# COLLEGE OF ARTS AND SCIENCES ANNUAL REPORT 2008-09

#### MISSION STATEMENT

The College of Arts and Sciences is the academic core of the University of Missouri-St. Louis, a public, metropolitan research university that serves Missouri's most populous and economically and socially diverse region. Through academic programs offered on and off campus, it educates traditional and nontraditional students who will supply knowledge, skills, and intellectual leadership in both the private and public sectors. Active engagement in research and scholarship enables College faculty in every department to advance knowledge and to impart research methods and results directly in their classroom teaching. In addition to providing extensive opportunities in general education and undergraduate and graduate degree programs in many disciplines, the College emphasizes multi-disciplinary programs in life and environmental sciences as well as metropolitan and regional studies.

### I. RESEARCH

The College again had a very successful year as measured by faculty achievements related to research. Faculty in the college continue to publish articles in top-tier journals in their fields and to publish books with some of the most prestigious publishers in the world. The most notable honor obtained by a member of the College faculty was the election of Bob Ricklefs to the National Academy of Sciences, the first faculty member at UMSL to achieve this distinction. The college brings in most of the external research funding on the campus and that funding is used to support not only the research of the faculty member, but also research done by both undergraduate and graduate students. A complete description of research accomplishment for each department is provided in the department annual reports that are available on the Sharepoint web site in Academic Affairs. We provide here a summary of some key accomplishments.

#### A. Research Accomplishments

Anthropology: Anthropology faculty published 3 refereed journal articles, 6 peer-reviewed book chapters, 1 peer-reviewed edited volume, and 2 editorial board-reviewed archaeology season reports. These publications include Susan Brownell, ed., *The 1904 Anthropology Days and Olympic Games: Sport, Race, and American Imperialism* (University of Nebraska Press, 2008). Margo Hurwicz was named a Fellow of the Gerontological Society of America. Michael Cosmopoulos received \$224,000 in two awards from the National Endowment for the Humanities, \$35,000 from the Institute for Aegean Prehistory, and \$17,000 from the Loeb Classical Library Foundation. Michael Ohnersorgen received \$20,000 for organizing the conference "Connectios and Impacts of Northwest Mexican Cultures." Allon Uhlmann received \$14,000 from the UM Research Board for "Knowledge, Cognition & Reasoning in Arabic Linguistics Text." Jay Rounds developed a project plan for the expansion and complete redesign of the South Florida Science Museum.

**Biology:** The most notable honor obtained by a member of the department was the election of Robert Ricklefs to the National Academy of Sciences, the first faculty member at UMSL to

receive this honor. Ricklefs was also awarded a prestigious Humboldt fellowship. Toby Kellogg has spent the year seconded to the National Science Foundation. The department obtained grants totaling almost \$2 \(^{1}\)4 million dollars in the last financial year: these include \$575,00 to Bethany Zolman (NSF career grant), Deborah Clark and David Clark \$314,000 (NSF) for their long-term work on tropical forests in Central America, Sam Wang \$306,000 (NSF) for his work on membrane lipids, Toby Kellogg \$169,000 (NSF) for her work on the architecture of grass inflorescences, and Wendy Olivas \$151,000 (NSF) for work on the regulation of yeast PuF proteins. Sam Wang headed an inter-departmental proposal that resulted in a grant of \$282,000 from the Missouri Life Sciences Board for a confocal microscope that will be used by various members of the community in the BSR complex.

**Chemistry and Biochemistry:** The faculty published over 70 journal articles. Alicia Beatty had a paper in the list of top 10 most cited articles in *Crystal Engineering Communications* in the period 1999-2009. There are currently three active NSF CAREER grants in the department.

**Criminology and Criminal Justice:** The CCJ program was ranked no. 4 among all Ph.D. programs in criminology and criminal justice by *U.S. News and World Report*. Richard Wright was named a Fellow of the American Society of Criminology. Finn Esbensen received the 2009 President's Award from the Western Society of Criminology. Richard Wright and Richard Rosenfeld received a grant from the National Science Foundation totaling over \$180,000. Beth Huebner received a grant from the National Institute of Justice totaling over \$400,000.

**Economics:** Economics faculty members had 22 publications consisting mostly of scholarly articles in refereed journals. Anne Winkler and Sharon Levin have ongoing research funded by the Mellon Foundation. Sharon Levin has additional ongoing research funded by the Sloan Foundation. Lea Kosnik received a grant of \$60,000 to fund research on small hydropower from the Smith Richardson Foundation and Susan Feigenbaum received a \$75,000 grant from the Cornea Research Foundation.

**English:** The department published 40 articles, short stories, poems, and reviews during the last year. Howard Schwartz published Leaves from the Garden of Eden: One Hundred Classic Jewish Tales (Oxford University Press). Also, with Arielle North Olson, he published More Bones: Scary Tales from Around the World (Viking). Eamonn Wall published A Tour of Your Country (Salmon Publishing, Co., Clare, Ireland). Joseph Carroll's pioneering work on literary Darwinism continues to attract international attention. An article describing his most recent discoveries in Evolutionary Psychology has provoked responses in The New York Times, the London Times, The Guardian, The Telegraph, and The Irish Sun and in Forbes. Professor Carroll gave nine invited lectures in Canada, Europe, and the United States during the last academic year. His recent article, "An Evolutionary Paradigm for Literary Style," was the "target" essay in the double edition of the journal Style, devoted exclusively to Professor Carroll's work in literary Darwinism. Richard M. Cook's Alfred Kazin: A Biography (Yale 2008) was included in the Washington Post's 2008 Best Book Selection (as well as its list of Best Biographes for 2008) and by the San Francisco Chronicle as one of the 50 Best Nonfiction Books of 2008. It was selected by *Choice* as a 2008 Outstanding Academic Title and included in the 2008 Best Book of the Year Selection by the Association of American University Presses (AAUP). Assistant Professor Eric Turley's dissertation, Scientific Management and the Residue

of Reform was awarded the 2009 James Berlin Memorial Outstanding Award—a national award given by the Conference on College Composition and Communication.

**History:** Department members published numerous articles. Among these, Minsoo Kang published a paper in *Antennae: The Journal of Nature in Visual Culture*; Louis Gerteis published a paper in *Missouri Historical Review*; Laura Westhoff published a paper in *Women's History Review*, Jack Gillingham published a paper in *Journal of European Integration History*; and Steve Rowan published a paper in *Der Maibaum*. In addition, Minsoo Kang co-edited and published an anthology of essays, *Visions of the Industrial Age*, *1830-1914* with Ashgate Press.

**IWGS:** Since April 2008, IWGS joint and associate faculty have published 15 articles, chapters, and reviews and have at least 12 essays in press. Deborah Cohen, a joint appointee with History, co-edited the book, Gender and Sexuality in 1968: Transformative Politics in the Cultural *Imagination*, which is forthcoming from Palgrave Macmillan later in 2009. Cohen's book, Transnational Subjects: Migrant Labor, the United States, and Mexico in the 1942-1964 Bracero Program, is under contract with University of North Carolina Press. Kathy Gentile, a joint appointee with English, has an edited collection, Sexing the Look: Sexualized Imagery in Popular Visual Culture, which is forthcoming from Cambridge Scholars Press in 2010. Zoe Peterson, a joint appointee with Psychology, was selected as an "Emerging Professional" in the Society for Scientific Study of Sexuality in recognition of her early-career research and service in the field of sexuality. She also received a \$345,000 grant from the National Institute of Children's Health and Human Development (NICHD) for 2008-10. Jody Miller received a \$21,750 grant from the American Institute for Sri Lankan Studies for her project "The Gendered Social Organization of Commercial Sex in Sri Lanka." Kristin Carbone-Lopez, joint appointee with CCJ, and Jody Miller, associate faculty with CCJ, were awarded \$27,500 from the UM Research Board for a study of women's methamphetamine use in Missouri.

**Mathematics and Computer Science:** The faculty published 15 journal articles, as well as an edited book and conference proceedings. These include Uday Chakraborty, ed., *Advances in Differential Evolution* (Springer Verlag, 2008). Martin Pelikan received a \$400,000 NSF career grant for work on Design and Application of Scalable Hierarchical Optimization algorithms for Optimization of Programs, Vectors, Rules, and Schedules. With co-PIs, he also received a \$20,000 subcontract for research from the University of Illinois. Charles Chui has a large ongoing grant on "Multi-level Processing and Visualization of Complex Scattered Data" from the Army Research Office. Sanjiv Bhatia received a grant for \$7,248 for "Image Storage and Retrieval in Open Solaris" from the Open Solaris Foundation. Cezary Janikow, Uday Chakraborty, and Wenjie He received a total of \$35,000 in grants from Express Scripts.

**Philosophy:** During this past year, Philosophy faculty continued to be highly productive and published (or had accepted for publication) 2 books, 8 book chapters and nearly 30 articles. These publications include Dr. Ronald Munson, *The Woman Who Decided to Die: Choices and Challenges at the Edge of Medicine* (Oxford University Press). In addition, Jon McGinnis, Philosophy, had his book, *Avicenna* (OUP Series, Great Medieval Thinkers), accepted for publication by Oxford University Press.

**Physics and Astronomy:** Jake Leventhal (with co-author and alumnus Charles Burkhardt) published *Foundations of Quantum Physics* (Springer). Ta-Pei Cheng completed the second

edition of his book *Relativity and Cosmology* (Oxford University Press); it will be published later this year. Sonya Bahar received the Innovation Award from the St. Louis Academy of Science in April 2008 and the UMSL Trailblazer Award in March 2009. Eric Majzoub received a \$390,000 grant from the Department of Energy in support of his research on hydrogen storage for fuel cells.

**Political Science:** The faculty published a total of 2 books, 11 journal articles, and 3 book chapters. Joyce Mushaben published *The Changing Face(s) of Citizenship: Integration and Mobilization among Minorities in Germany* (Providence/Oxford: Berghahn Books, 2008). Todd Swanstrom co-edited *Debating Democracy: A Reader*, 6<sup>th</sup> ed. (Houghton Mifflin, 2009). Brady Baybeck and Farida Jalalzai received a grant from the Pew Charitable Trust for "Design, Implement, and Analyze Surveys of Pollworker Training Practices." Todd Swanstrom received a grant for the project "Building Resilient Regions" from the MacArthur Foundation.

**Psychology:** In 2008, Psychology faculty published a total of 31 journal articles and 8 book chapters, for a mean of 2.24 per faculty. The publishing rate thus far for 2009 is very similar. Ann Steffen was co-editor of *Handbook of Behavioral and Cognitive Therapies with Older Adults* (Springer, 2008). Robert Paul was the lead editor on *HIV and The Brain: New Challenges in the Modern Era* (Springer, 2009). This book sold out and is now in a second printing. Grant activity produced a total of nearly \$1.7 million over the past 12 months. Much of this is due to Jerry Dunn, who was highly effective in garnering grants to support activities of the Children's Advocacy Center. External grants to Tara Galovski (\$226,500) and Steven Bruce (\$418,600) yielded significant dollars to support their research efforts. An Alexander von Humboldt Foundation (Berlin) grant to George Taylor supported a 3 month visit as a guest scientist at the University of Heidelberg Medical School. Zoe Peterson's article, "Conceptualizing the 'Wantedness' of Women's Consensual and Nonconsensual Sexual Experiences," published in *Journal of Sex Research*, was selected by the Foundation for the Scientific Study of Sexuality as an Ira and Harriet Reiss Distinguished Theory Paper and was selected for inclusion in a sexuality anthology to be published by Oxford University Press.

**Sociology:** Faculty published or had accepted 5 journal articles and 4 book chapters and/or conference proceedings. George McCall received the C. Brice Ratchford Memorial Fellowship Award from University of Missouri in June 2008. Robert Keel received the College of Arts and Sciences Outstanding Non-Tenure Track Faculty Award for 2008.

#### **B.** Faculty Incorporation of Research in Teaching

Anthropology: Pam Ashmore and Susan Brownwell used their books as texts in their respective classes. Michael Cosmopoulos taught courses in Greek history and culture in the semester abroad program in Athens and led students on tours of famous sites, including those where he has taken part in surveys and excavations. Donna Hart mentored a successful applicant for the national Fulbright Student Research Award. Margo Hurwicz and Mike Ohnersorgen taught anthropology courses directly drawing from their research, and Ohnersorgen involved 2 students in his summer 2008 dig.

**Chemistry and Biochemistry:** Faculty members engaged in research increase their knowledge on a daily basis and this new knowledge is often incorporated into lectures at all levels. Undergraduates are encouraged to experience research with a faculty mentor. It is an important

part of bringing together the skills and knowledge gained in the various lecture and lab courses and applying them to new challenging situations. In 2008-2009, the department had several undergraduate students enrolled in research (Chem 3905). Naturally, in the Ph.D. program teaching and research are one and the same. Most of the papers published by faculty have student coauthors. In particular, Jim Chickos published a paper with his STARS students Tracy Wang and Esseim Sharma and Keith Stine published with STARS student Nathan Manhanke. 20 graduate students presented posters at the UMSL graduate fair. Chemistry students Sudeshna Roy, Charulata Prasannan, Uma Mallik, Deepa Viswanathan, and Maria Lourdes Udan received awards for their posters. Sudeshna Roy also received the Sigma Xi award for the overall best poster.

Criminology and Criminal Justice: Faculty members incorporate research into their teaching in a wide variety of ways, ranging from using their own work to illustrate key points to involving students in the research process itself. Department members often require students to participate directly in the conduct of research as part of the classroom experience, especially in CCJ 4390, the senior capstone course, and in numerous graduate courses.

**Economics**: Anne Winkler regularly incorporates her active research agenda on work and family into teaching and uses her text in her course on this topic. She also does econometric analysis in her research and incorporates examples based on these experiences into her econometrics course. Larry White and Sel Dibooglu have incorporated data series developed for their research and presentations to the community on the global financial crisis into their courses. Dave Rose has incorporated a prisoner's dilemma interpretation of competition policy from his book, *The Moral Foundation of Economic Behavior*, into his principles and graduate microeconomic theory courses.

**English:** Faculty have offered specialized seminars and workshops which draw upon their areas of scholarship, for instance, literacy studies, American studies, feminist criticism, Jewish and Irish studies, autobiography, literary journal editing, literary publishing, writing pedagogy, contemporary criticism, cultural studies, performance history, contemporary poetry, and more.

**History:** All of the tenure track members of the History Department are teacher/scholars who incorporate their research into their classroom teaching. Two prominent examples are Laura Westhoff, whose scholarly work on Progressive-era reform informs her undergraduate course on Twentieth Century Social Movements, and Louis Gerteis, whose work on the Civil War in Missouri informs his courses on the Civil War era in America.

**IWGS:** All core and associate faculty relate their gender research to their teaching. For example, Sally Ebest uses her research from her book-in-progress on Irish American women writers in her class on this topic. Kathy Gentile incorporates her research on gothic theory and literature into her literature class, and incorporates her research on Jane Austen into seminars on this topic. Farida Jalalzai's published studies of women leaders led to the creation of a new course in spring 08—Women Rule: Shattering the Executive Glass Ceiling. Nan Sweet uses her ongoing gendered historicist research on the poet Felicia Hemans in her course on women poets. Deborah Cohen uses her ongoing research into Mexican-U.S. gendered power relations to frame her courses on Mexican History and Sexuality and Gender Theory.

