

July 18, 2013

To: Heidi Macpherson, Provost

From: Bruce Riley, Dean
College of Science and Health

Re: AY2012-2013 Year-End Report

What follows (first ten pages) is my summary of activities in the College of Science and Health; more detailed information is presented in the attached departmental summaries for AY2012-13.

Section 1: Programming and Students.

Programming. Several programs, clinical exercise physiology, occupational therapy, physician assistant, and physics, completed their academic program reviews. There were “no serious areas to address,” but the reviews resulted in recommendations for the departments/programs to consider/address; the college will assist in these efforts as appropriate.

College personnel were involved in the development of new programs, including: the Health Education and Health Promotion Department implemented, via a consortium of four UW institutions, an online B.S. degree completion program in health and wellness management (the first graduates are expected in December 2013), the Mathematics Department received authorization to implement (beginning fall 2013) a new major in statistics to replace the current mathematics major with statistics emphasis, and the Exercise and Sport Science Department will implement an online graduate program in sport administration in fall 2013. In addition, college personnel are currently investigating possibilities for professional science masters programs; of course, future budget consideration will play a role in how these investigations continue.

During AY2013-2014, the Microbiology Department is expected to propose a microbiology master’s degree program to replace the current microbiology concentration under the M.S. in Biology program (thus, the curriculum and faculty are already in place for a microbiology master’s program).

Departments carried-out several curriculum review/update projects, including: the continued review and revision of mathematics and science curricula as part of the Secondary Teacher Education Preparation (STEP) program; the introduction of a innovative general education course on computational thinking by the Computer Science Department; the implementation of evolution across the curriculum within the Biology Department; and the implementation of mathematics across the curriculum within the Microbiology Department.

During AY2013-2014, the Chemistry and Biochemistry Department will offer two new courses that address deficiencies in their ACS-certified B.S. degree program, the Health Education and Health Promotion Department will introduce a new general education course on public health for

educated citizens, and the Physics Department will introduce a new non-laboratory science general education course on global nuclear issues. Regarding curriculum development, next year's plans call for the Biology Department to work on revision of their 200-level core biology course offerings, the Computer Science Department to continue its revision of the CS core sequence with the development of a logic course as part of the core, the Exercise and Sport Science department to continue its development of a coaching concentration for education students, the Geography and Earth Science Department to work on revision of its GIS program, the Microbiology Department to develop ethics across the curriculum, and the Recreation Management and Therapeutic Recreation Department to begin revision of its undergraduate therapeutic recreation program.

A non-traditional form of instruction that was new this past year was the FastTrack program, an SAH and UW-System funded program. Led by Maggie McHugh, Jennifer Kosiak and Bob Hoar, FastTrack is a hybrid summer mathematics skills enhancement program consisting of 6 weeks of online instruction followed by one week of on-campus instruction for incoming freshmen that placed into remedial mathematics courses. Students retook the UWS mathematics placement exam at the end of the summer instruction with the goal of placing into a college credit-bearing mathematics class. The program was very successful with 38 of 39 participants placing into MTH 150 or 151 at the end of the program.

The FastTrack program was also the model for a popular College Readiness Math MOOC (Massive Open Online Course). The MOOC uses the materials developed for FastTrack to provide the same type of mathematics skills enhancement to a much broader audience, free of charge. There were over 1000 participants from all over the world, making the MOOC not only a teaching activity, but a service activity as well.

The mathematics and science tutoring services offered in the Murphy Learning Center (MLC), which received continuing funding for AY2013-2014 from the students' academic initiatives program, continue to serve a significant number of students, and the newly expanded facility will accommodate additional tutoring services, peer review sessions, and the new Public Speaking Center within the MLC. The MLC director, Maggie McHugh, supervised/mentored all mathematics and science tutors working in the Center. The MLC director also worked with other tutoring services (offered by Student Support Services, Multicultural Student Services, and the Disabilities Resource Center) to better coordinate tutor training and tutoring activities across campus. A survey of student satisfaction was conducted; the preliminary results are positive, final results will be included in the fall 2013 request to the Academic Initiatives Program for continued MLC funding for AY2014-15. AY2013-2014 will be a transition year for the MLC; Ms. McHugh will be resigning as the MLC director later this summer (she has taken a teaching position with the La Crosse School District), and a search for a new MLC director should be conducted for AY2014-2015 (or spring 2014 if possible). Plans are in place for leadership in the MLC during fall semester 2013 (and spring 2014 as necessary).

SAH faculty members administer the (externally funded) WiscAMP Undergraduate Research program and the McNair Scholars program at UW-La Crosse. The Wisconsin Alliance for Minority Participation (WiscAMP) is a state organization, housed at UW-Madison, with a mission to increase the number of underrepresented minorities who receive bachelor's degrees in

the STEM disciplines. Each year, through a competitive grant application process, WiscAMP has funded the UW-La Crosse WiscAMP Undergraduate Research program. There were six WiscAMP scholars during AY2012-2013 and, this summer, another six WiscAMP scholars are working with faculty mentors on undergraduate research projects in the sciences and mathematics.

AY2012-13 was the fourth year of the UW-La Crosse McNair Scholars program. There were twenty-eight McNair scholars with nine graduating in AY2012-13; seven graduates applied to and were accepted into graduate programs for AY2013-2014. Thirteen program alumni began or continued their graduate studies in AY2012-2013, and two additional alumni will enroll as graduate students for the first time in AY2013-2014. Twelve current McNair scholars are working with UW-LA Crosse faculty mentors this summer on undergraduate research projects. Roger Haro, McNair Program director, was successful in applying for funding renewal for the program for the next five-year funding cycle.

Related to the McNair program, Professor Haro and Jessica Thill, McNair Program coordinator, secured funding (from the SAH and WiscAMP) for the First Year Research Exposure (FYRE) program. The intention of the program is to identify and mentor eligible (for the McNair program) first year STEM students, preparing them for possible application to the McNair program. Ten students participated in the FYRE program during AY2012-2013 with the following results: 10 students enrolled in BIO 105, participated in twice weekly review sessions, and passed the class with grades of “C” or better; 5 students enrolled in CHM 103, participated in twice weekly review sessions, and passed the class with grades of “C” or better; 9 students enrolled in at least one Mathematics course (MTH 050, 051, 145, 150, 151, and/or 207) and earned a grade of “C” or better; 9 students were retained in the UW-L College of Science and Health, with one student transferring to UW-Madison for the 2013-2014 academic year in order to pursue biomedical research opportunities; and 3 students began undergraduate research projects in the spring or summer terms, including one student who was accepted into a Microbiology REU program at the University of Minnesota.

