
R. Reedy; The HIVE Learning Model: New Pedagogical Advancements in Learning and Real World Partnerships in Education (BHC 128)

PRESENTATIONS

2:10 pm - 2:30 pm
C. Miller; Conducting Ecological Research and Community Service: Killing (?) Two Birds with One Stone (BHC 126)
K. Schneider, R. Harrison II; An Update on CASTL at the University of Central Florida: Integrating the Scholarship of Teaching and Learning and Undergraduate Research (BHC 128)

2:35 pm - 2:55 pm
P. Draves; Challenges in Building Capacity for Undergraduate Research at Small Teaching Colleges (BHC 126)
K. Schneider; Developing Student and Faculty Councils to Support Undergraduate Research (BHC 128)

3:00 pm - 4:00 pm Recap Meeting (BHC 130)
PRESENTATIONS

2:45 pm - 3:05 pm
What Comes After Undergraduate Research? (Key West 218C)
Ken Teter, University of Central Florida
Undergraduate research can produce highly motivated, well-trained students. However, those same students may only have a limited understanding of their potential career options. To address this issue, the UCF Department of Molecular Biology and Microbiology developed a “Career Opportunities in the Biomedical Sciences” seminar series. The seminars are designed to impart career advice and to raise student awareness regarding the variety of available career paths. This presentation will give an overview of the seminar series and will consider seminar-related topics such as student interest, speaker availability, general organization, advertising, funding, and assessment. The talk is intended to provide audience members with a blue print for how to create a “Career Opportunities” seminar series for other disciplines and universities.

A Model for Engaging Citizenship Through Public Policy Research (Key West 218D)
Terri Fine and Douglas Dobson, University of Central Florida
The presentation will describe and analyze the undergraduate research underpinnings of the UCF Lou Frey Institute of Politics and Government’s annual “Civic Leadership Academy.” The Academy is a selective, intense, two-week, on-campus program for which high performing high school students from across Florida receive lower division college course credit for POS 2112 “State and Local Government.” The program focuses on Florida politics.

3:10 pm - 3:30 pm
The Florida Academy of Sciences and Undergraduate Research (Key West 218C)
Richard Turner, Florida Institute of Technology
Edward Haddad, Florida Academy of Sciences
Florida Academy of Sciences has served the scientific community since 1936. It advocates for and represents all branches of science. Each of its 13 sections focuses on a particular field of science and engineering. Its membership includes faculty, industry professionals, and graduate and undergraduate students from colleges and universities throughout Florida. Regional societies, such as state academies, facilitate networking among colleagues and students. There are issues in research, teaching, and service unique to Florida that are less effectively addressed by larger societies. One recent example is the Academy’s input to the State standards in science teaching at levels K-12. The Academy’s annual meeting provides students with a nearby venue for oral and poster presentations of their research. Registration and travel costs are much less than for national meetings, a consideration these days for faculty as well as students. Florida Scientist, the Academy’s journal, is a peer-reviewed publication solely for its members and is distributed nationally and internationally. The journal provides student members with the privilege to submit their research papers, and abstracts from the annual meeting are published in it as well. The Academy also recognizes excellence in research through appropriate awards for presentations at the annual meeting.
Applying Creativity to Research in Ethics (Key West 218D)

*Michael Strawser, University of Central Florida*

How should we think about the many ethical dilemmas that face us today? How should research in current ethical dilemmas be conducted to move beyond impasses in judgment towards developing a consensus for action? According to Anthony Weston, Philosophy Department Chair at Elon University, “we need a more expansive view of ethics,” one that incorporates creativity. Following Weston’s lead, I shall discuss the new Honors Interdisciplinary Seminar on Case Studies in Ethics that I am co-teaching with Dr. Nancy Stanlick and how we shall be guiding our students to think about ethical dilemmas. Our course is designed to prepare our students to participate in the UCF Ethics Bowl, which is already a creative act of engagement, but more importantly, we hope to open new possibilities in the study of ethical dilemmas that would allow for creative problem-solving in ethics. My presentation will include a discussion of the background reasons for our course, the methods for preparing students for research in ethics, as well as the methods for applying creativity to their research.