**Philosophy:** The faculty is involved in exploring philosophical theses about a wide range of topics: science, language, religion, art, the mind, medicine, and more, and bring this research into the classroom. Doing research in philosophy involves making and defending claims, as well as assessing the claims of others. Students must come to see why philosophical problems arise, which often requires questioning basic preconceptions. They must learn how competing formulations differ and decide which supporting arguments succeed, and why. This give and take is part of every philosophy class.

Physics and Astronomy: Faculty members directed over 100 credit hours of research and directed readings projects for more than 20 students at the graduate and undergraduate level and one high school student. Several faculty also directed students in research funded by the NASA/Missouri Space Grant Consortium. Eric Majzoub designed and taught the course Computational Physics for senior and graduate level physics majors which is one of his research specialties. Sonya Bahar designed and taught the course the Biophysics of Imaging which is the capstone course in the Medical Physics Option and also her research specialty. Erika Gibb taught Observational Astronomy which is the capstone course for the Astrophysics Options and her research specialty. Jake Leventhal used his textbook in his course Quantum Mechanics. Bernard Feldman's research publications on hybrid automobiles and the Minneapolis bridge collapse were based on lectures he gave to his introductory physics class and Honors Seminar. Wayne Garver discussed electric vehicle conversion and his electric car for "How Things Work" and for his Modern Electronics course.

**Political Science:** Many professors—Joyce Mushaben, Ruth Iyob, Terry Jones, David Kimball, Eduardo Silva, for example, teach classes (or portions of classes) directly related to their current research at the undergraduate and graduate level.

**Psychology:** What distinguishes UM-St. Louis from other, local non-research universities is that courses include the most recent developments in the field. Each graduate program incorporates a journal discussion group into the training of graduate students, which allows faculty to use their research experiences to guide young researchers in developing their own research careers. Undergraduates who enroll in Psych 3390 (independent study) serve as research assistants. The largest numbers each year work as student experimenters in the "rat lab," i.e., they are given training in the basics of research with animal models, a significant opportunity for undergraduates.

**Sociology:** Students learn directly from faculty members about detailed aspects of their research, including hypothesis development, construction of survey instruments, instrument translation, data collection and coding, use of appropriate social science methods for data analysis, and dissemination of the results. The Department of Sociology hosted monthly Sociology Pizza events in 2008-09 in which students and the sociology faculty made presentations. These events provide opportunities for students and faculty members to share their classroom learning and research experiences.

### C. Quality, quantity, or focus of research, and plans to sustain quality or improve gaps

**Anthropology:** The department will continue to support its strong researchers by giving them leaves for research when possible, for example, by making it possible for Michael Cosmopoulos to take a sabbatical by splitting it into two fall periods so he can teach in the semester abroad

program in the spring. The department arranged for a transfer of Margo Hurwicz to 75% in Anthropology and expects to see an increase in productivity under the new arrangement. The department has made funds available to support Michael Ohnersorgen's research in Mexico, but unfortunately the swine flu outbreak prevented him from taking students to his dig this summer, which will slow down his progress.

**Biology:** Much of the discussion in the Department centered on the report of the Five-Year Review committee that came out during the summer (it visited last Spring) and a departmental retreat that was held last fall. In terms of planning for research, little can be done given the size of the Department and the university hiring freeze. However, both Bob Marquis and Sam Wang in particular, have been thinking about the direction of their research. Funding for Bob Marquis' long-term study in the Ozarks has become questionable, but he is looking to establish a Long Term Ecological Research project there – however, the current funding climate is tough (unlike NIH, there is no money for new projects in NSF, even though everybody seems to think that there is). Sam Wang is looking to establish a major inter-institutional collaboration headquartered here.

Chemistry and Biochemistry: The quantity and quality of research in an experimental science such as chemistry is affected by several factors including numbers of graduate research assistants and postdoctoral associates (lab workers), the available capital equipment and laboratory infrastructure, and the number of research active faculty. Two new faculty (Alicia Beatty and Stephen Holmes) arrived in fall 2008 and both are NSF CAREER awardees. At the department's Five-Year Review in May 2008, the external reviewer made the following recommendations: 1) Increase the size of the graduate program, particularly the number of incoming students each year; 2) Develop a departmental culture where extramural funding is expected from most, if not all, faculty members; 3) Explore mechanisms for funding the activities of CNS by means other than splitting F&A revenues with Chemistry. While it is recognized that Chemistry enthusiastically supports CNS, the department will need all the financial resources it can get if it is to address its major problems in a meaningful fashion.

**Criminology and Criminal Justice:** The quantity of research produced by departmental faculty in AY 2008-2009 was outstanding by any measure, but it is even more impressive in light of its overall quality. Many of the articles were published in peer refereed criminological or sociological journals universally recognized as being top tier; all appeared in highly respected outlets. As noted earlier, the department was ranked No. 4 among all Ph.D. programs in criminology and criminal justice by *U.S. News and World Report*. At this juncture, no additional steps are required to sustain and improve faculty productivity.

**Economics:** The quantity and quality of research is about average for a department of its size and school of our rank. Most work done by department faculty is empirical in nature. The recent global financial crisis is indicative of the need for training in economic history and institutions. The department plans to increase funding for research activity and encourage faculty to undertake more theoretical, historical, and institutional research.

**English:** A number of research projects are in the intermediate or final stages of completion including: Joseph Carroll's book, *Graphing Jane Austen: Palaeolithic Politics in British Novels of the Nineteenth Century;* Kathy Gentile's edited collection of essays, *Sexing the Look:* Sexualized Images in Popular Visual Culture; John Dalton's novel, The Inverted Forest; Prof.

Peter Wolfe's monograph on the playwright, Simon Gray; Sally Ebest's monograph, *True Confessions: The Writing of Contemporary Irish American Women Writers*; Mary Troy's two novels, *Beauties* and *Swimming on Highway N*. Faculty Colloquia, which have been reinstated in the Department calendar, have served as a valuable venue for discussion of ongoing projects by the faculty.

**History:** All members of the department are engaged in research and writing that will produce scholarly books and articles in forthcoming years. The department will sponsor guest lectures and forums on topics that correspond with faculty research interests next year. It was able to offer modest funding for faculty research expenses. Continued revenue flow into the Grant Incentive Fund, largely due to recent grants for the Virtual City project, will enable the department to continue this policy during the next few years. When new positions become available, the plan is to build on its new emphasis areas: Metropolitan History, Regional History, National History and Transnational History. The department will continue to re-evaluate and modify faculty workloads to ensure that the most prolific researchers continue to have the time necessary to maintain their productivity.

**IWGS:** Nan Sweet, Sally Ebest, and Jody Miller have all established international reputations in their fields. All four IWGS assistant professors have very active records in gender research, especially Zoe Peterson, whose work in sexuality studies has already attracted national recognition in the form of grants and honors. Kristin Carbone-Lopez has six collaborative projects underway, and Farida Jalalzai (joint appointee, Political Science) continues work on a book on women political leaders around the world.

**Mathematics and Computer Science**: Charles K. Chui is a recognized world leader in approximation theory and wavelet analysis.

**Philosophy:** The traditional venue for philosophical research is the journal article. Members of the department have published prolifically in the very best journals. Maintaining this level and quality of publication very much depends on faculty having time to spend on research. The department encourages individuals to apply for internal and external grants to give them the needed released time to do so.

**Physics and Astronomy:** The department's research productivity is growing as it replaces faculty who retire. The majority of research grants in the department were won by assistant professors. Senior faculty members continue to be productive, mainly in the form of invited talks at international conferences, textbook writing, and professional service on editorial boards and international committees. The quality of research is expected to grow with the hiring of Jimmy Liu as Director for the Center for Nanoscience (CNS) in 2006. Some faculty members will be more research active as they submit grants as members of CNS research teams. The hiring of Eric Majzoub in 2007 greatly enhanced the Department's visibility in the Center as he heads the focus group in Energy and Nanomaterials.

**Political Science:** The quantity and quality are high. Faculty members receive some assistance with travel and are encouraged to apply for grants to fund their research projects. Brady Baybeck, David Kimball, and Todd Swanstrom moved the department in the right direction with respect to grants. The department ranked third among all UMSL units in the Faculty Scholarly Productivity report for last academic year.

**Psychology:** The target set by the department chair is for each faculty member to produce at least 3 papers per year and to initially aim for high impact journals. For doctoral graduate students, the target is for each student to have 3 publications by the time of their graduation. One means of achieving this is for graduate students and faculty to co-author publications, which should benefit both. The department has re-established a grant writing support group to encourage greater submission of external grants.

**Sociology:** All the tenured faculty members have active research programs. Teresa Guess is building her research trajectory in race and class issues. Nancy Shields has a research program on child development and community violence in South Africa and the U.S. Chikako Usui continues her research in comparative social and public policy and political economy of Japan. To sustain faculty research productivity, it is vital to provide travel funds and the teaching load of 2-2 to productive members.

### II. TEACHING

The College continues its tradition of high quality teaching by faculty who incorporate research into their teaching. In the last few years the College has strongly promoted the use of technology and innovations in teaching. Faculty are encouraged to consider seriously student engagement and to use the technological resources provided by the campus, especially MyGateway, to increase student collaboration and student engagement. Students in the college are now advised in their home departments, improving the quality of advising and increasing student interactions with faculty. A complete description of teaching-related activities and issues for each department is provided in the departmental reports that are available on the Sharepoint web site in Academic Affairs. Below, we provide here a summary of some key teaching issues.

#### A. Student Learning

#### 1. Evidence that graduates have met the learning outcomes.

**Anthropology:** 18 students completed the senior thesis required for completion of the major. All but two received A's and B's.

**Chemistry and Biochemistry:** Students take the chemistry major field achievement test administered by the Educational Testing Service (ETS) during their senior seminar course. In May 2008, there were 16 students who took the MFAT, and 10/16 (62.5%) performed at the 50<sup>th</sup> percentile or above and 6/16 (37.5%) performed at the 80<sup>th</sup> percentile or above.

Criminology and Criminal Justice: Data from the Educational Testing Service traditionally has shown that seniors graduating from our program score very well on the Major Field Test in Criminal Justice. During AY 2007-2008, however, student scores on this test were somewhat disappointing. One explanation is that students were not taking the test seriously. To address this, the department decided to require students to take the exam as part of the senior capstone course, CJ 4390. As this change has just been implemented, no data are available to judge whether it has been effective. Nevertheless, it is the department's hope (and belief) that this move will improve student scores, bringing them back in line with those from earlier years. If that does not happen, the department will take another close look at the undergraduate curriculum to identify and

strengthen any weaknesses that may be contributing to the reduced scores. MA and PhD students do not take an exit exam; their success in meeting learning outcomes is monitored through course grades. PhD students, however, do take comprehensive examinations prior to advancing to candidacy and this provides an opportunity to ensure that they have met learning objectives. Beyond this, student success is continuously assessed at department faculty meetings through reports from undergraduate, MA, and PhD directors.

**Economics:** Given recent changes in the department's assessment process, there is not enough data yet to perform such an analysis.

**English:** Field tests taken by graduating seniors indicate that students have met learning outcomes in the major. The Department will experiment with a Senior Seminar, with potential for more complete assessment of stated outcomes for the major, now submitted for posting in the 2008 Bulletin. These outcomes are based on four sets of course outcomes developed by Assistant to the Chair Jennifer MacKenzie in consultation with faculty teaching junior writing required for English majors (3090), grammar required for majors, literature surveys required for majors, and courses qualifying for 4000-level requirements.

**History:** All graduates of the History Department – B.A. and B.S. in Social Studies – complete the Senior Seminar and produce a significant piece of original scholarship. Of the 45 students enrolled in Senior Seminar sections, only five failed to complete the coursework. History students have been active participants in the Undergraduate Research Symposium in which they share their work with the UM-St. Louis community.

**IWGS:** Undergraduate certificate earners must complete a capstone experience, which can be a final writing project or an internship. Graduate certificate earners must complete a final project as well.

**Languages Program:** Eight French and Spanish majors took the assessment exam in their language before graduation and received satisfactory scores. This does not represent the total number of language majors, as many were double majors and took their assessment exams in other fields qualifying for 4000-level requirements.

**Mathematics and Computer Science:** Students graduating from the undergraduate programs are required to take the Major Field Test during their last year. Of the students taking the test during the Spring, Summer, and Fall semesters in 2008, 70% performed at or above the 50<sup>th</sup> percentile and 30% performed at or above the 80<sup>th</sup> percentile for CS majors, and 40% performed at or above the 50<sup>th</sup> percentile and 20% performed at or above the 80<sup>th</sup> percentile for Math major. All graduates from the graduate programs passed a set of rigorous requirements designed to guard the quality of the learning outcomes and approved by the Graduate School.

**Philosophy:** Undergraduate majors enroll in Philosophy 4491, a capstone experience the Spring before they graduate. The final paper required in this course ensures that graduates have mastered the techniques of argumentation and analysis central to the discipline. They also must meet distribution requirements so they are acquainted with a wide sampling from the sub-areas of philosophy. Master's students take a course at the beginning of the program to acculturate them into the discipline and also must meet distribution requirements. When the master's program began in Jan. 2000, the department put in place a series of comprehensive examinations

as the capstone experience. To better reflect the central of original analysis and critique in philosophy, these exams are being phased out and replaced with (1) ramped-up distribution requirements and (2) a thesis requirement, which can be either the retooling of a successful seminar paper or a new directed research project. The department's success in placing graduate students in Ph.D. programs is one last reflection of our success in transmitting the essentials of our discipline.

**Physics and Astronomy:** Students taking the Major Field Test in physics scored at or above the national average and one was above the 80<sup>th</sup> percentile. More than 50% of the department's B.S. Physics students are pursuing graduate degrees. Of the 11 students completing degrees in 2007 and 2008, six are pursuing advanced degrees in physics. Three have entered UMSL's graduate program, one is at UC-Davis, one at DePaul U., and one at University of Missouri-Columbia. Four students passed their oral exit exams, completed their MS degrees, and are continuing in the UMSL Ph.D. program. Two PhD students successfully defended their dissertations. At the 4th joint meeting between the UMSL and Missouri S&T Physics Departments, an UMSL graduate student won first prize in the poster competition.

**Political Science:** Seniors take a capstone course. Their seminar papers will be evaluated by an independent outside evaluator. Last year's evaluations contained useful comments for the faculty who taught those seminars.

**Psychology:** The department uses the Major Field Test in Psychology from the Educational Testing Service to assess seniors graduating from our program. In the past, the scores were not encouraging. With the introduction in 2007 of a required 2 hour credit capstone course, Psy 4999 (Integrative Psychology), scores have soared. Success of program graduate students in meeting learning outcomes is monitored through course grades and other assessment steps along the path to graduation. For example, PhD students take comprehensive examinations prior to advancing to candidacy and this provides an opportunity to ensure that they have met learning objectives. At the end of the winter semester, program directors for Clinical, I/O (Industrial/ Organizational) and BN (Behavioral Neuroscience) provide individual assessments of each graduate student in his/ her program. The written assessments include suggested goals for the upcoming year.

**Sociology:** Results from the ETS major field exam in 2008 (calendar year) indicate that 61.97% of the graduating seniors scored above the 50<sup>th</sup> percentile and 14.3% scored above the 80<sup>th</sup> percentile. The percentage of the sociology majors scoring above the 50<sup>th</sup> percentile has remained above 60 percent since 1997. Students did well in the areas of multi-culturalism, social institutions, and gender but somewhat poorly in social psychology this past year. Student course evaluations are consistently high. Students commented favorably on their learning experiences, including the quality of instruction, the opportunities for learning about and working with the state-of-the-art instructional technological tools, and face-to-face and online interaction with faculty members.