The Statistical Consulting Center (SCC), staffed by a faculty director, Melissa Bingham this year, and students majoring in statistics, provides advice and assistance in various areas of statistics to members of the UW-L campus community. During AY2012-2013, the SCC assisted 30 clients (9 faculty members, 15 graduate students, and 6 undergraduate students) on their research projects. Numerous consultative meetings with undergraduate and graduate students were also held but are not been included in the final client count. Clients were very satisfied with the services offered by the SCC.

The mathematics and physics faculty developed and implemented several externally funded professional development programs for in-service K-12 teachers that also provided valuable experience for some of our education students working in the programs.

Collaborative programs continue with local high schools. In particular, the Biology Department offers its introductory biology course through Logan (La Crosse) High School, and the Chemistry Department offers its general chemistry course through West Salem High School.

Students. SAH has strong, well-recognized, academic programs that continue to attract a larger proportion of UW-La Crosse students as displayed in fall enrollment data:

Fall Semester Enrollment by College

	2006	2007	2008	2009	2010	2011	2012
TOTAL	9,922	9,975	9,900	9,890	9,948	10,074	10,227
College of Business Administration	1,602	1,811	1,829	1,758	1,619	1,601	1,624
College of Liberal Studies	4,128	4,009	3,822	3,689	3,708	3,524	3,382
College of Science & Health	4,191	4,155	4,249	4,397	4,591	4,921	5,210
Other	1	0	0	46	30	28	11
UNDERGRADUATE TOTAL	8,345	8,521	8,634	8,748	8,945	9,119	9,441
College of Business Administration	1,558	1,759	1,775	1,686	1,557	1,537	1,576
College of Liberal Studies	3,105	3,114	3,125	3,156	3,285	3,170	3,145
College of Science & Health	3,682	3,648	3,734	3,903	4,103	4,411	4,719
Other	0	0	0	3	0	1	1
GRADUATE TOTAL	1,577	1,454	1,266	1,142	1,003	955	786
College of Business Administration	44	52	54	72	62	64	48
College of Liberal Studies	1,023	895	697	533	423	354	237
College of Science & Health	509	507	515	494	488	510	491
Other	1	0	0	43	30	27	10
<i>Percent CBA</i>	<i>16%</i>	<i>18%</i>	<i>18%</i>	<i>18%</i>	<i>16%</i>	<i>16%</i>	<i>16%</i>
<i>Percent CLS</i>	<i>42%</i>	<i>40%</i>	<i>39%</i>	<i>37%</i>	<i>37%</i>	<i>35%</i>	<i>33%</i>
<i>Percent SAH</i>	<i>42%</i>	<i>42%</i>	<i>43%</i>	<i>44%</i>	<i>46%</i>	<i>49%</i>	<i>51%</i>

Source: Fall Date of Record Enrollment Tables

Other includes Associate Degree and certain Grad Specials classified as "Grad Studies"

A number of SAH students are pre-professional (pre-allied health and pre-medicine) students that place high demand on general biology, general chemistry, general physics, foundational mathematics and statistics, human anatomy and physiology, and genetics courses. Monitoring and responding to these demands as well as to a shifting mix of students (for example, the increases in exercise science pre-professional and decreases in physical education teacher education majors in ESS) are a priority of academic departments and the college.

The quality of instruction provided in SAH programs, and the hard work and talent of SAH students, is suggested by the success of students on national professional certification examination scores: 100% pass rate for clinical laboratory science, nuclear medicine technology, radiation therapy, occupational therapy, physical therapy, and physician assistant students; over 90% pass rate for community health education students; and 80% pass rate for medical dosimetry students.

Over 240 undergraduate and over 150 graduate students conducted research projects during AY212-2013. Students presented the results of their work through a variety of venues, including:

- Twelve students from the Clinical Exercise Physiology program presented posters or oral communications at the American College of Sports Medicine Meeting, and one student from the Athletic Training program presented a full session at the National Athletic Trainers' Association Meeting;
- Three students from the Geography and Earth Science program gave presentations at the Annual Meeting of the Association of American Geographers, and one geography student presented at the National Great Rivers Research and Education Center Intern Symposium;
- A community health graduate student published her thesis in the International Electronic Journal of Health Education;

- Thirteen nuclear medicine technology students had abstracts accepted for presentation at the Annual Meeting of the Society of Nuclear Medicine, three occupational therapy students presented posters at the Midwest Dean's Conference, two medical dosimetry students published in their professional journal, Medical Dosimetry, a physician assistant student had an article accepted for publication in the Journal of Dermatology for Physician Assistants, and physical therapy students were co-authors on 10 peer reviewed publications and numerous presentations at the state and national levels;
- Mathematics students gave posters and oral presentations at the Annual Meeting of the Wisconsin Section of the MAA and at the Annual Joint AMS/MAA Mathematics Meetings, and mathematics education students gave seven different presentations at the Wisconsin Math Council's annual conference; and
- Seventy-nine SAH students gave presentations at NCUR 2013.

Recognitions. Many SAH students were recognized for their activities/accomplishments, including:

- Both 2013 Murphy Awards for Academic Excellence were awarded to SAH graduates: Tanya Larsen graduated in December 2012 with a bachelor's degree in microbiology with a biomedical concentration, and will be enrolling in the UW-L/Gundersen/Mayo Physician Assistant program; and Jordan Ludwigson graduated in May 2013 with a bachelor's degree in biology with a biomedical science emphasis, and will begin courses at the UW School of Medicine and Public Health to pursue a doctor of medicine;
- The Strzelczyk Award in Science and Health was awarded to Ben Sturomski who graduated in May with bachelor's degrees in physics education and mathematics education, and plans to attend Northern Illinois University to earn a master's degree in sport management;
- Elizabeth Rosendale, Physics Education, and Saskia Richter, Athletic Training, were selected to deliver the student addresses at the December and May commencements, respectively;
- Biology graduate student Jenna Merry won the best student research poster at the 2013 meeting of the Mississippi River Consortium;
- Geography undergraduate student Cody Mertens won first prize in the student research competition at the (national) Applied Geography Conference; all other students in the competition were graduate students;
- Radiation therapy students won the first three places in the paper competition at the Chicago Area Radiation Therapist's Student Seminar and Review Bowl;
- Two physics students received Wisconsin Space Grant Consortium undergraduate research fellowships; and
- Physics and Mathematics student Andrew Prudhom was recognized as one of the Society of Physics Students Herbert Levy Scholarship awardees.