3:45 pm - 4:05 pm

Developing Infrastructure for Undergraduate Research (Key West 218C) in Computer Science and Software Engineering

*Janusz Zalewski, Florida Gulf Coast University*

This presentation discusses an approach to the design and implementation of a lab to provide a diverse computing platform to enable undergraduate research in computer science and software engineering focused on real-time embedded computing. Multiple lab stations have been created for this purpose, based on: microcontrollers, FPGA boards, multicore processors, computer game devices, specialized single-board computers, and wireless networks. The research projects in the lab focus on remote access to data acquisition and control, with a capability of remote software development. First experiences are very positive and plans are being made for a significant expansion. This development is a part of an NSF funded project on “Web-based Real-Time Software Engineering Lab.”

Evidence of Impact: The Use of Engagement Data in Undergraduate Research Program Planning (Key West 218D)

*Patrice Lancey and Kimberly Schneider, University of Central Florida*

The benefits of participation in undergraduate research and other learning communities to student development, retention, and enrollment in professional or graduate school are well established. However, little systematic research has been conducted that establishes differences in the level of student engagement among undergraduate researchers when compared to their undergraduate student counterparts. The construct of engagement is now strongly seated in the lexicon of higher education and its relationship with effective educational practices is well documented. This presentation will report the results of a study, in a large four-year research institution, designed to ask whether junior and senior level students involved in undergraduate research will show higher levels of engagement compared to a control group comprised of a random sample of seniors. The usefulness of the National Survey of Student Engagement (NSSE) as a measure to provide evidence of the value of participation in student learning communities such as undergraduate research will be described. The presentation will emphasize the practical application of NSSE results for program improvement and enrichment of
the undergraduate student experience. This session is useful to the professional interested in documenting the impact of their undergraduate research program.

4:10 pm - 4:30 pm
Building a Continuum to Educate Future Generations of Scientists and Engineers
(Key West 218C)
Suzy Behel and Barbara Hunnicutt, Seminole Community College
As a nation we face a critical shortage of scientists and engineers; a need pivotal to our economic growth. High schools and graduate schools have long-established programs addressing this demand. You and I are here today to build a continuum between these two programs. Over the last decade universities established undergraduate research programs. Undergraduate peer-reviewed research journals and poster presentations at professional conferences developed vital communication skills. Economics, accessibility, and learning support have generated unprecedented increases in community college enrollment. Some universities report transfers comprise up to one-third of their undergraduates. This, then, is the final link in the continuum. Seminole Community College’s new Undergraduate Science, Technology, Engineering, and Mathematics (STEM) Research Program provides a two-semester research experience joining undergraduates and dual-enrollment students with scientist/engineer/mathematician mentors from Central Florida universities and research laboratories. The laboratory experience is supplemented by Saturday seminars addressing the research log, critical review of the literature, experimental design, statistical analysis methods, abstract and research paper preparation, seminar and poster presentation guidelines, and research ethics. While still a “work-in-progress,” SCC’s new program forges an important link in a continuum educating future generations of scientists and engineers.