# 2. How faculty use program or course-level assessment data or teaching evaluation (including midterm) data and NSSE to change their courses?

**Anthropology:** All faculty collected course evaluations from students in their classes by distributing the department course evaluation forms. Data were discussed with the faculty in

their annual evaluations and strategies for responding to complaints considered. A meeting of all core sequence instructors was held at the end of the semester and the changes implemented this year were discussed, resulting in a decision to retain this year's structure next year.

**Biology:** Comments from undergraduates regarding expectations for the capstone Senior Seminar have spurred the creation of guidelines for this course. The department is closely watching the reception of a new course, Global Climate Change, since it will help gauge the audience for similar and related courses.

Chemistry and Biochemistry: Faculty in introductory chemistry introduced use of a sophisticated on-line homework system called 'Mastering Chemistry' to provide students with more opportunity for on-line practice and feedback beyond simple multiple choice questions previously used. The software allows students to work through problems in a stepwise manner and enter answers for which they receive feedback and can request hints from the system if they are stuck at a particular step. The system works with numerical, symbolic answers, and even can accept chemical structures drawn using an on-line tool. Students are typically assigned a problem set for every chapter covered.

Criminology and Criminal Justice: Several faculty members in the department have taken advantage of the opportunity to receive anonymous mid-semester feedback from their students, using data from this exercise to address any outstanding concerns. Faculty regularly review course evaluations and make changes in light of them, though those changes are seldom discussed with the chair or at faculty meetings. Departmental syllabi indicate that many instructors update their courses very regularly, at least in part due to student feedback.

**Economics:** As some examples, Anne Winkler is encouraging student engagement in the course, by adding class presentations and seminar-style discussion of course readings. Dave Rose now thoroughly embeds graded homework in his course that is delivered through an internet program called APLIA.

**English:** Information gleaned from course-level assessment data and teaching evaluations have led faculty to experiment with writing process and alternative media to maximize student learning. For example, faculty have increasingly used Discussion Forums on MyGateway for inter-student exchange and paper development.

**History:** The chair interviews all Senior Seminar students and takes their comments back to the faculty. In response to student feedback during this and past years, the department will be implementing a comprehensive undergraduate curriculum reform. It will include a new methodology course at the 2000 level and more courses that concentrate on skill development rather than content at the 3000 level. The department offered a pilot version of its methodology course in the fall 2008 semester. Students also voiced a demand for more unconventional scheduling to accommodate work schedules. In response, the department has experimented with more once-a-week, online, and Saturday courses. Student dissatisfaction with advising procedures will result in an evaluation of department practices in this regard next year. To better assess the graduate program, the department designed pilot surveys that will allow alumni to evaluate the History department MA program retrospectively. These surveys will be administered this summer.

**IWGS:** After completing the capstone experience, students are subsequently interviewed and the Institute has used this feedback to refine requirements for the capstone. Student evaluations of WGS cross-listed courses have been consistently positive over the years, with students often commenting on how WGS courses emphasize critical thinking, open-mindedness, and participatory learning.

Languages Program: Curricular surveys were distributed to all Spanish 2101, German 2101, and French 2101 sections. In response to the findings of the Spanish 2101 survey, the Spanish section will spend AY 09-10 incorporating a larger cultural component into the coursework. Students also reported low satisfaction regarding the technology tools used in the sequence (namely Quia for homework) and so the Spanish section is looking into an alternative. Professor Susan Yoder-Kreger will also test a new program that incorporates voice recognition software into online exercises. The findings of the German 2101 survey also revealed greater student interest in culture. In response, a new elementary textbook that includes more cultural context was adopted in FS 2008. The German section is also experimenting with targeted conversations about culture in English, in order to address a complex topic at the students' native level of sophistication. The curricular surveys distributed to students in French 2101 were extremely positive. Nonetheless, in response to student comments to instructors, the French section is reworking all assessments for the elementary sequence and is simplifying the task-based elements along with their instructions.

Mathematics and Computer Science: Feedback on faculty teaching is obtained from the following sources: student evaluations, classroom visits by other faculty members, and exit interviews conducted by the chair or associate chair of the department. This feedback is passed on to individual faculty members, and used in faculty annual evaluations. The department reacts to such feedback by adjusting its curricula. For example, the department is in the middle of a major overhaul on the CS curriculum. Faculty members are also encouraged to attend workshops or seminars on improving teaching techniques.

**Philosophy:** Faculty have increasingly made use of My Gateway, with noticeable benefits in student engagement and performance. The Mid-Semester Evaluation developed by the Center for Teaching and Learning is mandated for all courses taught by TAs., so graduate students with teaching responsibilities have this instrument as a trigger for mid-semester changes. The department has also developed its own Student Satisfaction with Philosophy Survey. A panel reviewing the survey found that students are generally happy with the accessibility of their instructors, but offered two recommendations: Faculty should explicitly encourage students to seek assistance outside of class and faculty might also encourage more class discussion since this is something many students value.

**Physics and Astronomy:** A task force was formed to address complaints from students and GTAs about the introductory physics labs. As a result, new labs are being designed and the lab manuals rewritten. Department By-Laws were revised to make the task force a permanent standing committee. Based on the material covered by the Major Field Test, some topics were dropped from the calculus-based physics lecture and lab courses while others were added. Bernard Feldman offered to conduct a prep session for students in advance of them talking the Major Field Test. The course in Transmission Electron Microscopy (P4308) was offered through Continuing Education to attract researchers in industry and had an enrollment of 20 students, the

majority from industry and from Washington University. Fewer degrees on campus require a lab component. Following the success of Geology 1001A (lecture with no lab), the department has changed Introductory Astronomy 1001 to include a no lab option (1001A). As a result, enrollment in Astronomy 1001 jumped from 60 to 140.

Political Science: Faculty have seen the data. Most reevaluate their requirements each semester.

**Psychology:** Many faculty use the mid-semester feedback system and others use this plus end-of-semester course evaluations to determine needed modifications. Faculty consistently receive high ratings. The department's Teaching & Learning series, organized by Ann Steffen, provides an opportunity for faculty to discuss a wide range of topics, e.g., teaching & technology, responding to problematic student behaviors, campus learning resources, supporting the work of your GTA, grading dilemmas, and developing effective writing assignments.

**Sociology:** The faculty has incorporated more critical thinking projects organized in small groups, writing assignments, and research papers (in upper division courses). In addition, course evaluations are used to improve teaching, including the continuous updating of the syllabi and incorporation of group projects, discussion sessions, etc.

3. Evidence that course requirements are intellectually rigorous and require student research and/or creative expression and that a graduate program is more rigorous than the undergraduate program (if applicable).

**Anthropology:** The department course evaluation forms specifically ask whether the level of difficulty of the course is appropriate. Overall, students answer "yes." If too many responses state "too easy," the Chair asks the faculty member to change the course. All 3000-level and above courses require research papers, and many lower-level courses do too. All majors are required to do original research and to present it before the faculty, and it is generally agreed by both faculty and students that the level of difficulty is extremely challenging for the poorest students and very challenging for the rest.

**Chemistry and Biochemistry:** In most cases, the MS/PhD courses have undergraduate prerequisites and the basic knowledge learned in the undergraduate courses is taken to a higher level. Chemistry is a layered subject. Several of the graduate courses are focused on narrow subject matter and the material comes from the primary literature and not an established text book.

Criminology and Criminal Justice: All courses in the Department of Criminology and Criminal Justice are intellectually rigorous; the department has developed a written set of learning expectations/competencies/outcomes for the program and each course is designed to address one or more of them. Most of the upper division courses require student research and writing, and all require critical thinking. MA courses in the department can be distinguished from undergraduate ones by the fact that they require more reading, place far greater emphasis on discussion, and universally require more writing and/or independent research.

**Economics:** In economics coursework, one dimension of advanced rigor is the amount of mathematics. Graduate core courses require calculus (and linear algebra), which is not required for undergraduate degrees. Also, almost every course at the upper level requires a substantial

paper and graduate students must complete a rigorous writing assignment which requires an original argument in the field of micro-theory. Additionally, all graduate students must complete a course in econometrics, which likewise requires a substantial and original empirical paper. Our students continue to flourish in Economic Ph.D. programs at major universities including Cornell, Georgetown, Penn State, and University of Illinois.

**History:** To ensure the intellectual rigor of courses, syllabi are reviewed by the department chair. All upper-level courses require significant writing assignments. The M.A. in History and in Museum Studies focuses substantially on original, primary research and deep engagement with specialized historical subfields. In contrast, B.A. and B.S. coursework emphasizes secondary reading, lectures, discussions, and an introduction to primary research.

**IWGS:** The program added a new requirement for a theory course. A number of student evaluations indicate that 3033/5033, Sexuality and Gender Theory, is the most demanding course they have taken at UMSL because of the reading and writing requirements. The program was also revised so that IWGS graduate certificate earners may take up to 6 hours of 4000 level courses (formerly, 3000-level courses could count).

**Languages Program:** There is no graduate program in foreign languages. The undergraduate program offers senior seminars in French and Spanish at the 4000 level that incorporate either research or creative expression (usually not both in the same class). Students either produce a research paper or do other major projects like designing and presenting a website. In the Spanish section, a 4000 level course titled Creative Writing in Spanish requires students to produce a portfolio of original pieces of fiction and nonfiction in Spanish.

Mathematics and Computer Science: The programs and courses are designed with the guidelines of the Mathematical Association of America (MAA) and Association for Computing Machinery (ACM) in mind. For example, in compliance with the MAA guidelines, the department imposes the requirement of abstract algebra and real analysis for the undergraduate math programs. For the CS programs, the ACM guidelines are being used in redesigning the curriculum. The textbooks and syllabi used in the department's courses also reflect the rigor of these courses. Master syllabi for the foundation courses in Math and CS are now available on the department's webpage for all of the faculty and staff to view. These will be made public soon. The department also plans to have syllabi for all of the department's courses available online in the near future. The graduate programs train students at levels which are distinctively higher than those for the undergraduate students. For example, the 5000 level courses require students to have a solid foundation from our 4000 level courses. In addition, textbooks used and the topics covered in both 4000 and 5000 level courses are comparable to those seen in some of the best math and CS departments in the nation.

**Philosophy:** Students have been placed in highly ranked graduate degree programs. Undergraduates have been accepted into Ph.D. programs ranked as high as #2 nationally. Students are instructed by active researchers with national and international reputations. Moreover, whenever appropriate the courses are writing intensive, so students are mentored in this central activity of the discipline. The department's course and degree requirements are compared to those offered by our competitors. Graduate coursework typically requires creative research as well as poised verbal expression. They also have higher standards (i.e., more substantial papers, the expectation of more incisive critique) than do undergraduate courses.

Under the revised program, all graduates will complete a master's thesis, which will give them an opportunity to examine issues in more depth than would be expected of an undergraduate. Overall, the department expects graduate students to have more sophisticated encounters with the course material, mastering more facts, coming up with more telling counterexamples and objections, and having a better sense of the overall significance of the problems explored.

**Physics and Astronomy:** Graduate students conducting research are required to make a presentation at Journal Club each year on a research topic of general interest and these presentations have been of a high quality. A growing number of master's students are writing theses. A review of the syllabi and textbooks for the graduate courses shows that they cover more advanced topics than the undergraduate courses.

**Political Science:** The syllabi are reviewed to ensure that there is a writing requirement and appropriate reading for the course level. Similarly, graduate courses require significantly more reading, writing, and analysis.

**Sociology:** The department has examined the extent which the department curricula have a clear cumulative building of knowledge and skills from the lower level to upper level courses by organizing faculty review groups. Each group (consisting of two to three department members) examined course materials (such as syllabi, assignments, exams, and grades). Results indicated that higher level courses added more demanding academic content and learning components. The review also identified courses that needed more rigorous exams and grading standards. Seniors complete a capstone course. Graduate students are expected to conduct their own research.

## 4. Describe quality of dissertation/thesis supervision. Explain how quality is assessed.

**Anthropology:** The quality of senior theses is assessed by faculty who attend the presentations at the URS and the department presentations. Each thesis also has two readers who compare assessments.

**Biology:** The graduate program is largely constrained by the size of the faculty and the flat funding for students. The quality remains high, as is evidenced by the fact that three incoming students have Fulbright scholarships and another has an East-West scholarship; one recently admitted student secured a NSF Graduate Student Fellowship. This year work carried out here by three Masters students had journal covers - Matt Ogburn had the cover of *American Journal of Botany*, Muse Opiang had the cover of the *Journal of Mammology* and his work was featured in the *New York Times* Science section, and Caroline Duffy had the cover of the *Journal of Molecular Ecology*. Seven PhD and four Masters theses have been successfully defended so far this year. Last year a requirement of a satisfactory review of a graduate student's progress by the entire thesis committee was made mandatory as a precondition to receiving continuing departmental support; this seems to be successful.

Chemistry and Biochemistry: Each year in May, all of the graduate students are assessed at a meeting of the entire faculty. The complete record of each student is examined and the research advisors report on the student's progress. If there are problems with supervision, a pattern of poorly performing students under a particular advisor would appear. The quality of the MS thesis and PhD dissertations is steadily improving in the department as the quality of the graduate

students is improving. For the 2008 graduate review meeting, there were no particular problems that surfaced.

Criminology and Criminal Justice: The quality of dissertation supervision in the department can be demonstrated by the strong success of PhD students in finishing their dissertations and competing effectively on the job market. Since last year's report, two additional students have completed their PhDs; both have secured tenure-track jobs, one at Michigan State University and the other at the University of Massachusetts - Lowell. In addition, three ABD students have accepted excellent tenure-track jobs (one at the Indiana University/Purdue University - Indianapolis and two at Old Dominion University) and plan to complete their dissertations within the next few months. One of the department's PhD graduates from last year, Dan Isom III, recently was named Chief of the St. Louis Metropolitan Police Department.

**History:** M.A. theses are reviewed by a committee of historians or scholars in related fields. The best theses are submitted to the State Historical of Missouri annual prize competition.

**Mathematics and Computer Science:** Faculty members who supervise dissertations or theses are all established researchers in their respective fields. For dissertations, the quality of their supervision is assessed through two oral exams with fellow faculty members sitting on the committees. The first exam is on a survey paper about topics in an area in which a student is going to do his or her dissertation. Although there is an option of taking a written exam in place of this oral exam, all of the students have chosen the oral exam option so far. The second exam is the dissertation defense. In the future, the department might consider additional ways to assess the quality of the supervision.

**Philosophy:** Students work closely with an assigned thesis director, and they also receive feedback and assistance from the two other faculty members on the committee. The quality of the research is assessed by examining the student's final work, and in an oral defense. Starting this fall, graduate students will also, in their concluding semester, present their thesis project to the Department in the ongoing WIP (Work in Progress) seminar series. This will provide feedback from the entire department, and also give students a feel for how to present a conference paper.

**Physics and Astronomy**: The quality is high as measured by the publication of the dissertation research in respected professional journals and successful presentations at professional meetings. Two of the MS theses written in 2005 were published in 2007. A Ph.D. dissertation completed in 2006 was published in *Physical Review D*. Doctoral students writing their dissertations were first authors on five refereed publications in *IEEE Sensors*, the *American Journal of Physics*, *Physical Biology*, and the *Journal of Biological Physics* and *Journal of Theoretical Biology*.