Section 2: Staffing, Resources, and Facilities.

College Staffing. Seventeen tenure-track faculty, four instructional academic staff, and two classified staff members joined the college in August 2012, and two instructional academic staff

members joined the college in January 2013.

- The new staff increased departmental expertise in targeted areas of study, and provided several departments with opportunities to offer additional sections of high demand courses and laboratories.
- The new staff helped lighten the workload on continuing staff and, with the increased staff, some departments were able to provide faculty with some reassigned time to devote to scholarly activities (more departments need to examine how they might use reassigned time in this way).
- Based on first year reviews, the new faculty did quite well in the areas of teaching and scholarship during their first year at UW-La Crosse.
- Fourteen of the new faculty members participated in the College's early start program for grant proposal writing (during the month of August 2012). The results of the grant writing activity are displayed in an attachment. Five of the external grant proposals were funded and ten proposals are still under consideration. Five external grant proposals were not funded and one is being revised for resubmission, and two additional proposals are being prepared for submission this summer.

During the year, seventeen faculty and five instructional academic staff members were hired to begin in AY2013-14 (twelve of these are GQA funded positions). These new hires fill consequential needs in the college including the areas of athletic training, chemical biology, comparative vertebrate anatomy, computational mathematics, computer science, discrete mathematics, genetics, geoscience education, mathematical analysis, mathematics education, microbiology, physical education teacher education, physical therapy, physician assistant, physics, public health, school health education, and statistical bioinformatics. In addition to meeting departmental needs, including scholarly collaboration within departments, many of the positions were developed to increase the potential for scholarly collaboration across departmental lines. There are still three instructional academic staff position searches in the areas of biology, nutrition, and physician assistant underway with hopes of filling the positions this summer.

In AY2012-2013, there was one retirement in each of the Mathematics and the Recreation Management and Therapeutic Recreation Departments (another retirement in Therapeutic Recreation is planned for December 2013), there was one resignation in each of the Geography, Occupational Therapy, Physical Therapy, and Physician Assistant programs, and there was a non-retention decision made in the Geography and Earth Science Department. The retired mathematics position was filled during the year and it is hoped that the resigned physician assistant position will be filled this summer for fall 2013 (as noted above). In addition, two Mathematics Department members serving in interim administrative positions were selected to fill the positions permanently and, therefore, vacated their mathematics faculty positions.

During AY2013-14, the college plans to search for eleven tenure-track faculty positions (including the positions discussed in the previous paragraph) in cultural geography, exercise physiology, exercise science, genetics, mathematics education, physical geography, physical therapy, pure mathematics, recreation management, and therapeutic recreation, and four instructional academic staff positions in biology, biochemistry, chemistry, and occupational

therapy. Thus, faculty recruitment will be a major activity in the college during the next academic year.

College Finances/Supplies and Expenses/Facilities. The college was able to invest one-time salary savings dollars to meet needs in the college, including:

- Provide S&E help to several departments;
- Replace and upgrade equipment used in teaching laboratories (much of this equipment will also be used for faculty and student research projects, and is often referred to as institutional resources available to grant proposal projects);
- Replace faculty computers and computers in departmental computer laboratories;
- Fund small classroom/laboratory modernization projects;
- Supplemental travel and professional development funding for faculty and staff; and
- Matching funds for grant proposals.

Equipment needs were identified by departments in memoranda and classroom/laboratory modernization proposals sent to the college office, and in an inventory of equipment owned by the college conducted by the SAH College Committee.

Renovation work (teaching and research laboratories in Mitchell Hall and the Health Science Center, offices in Cowley Hall, the Health Science Center, and Wing Communication) are complete or being completed this summer, so that the college's instructional, research, and office space needs should be met for AY2013-14. Additional, planning/renovations will be required to accommodate the new faculty that will be hired to begin in AY2014-15.

Starting in spring 2010 through spring 2011, faculty/departments housed in Cowley Hall participated in the development of a pre-design program report for the Cowley Hall/New Science Building Project. Faculty members were pleased with the comprehensive program report, and look forward to the next two-year design phase of the project.

Faculty/departments housed in Mitchell Hall completed a study of (instructional, research, and office) space and renovation needs in the building. Based on the results of the study, small-scale renovations are underway. Hopefully, the results of the study will be incorporated in future (large-scale) UW-La Crosse facilities improvement proposals for "all agency funds" managed by UW System Capital Planning.

Scholarly Activities. SAH faculty members were successful in their contract and grant writing efforts: 11 contracts, 3 UW System grant proposals, 15 federal grant proposals, and 25 non-federal grant proposals were funded totaling nearly \$2.2 million in direct and indirect funds coming to the university. In addition, 20 grant proposals are still pending with the potential of nearly \$3.5 million in direct and indirect dollars.

In AY2012-13, SAH faculty members were quite active (and successful) in the area of scholarship with over 130 research publications, 4 books, over 300 talks at professional meetings, and mentoring work with over 240 undergraduate and over 150 graduate students on research projects.

Service Activities. Members of the college have a strong record of university and professional service. For example, the chair (and two other members of the executive committee) of the Faculty Senate and the chairs of sixteen Faculty Senate committees were SAH members, and the Mathematics Department's ADA served as chair of the Classified Staff Council. Beyond our own institution, college members held leadership positions in professional organizations and the organization of professional conferences, refereed and reviewed research papers and book chapters, reviewed grant proposals, and served as consultants to other academic institutions or professional organizations. SAH faculty, staff, and students were also actively involved in professionally related service with area schools, health care institutions, and civic and other community organizations.

Recognitions. Many SAH members/units were recognized for their professional activities/accomplishments, including:

- The Biology Department received the 2013 UW System Board of Regents Department/Program Teaching Excellence Award;
- The Physics Department received the 2013 American Physical Society Award for Excellence in Undergraduate Physics Education;
- Nishele Lenards, Health Professions, received fellow status for the American Association for Medical Dosimetrists and the 2013 AAMD Award for Excellence;
- Robert Allen, Mathematics, Suzanne Anglehart, Microbiology, and Curtis Czerwinski, Chemistry, were selected as 2013 Provost Teaching Award recipients;
- Carla Burkhardt, SAH, received the 2012 Academic Staff Excellence Award; and
- Faye Ellis, Biology, was selected for a YWCA Tribute to Outstanding Women of the Year Award.