Research on Undergraduate Research: Overview of Evaluation Research
Outcomes from the Science for Life Program at the University of Florida
(Key West 218D)
Ana Puig, University of Florida
With funding from the Howard Hughes Medical Institute (HHMI), the Science For Life (SFL) Program at the University of Florida (UF) has a mission “to strengthen and transform undergraduate research and interdisciplinary laboratory education in the life sciences” at UF and our partner institutions. As part of the assessment and evaluation of the SFL program, the assessment team from the UF College of Education conducted the following research: developed and administered surveys to both students and faculty participating in the program. In the first year, focus groups and individual interviews were also used to assess the experiences of student outliers who had expressed little activity or involvement during their research experiences with a faculty mentor. Focus groups were also held to evaluate student experiences in integrated core laboratory (chemistry, physics and biology) classes to assess this innovative undergraduate science training. The SFL program is entering its fourth year; thus, research efforts are turning toward longitudinal comparisons within the first and second year cohorts, as well as comparisons across all three previous cohorts. Implications and recommendations for future program evaluation research will be discussed.
4:35 pm - 4:55 pm
USP @ UF: The University Scholars Program (Key West 218C)
Bernard Mair, University of Florida
The University Scholars Program at the University of Florida is a campus-wide undergraduate research program funded by the Office of the Provost and coordinated by the University Honors Program. The goal of the program is to fund year-long student research projects with UF faculty in individual disciplines as well as some interdisciplinary work. Participants must present the results of their projects at the annual research symposium, and are invited to submit papers to the UF Journal of Undergraduate Research. In this talk, we will give an overview of this program.

Undergraduate Research at the University of South Florida
College of Engineering (Key West 218D)
Rudy Schlaf, Alasdair Cain, Miguel Labrador, and Peter Stroot, University of South Florida
The College of Engineering Research Experience for Undergraduates (COE-REU) program at the College of Engineering at USF aims to involve undergraduates directly in state-of-the-art research projects performed in COE laboratories. The program offers students the opportunity to work together with graduate students, post docs and faculty. Successfully participating students are awarded scholarships jointly funded through the grants of the advising faculty as well as the College of Engineering and the Undergraduate Research Office at USF.

POSTER PRESENTATIONS (Burnett Honors College)
Plagiarism: How Often Does It Happen and Do Students Have The Knowledge to Avoid It?
Shannon Whitten, Karen Mottarella, DeAnn Collins, Lauren Maleski, University of Central Florida
An important part of learning about research is summarizing and presenting the results of prior research. Many instructors have concerns about whether students know how to provide correct citations and avoid plagiarism. The purpose of the present study is to find out what students know about citation and plagiarism. Participants in an initial study were students enrolled in a Web-based, upper-division psychology course. This course included an optional module on APA citation and discussed plagiarism with multiple examples. We found that on an essay assignment, 26% of the essays contained direct quotations that included no citations and 36% contained paraphrases that were not cited. On one essay, 77% of students included a direct quote that was not cited; and on another, 54% included a direct quote that was not cited. A follow-up study is being conducted which will compare what instructors are teaching about citations and what students perceive as being taught; as well as what sources students use (e.g., peer-reviewed vs. Web-sites). Data is being collected and will be analyzed before the conference. The results emphasize the importance of undergraduate research and provide information to instructors and mentors on what undergraduates know.

What Students Want in an Undergraduate Research Mentor
Shannon Whitten and Karen Mottarella, University of Central Florida
Most students enter into an undergraduate research experience seeking personal growth and items to enhance their resume (Whitten & Mottarella,
The vast majority of undergraduates who participate in research have a positive experience. They report gains of different kinds including personal/professional gains, increased knowledge of the research/scientific process, acquiring new skills, advancing career plans and preparing for these (see Seymour, Hunter, Laursen, & Deantoni, 2004, for a review). However, few have investigated the qualities that make a successful undergraduate research mentor (Daly & Leong, 2009). What qualities do students value? Are these qualities the same for those who are successfully enrolled in a graduate program compared to those who are in the process of completing their undergraduate program? UCF graduate and undergraduate students in psychology will be given a comprehensive survey that addresses the qualities and methods that were most supportive of their success. The implications of these goals for faculty research mentors will be discussed.