**Political Science**: If a student found fault with the dissertation supervisor, the graduate director or the chair would hear of it. The department has a good crew of dissertation supervisors who have shepherded a very diverse student body through to successful completion of the Ph.D.

**Psychology:** At the end of the winter semester, program directors for each area -- Clinical, I/O and BN – provide individual assessments of each graduate student in his/her program. The written assessments include goals for the coming year.

**Sociology:** The department has established clear guidelines and procedures for MA thesis supervision. The MA thesis is intended to serve as a vehicle for developing the student's research and scholarly capability. The student must demonstrate all the rigors of critical reading, evaluation and analysis of research and theoretical literature, problem definition, research design and analysis, and the written and oral presentation of findings and conclusions. Students are required to make a formal presentation of their work. The department also conducts a mid-year review of student performance by a faculty committee.

## 5. Significant community engagement/service-learning activities this year.

**Anthropology:** Several senior thesis topics involved engagement with the community and policy recommendations.

**Chemistry:** Department members James O'Brien and Keith Stine hosted ACS Career Day on May 1<sup>st</sup>, attended by close to 300 high school students. The department hosted and administered the St Louis area High School chemistry contest on March 13<sup>th</sup> and 14<sup>th</sup> which was taken by 244 students. (Arrangements for hosting, proctoring, and grading were made by Keith Stine). Hal Harris and Keith Stine hosted and administered the Chemistry Olympiad on April 25<sup>th</sup>, both the written exam and the lab exam.

**Criminology and Criminal Justice:** The department's most significant service learning activity is the work that Jody Miller and her students have been doing with the Center for Women in Transition, a half way house for women re-entering society after incarceration. That work involves documenting the challenges that women face following imprisonment, and is designed to enhance female-centered correctional programming in the St. Louis region.

**History:** Laura Westhoff and Andrew Hurley were involved in a project funded by the U.S. Department of Education to develop a local history curriculum for high schools in the City of St. Louis. This project involves a partnership with the Scott Joplin State Historic Site. Hurley's participation in the project also includes outreach to residents of the Jeffvanderlou neighborhood in the effort to align historical analysis with community redevelopment priorities. Westhoff has also organized reading groups and colloquia for elementary, middle, and high school teachers in the region. Many History faculty participate in the Regional History Day competition sponsored by the Department on the UM-St. Louis campus. The James Neal Primm Lecture in History is offered annually to the public at the Mercantile Library. Student members of the History Honorary Society, Phi Alpha Theta, maintain an online journal of student publications that is accessible on the Department website.

**IWGS:** Jody Miller used service learning in her Honors seminar where students worked on gender research by evaluating the CHAMPS Prison Program at Women's Eastern Reception, Diagnostic & Correctional Center, Vandalia, MO. IWGS is a co-sponsor of the Women's Mentoring Project, developed by Affiliate Faculty Malaika Horne and Sally Ebest, which pairs students with community leaders in an on-going mentoring relationship.

**Languages Program:** The Spanish Costa Rica program, held during the winter intersession, included a service learning component. Students worked with young children in an orphanage and a day care center in San José, while taking intensive language classes at a certified language

school. The Spanish practicum course was offered again in spring 2009 and placed seven students in local community organizations that deal with the Hispanic population of St. Louis.

Mathematics and Computer Science Under the direction of Richard Friedlander, the Calculus I course (Math 1800) was offered for advanced credit this past year at 19 high schools in the St. Louis metro area. Friedlander visited the classes of each of the 25 teachers who taught in this year's program. Friedlander also worked this past year with all of the middle and high school math teachers in the Bayless School District as part of a 3 year, \$1.5 million, mathematics and science partnership grant between Bayless and UMSL. A major goal of this grant is to improve the math and science content knowledge of the large number of English Language Learners in the Bayless School District. This past February, area high school students came to the department to participate in the American Mathematics Competition sponsored by the Mathematical Association of America and the American Mathematical Society. After the exam, the department held a reception for the students. This event was coordinated by Ron Dotzel. Dotzel also coordinated the 12<sup>th</sup> Spencer Lecture which the department hosted this past April. This is an annual event in which the department invites the community to come to campus to hear a renowned mathematician or computer scientist give a general talk on his/her area of expertise.

**Philosophy:** Ronald Munson is an invited and regular participant in the monthly Ethics Rounds for Surgery and Anesthesia residents and faculty at the Washington University Medical School. Each month cases encountered by the residents in their hospital training are presented and discussed.

Physics and Astronomy: As part of her NSF CAREER grant, Sonya Bahar continued working with physics students at Normandy H.S. and hosted them on campus for several biophysics projects. About 500 5<sup>th</sup> grade students visited the UMSL Planetarium to learn about motions in the night sky and how comets are made in a program funded by the NASA/Missouri Space Grant Consortium (Bruce Wilking). The Richard D. Schwartz Observatory hosted about 300 visitors at the monthly public Open Houses (Wilking, Erika Gibb). Faculty members gave general interest talks about their research for the St. Louis Astronomical Society (Wilking), the Cape Girardeau Conservation Nature Center (Mike Fix), the St. Louis Science Center (Philip Fraundorf) as well as interviews on local radio and television on astronomical topics (Gibb, Wilking). Wilking, Feldman, Fraundorf, and Wayne Garver participated in the Junior Science, Engineering, and Humanities Symposium. Fraundorf gave the challenge address at the awards ceremony. Fix is a consultant for the Bollinger County Museum in Marble Hall, MO which houses the dinosaur fossils from his dig in Bollinger County. Several department faculty directed UMSL undergrad and graduate students and 3 high school student in research projects funded by the NASA/Missouri Space Grant Consortium in 2008.

**Political Science:** During the historic 2008 election year a number of our faculty – especially professors Robertson, Jones, and Kimball – were highly visible in the television, radio, and print media at the international, national, regional, and local level.

**Sociology**: Clifton Glore was awarded a Community Building Fellowship for 2008-09 by the UMSL Community Partnership Project and worked in Old North St. Louis to build a stronger community. Katy Till was offered an internship position at the Youth Empowerment in Action

in 2008-09 and has worked on the Anti-Tobacco grant from the Department for Health and Human Services.

# 6. Significant student accomplishments (e.g., student publications, presentations, or prizes) this year.

**Anthropology:** Angela Toole (BA 2009) earned a 2009-2010 Fulbright Student Research Award for her project "Vulnerable Primates in a Newly-Protected Neotropical Forest." She also won the XXXIV National Lambda Alpha Scholarship Award for seniors, a prize of \$5,000. Lambda Alpha is the national collegiate honors society for anthropology. Its Executive Council selected her from among a nationwide pool.

**Chemistry and Biochemistry:** 23 undergraduate students received awards or scholarships. 7 graduate students received awards or scholarships. Numerous students authored or co-authored paper as indicated on the department's report on Sharepoint.

Criminology and Criminal Justice: Amanda Gendon was awarded a Minority Fellowship by the American Society of Criminology. Mike Cherbonneau co-authored a book chapter with faculty member Richard Wright entitled, "Auto Theft," which was published in *The Oxford Handbook of Crime and Public Policy* (Oxford University Press, 2009). Scott Jacques co-authored a paper with faculty member Richard Wright entitled, "The Victimization-Termination Link," which was published in *Criminology*, the discipline's flagship journal. Scott Jacques authored a paper entitled, The Necessary Conditions for Retaliation: Toward a Theory of Non-Violent and Violent Forms in Drug Markets, which has been accepted for publication in *Justice Quarterly*, a top-tier criminological journal. Jennifer Cobbina was awarded a Dissertation Fellowship by the National Institute of Justice. Cobbina co-authored a paper with faculty member Jody Miller (and Rod Brunson) titled "Gender, Neighborhood Danger, and Risk-Avoidance Strategies Among Urban African-American Youths," which was published in *Criminology*. Mike Vecchio won the Graduate Student Paper Competition at the 2008 Meeting of the Midwestern Criminal Justice Association.

**Economics:** Patrick "Mitch" Downey (BS/MA 2009) presented a paper at the meetings of the Missouri Valley Economic Association (MVEA).

English: Linda Tate (MA), who teaches at the University of Denver, has had her third book, Power in the Bood: A Family Memoir published. Angie O'Gorman's (MFA novel *The Book Of Sins*) will be published by Plain View Press. Joe Betz (MFA) has 3 poems in the *Blue Earth Review*, and one in the *Michigan Quarterly Review*. Julia Gordon-Bramer's (MFA) poem, "Daddy II", first published in MARGIE: *The American Journal of Poetry*, Vol. 7, Fall 2008, has been nominated for the Stanley Hank's Memorial Prize, which picks the best poem published in a Missouri journal by a Missouri author. She also published a story in the Santa Fe Writers Project Literary Journal. Dan Begley's first novel *Ms. Taken Identity* will be published this June by Doubleday.

**History:** Benjamin Israel won the Lewis Atherton award sponsored by the State Historical Society of Missouri for his MA thesis, "Putting Black in Blue: The Struggle to Put Uniformed African American Police Officers on the St. Louis Metropolitan Police Department." In

addition, several graduate students presented papers at professional conferences during the past academic year.

**IWGS:** Angela Toole presented her research at the Undergraduate Research Symposium and at the American Anthropological Association in San Francisco. Amanda Duckwall presented a course paper she wrote at the UMSL Undergraduate Research Symposium. Kimberley Casey will be presenting a paper she wrote for Kathy Gentile's Jane Austen graduate seminar at the American Political Science Association National Conference, which rarely accepts student work. Hjun-Jin Lim presented a paper at the 18<sup>th</sup> & 19<sup>th</sup>-century Women Writers Annual Conference. Monica Swindle organized V-Day activities and the production, *Any One of Us*, as president of VOICES (the WGS club). This production raised money for related charities. Before the presidential election, VOICES, along with IWGS, sponsored a political roundtable.

Languages Program: Spanish major, Stacy Ann Goodman, was admitted to St. Louis University Law School and was one of ten students awarded a prestigious 1843 (full) scholarship. French major, Kris Whitfield, was accepted to the MA program in French Studies at Florida State University. Stacy Ann Goodman (Spanish) received the J. F. Fausz Academic Achievement Award from Pierre Laclede Honors College. Two French students were included in *Who's Who Among Students*: Theresa Marie Baker and Margarita Sanchez.

Mathematics and Computer Science: Three CS undergraduate students (Dante Avery, Daniel Garrett and Antonin Brjetchka) working with Dr. Sanjiv Bhatia won a competitive grant from Sun Microsystems, Inc. to expand the use of Robust Image Search Engine (RISE) – a utility that can be used to store and organize image files in OpenSolaris. Part of their work was reported in the Undergraduate Research Symposium. Department students also participated in the campuswide Andalafte Mathematical Competition organized by the department. Mark Hauschild, graduate research assistant, was co-author on two refeered conference proceedings papers with Martin Pelikan and his colleagues.

**Philosophy:** Waldemar Rohloff and Tom Knoten (a graduate student) took part in the 16<sup>th</sup> annual Philosophical Collaborations Conference hosted by the Philosophy Department at SIU-Carbondale. Previously, only pairs from Ph.D.-granting departments were invited, so this is a considerable accomplishment. Two graduate students, Tyler Paytas and Nick Baima, were accepted into the Ph.D. program at Washington University. This is a singular accomplishment for the department, as Wash U. is very selective, accepting only 5 incoming graduate students each year. One earlier graduate, John Gabriel, is also pursuing a Wash U. Ph.D. This Spring, the graduate student organization, The Philosophers' Forum, staged the 4<sup>th</sup> Annual Gateway Graduate Conference. They chose a theme for the conference ("Updating the Agenda for the Metaphysics of Mind"), recruited a renowned philosopher as keynote speaker (Terry Horgan from the University of Arizona), and selected 9 graduate students from across the country who would come present papers. Philosophy graduate students served as commentators for the presented papers.

**Physics and Astronomy:** Graduate student Jinfeng Wang received a Presidential Scholarship Award from the Microscopy Society of America. Five graduate students were first author or coauthors on refereed publications. Four undergraduate physics students and one graduate student made research presentations at the 17<sup>th</sup> annual meeting of the NASA/Missouri Space Grant

consortium held on the campus of Missouri S&T. Undergraduate and graduate students participated in the on-campus URS and Graduate Fairs. PhD candidates gave talks at the American Physical Society, the Meeting of the Organization for Human Brain Mapping in Melbourne, Australia, and others presented posters at the meetings of the American Astronomical Society. Twelve graduate students presented posters on their research at the 4th joint meeting between the UMSL and Missouri S&T Physics Departments in October 2008; an UMSL student won first prize in the poster competition.

**Political Science:** The department awarded 6 students with scholarships as well as an internal award for Best Graduate Student Paper. Kim Casey (Ph.D. Candidate) presented papers at various political science professional meetings. Three more Ph.D. Students – Bryce Summary, Cassie Gros, and Mary Carver – presented papers at the Midwest Political Science Association Meeting. A junior in Political Science representing Spain took second place in the "Best Prime Minister" category among 15 universities and 27 "countries" competing in the Model European Union held at Indiana University-Purdue University.

**Psychology:** Students presented dozens of research related posters in on-campus research competitions. Of the 20+ posters at the Graduate School Research Day, psychology students won 3 of the top 4 cash prizes. On the national stage, graduate students are highly visible at national and international conferences. Perhaps more impressive are that psychology graduate students were first authors or co-authors on a dozen publications this past year. All of the department's graduates, both terminal MA and PhD, have found professional employment upon graduation.

**Sociology:** Recent MA graduates (Kelley Harris and M. K. Stallings) continue to teach in the Department of Sociology and Criminal Justice at St. Louis University. Randall Lynn completed his MA in sociology in May 2009 and has been admitted to the sociology Ph. D. program at George Mason University.

# 7. Changes to programs, courses, assessments, and/or program descriptions and outcome statements based on this year's findings.

**Anthropology:** A change to the major was submitted which allows students to choose from a list of 3000-level topical courses rather than requiring one. The new structure of the core sequence was discussed and it was decided to maintain it next year.

**Economics:** On the basis of objective and informal data the department decided to eliminate its evening undergraduate program. The day undergraduate program suffered from a lack of elective choice and even the intermediate theory courses were only being offered every other semester. By eliminating the evening program, which only served 3-5 students per semester, the department is able to redirect resources to the day program. On the basis of anecdotal evidence at the individual class level it has become clear that graded homework is becoming an increasingly important part of most courses in economics. The department has therefore increased its funding of graders to assist professors.

**Chemistry and Biochemistry:** As an ACS accredited program the department has very little room to alter the curriculum. The curriculum has evolved under the guidance of ACS committee on professional training and covers all of the important subjects in chemistry and biochemistry. In light of newly announced ACS guidelines, the department approved changes to BS with a

biochemistry emphasis so that these students would meet the new requirement for advanced lab hours. In the graduate program, the department recognized that it had very few graduate students or applications from students studying physical chemistry. As a consequence, it very rarely offers graduate level work in physical chemistry. However, in order to offer these courses to a small number of potential students, a course in directed reading for physical chemistry was approved. The physical chemistry will take on such assignments in addition to their normal teaching load.