Section 3: Outreach Activities.

SAH faculty and student community engagement focus on service programs in the areas of adult fitness/cardiac rehabilitation, adventure education, mathematics and science education enhancement programming, motor development, and wellness and recreational programming on campus and in community and business organizations, public schools, and senior and assisted living facilities.

Inclusive Excellence. While I only minimally promoted inclusive excellence during AY2012-2013, SAH faculty and staff members were engaged in activities consistent with the goals of inclusive excellence, for example:

- Faculty members are involved in mentoring minority students in the previously mentioned FYRE, McNair, and WiscAMP programs;
- SAH faculty members participated in underrepresented minority student recruitment programs in collaboration with the Admissions Office and with their professional organizations;
- SAH faculty members were actively involved in women in science programs on campus and at the state level;
- College staff participated in (and the college office supported) supplemental instruction programs for STEM courses in collaboration with Multicultural Student Services;

- Inclusive excellence topics and speakers were incorporated into courses and seminars; and
- Academic programs offered service-learning opportunities that address issues of vulnerable populations.

International. SAH faculty international activities include presenting research results at international conferences and universities, and engaged in collaborative research with international scholars both abroad and on campus (for example, the Computer Science, Microbiology, and Recreation Management and Therapeutic Recreation Departments hosted visiting Chinese scholars, and the Exercise and Sport Science Department hosted visiting Dutch scholars during AY2012-2013).

SAH faculty/departments also offered international academic programs, including:

- The Computer Science department continues to develop MSE contract programs for international students. The newest contract involves a 3+2 program with the South Central University for Nationalities with the first cohort of 10 students arriving at UW-La Crosse in fall 2013;
- Athletic training faculty taught athletic training skills in Germany and will be offering similar instruction in Spain this upcoming year, and clinical exercise physiology faculty taught coursework in the Netherlands;
- Suzanne Anglehart led a January 2013 international study trip to learn about rural healthcare in India; and
- Gretchen Gerrish and Greg Sandland, Biology, developed an international study trip plan for a marine symbioses course that will be partially taught as a two-week field course in Belize in January 2014.

Section 4: AY2013-14.

In the prequel, I mentioned several activities for the next academic year:

- Curriculum implementation, revision, and development projects;
- Monitoring and addressing issues posed by the changing mix of UW-La Crosse students (in particular, the increasing number of pre-professional students);
- Faculty recruitment (several areas, mathematics education, occupational therapy, physical therapy, and therapeutic recreations, always pose challenges for a successful search);
- Addressing near future space needs in Cowley Hall and Mitchell Hall;
- Cowley Hall/Science Building Project design activities.
- Securing continuing funding for the Murphy Learning Center, and recruitment of a new director.

In addition, I place high priority on:

- Mentoring the new(er) faculty as needed;
- Finding ways to support faculty/staff scholarship and professional development activities;
- Addressing faculty/staff salary inversion/compression issues;
- Continue work on college wide assessment of student learning processes;

- Development of (five year) departmental academic plans (with the large number of SAH faculty hires over the past few years, departmental priorities are shifting and the development and review of departmental academic plans would contribute to strategic planning at the college level);
- Continue the college's student program/course pipeline analysis (the analysis will contribute to strategic planning within the college and, perhaps, to the university's enrollment management planning);
- Continuing to develop and implement plans for meeting the additional responsibilities created by moving the secondary mathematics and science education programs into SAH (especially, monitoring and addressing the heavy time commitment on the part of content faculty involved in teacher education); and
- Review Summer Session 2012, and identifying the opportunities for and well defining the goals of CSH's summer session programing, and adjusting course offerings accordingly.

SUMMARY OF ANNUAL ACTIVITY
BIOLOGY DEPARTMENT
(June 1, 2012 - May 31, 2013)

The most notable achievement of the Department of Biology was winning the Board of Regents Teaching Excellence Award for a department or program.

In 2012-13, the Department of Biology welcomed three new tenure-track faculty: Dr. Barrett Klein, animal behavior; Dr. Jennifer Klein, biophysics; and Dr. Megan Litster, biology education. Each has settled in well and is succeeding. In addition, Biology conducted two successful tenure-track searches hiring Dr. Todd Osmundson, population genetics; and Dr. Eric Snively, comparative vertebrate anatomy. One search in molecular genetics did not result in hire, and this search will need to be conducted again in 2013-14.

Current Biology faculty also enjoyed success in their career tracks. Drs. Sumei Liu and Kathryn Perez were both promoted from Assistant to Associate Professor. Drs. Anita Baines, Greg Sandland, and Eric Strauss all were recommended for tenure.

Programmatic innovations include institution of the Evolution Across the Curriculum program where a total of 23 new evolution-learning modules were incorporated into 9 core Biology courses (including Anatomy and Physiology). This large program was carefully assessed via pre- and post-tests specific to each class and administration of a similar set of 30 questions to students in both General Biology, BIO 105, and senior Capstone Seminar, BIO 491. Assessing student learning on a breadth of evolution concepts at the freshman and senior level will allow for the tracking of the growth of student learning. Results are currently being analyzed.

Another programmatic change was a departmental decision to phase out the two class series of Animal Biology, BIO 210, and Plant Biology, BIO 204. Animal and Plant Biology are currently requirements for the General Biology, Aquatic Science, and Environmental Science concentrations, which comprises about half of the total Biology majors. In the future, Biology majors in all concentrations will be required to take the single course in Organismal Biology, BIO 203, instead of the two-course sequence of BIO 204 & 210. This change will decrease the total number of core Biology course credits by two, allowing students to take more credits directly related to their career goals. In addition, the change will ultimately lead to more efficient lab teaching, as there will be one less lab contact hour per student for the 200 level course requirement. Eight Biology faculty and staff submitted and received a Curriculum Redesign Grant to infuse more active learning and critical thinking in the BIO 203 labs. Those changes are in development in Summer 2013 and will be instituted in 2013-14.

The Biology Department was quite productive in scholarship. Faculty and staff received or worked on existing **teaching grants** totaling \$1,279,330 - 8 UW-L internal (total = \$62,780) and 6 external (total = \$1,216,550). Biology faculty and staff were PIs or co-PIs on 20 **internal research grants** (\$142,064) and 24 **external research grants** (\$3,048,796). In addition, Biology faculty were involved in 4 external grants to support service related activities (\$69,500).