The Influence and Impact of Web 2.0 on e-Research: Using LibGuides to Deliver Information
Aysegul Kapucu, University of Central Florida

LibGuides is a Web 2.0 content management and library knowledge sharing system growing in popularity among researchers. This poster session will demonstrate how University of Central Florida (UCF) Libraries started using LibGuides for teaching, learning, research, and delivering information on a Web 2.0 platform. LibGuides provide course-related instruction and general research guides aimed to help students get started with research in a specific subject area, information literacy guides, and other relevant instructions. LibGuides allows collaboration between the librarians and the faculty to create user-friendly, efficient electronic resources that meet the research needs of a particular department, class, or an assignment. Partnering with a subject expert librarian, the faculty member introduces their students to discipline-based research databases, print resources, and authoritative website for specific projects or assignments. It is also a good way to bring the library to distance education or online students. The guides provide dynamic content including videos, pictures, delicious bookmarks, RSS feeds, IM, search tools, and etc. The poster session will display how UCF Libraries use the LibGuides for research, teaching, learning, and collaboration. The session will also provide the fall 2009 semester usage statistics.

Mentoring Undergraduate Research Students for Academic Success
Flona Redway, Teresa Petrino-Lin, and John Karen Frei, Barry University
At Barry, we offer undergraduate biology, chemistry, psychology, and mathematics sophomores through seniors the opportunity to carry out research on-campus with faculty during the academic year, as well as in the summer and winter breaks. A key component to student retention and to achieving their academic success is the effective mentoring provided by the faculty and the lasting mentor relationships that develop. Students in the NIH funded programs are retained to graduation at 71-100%. Faculty mentor student researchers by providing individualized attention to their research training through role modeling; hands-on research training; preparations for presentations at scientific meetings and; an “open-door policy.” The annual evaluations for research students show that 80% strongly agree and another 15% agree that our faculty mentors are excellent role models for them. Over the past 10 years, 73% (68 of 93) of these graduates have entered into or completed graduate, medical, and professional schools. (NIH NIGMS MARC U*STAR, T34 GM 08021-26, MBRS RISE R25 GM059244-9 Grants, Barry University).
Participation in Authentic Science: Research in the Classroom as a Teaching Tool
Anna Goebel, Brian Bovard, and Edwin Everham III, Florida Gulf Coast University
Florida Gulf Coast University was started with a commitment to an interdisciplinary liberal arts education, which included expecting students to practice their specific disciplines in professional settings. Continuing to achieve this goal has been difficult as FGCU has grown. To meet the needs of a research expectation, we independently explored the use of original research in our classrooms with varying levels of success. Here we describe three projects: measuring the abundance and distribution of an orchid, comparison of DNA from native oak trees to those brought in as part of the formal landscaping, and measuring the changes in forest vegetation on the FGCU campus. These projects were field-based and had an environmental component complementing FGCU’s mission. Students self-reported a greater interest in projects where the outcome was unknown, and were excited by the idea of creating new knowledge that could be built upon by future classes, students, or researchers. Different levels of enthusiasm for conducting research projects were observed within and between our classes, although greater enthusiasm was more evident in upper division students. Course projects such as these were built slowly. Projects were conceived long before they were successfully implemented, and the level of “success” improved in small increments.