Criminology and Criminal Justice: The department made no major changes to its programs, courses, assessments, program descriptions and/or outcome statements this year. However, it has continued to closely monitor a change implemented last year that concerned the comprehensive exam PhD students must pass prior to advancing to candidacy. After extensive discussion and consultation, it was decided that PhD students' intellectual development would be facilitated better by a comprehensive exam that required them to write two major papers of publishable quality in which they had to apply the theoretical and methodological skills acquired through their course work. Indications are that the new comprehensive exam system is working extremely well, functioning to facilitate far greater student/faculty engagement than existed under the previous system. Student admitted starting in Fall 2008 must complete the two major papers; those admitted prior to Fall 2008 will still have the option of taking an all day in-class test followed by a two-day take home exam in lieu of writing the papers.

**English:** The English Department has completed a curricular revision process begun under previous chair Barbara Kachur. It has added a requirement in either world literature or a literary genre; replaced five upper-division distribution areas with three and adding optional Emphasis Areas (British literature, American literature, Ethnic and world literature, Women's and gender studies, Creative writing, Language and writing, Literary theory and criticism. Led by Jeanne Allison, Writing Certificate Coordinator, the Department has revised its Certificate in Writing as a Professional Writing Certificate and added a Creative Writing Certificate. English is also now responsible for the campus Writing Lab and has worked this year toward integrating that unit into the department.

Languages Program: During AY 08-09 the French, German, and Spanish sections continued their efforts to revise the elementary language curriculum that covers the first three semesters of instruction. The Spanish section was the first to move towards a proficiency-based curriculum, followed by German, and then French. To assess success, the unit initiated use of SOPI (Simulated Oral Proficiency Interview) in these courses to track student outcomes. Students received a letter grade for their SOPI performance (equal to 5% of their semester grade). In December 2009, SOPI ratings from the 2009 calendar year will be assessed. To address motivation problems long noted in third-semester language classes, the Supplemental Instructor Program (coordinated by the Center for Teaching and Learning) provided four SI's who were assigned to each 2101 class offered in French and Spanish. This program was later expanded to Japanese. Changes have also been made, and refined as needed, in the test used to properly place students into the language sequence. The most recent changes have addressed test security issues and increasing numbers of students attempting to test out of the foreign language requirement. Efforts have also been directed at improved student advising.

**Mathematics and Computer Science:** In response to the decline of enrollments in the CS undergraduate program, the department has started the process of revising and updating the CS

curriculum. The objective is to update the program so that more students will find it attractive in terms of its quality, its value, and its relevance to their personal plans. In an effort to increase the enrollments of college algebra, contemporary mathematics, and intermediate algebra, the department modified the prerequisites of these courses in order to give students more options to be qualified for entry into them. As an experiment, the department added a lab component in some of the Math 1105 sections and gave student online assignments. The student performance in these experimental sections has improved significantly. This experiment has demonstrated that, with the help of the technology, lower level courses like 1105 can be taught sections containing a larger number of students.

**Philosophy:** As described above, the department has jettisoned the old system of comprehensive exams for master's students, replacing it with a thesis requirement. Course evaluations are now being administered online via My Gateway. The department is instituting a procedure for posting course descriptions in advance of each semester, in order to inform and recruit students. The faculty are always encouraged to teach new courses.

**Physics and Astronomy:** Since May 2006, the department has administered an Exit Questionnaire to students graduating with a B.S. or B.A. The results were reviewed at a fall faculty meeting and no substantive changes were made to the program. After discussions among faculty members, a new textbook was adopted for the Physics 1011/1012 sequence (introductory physics for the life sciences); this book will be first used this summer.

**Political Science:** The department made decisions regarding courses to archive and then created a three-year course schedule. The graduate program added a Proposal Preparation course to be taken in the semester in which the student will take qualifying exams. This should speed up time to completion for the Ph.D.

**Sociology:** The Department implemented online course evaluations beginning in the fall semester. The number of students participating has increased. At the graduate level, a non-thesis option was added (approved in April 2009).

#### **B. Planning**

### 1. This year's enrollments (on-campus, off-campus, on-line) compared to last year's.

**Anthropology:** According to incomplete data, total enrollments in anthropology courses have been constant for the past two academic years. From AY07-08 to 08-09, VIP course enrollments dropped by about 40 students, while online courses (run both through CE and A&S) increased by 110. Day classes dropped by about 60 students; this was primarily because Anthro 1041, Sex and Gender Across Cultures, was not offered this year. It will be offered next year if the money to pay the adjunct is available.

**Chemistry and Biochemistry:** These data should be available from institutional research.

**Criminology and Criminal Justice:** This year's undergraduate enrollments both on and off campus were in line with those of recent years, as were MA enrollments.

**Economics:** Both the graduate and undergraduate enrollments of the department of economics were essentially unchanged.

**English:** Undergraduate Enrollment remains steady at 210 students. MA and MFA combined enrollment remains steady at 120 students.

**History:** History enrollments have been fairly consistent since 2003, although there have been significant fluctuations within certain classifications of students. The major area of growth has been the MA program whereas most of the decline has been due to a reduction in B.S. –Ed. Students. In the last year student enrollments were up slightly.

**IWGS:** Fall 2008 and spring 2009 enrollments were comparable to last year's with all 5 sections of 2102 Introduction to Women's and Gender Studies (3 sections in fall and 2 in spring) being fully enrolled. The number of students enrolled in the certificate programs continues to gradually increase. In spring 09 75 students were enrolled in the undergraduate program and 30 were enrolled in the graduate program.

Foreign Languages Program: According to OIR reports comparing Fall 2007 to Fall 2008, student credit hours in foreign languages fell by 191 credit hours, from 4219 to 4028. This is entirely due to the fact that Arabic and extra sections of ESL were run through Continuing Education. Using the metric of student headcounts, OIR reports show an increase in the number of students enrolled in ESL and Language classes: 1,006 students enrolled in fall 2007 and 1,076 students enrolled in fall 2008. These data suggest that the program had more students, but more were taking three-credit classes at the 2000 level and above, rather than the five-credit 1000 level courses. A similar pattern is visible when comparing winter 2008 and winter 2009 enrollments. Student credit hours declined by 337 credit hours, from 3747 to 3410 (Part of the reduction can be explained by the fact the courses were run through Continuing Education.) Once again, OIR reports of student headcounts reflect an increase in enrollments from 957 in winter 2008 to 973 in winter 2009. One explanation for this pattern is the way the new test was administered: It could be taken online at any location, raising concerns about test security. In May 2009, the program instituted a more stringent policy which requires students to take the placement test under the Director's supervision on campus if they wish to test out of the language requirement.

Mathematics and Computer Science: This year's undergraduate enrollments stayed at about the same level as last year's. A slight decline in the Math MA program is seen, which should be within a reasonable range of random fluctuation, but the decline in the CS MS program is more noticeable. While the CS undergraduate enrollment remains stable compared to the last year, it is significantly lower than what it used to be a few years ago. In the department's last Five-Year Review, the external reviewer pointed out that faculty resources for the CS programs are critically low. This could be a factor that links to this problem.

**Philosophy:** At present, there is a robust number of undergraduate philosophy majors (39). The department was also successful in recruiting a sizeable and talented crop of incoming master's students despite the fact that the financial aid packages offered compared unfavorably with those offered by other master's-only programs.

**Physics and Astronomy:** Enrollments in physics courses were flat with the exception of the introductory physics courses for the life sciences, which continue to grow. Enrollments in introductory astronomy (without lab) also jumped; this has spurred the department to offer the

"no lab option" every semester. Geology enrollments jumped since the department began offering geology during the day (FS2006) and offered a "lecture-only" option.

**Political Science:** Not counting summer and intersession courses, student credit hours were down 372.

**Psychology:** Enrollments in undergraduate psychology courses increased in AY08-09 (10,859) compared to AY07-08 (10,650). There are fewer psychology majors, perhaps because of the more rigorous requirements for the BA adopted in Fall 2007. Enrollments in the graduate programs are determined largely by the availability of financial resources to support GTA and GRA positions. Because the GTA funds supplied the department have been static, numbers in the programs continue to be static. Successful grants by faculty (Galovski, Patterson & Paul), however, have allowed the department to admit a handful of additional graduate students as GRAs for AY08-09. The department Chair is now actively encouraging and rewarding faculty who submit grants that include GRA funds.

**Sociology:** According to the data provide by the Dean, student enrollments (expressed as SCH) increased by 0.98% from 2007-08 to 2008-09. The department was one of the three in the CAS that increased the SCH this past year. (The total CAS SCH declined by 3.76%.) In WS2009, the department of sociology had 69 majors, 32 minors, and 16 active graduate students (up from 64 sociology majors and 11 graduate students in WS08).

#### 2. New programs approved or in progress.

**Anthropology**: Anthro 1052, Olympic Games: Ideals and Reality, was added to the course list and approved for Gen Ed credit.

**Chemistry and Biochemistry:** In light of newly announced ACS guidelines, the department approved changes to BS with a biochemistry emphasis so that these students would meet the new requirement for advanced lab hours. A 4+3 program with optometry was approved. This program allows students to get a BA in chemistry and smoothly transition into the UMSL optometry program.

**History:** The most significant programmatic change at the undergraduate level was the adoption of comprehensive curriculum reform as noted above. In addition, the department added introductory courses in World History to its curriculum. The most significant programmatic change at the graduate level was the development of a curriculum for an online MA degree program in conjunction with the department of History at Missouri Southern State University. This program will be geared toward full-time teachers and will be inaugurated in fall 2009. In spring 2007, a new Ph.D. program was proposed and approved at the campus level. The program was justified on the grounds of a robust local demand as determined through formal surveys and informal inquiries. Last year, the department decided to rescind the proposal and refine it to better meet the needs of prospective students who will not be pursuing careers in academia. The department is currently drafting a new Ph.D. proposal which will place more emphasis on applied historical research and the needs of K-12 teachers.

**IWGS:** In fall 2008 and spring 2009 IWGS listed several new undergraduate and graduate courses, as well as an on-line course cross-listed with History. IWGS is moving forward with

developing a proposal for a major and minor in Women's and Gender Studies. Preliminary survey results indicate significant interest; 63 of 134 surveys returned expressed interest in taking a major in WGS.

Languages Program: One new program that continued this year after a pilot in Spring 2008 was a one-credit immersion experience in foreign language. Five languages attempted to offer the immersion experience in April 2008, but only the Spanish section had sufficient enrollment. In January 2009 the French and Japanese sections offered an immersion experience with both a credit and non-credit option. The Chinese section offered an immersion experience in March 2009. By all accounts these were successful initiatives and will be repeated in Academic Year 09-10, following the same calendar. Additionally, ESL Director Denise Mussman created a new course targeting classroom practice and communication in English for international faculty.

**Math and Computer Science:** The department is investigating the need and feasibility of adding some new tracks in the CS undergraduate program.

**Philosophy:** The Department continues its ongoing project of revising course offerings, eliminating those courses that are no longer a central part of the mission, and developing particularly cross-disciplinary offerings in collaboration with other departments (for example, Ethics and the Computer with Computer Science and online courses in both Engineering Ethics and Philosophy of Science to benefit the UMSL/Washington University joint program in engineering.) The department would like to develop an emphasis area in Environmental Ethics comparable to our other applied ethics offerings; ideally this could ground an interdisciplinary campus program.

**Physics and Astronomy:** An advanced course in Transmission Electron Microscopy was offered though Continuing Education and had an enrollment of over 20 students, mostly from industry or other local universities. A graduate certificate in nanotechnology is under consideration.

**Political Science:** The department added a new track in not-for-profit management in the BSPPA program. The BSPPA program is working with Public Policy Administration to create a 3+2 program culminating in an MA in Public Policy Administration.

Psychology: Brenda Kirchhoff is developing a new course, "Cognitive Neuroscience."

**Sociology:** The department officially began offering an Undergraduate Certificate on Disaster and Risk Management in fall 2008. It is a multi-disciplinary program initiated by Sociology, involving the Center for Transportation Studies; Department of Communication; Department of Economics; Department of Political Science; Department of Psychology; Theater, Dance, and Media Studies; and Women and Gender Studies.

### 3. Programs, tracks, or courses considered for elimination or eliminated this year.

**Economics:** The department suspended the Graduate Program in Forensic Economics due to insufficient resources. The Bulletin and web site have been updated to reflect this change.

**History:** In preparation for the new course sequence at the undergraduate level the department will be streamlining its offerings, eliminating many of the content-based courses that once constituted all upper-level work. In particular, the department will eliminate courses that deal with specific countries outside the United States (e.g. France, Germany, etc.) and replace them with courses covering broader geographic areas (e.g. Europe). These changes are also a response to extreme faculty shrinkage over the last five years. Due to low student enrollments in evening classes and shrinking faculty resources, the department will continue to bias our offerings toward the daytime hours.

**Philosophy:** The department archived a number of courses that were outdated, would not enroll successfully, or were tailored to past faculty and so had not been offered recently.

**Political Science:** Several courses were eliminated (archived) this year because they were not central to the core mission and programs of the department.

**Sociology**: This past year the department has formed a committee (including internal and external members) to evaluate the existing programs and plan for the future. The committee will share its recommendations with the new  $\underline{D}$  for making appropriate changes in the department.

4. Plans to sustain or increase enrollments, including plans for courses and programs offered at other sites, during winter intersession or online.

**Anthropology:** The department expanded its online offerings with Anthro 3235, Women of Subsaharan Africa, which was developed by Sheilah Clarke-Ekong, and Japan 1011, Anime Nation: Popular Culture in Japan, which was developed as an online course by the Languages Program and cross-listed with Anthropology.

Chemistry and Biochemistry: There are no plans to offer courses at other sites, during winter intersession, or online. The department will work on recruiting undergraduates through interactions with high schools and community colleges (magic shows, career days, open houses, etc) and graduate students through mailings, seminars at four-year schools and recruiting booths at regional chemistry conferences.

Criminology and Criminal Justice: To sustain and increase enrollments at the undergraduate level, several faculty have given guest lectures in criminal justice and criminology courses at local community colleges. The department has also begun to offer a variety of online courses that have proven to be highly popular, prompting concern that such courses could undermine oncampus enrollments, something that needs to be monitored closely in the years ahead. At the MA level, the department has begun to admit somewhat larger cohorts of highly qualified applicants in an attempt to "grow" the program without lowering standards.

**English**: The department is increasing its on-line offerings in junior-level writing, to include Eng 3090 as well as 3100 and 3120. Courses are offered through Nursing at DePaul Hospital, through Outreach at the South County Center; at Lindbergh and Clayton High School; and in collaboration with Jefferson and Mineral Area Colleges.

**IWGS:** Sheilah Clarke-Ekong developed a new hybrid course, Hear Her Stories in Life Speak, where she used a face to-face format at Wildwood while simultaneously leading a live online

class at UMSL.Four sections of the introductory course, WGS 2102, are offered through Advanced Credit at Clayton, Webster Groves, McClure North, and Incarnate Word.

Languages Program: The program has instituted awards and events to recruit and retain students, and has looked into offering courses at off-campus locations and online. With regards to offering language classes at alternate locations, a key difficulty is that facilities off-campus do not have the same technologies that are available on campus: Technology is an increasingly important component of foreign language instruction. Research to date suggests that elementary language classes are best offered in traditional format, not online, so this option is not currently being pursued. An online format can be effective for upper-level courses and this possibility is being explored. Maria Snyder is developing an online version of French 4311/5311, Imagining Paris. The class will be offered on a blended model in fall 2009, with only three meetings on campus. The rest of the class will be entirely online. Student feedback will determine the type of format in the future. The program has also begun to develop elementary-level culture classes that are offered entirely on-line through Continuing Education. The first of these was *Ancient Greek Culture and Civilization*, designed by Margaret Phillips. The second, *Anime Nation*, designed by Chris Born, was offered for the first time in spring 2009.