Biology faculty were authors on 31 **peer-reviewed publications** or book chapters (2/31), 8 of which were teaching and learning publications. At least five of these peer-reviewed publications had **undergraduate co-authors** and seven had **graduate student co-authors**. Faculty and staff participated in 117 **professional presentations** external to campus. **At least 51 of those presentations had undergraduate co-authors and 24 had graduate student co-authors.**

Awards:

Grad student Jenna Merry won both top prize for best student research poster at the 2013 meeting of the Mississippi River Research Consortium and best graduate student research poster at the UW-L Celebration of Graduate Research in 2013. Undergraduate Courtney Schneider was awarded the "Best Student Presentation" at the UW-L summer research symposium. Faye Ellis was selected for the YWCA Tribute to Outstanding Women of the Year Award.

Biology continued to support **Inclusive Excellence** by providing opportunities for underrepresented students in research. Roger Haro was the PI on the NSF McNair Postbaccalaureate Achievement Grant, which was funded for a second cycle in 2013 for \$1,097,500. Dr. Haro was also PI on a successful grant (\$26,500) from the NSF Louis Stokes Alliance for Minority Participation program to support a First Year Research Experience (FYRE) program. Dr. Haro continued to receive 0.5 FTE reassignment from Biology to administer these programs. Dr. Tony Sanderfoot served as PI on a \$35,000 Wisconsin Alliance for Minority Participation (WiscAMP) grant that was awarded in 2013. Biology Chair David Howard was one of the first faculty to take the Inclusive Excellence Inventory survey. He encouraged the Biology Department to complete the survey as well, but additional encouragement will be needed to increase departmental participation in the survey.

International Education:

Drs. Gretchen Gerrish and Greg Sandland developed a course syllabus and international study trip plan for a Marine Symbioses course, which will be partly taught as a two-week field course in Belize. The LX forms were passed by the Biology Department and international course proposal is under review by the International Education Committee. Their plan is to offer the course in Winter Interim, January 2014.

Service:

Biology faculty and staff were quite active in serving the University and community. Some of the notable cases include:

Mike Abler served as Vice Chair of Faculty Senate and Chair of Joint Planning and Budget.

Scott Cooper served as Director of the Undergraduate Research and Creativity office (0.5 FTE reassignment), on the NCUR Executive Committee, and the NCUR Abstract Coordinator.

Anne Galbraith served on the Faculty Senate Executive Committee.

David Howard served on the NCUR Steering Committee and co-chaired the Oral Sessions for NCUR.

Tisha King-Heiden was a conference organizer for the Midwest Meeting of the Society of Environmental Toxicology and Chemistry.

Peg Maher served as the Director of the Office of Research and Sponsored Programs (0.75 FTE reassignment).

Jennifer Miskowski was the Faculty Assistant to the Provost (0.5 FTE reassignment).

Tony Sanderfoot served as Chair of Graduate Council.

Mark Sandheinrich was Chair of the SAH College Committee.

Eric Strauss served as Vice-President (until April 2013) and President (April 2013 to present) of the Mississippi River Research Consortium.

Rob Tyser served as co-Chair of the Department of Art.

Challenges:

The biggest challenges continue to center around providing enough lab and lecture sections for the largest major on campus. In Fall 2012 there were 1121 Biology majors, 100 Biology minors, and 330 Nutrition minors. In addition, many Biology courses such as General Biology, Human Anatomy and Physiology I & II, and Genetics are required by other majors such as Radiation Therapy, Nuclear Medical Technology, and Exercise Sport Science. Hopefully, the consolidation of 200 level courses into a single Organismal Biology, BIO 203, will free up some time in teaching lab rooms so that other courses (like Genetics) can expand their offerings.

Another challenge is finding faculty time to effectively assess the Biology program. One possible solution would be to provide reassignment time (2-3 contact hours) to the head of the Biology Assessment Committee.

Goals for 2013-14:

Analyze the results of the Evolution Across the Curriculum assessments, engage in a departmental discussion of the data, and make adjustments as necessary. Phase in the conversion to Organismal Biology, BIO 203. Develop a new set of learning outcomes for the Biology program. Revise the departmental assessment program to address appropriate outcomes.

SUMMARY OF ANNUAL ACTIVITY
DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY
(June 1, 2012 - May 31, 2013)

Section 1: Students and Programming

As part of the Department's external review and certification process by the American Chemical Society–Committee on Professional Training (ACS-CPT), we continued planning a set of major curriculum revisions for our ACS-Certified BS degree in Chemistry. Two new courses were created as new degree requirements (CHM 231, 271), and the lab portion of CHM 231 was generously funded and purchased with some of this year's "one-time monies." Our CHM 407 biophysical chemistry course was offered under a new 3 cr. format for the first time.

We continued to increase embedded writing and oral communication assignments throughout our curriculum, and expanded the assessment of these skills. With our new chemistry education hire (see below), we formally entered into the newer STEP collaborative with the School of Education and other science departments in the hopes of improving and growing our Chemistry Education major. Our biochemistry laboratory courses were completely overhauled and modernized, employing several pieces of new equipment and instrumentation acquired with last year's "one-time monies." Similarly, we greatly expanded the use of our new (\$400k) NMR instrument in our organic chemistry laboratories, another requirement by the ACS-CPT. At the CHM 103-104-301 levels, several faculty members completed instructor's guides for the laboratories as well as video tutorials for student use prior to entering the labs. These should enhance student learning and understanding as well as safety.

Faculty members mentored **59** undergraduates in independent research projects, and co-advised **8** MS degree candidates (from BIO and MIC). We secured approx. **\$20k** in (internal) teaching development grants this year. The department awarded approximately **\$25k** in scholarships to its majors. We successfully initiated a new Visiting Seminar Speaker series that brought one chemist to campus each month using our Foundation funds. These were very well received and attended by our majors and faculty members.

Section 2: Staffing, Resources, and Facilities

We welcomed one new tenure track faculty member, **Anna George** (GQA), our new Chemistry Education/STEP expert, and she had a great first year. We ran one successful search that led to the hiring of a new synthetic organic chemist/chemical biologist, **Nick McGrath** (GQA). IAS member, **Melissa Anderson** (102), resigned in late May 2013. Two chemists (**Kris Rolfhus** and **Adrienne Loh**) were granted sabbatical leaves for the 2013-14 AY, one per semester. A sabbatical replacement for the 2013-14 AY was hired—**George Hudson**.