Saturday, September 26th, Abstracts

WORKSHOPS

9:00 am - 9:45 am
Building Communities Through Science: Engaging Undergraduates in Community Based Research (BHC 126)
Catherine Batsche, Kathleen Moore, Roger Boothroyd, and Paul Stiles, University of South Florida
This session will describe methods used by an NSF-funded REU in Behavioral Health to engage undergraduate students in Community Based Participatory Research (CBPR), a collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings. CBPR begins with a research topic of importance to the community, as well as the student, and has the aim of combining knowledge with action to achieve social change. REU students participate in a community field rotation in which they are exposed to a variety of community programs such as drug courts, mental health courts, inpatient psychiatric facilities, group homes, homeless shelters, and assisted living facilities. Students who opt to utilize a CBPR approach design their projects in consultation with community partners and discuss their findings with these partners to obtain feedback, contextual information, and suggestions for future research and policy implications. This session will provide practical strategies for engaging undergraduates with community partners in the research process and will highlight student projects that reflect this approach. The session will also describe methods to help students analyze their results and disseminate their findings in ways that can inform public policy.
Research Rewards: A Video Mentoring Program (BHC 128)
Kathleen Bell and Kimberly Schneider, University of Central Florida
Arts and Humanities students too often have an unimaginative concept of research and limited use of research strategies. To stimulate their interest in research and participation in faculty mentored projects, I used CASTL grant funding to develop a video series based on successful faculty-mentored undergraduate student research projects. These dynamic portraits capture the research process, responsibility, commitment, and pride students experience in these mentor relationships. Assessment plans using survey responses will also be included.

9:50 am - 10:35 am
These are the People in Your Neighborhood: Social Matters, Community Interviews, and the First Research Paper (BHC 126)
Laura Jeffries, Florida State College at Jacksonville
This session presents a successful and highly flexible two-stage method of introducing first or second-year students to academic research, capitalizing on students’ natural interest in the lives of other people. Starting with a local interview, students produce a reflective draft that leads to a pertinent and realistic research question, a greater range of quality sources, and a short research paper with the marks of a motivated and socially-responsible writer. The writing and research stages will be demonstrated on slides, with particular emphasis on topic generation and source integration issues. Student work samples will be available to show how inexperienced writers have found a practical purpose for academic writing and begun to recognize themselves as voices in the community, people in the neighborhood. This presentation is for faculty in all academic areas as well as student engagement professionals. Participants will generate project frameworks appropriate to their own disciplines and leave the session with an idea sheet that can be implemented this semester and at no cost.

Student-Faculty Collaborative Scholarship Program at Rollins College (BHC 128)
Thomas Moore and Jayashree Shivamoggi, Rollins College
Over the past ten years Rollins College has developed a program designed to engage students in original scholarship in a partnership with a member of the faculty of the College. This program is designed to involve student scholars from any subject area including the sciences, social sciences, arts, and humanities. This program is unique in that it is a student-centered program, and is not designed to merely provide faculty with the opportunity to pursue their research with student assistants. Rather, the intent is to provide students the opportunity to pursue genuine scholarship with faculty collaborators. Students are expected to understand the research or scholarly activity, contribute physically and intellectually to the project, and participate to an extent such that they are truly partners in the project. Students involved in the program have presented their work at numerous state and national conferences and have published their results in many peer-reviewed journals. This interactive session will include a discussion of various aspects of the program and will describe (1) the financial rewards, (2) the application process, (3) the actual program, and finally, (4) a celebration of undergraduate research in fall.
Building a SURCAS: How to Organize a Campus-Wide Research and Creative Arts Symposium (BHC 126)
Kimberly Reiter, Stetson University
Stetson University’s Student Undergraduate and Creative Arts Symposium (SURCAS) has provided an opportunity for undergraduates across the campus to present research, new business strategies, creative projects, art portfolios and musicology to the university and local community since 1999. This workshop will go through the steps needed to organize such an event, either university wide or within a division. Areas such as budget, mixed versus cognate sessions, judging, recruitment, and faculty encouragement will be covered.

When Traditional Mentoring Won’t Work:
An Alternative Model for Mentoring Undergraduates (BHC 128)
Christopher Leone and LouAnne Hawkins, University of North Florida
Compared to faculty at large institutions, faculty at small institutions typically have heavy teaching loads and committee assignments. These demands on the time of faculty at small institutions present several challenges including a relatively limited opportunity for faculty to engage in scholarship and to mentor undergraduates as future scholars. We present a model for mentoring protégés in which faculty can increase both the number of the undergraduates who benefit from their tutelage and the richness of the experience these undergraduates experience. We incorporate into this model several pedagogical devices such as peer mentoring and small group supervision which serve to increase the range as well as depth of professional, intellectual, and social skills student protégés will acquire. We also incorporate into this model a team meeting during which the faculty mentor and/or student protégés address issues and concerns common to all involved (e.g., securing appropriate graduate school opportunities, acquiring discipline-specific writing skills, receiving training in discipline specific research ethics, honing skills for presentations at professional conferences). Although we present a model involving one faculty mentor and several undergraduate protégés, this model can be adapted to include several faculty with shared interests and graduate as well as undergraduate protégés.