Mathematics and Computer Science: As a result of CS undergraduate curriculum overhaul, the department is expecting some significant changes in the program. A key reason promoting this exercise is the decline of enrollment in the past few years. The new curriculum should attract more students. A step forward after this will be to look into the graduate CS curriculum to synchronize it with the new undergraduate program. To explore the online education market, the department has planned a pilot online course (Math 1020, Contemporary Mathematics) this fall. This should provide a better idea about what is needed regarding the offering of lower-level math courses online in a systematic way. Qiang Dotzel is in the process of designing such a course. Following the success of MTLC and the college algebra, the department is now looking into the possibility of expanding the use of technologies to other lower-level math courses. Initial efforts in Math 1105 have shown promising results. The plan is to further push the changes in this direction, and hope that one day the math department is ready to offer larger scale service courses in applied statistics for the campus.

**Philosophy:** The department is producing course descriptions of upper-level courses, especially those that vary from semester to semester, and making them electronically available to students. In addition, the department created an online newsletter (it will also be mailed to current students and alums.) Regarding online courses, Andrew Black is devising an online version of Philosophy of Science course to serve undergraduates in the cooperative engineering program; Kim Maricic is developing an online version of her Engineering Ethics course to serve engineering students in the Pierre Laclede Honors College; and Irem Steen is developing an online version of Ethics and the Computer to serve the Math and Computer Science Department. The department has successfully compressed several intro-level courses and offered them in the Winter Intersession. The department has also experimented in offering Friday seminars.

**Physics and Astronomy:** The department has doubled physics course offering for summer school beginning in summer 2007 and nearly all sections are full. Jimmy Liu taught a 4000-level course in scanning electron microscopy techniques though Continuing Education that attracted researchers from industry.

**Political Science:** The department offered two winter intersession courses (the same as last year) and will evaluate opportunities for on-line courses.

**Psychology:** The departmental faculty is committed to evolving away from the current "video" courses to true online courses. A new set of online courses will employ modern computer technology to provide interactive, challenging courses as an option for students.

**Sociology:** The department now has eight online courses and has plans for more. Additional online courses, along with the continuous innovations in the existing online course delivery, will increase enrollments. The department this past year added a new online section of SOC 3210, Sociological Theory, providing students the option of taking it as an online or face-to-face course for the first time. A new online section of SOC 3230, Research Methodology, will be offered in fall 2009.

#### III. SERVICE

Faculty in the College continue to serve in the departments, in the college, on the campus, the UM system and in the community. They contribute their knowledge and their leadership skills to improve the university and the community. Most faculty also give generously of their time serving their professions as editors, reviewers, and members of service organizations within their professions. A complete description of service contributions for each department is provided in the department annual reports that are available on the Sharepoint web site in Academic Affairs. We provide here a summary of some key contributions.

## A. Major contributions unit made to faculty governance and other campus activities

Anthropology: Sheila Clarke-Ekong carried an exceptionally heavy service load in 2008-09. She was on 13 campus committees, including Chair of the Chancellor's Athletics Advisory Committee and Co-Chair of the Respect Committee; member of the Faculty Senate, the Provost's Sociology Ad-hoc Review Committee, Key Communicators, Sue Shear Institute Board, and others. Margo Hurwicz was a member-at-large on the Faculty Senate and a member of the Senate Committee on Committees. Susan Brownell was a member of the Search Committee for the Dean of Arts and Sciences.

**Biology:** Members of the department serve on various Senate and other College/University committees.

**Chemistry and Biochemistry:** The department undertook much service work including two active members of the Senate (George Gokel and Christopher Spilling) and a member of the Senate Steering Committee (Christopher Spilling). Several individuals are active on system, campus and college committees. Keith Stine has been nominated for the Chancellor's Award for Excellence in Service.

**Criminology and Criminal Justice:** Richard Wright served as Chair Pro Tempore for the University of Missouri Faculty Committee on Tenure. He also served on University of Missouri-St. Louis Program Audit Committee and on the Search Committee for the Dean of the College of Arts and Sciences. David Klinger served on the Institutional Review Board for the Protection of

Human Subjects. Finn Esbensen served on the College of Arts and Sciences Dean's Advisory Committee on E & E.

**Economics**: Anne Winkler served on the Senate Library Committee, the Chancellor's Taskforce on Gender, Campus Recruiting for Success Committee, and an ad hoc A&S Committee on Tenure and Promotion. Clinton Greene and Sel Dibooglu played key roles in the campus-wide Accreditation Committee. Sel Dibooglu served on a committee to study E&E allocation in the CAS. Dave Rose served on the CAS Dean Search Committee. Susan Feigenbaum served in the Faculty Senate.

**English:** Faculty served on committees at the college and campus level, including such Senate committees as Budget and Planning, Advising, Tenure and Promotion, Library, Awards, and more.

**History:** Many members in the department are involved in faculty governance and other campus activities. The following are some of the major contributions: Laura Westhoff served on the Faculty Senate, Gerda Ray served on the Chancellor's Task Force on Diversity and was the faculty advisor to the campus chapter of Amnesty International, Jack Gillingham sat on the Dean's Advisory Committee for Tenure and Promotion, and Adell Patton was on the Faculty Campus Grievance Committee.

**IWGS:** Kathy Gentile chaired the Chancellor's Task Force on Gender Issues, which set up a new website on gender policies and issues this spring. She also serves on the Chancellor's Diversity Initiative, the Women's Leadership Initiative, and the Senate Research Committee. Sally Ebest directs the Center for University Teaching and serves on the campus Audit Committee. Kathleen Nigro is faculty advisor to PRIZM and AAUW, and Farida Jalalzai is faculty advisor to the Sue Shear Institute for Women in Public Life.

Languages Program: Faculty served on numerous College and University committees (Faculty Senate Committee on Committees, The Current Committee, University Libraries Committee, Administrator Evaluation Committee, Curriculum Committee, the Respect Committee, Space and Planning Committee). Faculty members also helped to enrich campus life by serving as advisors to student groups (HISLA, JASA). Faculty members sponsored weekly language tables in French, Spanish, and Chinese. Japanese and German language tables met monthly. Rosalinda Mariles collaborated with the Association of Student Anthropologists to organize a Day of the Dead celebration. Also in the fall and spring semesters, Marité Balogh gave presentations for the IWGS program. Seven faculty members organized a foreign language poetry reading for the Monday Noon Series. ESL Director Denise Mussman gave multiple presentations to International TA's and International MBA students. Both she and her colleague Nancy Mayer gave multiple workshops at the Writing Lab as well.

Mathematics and Computer Science: Faculty members from the department are involved in various faculty governance and other campus activities. Some of the major contributions include: Shahla Peterman in the Search Committee for the new Dean of A&S, Rich Friedlander in the Search Committee for the new Director of the Advanced Credit Program, Qingtang Jiang in the Senate Committee on Research Dishonesty, Sanjiv Bhatia in the Senate Assembly IT Committee, and Haiyan Cai in the Graduate Council.

**Philosophy:** Ronald Munson was Department Chair, served on the Dean's Search Committee and on the Interim Dean's Advisory Committee on Equipment and Expenses, was on the Arts and Sciences Dean's Advisory Committee on Tenure and Promotion and on the Committee for Tenure Review, and was a Research Board Award reviewer. He was also a member of the Senate Committee on Faculty Dishonesty, and the University Committee for Tenure Removal. Robert Northcott was Faculty Senate representative. Eric Wiland is Graduate Program Director. Andrew Black is Undergraduate Program Director. Stephanie Ross is Department Chair and a member of the Dean's Policy Committee. John Brunero was departmental representative to the Center for the Humanities.

Physics and Astronomy: The department's Administrative Associate, Alice Canavan, won the Chancellor's Award for Staff Excellence. Sonya Bahar serves as Director for the Center for Neurodynamics and Jimmy Liu for the Center for Nanoscience. Sonya Bahar is a member of IACUC. Sonya Bahar spoke to the New Faculty Teaching Scholars about grant writing activities. Bernard Feldman is also the Associate Dean of the UMSL/Wash. U. Joint Engineering Program, serves on the Faculty Senate, and is a member of the Senate Committee on Committees. Bruce Wilking serves on the Chancellor's Task Force on Gender Issues and was President of the UMSL Sigma Xi chapter. Wilking was also involved in the planning for the Benton-Stadler renovation project. Bruce Wilking and Liu serve on the Conflict of Interest Panel. Philip Fraundorf and Liu serve on the Advisory Committee for UM System's Entrepreneur of the Year Award. Liu serves on the UM Systems' Patent Committee.

**Political Science:** E. Terrence Jones is a Senate member and chair of the Assembly Budget and Planning Committee. Dave Robertson serves on the Senate Advancement, Tenure and Promotion Committee, Barbara Graham is on the Provost's Advisory Council and Kimball serves on the Graduate Council. David Kimball, Robertson, and Graham participated in Constitution Day activities.

**Psychology:** Many faculty serve on college, campus-wide and system committees. As some select examples: Brian Vandenberg serves as an Honors College Liaison; Jennifer Siciliani serves as an executive member of the campus General Education Curricular Planning Executive Committee; George Taylor served on the UM Research Board; and Ann Steffen was a consultant for the Five-Year Review of biological sciences at UMKC.

**Sociology:** The Department actively contributed to faculty governance and campus committee activities, including: campus-wide or system-wide research proposal reviews and participation in committee services such as the UM-System Task Force on Online Education, Faculty Senate/University Assembly Committee on Bylaws and Rules, Graduate Council, Committees on Committees, and Diversity Task Force.

#### **B.** Activities that promote the profession

**Anthropology:** Pam Ashmore organized a workshop for the annual meetings of the American Association of Physical Anthropology. Susan Brownell published an essay in the *Anthropology Newsletter* of the American Anthropological Association for the Interest Group for the Anthropology of Public Policy. Her panel at the Virginia Festival of the Book was shown on C-Span2's BookTV. Margo Hurwicz's service to the profession of Anthropology achieved an

important milestone when the Society for Anthropological Sciences, of which she was a founding member, moved beyond its probationary period as an "interest group" and achieved "section" status under the American Anthropological Association, and organized its first independent conference. Mike Ohnersorgen received \$10,000 to organize "The First Regional Aztatlan Archaeology Workshop" in Guadalajara, Mexico. Jay Rounds was invited to serve on the editorial board of *Curator*, the most prestigious journal in museology. He chaired and presented a paper for a panel at the annual meeting of the California Association of Museums.

**Biology:** Toby Kellogg has been trying to rationalize the NSF's understanding of systematics and development during her tenure there; she is also on the council of the American Association of Arts and Sciences. Betty Loiselle is very active on the governing board of the Organization for Tropical Studies. Amy Zanne and Peter Stevens are working with the NSF-sponsored iPTOL/iPlant who are providing informatics support to migrate the Angiosperm Phylogeny Website, a major informational resource for biologists from high school student on up, from html to xml. Faculty members are active in the STARS program, for example, Bob Marquis is mentoring two students this summer.

Chemistry and Biochemistry: Almost all of the chemistry faculty promote the profession through manuscript and grant reviewing. Several members provide exceptional levels of service to the profession. For example: Keith Stine was Chair of the St. Louis section of the American Chemical Society; Alexei Demchenko is a member at large on the executive committee for the Carbohydrate Division of the American Chemical Society; Lol Barton and Hal Harris are Directors for the St. Louis section ACS; Chris Spilling is an alternate councilor for the St. Louis section ACS.

Criminology and Criminal Justice: Richard Wright continues to serve as Editor-in-Chief of the British Journal of Sociology, the first non-British-based person to do so. He also serves on the Criminal Justice Advisory Committee for the St. Louis Community Colleges. Finn Esbensen is Executive Counselor of the Western Society of Criminology. Janet Lauritsen served on the Committee on National Statistics' Panel to Review the Bureau of Justice Statistics for the National Academy of Sciences and continues to serve on the National Research Council's Committee on Crime, Law and Justice. David Klinger serves on the Use of Force Ad Hoc Committee of the International Association of Chiefs of Police. Richard Rosenfeld continues to serve on the National Academy of Sciences' Committee on Crime, Law and Justice. He also has been elected to serve as President of the American Society of Criminology for 2010. Beth Huebner served on the American Society of Criminology's Program Committee. She also continues to serve as Executive Counselor for the ASC's Division on Corrections and Sentencing. Jody Miller has been elected to serve as Executive Counselor of the American Society of Criminology for 2010. Andres Rengifo served on a three member independent commission to advise the Colombian Bureau of the Census on the quality of that country's crime and justice data.

**Economics:** Tenured and tenure-track faculty attended major and field conferences. Larry White was an invited plenary speaker on the global financial crisis to colloquia sponsored by national banks and research institutes in Japan, Central America, England, and Germany. Tenure and tenure-track faculty regular peer review for economics and related journals. Anne Winkler is on the editorial board of *Social Science Quarterly*.

**English**: Faculty have served the profession by participating in approximately 45 conferences, readings, presentations, and other professional activities, with approximately one-half of these in the greater St. Louis area. Both Joe Carroll and Howard Schwartz gave more than a dozen invited talks nationally and internationally. Suellynn Duffey is President of Mid-America Writing Program Administrators; Sylvia Cook serves on the Editorial Board of *Studies in American Culture*; Mary Troy reads for the University of Nebraska Press and judges writing contests; while others organize programs locally and judge locally.

**History:** Keven Fernlund continues as Executive Director of the Western History Association.

**IWGS:** IWGS faculty serve as reviewers for numerous journals. Deborah Cohen is an associate editor for *Theory and Society*. Zoe Peterson is a consulting editor for the *Archives of Sexual Behavior*. As president of the Kate Chopin Society, Kathleen Nigro organized a panel for the American Literature Association Conference. IWGS sponsors a Faculty Colloquium Series each year where joint and affiliate faculty present their research in progress.

Languages Program: The faculty belong to dozens of professional organizations at the regional, national, and international levels and several hold officer positions. Beth Landers and Kersten Horn both serve as regional representatives on the Delegate Assembly to the Modern Language Association. Beth Landers was appointed to a three-year term on the MLA's Ad Hoc Committee on Contingent Labor. Sue Hendrickson is the chair of the AATF Commission on Articulation and works with the Missouri Department of Higher Education. She is a reader of AP French exams and a member of the ETS ACTFL Praxis II World Languages National Advisory Committee. Beth Landers and Susan Yoder-Kreger participated in the ELIXR grant administered by Cheryl Bielema in Academic Affairs. Faculty members have also participated in conference presentations on recent curricular work undertaken in the language programs.

Mathematics and Computer Science: The faculty participate in professional organizations, serve on editorial boards, organize conferences, conference sections, or deliver lectures around the world. For instance, Dr. Charles Chui is the co-editor-in chief of *Approximation Theory and Applications* and of *Applied and Computational Harmonic Analysis* (ACHA) and serves on the editorial board of several other mathematics journals. Charles Chui, Qingtang Jiang, and Wenjie He organized a Mini Conference on Applied Harmonic Analysis with speakers from nearby universities and Germany. Uday Chakraborty is on the editorial board of several computer science journals, area editor of *New Mathematics and Natural Computation*, guest editor of *Information Sciences Journal*, in addition to being editor of *Journal of Computing and Information Technology*. Martin Pelikan is on the editorial board of the *Journal of Global Optimization*.