One successful promotion portfolio was advanced for **Heather Schenck** (to Associate Professor), and one unsuccessful promotion portfolio was advanced for **Aric Opdahl** (to Professor). One IAS member, **Tanya Cordes**, was promoted to Lecturer. **Curt Czerwinski** won the first ever Provost's Teaching Excellence Award, which was well deserved. Several

other faculty members won “most accessible faculty” awards from Students Advocating Potential Ability.

Scholarly activity and success continues to rise. Department members collectively wrote several grant proposals for external and internal funding and were fortunate to receive some good awards this year, despite a very tight federal funding environment. Over **\$2M** in existing multi-year external grants were managed and brought to completion. Over **\$1.6M** in external funding was requested this year, and these proposals are either still under review or went unfunded. Funded external grants totaled **\$369k**. Chemists netted **\$74k** in internal UW-L research and faculty development grants. Department members and their students made **45** scholarly presentations at a range of professional conferences. Chemists collectively published **8** peer-reviewed manuscripts, **1** provisional patent application, and **3** professional books/reports. Numerous peer reviews of manuscripts and grant proposals were completed.

We were also very busy prioritizing needs, obtaining quotes, making purchases, setting up new instruments and equipment, and learning to use these items as a result of three rounds of very generous “one-time funding” for “major purchases.” Over **\$200k** in acquisitions this year helped to significantly modernize our teaching and research infrastructure and enhance inter-departmental collaborations.

Section 3: Outreach Activities

In addition to normal teaching loads, several faculty members hosted special outreach teaching workshops for primary and secondary schools, which include the Young Scholars, Mississippi Valley Gifted and Talented Network, and Girls in Science programs. Demonstrations were delivered in several local schools, and we also put on our “Chemistry Wizard” demonstrations for busloads of students at the ends of each semester.

We continued to offer the year-long CHM 103–*General Chemistry I* course for advanced West Salem HS students (the seventh time) and HS students often visit our Radiation Center and NMR Instrumentation Facility for demonstrations. Workshops were also delivered to our Murphy Learning Center chemistry tutors and to in-service regional teachers through a CESA#4 sponsored continuing education program. Chemists also continue to offer special laboratory safety training and testing for all Cowley Hall departments three times throughout the year.

Chemistry faculty members were widely engaged in service and university governance at all levels. Likewise, most department members were active in various forms of professional and community service.

Section 4: Plans, Focus, Challenges, and Opportunities for 2013-14

In the fall, we will run two new courses for the first time as part of our new ACS-Certified major in chemistry, and will quickly complete the recommended modifications to our curriculum that should get us off “probation” status with the ACS-CPT.

We also will seek “American Society of Biochemistry and Molecular Biology (ASBMB)-Recognized” status for our biochemistry program, which will allow us to offer a more prestigious “ASBMB-Certified” BS degree in biochemistry.

We will likely begin more detailed planning for the design and move into a new science building, and continue our instrumentation upgrade and maintenance efforts, as funding permits.

Staffing. We hope to hire **1-2** new faculty members next year. **1.)** We wish to convert the Melissa Anderson position from IAS to a tenure-track biochemistry faculty member. This would increase our research, advising, electives development, and other support to the biochemistry major, which now has more students than our chemistry major. We have only **3** tenure track biochemists (and **0** IAS) for approx. **140** majors, as compared to **16** tenure track chemists (and **8** IAS) for approx. **120** majors. We are unable to cover all of the planned biochemistry course offerings in our curriculum and to serve the many students seeking research opportunities. **2.)** If funding permits, we could easily employ a new GQA IAS member who would primarily teach *General Chemistry* laboratories and help us to meet student demand there. Although we are out of spaces in which to increase our lab offerings, this new IAS member would allow us to begin using more evening hours.

An additional staffing consideration is possibly to hire a PhD-level, 12-month support staff member who could serve as a “Director of Scientific Instrumentation,” in support of the Cowley Hall departments of CHM, BIO, MIC, and PHY. Analogous positions exist at many sister institutions that have a significant instrumentation infrastructure, and one would be very well utilized here in both teaching and research.

Challenges. Of course, our main problem continues to be space. We operate well beyond capacity in Cowley Hall in both teaching and research and do not seem to be able to meet student demand for our (laboratory) courses. Additionally, many parts of the building continue to fail, and we repeatedly need to use department and college funds to make repairs and conduct maintenance. Water supplies, ventilation, plumbing/flooding, and general crowding are the main problems. All of these should go away with the new Cowley Hall, but we struggle to deliver quality services to our students and to do good work under the present conditions.

SUMMARY OF ANNUAL ACTIVITY
COMPUTER SCIENCE DEPARTMENT
(June 1, 2012 - May 31, 2013)

The 2012-13 academic year has been a strenuous but productive year for the UWL Computer Science Department in all areas of instruction, scholarship and service. It has again been a year of significant staffing challenges. This summary focuses on broad activities of the department.

This year we have approximately 150 majors and more students in the three course introductory sequence than we have had in more than a decade. This increase is consistent with national trends and marks continued recovery from the significant declines after the dot-com bubble. Various job rankings, including the U.S. Department of Labor, indicate an extremely strong demand for software engineers with the Bureau of Labor Statistics continuing to project 38% growth over the next decade. The department continues its outreach activities including participation in the local Job Expo for high school students and the offering of our CS 120 course at West Salem High School.

The department completed the second year of offering CT 100 (Computational Thinking) as the department's main general education offering. The course targets a broad audience with a focus on the core ideas of computer science that have become ubiquitous in all areas of our society. The course continues to be refined but the department is extremely pleased with the success so far. The department plans to continue offering CS 101 on a reduced basis as long as demand continues. This course is at the forefront of national trends and is consistent with a national movement to replace the existing high school AP computer science course with a course focused on computational thinking.

The department continues to develop the introductory sequence (CS 120, 220 and 340). Both CS 120 & 220 are now 4 credit courses. This allows increased time to provide a strong programming foundation for the major. The department has also continued to discuss the role and purpose of MTH 225 in the Computer Science major with the Mathematics Department. The Computer Science department plans to seek approval to offer a Discrete Computational Structures course itself which would cover discrete mathematics topics and occur in parallel with CS 220.