Best Practices in Undergraduate Research Journals (BHC 126)
Creed Greer, University of Florida
Tison Pugh, University of Central Florida
Join us for a discussion of best practices in building and maintaining undergraduate research journals. Topics addressed include publicizing the journal, preparing students for research projects, and guiding them through the peer-review process.

Math & Physics REU and Machine Learning REU: Program Overviews (BHC 128)
Costas Efthimiou and Michael Georgiopoulos, University of Central Florida
In this talk we will summarize the activities of two active REUs at UCF, one of which is highly theoretical and abstract and one applications oriented. We will then describe the lessons learned and future plans.
Engaging Undergraduate Students as Scholars: The Hurricane REU Model
Robin Ersing and Naomi Yavneh, University of South Florida
This workshop introduces an innovative student-faculty-community collaborative research strategy designed to develop skills of critical inquiry through the context of a real world problem – hurricanes. For the past three years, the University of South Florida has provided a 9-week Research Experience for Undergraduates (REU) to study the social aspects of hurricanes – i.e., how individuals, communities and institutions prepare for and recover from hurricanes. Implemented with funding from the National Science Foundation, an engaged group of faculty mentors from anthropology, sociology, geography, education, social work, aging, and public health train students in qualitative and quantitative research methods and provide an intense and substantive research experience examining hurricanes from an interdisciplinary social science perspective. Community partners collaborate with the research endeavor by providing training in disaster-related humanitarian intervention skills (e.g., mass care, sheltering, behavioral first aid), and in real-life disaster exercises to immerse the emerging scholars in the field of hazards research. This presentation shares lessons learned in developing, implementing, and maintaining a collaborative research experience with undergraduate students. Examples of scholarly work produced by the students will be showcased including technical reports, posters and published manuscripts.

The HIVE Learning Model: New Pedagogical Advancements in Learning and Real World Partnerships in Education
Robert Reedy, University of Central Florida
Four years ago I developed a program called Advanced Design Lab for students enrolled in my foundation level undergraduate, three dimensional design courses. These courses are competitive experiences partnered with real world clients to create product design and fine art objects. Over the last three years we have earned and produced over $300,000 in income, commissions, and scholarships. We recently have opened our own graphic design agency, “The Spot,” on campus in partnership with Business Services. All this has been accomplished with little or no funding from our university. This workshop will share with its participants how HIVE learning accomplished these achievements and much more.

Conducting Ecological Research and Community Service: Killing (?) Two Birds with One Stone
Christopher Miller, Saint Leo University
People in academia often see research and service as two separate activities that are conducted under different sets of circumstances; however, it is possible to provide service to a community while collecting scientific data. This presentation describes an on-going effort by undergraduate students from Saint Leo University to conduct ecological research in the Peruvian Amazon. Data generated from this research will be used to help people manage forest resources (and save birds, despite the inappropriate title of the talk). Specifically, non-timber forest products were surveyed by students in the Summer, 2009 in collaboration with the Rainforest Conservation Fund, a non-profit group dedicated to forest conservation in northeastern Peru.
An Update on CASTL at the University of Central Florida: Integrating the Scholarship of Teaching and Learning and Undergraduate Research (BHC 128)

Kimberly Schneider and Richard Harrison II, University of Central Florida

The University of Central Florida (UCF) is one of ten universities that in 2006 was designated by the Carnegie Foundation for the Advancement of Teaching as a leadership institution in the Carnegie Academy for the Scholarship of Teaching and Learning (CASTL). The institutions that comprise the CASTL group seek to foster and encourage the scholarship of teaching and learning as it pertains to undergraduate research. This paper describes the CASTL program and outlines the focus of the CASTL undergraduate research group; describes UCF’s rationale for applying for the CASTL designation; and addresses UCF’s contributions to date to the CASTL undergraduate research theme.