**Philosophy:** Two faculty members have created blogs that have garnered national attention. Brit Brogaard created Lemmings, "A blog devoted to issues in language, epistemology, metaphysics, and mind." Gualtiero Piccinini created a blog, Brains, that has since become a group blog. Stephanie Ross is just now ending an 8-year term as Book Review Editor for *the Journal of Aesthetics and Art Criticism*. Ronald Munson is Associate Editor for *Ethics for The American Journal of Surgery*. Jon McGinnis was Secretary-Treasurer of the Society for Medieval and Renaissance Philosophy and a member of the Society's Executive Committee. Brit Brogaard has been invited to become American editor of *Erkenntnis*, a highly distinguished analytic journal. Gualtiero Piccinini was Philosophy Program Chair for the Southern Society for Philosophy and

Psychology. Gualtiero Piccinini is a member of the APA Committee on Academic Career Opportunities and Placement. Almost all of our active department members serve as referees for various journals and presses.

**Physics:** Dr. Bahar is Co-Editor –in-Chief of the *Journal of Biological Physics* and Editor of *The Biological Physicist* newsletter. Peter Handel is on the Editorial Board for Bentham Science Publishers, LTD. Jimmy Liu is on the editorial board for the *Journal of Nanomaterials* and the *Journal of Synthesis and Reactivity*. Philip Fraundorf is on the Editorial Advisory Board for the *Journal of Nano Education*. Bruce Wilking continued as an Executive Board member for the NASA/Missouri Space Grant Consortium. Fraundorf was on the St. Louis Science Center's Emergent Technologies Advisory Board and NanoFutures Forum Planning Committee. Liu is a Council Member and Education Committee Chair for the Central States Microscopy and Microanalysis Committee. He is also a Member-at Large representing the State of Missouri for the Prairie Section of the American Physical Society. Nearly all faculty members served as proposal reviewers or manuscript reviewers for professional journals and two (Bahar, Liu) were on review panels for NSF.

**Political Science:** There was strong participation in professional meetings as well as talks and media appearances. Glassberg is co-editor of the *American Review of Public Administration*. Many faculty members are also on the board of editors of political science and subfield-specific journals.

**Psychology:** Psychology faculty served as members of prestigious professional organizations. For example, Steve Bruce is an associate editor of *The Behavior Therapist* and Rob Paul is a member of the National Academy of Neuropsychology Grant Review Committee.

**Sociology:** Department members organized and participated in conferences, seminars and symposia both nationally and internationally (e.g., Japan, South Africa); worked with other professional associations abroad (e.g., South Africa); served on an editorial board; and provided professional services to promote high quality research.

### C. Activities that fulfill the university's land-grant mission with community service

Anthropology: Sheilah Clarke-Ekong prepared legal briefs for asylum seekers for Human Rights First. She gave the Martin Luther King, Jr. Keynote Address at the St. Louis Art Museum. She serves as a member of 5 community organizations: the Professional Organization of Women (African American Chapter), Professional Organization of Women (St. Louis Chapter); Community Women Against Hardship; National Heart Healthy Executive Women's Group; CORO – Women In Leadership. Among her presentations, she gave a Keynote Address, Order -Daughters of Elks 45th Anniversary, Columbus Ohio. Margo Hurwicz serves on the organizing committee and as the UMSL fund raising team captain for the Arthritis Walk. She was a member the Alzheimer's Association (Multicultural Outreach) Task Force for the Healthy Brain Workshop that targeted African American Baby Boomers. Mike Ohnersorgen gave two lectures at Cahokia Mounds State Historic Site. Jay Rounds was a consultant for a number of local museums.

**Biology:** The Department co-organized and sponsored a very successful "Darwin's Birthday Party" – a series of three public lectures, one given by Patty Parker, followed by coffee and cake

– at the Schoenberg Auditorium at the Missouri Botanic Gardens; the auditorium was full, and some 350-400 people attended. There were rather more visitors to the magnificent "flower" of the titan arum in the departmental greenhouses, the progress of the plant was followed by thousands on a webcam that was set up, and it was also picked up by a number of news organizations; Kathy Upton put in a great deal of time organizing access to the public and talking to visitors.

**Chemistry and Biochemistry:** Faculty members visited local schools, conducted tours of the department for events such JSEHS and hosted ACS Career day which brought >300 high school students to campus. Through the CNS, the department is reaching out to local companies, organizations and politicians to further science on the UMSL campus.

Criminology and Criminal Justice: Beth Huebner provided pro-bono research and evaluation services to the Missouri Department of Corrections' Division on Probation and Parole, helping to develop a police/probation partnership to reduce recidivism in the Wells Goodfellow neighborhood. She also serves as a research consultant to the Violence Intervention Program implemented by the St. Louis Metropolitan Police Department and St. Louis Children's Hospital. Richard Rosenfeld continued to work closely with the Regional Commerce and Growth Association to counter media reports labeling St. Louis as the most violent city in America. He received the 2008 "Sold on St. Louis Award" from the RCGA, *St. Louis Post-Dispatch*, and the St. Louis Board of Realtors for his efforts on behalf of the city. In addition, he conducted an analysis of racial profiling during traffic stops on behalf of the St. Louis Metropolitan Police and presented the results before the Chief's command staff. Finn Esbensen organized the 8<sup>th</sup> Annual Youth Violence Prevention Conference, which attracted approximately 200 practitioners from the St. Louis area.

**Economics:** David Rose and Larry White gave several interviews to local radio stations on the global financial crisis. William Rogers – an expert in real estate economics and property values – also gave several interviews to the media. William Rogers co-chaired a panel entitled "Foreclosure: Understanding the Impact on Home Prices, Vacancy and Crime." The panel was a part of the University's Community Partnership Project's Seminar Series and attracted many local community organizers and real estate professionals. Rogers was also involved with the Saint Louis County's planning department in identifying troubled neighborhoods. Rogers is working with the East-West Gateway Council of Governments and a collaboration of researchers to assess the utility of tax increment financing and other local tax incentives to spur local economic development.

**History:** Members of the Department serve on the boards of museums and civic organizations. Carlos Schwantes, Fred Fausz, Andrew Hurley, Steve Rowan, and Louis Gerteis, are particularly active as public lecturers. Louis Gerteis organizes the Tower Grove Park lecture series.

**IWGS:** Nan Sweet serves on the board of *River Styx* literary magazine and continues to give poetry readings and work with the women's poetry workshop Loosely Identified. During election season, Farida Jalalzai, was interviewed by numerous local and national news organizations, participated in political panels and gave several talks to the community on gender and politics. Kathleen Nigro has led a number of community book discussions and serves as the project coordinator of the Read MOre project with Kirkwood Library, which encourages all Missourians to read and discuss the same book. Nigro has received two grants for Kirkwood Library, one

from NEH and another from the American Library Association. The IWGS Advisory Board now has 22 community and campus members. With the help of Advisory Board, IWGS organized a successful fundraiser at the Kerr platinum green building downtown.

Languages Program: Several faculty members organized professional development opportunities for local teachers: five faculty members from French and Spanish prepared a professional development workshop for the Foreign Language Faculty of the St. Louis Public Schools. Beth Landers gave a professional development workshop to high school and middle school teachers in the Mehlville school district. Beth Eckelkamp organized a half-day professional development workshop for high school teachers of Japanese. Four faculty members work with the Advanced Credit Program and frequently mentor and high school teachers through their role as liaisons in this program. Regarding outreach to local students: Beth Landers was part of the AATF committee that organized a French Career Day at Saint Louis University for over 400 local high school and university students. Three members of the French faculty served as judges for the annual Optimists International essay contest. Finally, Professor Martha Caeiro is a member of UMSL's Civic Engagement Task Force and collaborates with local agencies in her Spanish Practicum class.

**Mathematics and Computer Science:** These are listed in the paragraphs on "Community Engagement/Service Learning Activities provided earlier.

Philosophy: Ronald Munson is a continuing member of the St. Louis Science Center Ethics Advisory Panel. Most recent discussions have focused on the controversial exhibition "Body Works Three." Munson is an active participant in the St. Louis Ethics Consortium, which is made up of representatives from the three research universities and Webster. Munson discussed ethical and social issues connected with genetic screening and testing as a guest on KWMU's program "St. Louis on the Air." He also serves as Ethics consultant for the Clinical Trials Division of the National Cancer Institute, Medical Ethicist for the Department of Veteran's Administration Data and Safety Monitoring Committee, Medical Ethicist for the National Eye Institute Multicenter Ocular Hypertension Treatment Study, and contributor to the Office for the Protection of Human Research Subjects at Washington University School of Medicine.

**Physics:** See items under Teaching/community engagement/service learning. Erika Gibb serves on the Board of Directors for the Alliance for Astronomy based in St. Charles, MO. In addition to the Planetarium program for local area 5<sup>th</sup> grade students, planetarium presentations were made for an Honors Class from SIUC, Camp Wyman, and Marquette H.S. (Wilking). Geology instructor Mike Fix is a volunteer and consultant for the Bollinger County Museum of Natural History.

**Political Science:** Brady Baybeck and Terry Jones are involved with activities regarding children. Lana Stein and Andy Glassberg were engaged in neighborhood organizations. Jones works with Leadership St. Louis and Focus St. Louis. Todd Swanstrom is on the Board of Directors of Citizens for Modern Transport and on the Governing Board of the St. Louis Metropolitan Research Exchange.

**Psychology:** Miles Patterson organizes a Psychology Series for St. Gerard Majella Church in Kirkwood and Matt Taylor is active in various groups in the St. Louis African-American community.

**Sociology:** The department placed two graduate student interns into St. Louis community projects this past year.

#### IV. ECONOMIC DEVELOPMENT

#### A. Economic development activities

**Anthropology:** Jay Rounds' consulting helps local museums improve effectiveness.

Chemistry and Biochemistry: Zhi Xu filed several invention disclosures, provisional patents and patents in 2008 and continues to have royalty income from his license (2) with Grace Co. He is currently working a non-invasive glucose monitor. Wes Harris and Christopher Spilling continue to collaborate with scientists at the University of Kentucky. A patent and a provisional patent have filed by UK with joint assignment to UK and UMSL. Harris, Spilling and UK collaborators have founded a company called "Alkymos" to further develop the technology and seek additional funding for the research. Alkymos was recently awarded a phase I SBIR grant from the NIH with a match from the State of Kentucky (\$200K) to continue the research. James Bashkin continues to perform research at UMSL funded by his company NanoVir. UMSL have an equity stake in NanoVir and receive overhead funds from Bashkin's grants. NanoVir was just awarded a new NIH STTR Phase II grant (approx. \$3M) to fund their research on anti viral compounds to treat HPV. Gokel, Stine and Demchenko have filed invention disclosures which are under review. Our instrument facilities are heavily used by companies from the St. Louis region. Access to high research equipment helps these companies move their projects forward and grow in strength, ultimately helping the economy of the St. Louis region.

**Economics:** William Rogers has a long-term project to create a residential real estate database of Saint Louis County and City.

**History:** The Virtual City Project (Louis Gerteis and Andrew Hurley, co-PIs) is currently funded by a three year National Leadership Grant in excess of \$700,000 from the Institute for Museum and Library Services for the purpose of developing a "tool kit" that will enable small museums to develop three dimensional display environments. This project holds the potential for economic development.

**Mathematics and Computer Science:** Uday Chakraborty (Co-PI) and Cezary Janikow (PI) received a grant from Express Scripts (ESI) on Release Scheduling Tool. Wenjie He (Co-PI) and Cezary Janikow (PI) received grants from Express Scripts, Inc. (ESI) to develop a web project *Mobile Member Portal* for Fall 2008. For Spring 2009, ESI funded *Pharmacy Locator* project independent project classes. Cezary Janjikow is Express Scripts Professor in Residence this summer.

**Physics:** Eric Majzoub has a patent applied for on bialkali hydrides for hydrogen storage. Electronics technician Wayne Garver collaborated with faculty in Optometry on two patents:

Color Hue Test and Light Hypersensitivity Meter, Visual Suppression Test. Negotiations are underway with companies to license them. Jimmy Liu made the resources available in the Microscope Image and Spectroscopy Tech Lab to students and researchers from local industry and universities. In 2007 and 2008, the NASA/Missouri Space Grant Consortium jointly funded a summer research internship for an UMSL physics major to work with Philip Fraundorf and MEMC Electronic Materials in St. Peters, MO. In 2007, the department arranged for a summer internship for a Missouri S&T engineering student with FastMetrix which is owned by an UMSL physics alumnus. Jimmy Liu is the coordinator for the UM System-wide nanoscience and nanotechnology network as well as in charge of developing closer ties with local industries. He provides consultation for Crosslink Company on their research projects.

**Political Science:** Andy Glassberg is an advisor to the City of Jennings. Todd Swanstrom has a contract with St. Louis County to plan their Neighborhood Stabilization program. He is also working on the foreclosure issue. A report on local responses to foreclosure in six metro areas will be published in the next few days by the MacArthur Foundation Building Resilient Regions website.

**Psychology:** Many of the faculty collaborate with colleagues at local medical schools to improve opportunities for successful research grants. The departmental Centers, especially CAC, are active in procuring service grants. An example is Robert Harris bringing the St. Louis Clinical Psychology Internship Consortium to campus, an effort which brought tens of thousands of dollars to the campus.

#### V. CONTINUOUS IMPROVEMENT

### A. Progress in plans made after the last Five-Year Review

**Anthropology:** Due to a shortage of senior faculty and the time that the chair had to put into restructuring the positions of Margo Hurwicz and Sheridan Wigginton, the department has made little progress on plans established from the 2007 Five-Year Review. The department should be able to make progress next year when more senior faculty will be present to push them forward.

**Biology:** The report of the Five-Year Review Committee sparked an ongoing discussion about the curriculum. There is a developing consensus that pushing the curriculum in the environmental direction would be both attractive to students and also didactically sensible. There has also been extensive discussion about advising, but further steps await discussion with the incoming DDean. Specific proposals include 1) producing guidelines for the capstone Senior Seminar so that expectations for the course are made more even – comments from undergraduates spurred this; 2) shifting the emphasis of the important introductory Bio 1821 immediately to reduce the diversity side of the course and increase the environmental side; 3) the offering of a new course, Global Climate Change. Its reception will be closely followed, since it will help gauge the audience for similar and related courses. The relationship between the Biology Club and the Department is under discussion, particularly the fact that the Club has answers to old exams that are accessible only to members of the club. The failure rate in some

introductory courses is a matter of concern. A short quiz is being developed that will be given to transfer and returning students to ensure that they have the basic knowledge needed for the courses they wish to take.

**Chemistry and Biochemistry:** The Department of Chemistry and Biochemistry underwent a Five-Year Review on April 16<sup>th</sup> 2008. The self-study and associated reports are available on the Sharepoint site.

**Criminology and Criminal Justice:** At the time of the last Five-Year Review, the department saw a strong need to increase the size of the faculty, and to add greater diversity in doing so by recruiting highly qualified women and minority scholars. As recently as three years ago, the department included two African-American scholars but both have since left, despite substantial counter offers. Hiring one or more African-American scholars is a high priority. The department has been successful in hiring a Latino scholar and two additional women scholars. The department remains about the size it was in 2000. In order to add greater diversity, continue to re-balance the department's age and rank structure, and ensure continued excellence into the future, it is critical that the department be allowed to increase its faculty size as soon as resources allow. The last Five-Year Review also recommended that the department raise PhD stipends to stay competitive with those offered at other top-ranked criminology and criminal justice programs. Stipends are now competitive on a yearly basis, though the department remains unable to offer multi-year commitments to prospective doctoral students. In a related vein, at the last review the department was urged to find a way to provide doctoral students with computers; this now has been accomplished. Finally, the last Five-Year Review recommended that the department take steps to increase external funding as one way of helping to support some of our doctoral students and the department has been successful in this regard; doctoral student support has been included in large external grants recently garnered by faculty members.