The department continues to develop MSE contract programs for international students. We currently have contract programs with Wuhan University and the South Central University for Nationalities (SCUN). The existing contract with SCUN has now transitioned from a 1+1 format to a 3+2 format with the first cohort of 10 students to arrive at UWL this fall. This cohort will spend two years at UWL completing the MSE degree. The second cohort, estimated to be 15 students, will start at UWL in the fall of 2014. Under this program, two cohorts will be at UWL each year. This spring the university hosted a delegation from SCUN. Members of the delegation indicated interest in expanding relations with UWL to include other programs. This next year the department will be hosting a senior faculty member from Wuhan University as a visiting scholar.

Last year the department hired three new faculty. Dr. Mayank Singh started in spring 2012 and Drs. Foley and Hursey started in fall 2012. This year has again seen the department engage in significant faculty hiring. Dr. Singh unexpectedly resigned this last fall for personal reasons.

Together with a converted tenure track position this meant that the department needed to hire two additional faculty. Dr. Andy Berns (Ph.D. University of Iowa) and Dr. Brad Shutters (Ph.D. Iowa State University) will join the department starting in the fall of 2013. In the last three years the department has hired five new faculty, which represents about half of the department.

This year the department participated in the NCUR conference on campus by reviewing submissions and then in the following week hosted the Midwest Instructional Computing Symposium (MICS) at UW-La Crosse. The conference attracted 250-300 faculty and students in computing from the upper Midwest. In addition to presentations on research and education topics by both students and faculty, the conference includes a programming contest and a robotics contest. Approximately two dozen students worked as volunteers assisting with the operation of the conference. Three UWL teams participated in the programming contest and one UWL team participated in the robotics competition. Response from the participants indicates that the conference was well received.

This was the final year for the NSF funded S-STEM scholarship program focused on students transitioning from the undergraduate major to the MSE program. This program has provided \$500,000 of scholarships to 33 students over the last six years.

This last year Dr. Allen, together with an undergraduate student, conducted a Faculty Research Grant funded project on multi-agent reinforcement learning. The student presented a poster at the MICS conference based upon this work. Dr. Allen has also been active in the Mathematical Biology group at UWL. This group has been meeting for 2 years now, and there are a variety of collaborative projects occurring within the group, including grant proposals and a planned proposal for an NSF REU site. This group has the potential to interest other members of the department as well as it grows to include more computationally intensive projects. Drs. Foley and Hursey have received Faculty Research Grant funding for this summer.

The department continues to operate two significant computing resources, the Rocks Visualization Cluster and the Eucalyptus Cloud, that support both coursework and research in the department. Both resources were upgraded this last year. The Rocks Visualization Cluster is a 16-node cluster computer and high-resolution display wall. The Eucalyptus Cloud is an open source software system that provides the same API as used by Amazon in their commercial cloud. This is an extremely advanced capability for a department such as ours. It allows students to launch virtual servers, over which they have complete administrative control, to use in course projects.

**SUMMARY OF ANNUAL ACTIVITY
EXERCISE AND SPORT SCIENCE DEPARTMENT
(June 1, 2012 - May 31, 2013)**

Section 1 – Students and Programming

We were very proud to have a student from the Department deliver the student address at Commencement (Saskia Richter)

We were able to select outstanding students from three of our four undergraduate programs who received funding to attend a professional meeting of their choice. Daniel McEssay (Sports Management), Saskia Richter/Bridgett Comee (Athletic Training) and Samantha Reudy (Physical Education) were selected by various faculty committees from their respective majors.

12 students from the Clinical Exercise Physiology program presented posters or oral communications at the American College of Sports Medicine Meeting and one student from Athletic Training presented a full session at the National Athletic Trainers' Association Meeting.

The department is continuing revisions to the coaching concentration in order to offer the program as a minor. We believe this will enhance recruitment efforts into our physical education undergraduate degree program.

Our exercise science program with tracks in pre-professional and fitness continues to be our fastest growing program. We will be conducting a review of the curriculum in exercise science pre-professional in FY14. It has been four years since the program began and we feel some changes are in order. The program has become so large that considerable resources have had to be re-focused to address the needs of its students.

The online Sports Administration master degree has begun. This program utilizes no departmental resources and is offered through the office of continuing education and extension.

The number of majors in the department continues to grow. The mix of students has changed dramatically with increases in exercise science pre-professional and decreases in physical education teacher education. This will need to be monitored continually.

Section 2 – Staffing, Resources, and Facilities

The Department of ESS had three tenure line faculty, one replacement IAS, and one new .45 IAS positions to fill in 2012-13. The replacement position was for David Robertson who resigned his position. We successfully hired Dr. Cordial Gillette in one of the tenure line positions. The other two positions we failed to hire. David Robertson's replacement is Deb Sazama. A .45 IAS position (the result of three coaches moving from .5 to .65 positions in athletics) was combined with a .5 position from athletics to make a .95 position for an assistant football coach.

Faculty in the Department continued to be very productive in the area of scholarship and grant activity. There were approximately 40 manuscripts accepted for publication and faculty presented at all national, regional and state conferences in their respective disciplines. Presentations were completed at AAHPERD, ACSM, NATA, NSCA, NASSM, ACCT and many others. Six faculty provided invited or refereed international presentations.

The Mitchell Hall facility continues to be over used by the four entities (Exercise and Sport Science, Health Education and Health Promotion, Intercollegiate Athletics and Intramural and Recreational Sports. Scheduling conflicts between academic courses and recreational use are not uncommon. Maintaining the building as an academic building for the nearly 1300 majors housed here is a struggle. Constant reminders of the primary focus of the university to non-academic entities are required. The renovations to allow for the College of Business Administration move to Wittich Hall have increased the stress on the facility. Providing research space for our highly engaged faculty has further diminished the use of Mitchell Hall for student focused academic activities. Thankfully, we have been able to secure classroom space in a variety of locations around campus.

The Department of Exercise and Sport Science received financial resources for equipment and supplies through three cycles of funding from the Dean's office. Our proposals were able to garner nearly \$160k in additional funding. Unfortunately, we were not able to process purchase requisitions at the end of the academic year for approximately \$40k of this amount due to our tardiness in submission. We will seek to remedy our needs for this lab equipment through close monitoring of our expenses in FY14.

A particular need at this point is the renovation of the human performance laboratory on 2nd floor of the south wing of Mitchell Hall. We are hopeful that we can renovate this space to allow up to eight of our scientists adequate research space. Other immediate needs are for the strength center to move to the basement (the building can not continue to support the weights on the first floor), additional space for the athletic training center/lab, renovation and more efficient use of our field house storage room, and renovation of the dance studio to support additional academic offerings.