Challenges in Building Capacity for Undergraduate Research at Small Teaching Colleges (BHC 126)

Patrick Draves, Saint Leo University

This presentation will outline successes, obstacles, and challenges faced in the psychology department in trying to build the capacity for collaborative research across multiple geographically dispersed campuses. Challenges arising from resistance, logistical concerns, entrenchment, and buy-in will be discussed. Solutions sought and their effectiveness will be presented. Presentation will be of value to any small organization or school seeking to start up empirical research with humans from scratch, or those seeking to coordinate multiple non-communicative silos of effort.

Developing Student and Faculty Councils to Support Undergraduate Research (BHC 128)

Kimberly Schneider, University of Central Florida

The Office of Undergraduate Research was developed in 2007 at the University of Central Florida. To support the office and campus-wide undergraduate research endeavors, two councils have been developed. The Undergraduate Research Council (URC) is made up of faculty and academic staff. This group meets to discuss and promote undergraduate research monthly during the academic year. The URC currently has 40 active members. The Student Undergraduate Research Council (SURC) meets bi-weekly throughout the year and has 10 members. Students apply to participate on the council and represent a wide variety of disciplines. SURC members serve as research ambassadors and support the initiatives of the Office of Undergraduate Research. Both of these councils greatly expand the visibility and participation in undergraduate research activities at UCF. This presentation will review details about the councils, including ideas on how to develop and sustain similar programs at other universities.
Florida Statewide Symposium: Engagement in Undergraduate Research

SYMPOSIUM ORGANIZERS:
Dr. Kimberly Schneider, Director, Undergraduate Research
Dr. Alison Morrison-Shetlar, Vice Provost & Dean, Undergraduate Studies
Ms. Nancy Lynch, Senior Administrative Assistant, Undergraduate Research
Dr. Marty Dupuis, Assistant Dean, The Burnett Honors College
Mr. Richard Harrison II, Associate Librarian, Libraries
Mr. Michael Aldarondo-Jeffries, Director, RAMP & McNair Scholars

MANY THANKS TO:
Ms. Macarena Torres, Graphic Designer, Undergraduate Studies
Mr. Robert Bilic, Web Designer, Undergraduate Studies
Mr. Brian Strickland, Programmer, Undergraduate Studies
Mr. Thomas Swanson, Client/Server Analyst, Undergraduate Studies
The Student Undergraduate Research Council
The UCF Student Union
The Burnett Honors College
Continuing Education and Becky Morgan
Office of Undergraduate Studies
Symposium Participants and Guests
Vicinity Map and Dinner Suggestions

UCF Student Union (#1 on map)
- Wackadoo’s (Sports Bar and Grill)

University Shoppes
Alafaya Tr. + University Blvd. (#3 on map)
- Anmol Indian Cuisine (Indian)
- Bangkok Square (Thai, Sushi)
- El Cerro (Mexican)
- Fusian (Japanese, Sushi)
- Millie’s Jamaican Cafe (Jamaican)
- Underground Blues (Pub)

UCF Knights Plaza
Gemini Blvd. + N. Orion Blvd. (#2 on map)
- Maggie Moo’s Ice Cream
- Red Brick Pizza (Italian)
- Subway (Sandwiches)
- Tailgaters (Sports Bar and Grill)

University Palms Shopping Center
Alafaya Tr. + McCulloch Rd. (#4 on map)
- Dragon Court (Chinese)
- Giovanni’s (Italian)