**Economics:** The department implemented its first Assessment Exam of undergraduate economics majors in May 2009.

**English**: Regarding faculty and programs, the faculty numbered 33 full-time members during the 2008-2009 AY (four with some form of joint or shared appointment). Tenure-track faculty now include three the Department sought in 2004: a Writing Program Administrator (hired with tenure), a fiction writer, and a Shakespearean. The new WPA, Suellynn Duffey, has led the writing faculty as they explore writing needs across the curriculum, teaching faculty development, and online and software developments; these efforts extend to the Certificate in Writing, now the Professional Writing Certificate (with a new course in Proposal Writing and more). A second assistant professor in English and Education is now on the faculty. Four fulltime non-tenure track faculty have been added. These gains are balanced in some cases with losses through retirement at both levels (and a junior member in linguistics has replaced a linguist denied tenure). Regarding workload, the department developed a set of guidelines for adjusting teaching loads in relation to research and publication results for all tenured faculty. The guidelines stipulate that untenured assistant professors will teach a 2/2 load until the tenure decision. Regarding the promotion of teaching professors, the department created a set of guidelines for the promotion of the teaching professors. Regarding administration, the chair established an advisory committee to help with the annual evaluation of faculty.

**History:** Significant progress has been made in program review and revision since the last Five-Year Review. Next year the department will continue to refine its Ph.D. proposal with the goal of having a final version ready for submittal by the end of the academic year.

**IWGS:** The Institute has aggressively implemented the recommendations of the reviewers. It substantially revised its mission statement and bylaws and strengthened faculty structure by instituting a formal affiliation process for faculty. IWGS now has 7 Core Faculty, 3 Associate Faculty, and 30 Affiliate Faculty. Among the changes: IWGS has drawn up formal guidelines for tenure and promotion for joint appointees that correspond to UM guidelines; reestablished regular faculty colloquia; established a small grants program; reestablished the Advisory Board; and enhanced marketing and fundraising efforts. In spring 2006, IWGS substantially revised its curriculum by establishing core requirements for certificate seekers, including a gender theory course and a capstone project, and by cooperating with other departments to establish a formal list of courses offered.

**Languages Program:** The last Five-Year review in Foreign Languages and Literatures occurred in AY 03-04 before the merger with Anthropology. So much has changed since then that it has, in many ways, become irrelevant.

**Mathematics and Computer Science:** With ever reducing resources, the department is working hard to provide the best possible service to students, and continues to search for new ways to improve enrollments and retention. The department is committed to preserving its excellence in research, teaching, and service.

Philosophy: At the last Five-Year Review (AY 2003-4), the faculty had plummeted from a previous high of 14 to a low of 6 FTE, endangering the continuation of the master's degree. The department since hired 3 associate professors, all tenured within the past few years, another who will go up this fall, plus 3 assistant professors who are all making excellent progress towards tenure. The Leiter Report that annually ranks all Ph.D.- and M.A.-granting departments of philosophy places the UMSL program among the top 8. The number would be even higher if not for the lack of adequate support for graduate students. The last Five-Year Review also pointed to the need to increase enrollments in both the undergraduate and graduate programs. Targets have not been met primarily due to campus enrollment trends and national economic trends. Among other developments, applied ethics offerings have been expanded. Online versions of Engineering Ethics and Ethics and the Computer are in the works; the next focus of attention will be Environmental Ethics, most likely with an interdisciplinary approach to this topic. The department is also pursuing an online version of the intro-level course, Phil 2255: Environmental Ethics. The department plans to develop two emphasis areas within the master's program – one covering philosophy of science, the other ethics.

**Physics:** The department is pursuing strategies to achieve the following goals: 1) in making faculty hires, build on strengths in astrophysics, biological physics, and materials physics; 2) use GIF money as seed money for faculty projects; 3) build closer times with Missouri S&T physics; 4) formalize credit for writing books; 5) increase recruitment efforts; 6) improve teaching through professional development; and 7) review intro physics curriculum.

**Psychology**: In response to the Five-Year Review done in 2007, changes include: 1) Regular meetings of the Chair and the department's "Management Group" (graduate program directors). This group will be expanded to include other department stakeholders; 2) Reallocating resources to better reflect faculty size of each area (Clinical, I/O, BN).

**Political Science:** The department will address strategic planning for the department when the University's budget situation is clearer. Currently, it is making adjustments to offer the program with fewer tenure track faculty. But this is difficult given limited funding to pay adjuncts. This has been made even more difficult, given the College of Arts and Sciences policy of keeping a large share of course buy-out funds generated by departments.

**Sociology:** The Department has updated the department website and improved its effectiveness as virtual department bulletin boards. The Department instituted a monthly luncheon with pizza for sociology majors in the fall 2008. It has fostered a sense of community and improved student-faculty interactions. The department established two capstone courses, 4365 Sociological Writing and 4040 Research Practicum to provide students with more flexibility in schedule and choices on capstone experiences. To maintain communications with the alumni, the Department published and mailed *Sociology Update* to over 120 alumni and friends of sociology in January 2009. The newsletter is also linked to the department web page.

# B. Critical issues, plans for addressing them

CAS: For the college as a whole, the issue of the loss of SCH from regular semesters and face-to-face courses to courses offered through Continuing Ed is becoming critically important. While CE was originally supposed to bring in new students by offering courses that are not normally offered on campus, in reality the CE courses are draining SCH from the colleges and tuition dollars from the GRA. The result is that dollars provided to the college as "profit sharing" on the CE courses are then given back to the campus as part of a cost cut when the campus fails to bring in sufficient tuition revenue. At this time there is a disincentive for the college to work with CE to create any additional offerings through CE.

**Anthropology:** The hiring of the Spanish Linguist, replacement for a faculty member denied tenure, was frozen. The department plans to keep pushing to have it replaced when the freeze ends. A second faculty member was denied tenure and the position is in the process of being converted to NTT. The department will also continue to work on preserving that position. In addition, the department is putting Patti Wright up for tenure in the coming AY since securing tenure will likely facilitate her return to UMSL.

**Biology** (Harris Center): During the year, a search for a Professor/Director of the Harris Center aborted, and although an appointment would have complemented the work of the EES faculty, it would not have helped the age structure in the Department. Bob Marquis has taken over the position on an acting basis and over the next two years will draw up a plan for the governance/running of the center and how best to further its aims. No gala dinner is being held this year. Gifts to the Center continue; where possible they are being used to bolster funding available to undergraduates with a view to giving them hands-on experience with research in the tropics. A critical issue that is developing is the recent proposal to take 1% annually from the ENDOWMENT for the Development group (a law has just been passed that allows this figure to

be up to 2% - it is the "Uniform Prudent Management of Institutional Funds Act" (sic)). The annual university disbursement to the center, used largely for scholarships, student research, etc., is 5%, and that remains the same; the 1% tax would make it harder for the endowment to grow.

**Economics:** The elimination of soft money for adjunct instruction made a viable evening undergraduate program unviable. With the exception of service courses to other units, the department has therefore eliminated offering the evening undergraduate program.

Criminology and Criminal Justice: The critical issues facing the department continue to center on matters such as: increasing faculty diversity, providing adequate support for PhD students, retaining the current faculty, and increasing the overall size of the faculty. This is essential so that the department can continue to (1) provide a first class undergraduate and graduate education to its students, (2) conduct research and scholarship that ranks with the world's best, and (3) serve the college, university, and local, state, national and international communities.

**History:** The most critical issue that has arisen since the last Five-Year Review has been the budget crisis. The department has attempted to address budgetary shortfalls by increasing revenue from Continuing Ed and online courses, and reducing expenditures when possible. For instance, this year the department abandoned the print copy of the annual newsletter, moving to an online format. The department also developed workload guidelines this year to maximize the efficiency of its human resources. In the coming year, it will continue to pursue cost-savings and look for additional revenue streams.

**IWGS**: These include: hiring more joint appointees and/or recruiting faculty housed in other departments to become joint appointees; proposing an undergraduate major in Women's and Gender Studies; providing more courses for students, including more sections of the intro course; recruiting more students into the certificate programs; fostering research and an intellectual climate through continuing grant support of gender research, colloquia, and bringing in outside speakers.

Languages Program: The most critical issue was the merger between Languages and Anthropology, approved on May 11, 2007. It has been determined that the unit cannot be titled a "Center" and discussions for renaming the unit have been ongoing. During AY 08-09 the most pressing three tasks were the development of the Policy and Procedures Manual for the Language unit, the first promotion case for an NTT faculty member since the new titling system was implemented in 2007, and the election of a new Director. The unit still needs to draft unit-specific NTT promotion guidelines in AY 2009-2010. Other important issues in the Language Programs were the continuing work on the elementary curriculum (explained above), and a continued effort to improve the professional culture in the unit. The program has an annual evaluation process in place. Future challenges will be to continue to recruit and retain excellent NTT faculty and to bring the curricular revision to completion. The program also needs to work with Anthropology to develop and revise classes that use cultural expertise on both sides of the faculty, and work to hire a Spanish linguist once the hiring freeze is lifted. Finally, the recruitment and retention of students will be critical to the continued success of the unit.

**Mathematics and Computer Science:** The most critical issue facing the department is the current budget crisis. In response to the crisis, the department increased the caps of the class enrollments and implemented money saving strategies in using paper, sending public relations

announcements, and running events like the Spencer Lectures. The plan is to continue such practice in the near future. To sustain important operations like offering scholarships to qualified students, the department will also expand its contacts with alumni, seeking their support.

**Philosophy:** The department has made great strides in recovering from the crisis documented in the last Five-Year Review. One result is that the department has many scholars just beginning to establish national and international reputations. It is crucial that they continue to receive support and, whenever possible, released time for research. Maintaining this faculty size and quality is critical.

Physics: The department has a leadership void. To address this, the bylaws have been revised to create the position of Associate Chairperson in hopes of "training" a faculty member to take over as Chairperson in the near future. The department needs to raise more money for department scholarships; staying in touch with alumni seems to be the best strategy. The planetarium projector needs to be replaced. Possible funding sources may be money tied to the Benton-Stadler renovation or special programs offered by NSF. More student recruitment is needed, perhaps in cooperation with CNS. The department is spread too thin in teaching the basic graduate courses and the next hire should be a theoretical physicist who can teach graduate level quantum mechanics or electrodynamics. The department is negotiating with the Physics Department in Rolla to offer graduate courses on the network to our students in W2010. The department also seeks to foster collaborations between the Center for Neurodynamics and researchers in Psychology. The original plan for the Benton-Stadler renovation had a joint teaching/research lab in neuroscience that would promote such collaborations.

**Political Science:** The most critical issue is offering the full range of courses day and evening for our programs. Since faculty members are highly research-oriented, increasing their teaching load is not, for the most part, an option. Instead, the department needs to identify adjunct faculty who can teach on a regular basis, and some progress is being made on this front. Funding adjunct positions and other operating expenses has also become an issue. The department seeks to regain control from the College of Arts and Sciences over funds generated by course buy-outs; it also needs to generate more funds whether from grants with overhead, gifts, on-line courses, or course offerings for continuing education.

**Sociology:** There is much stronger emphasis on program assessment and planning. The reviewer suggested that we offer more of the listed courses and create opportunities for student-faculty research as well as opportunities for service learning and internships. The reviewer also raised the fundamental issues of academic integrity, especially for our graduate program. This past year the entire department has engaged in collective discussions to articulate student learning objectives and how they should be integrated in the program. Given the limited resources, the graduate program needs to be re-organized by working closely with other departments. An interdisciplinary structure of the MA is being examined.

# C. Strategies to assess the plans made either from the last Five-Year Review or in response to other critical issues

**Anthropology:** At the moment the most basic goals are related to the structure of the department: 1) preserve the tenure lines of the Spanish linguist and Patti Wright, 2) preserve

Sheridan Wigginton's position whether as NTT or tenure-track, 3) maximize Margo Hurwicz's contribution to the department in her new 75% appointment, 4) absorb Jeanne Zarucchi as a 50% FTE in AY 2010-2011 after her leave ends, and maximize her contribution to the department. In the Five-Year Review the department was challenged to re-consider its emphasis on the senior thesis. After considerable introspection the department decided to continue this emphasis, having come to the consensus that it is worth the effort in terms of student outcomes, such as three successful Fulbright applicants and an increased number of graduate school admissions. It also generates good publicity for the department and UMSL. Other concerns raised in the Five-Year Review, such as the writing of by-laws, have taken a back seat and will be revisited next year.

Criminology and Criminal Justice: The success of the department's efforts is continuously monitored in a variety of ways. Faculty performance and productivity is assessed through annual reviews undertaken by the department chair and members of our elected Executive Committee. These rigorous reviews are regarded as models in the College of Arts and Sciences. Undergraduate student success and satisfaction is monitored through course evaluations, grades, and a senior exit exam. Graduate student success and satisfaction is monitored through course evaluations and grades. The department also pays close attention to the placement of PhD students. In addition, the MA and PhD directors meet regularly with graduate students to discuss their concerns and progress. Issues affecting our undergraduate and graduate students are regularly discussed at departmental faculty meetings as part of reports from the undergraduate, MA and PhD directors.

**History:** The department measures success in terms of its ability to maintain student credit hour production and research productivity in the face of reduced resources.

**IWGS:** IWGS has been able to assess improvements by keeping records and making comparisons with benchmarks and recommendations in the Five-Year Review.

Languages Program: The success of the merger and the creation of the [to be renamed] "Center for Languages and Cultures" will ultimately be assessed by the durability of the new configuration. It has proved workable and stable for two academic years. The creation of the Policy and Procedures manual on the Language side should ground administrative practice at that level. The success of the elementary curriculum is assessed by student surveys distributed at the 2101 level, which have been distributed each semester starting in FS 2007. These curriculum surveys, in conjunction with student teaching evaluations, will be used to draft an action plan for the following academic year. As other indicators of success, growing numbers of NTT faculty are developing national profiles and serving on national committees. In addition, instructors continue to earn excellent teaching evaluations while performing extensive service in the department and on campus.

**Math and Computer Science:** For research, the department will assess the success through the productivity, quality of the publication venues, and success rate in securing external research funding. For teaching, the department will use SCH, retention rates, and feedback from graduates and alumni through exit interviews or surveys to assess the quality of teaching.

**Philosophy:** Since the department's next Five-Year Review takes place this coming AY, the department will be deeply involved in assessing current programs and planning improvements.

The department will compare itself, not merely with other urban branches of multi-campus state universities, but with branches with highly ranked M.A. programs in philosophy.

**Physics:** Discussions at faculty meetings and reviewing the goals detailed above.

**Political Science:** The department's ability to offer the full range of undergraduate and graduate courses – both core, distribution, and specialized – is the best indicator.

**Psychology:** The department will initiate quantitative methods to evaluate faculty productivity.

**Sociology:** The department adopted the common mechanisms of assessment—student survey, alumni survey, capstone course, and commercial exams. Also, the department developed assessment rubrics for research paper writing. The department will make greater efforts to use the data from these assessments to strengthen the curriculum and teaching.