Section 3 – Outreach Activities

Our international activities are focused in the areas of teaching and scholarship. Our athletic training faculty have been engaged in the teaching of athletic training skills in Germany. This upcoming year we will be teaching in Spain. Our clinical exercise physiology faculty have taught coursework in the Netherlands. In the area of scholarship, several faculty (Drs. Foster, Jin, Porcari, Steffen, Yu) had papers presented internationally, several others (Gordon, Aminaka, and Hepler) had publications in international journals.

Our community engagement activities focused on service programs for community members in the areas of adult fitness, cardiac rehabilitation, adventure education, and motor development. These programs also serve as useful clinical placements for graduate students in the Clinical Exercise Physiology and Physical Education Teacher Education programs.

Section 4 – 2013-2014

The Department of Exercise and Sport Science will celebrate their centennial as a department in 2013-14. In addition to speakers and activities planned throughout the academic year a timeline has been developed for the main hallway of the building that will show significant events over the last 100 years. The department is cognizant of the history of UW-L and it's early strengths in physical education. The tradition of excellence developed by previous faculty at UW-L and their long-standing support of all programs at the university continues to be embraced by the current faculty.

The foreseeable challenges in the coming years will be to maintain a sense of community within the department without having a true home. Well over half of our academic "seats" in Mitchell Hall have been renovated for other uses. Having fewer students majoring in exercise and sport science traversing the hallways may have a negative impact on our total number of students. Maintaining a strong academic presence in the building may be challenging.

Our opportunities will be developed through the continued refinement and development of our academic programs. We have strong academic programs that are well recognized. Our challenge will be to continue to enhance these programs as we move forward into our second 100 years.

SUMMARY OF ANNUAL ACTIVITY
GEOGRAPHY AND EARTH SCIENCE DEPARTMENT
(June 1, 2012 - May 31, 2013)

The 2012-2013 academic year was a very productive for the Department of Geography and Earth Science, with continued change and innovation in teaching, research and service. Drs. Joan Bunbury and Gargi Chaudhuri joined the Department as new tenure-track faculty members in fall 2012. They have proven to be excellent additions to the Department and University. Faculty have contributed significantly to peer reviewed publications and grants received, and a number of students have presented at national meetings.

Section 1: Students and Programming

1. Student accomplishments:

The Geography faculty are actively involved in undergraduate research, advising approximately 18 students on undergraduate research projects. Students presented their research the National Conference for Undergraduate Research and at national and regional conferences.

Seven students presented at the National Conference for Undergraduate Research at UW-L:

- Steven Oxley and Rebecca Roider, *Lead Contamination in Passage Island Soils and Rock Pools, Isle Royale National Park* (advisor: Perroy).
- Mary Windsor, *Measuring the Effectiveness of Different Map Rhetorical Styles for Persuasive Geocommunication* (advisor: Muehlenhaus).
- Melissa Goldade, *PH Analysis of Lead Contaminated Sediment and Water in the La Crosse River Marsh* (advisor: Belby and Perroy).
- Brannick Beatse, *Effects of Limited Soil Areas on the Growth of Gleditsia Triacanthos* (advisor: Perroy).
- Derrick Sailer and Hannah Moseson, *How Food Secure is La Crosse?* (advisor: Slocum).

Cody Mertens, an undergraduate Geography major working with Drs. Belby and Perroy, won first prize in the student research competition for his poster and oral presentation on modeling lead contamination in the La Crosse River March at the Applied Geography Conference in Minneapolis, MN (October 12, 2012). All of the other students in the competition were graduate students. The Applied Geography Conference is a national conference.

Three students presented research at the 2013 Annual Meeting of the Association of American Geographers in Los Angeles, CA, a national/international conference:

- Cody Mertens and Sarah Erickson, *Three-Dimensional Modeling of Lead Contamination in an Urban Wetland*, April 9, 2013 (advisors: Belby and Perroy).
- Mary Windsor, *See What We Mean? Measuring the Effectiveness of Different Map Rhetorical Styles for Persuasive Geocommunication*, April 12, 2013 (advisor: Muehlenhaus).
- Rebecca Roider, *Lead Contamination in Passage Island Soils & Rock Pools, Isle Royale National Park*, April 11, 2013 (advisors: Belby and Perroy).

Cody Mertens, Melissa Goldade and Sara Erickson also presented research on the pH of lead contaminated sediment and modeling lead contamination in the La Crosse River Marsh at regional conferences, including the Mississippi River Research Consortium in La Crosse, April 25, 2013 and at the Wetlands Healthy Watersheds, Wisconsin Wetlands Association, in Sheboygan, WI, February 13, 2013 (advisors: Belby and Perroy).

Sarah Erickson, a McNair Scholar, presented her project *Lead Contamination in Water and Biota at the Site of a Former Trap Shooting Range*, at the National Great Rivers Research and Education Center Intern Symposium, Alton, IL, August 6, 2012 (advisors: Belby and Perroy).

Two students who graduated at the end of this academic year received full funding and research assistantships to pursue Masters degrees at research universities in the fall: Melissa Goldade will be attending the University of Kansas, and Mary Windsor the University of North Carolina.

2. Programming:

The GIS program has traditionally attracted the greatest number of majors in the department. This changed over the past year, with the environmental science concentration now the stronger of the majors. Attracting majors into the latter is a positive outcome of past curriculum revisions. However, the department also wants to increase enrollment and maintain a strong GIS concentration. Thus we have started the process of assessing the GIS curriculum with a goal of modifying it to reflect current developments in the field and better meet student needs. Drs. Chaudhuri and Muehlenhaus received a curriculum re-design grant for this summer and upcoming year. This is part of the department's plans for 2013-2014.

Section 2: Staffing, Resources and Facilities

1. Staffing:

Drs. Joan Bunbury and Gargi Chaudhuri joined the Department in August 2012. Dr. Bunbury has a Ph.D. in Geography from the University of Ottawa. Her specialization is in climate change and paleoclimatology. Dr. Chaudhuri has a PhD. in Geography from the University of California – Santa Barbara. Her specialization is in Geographic Information Science and land use/cover change.

Dr. Ryan Perroy notified the department that he accepted a position at the University of Hawaii – Hilo starting August 2013. He will leave UW-L at the end of July 2013. This represents a major loss for the department, our students and the University. Dr. Perroy has expertise in geomorphology, soils, LIDAR technology, and spatial data analysis. Much of his expertise is not duplicated in the department, and thus this represents a serious loss to our students and colleagues. He had a major influence on recruiting students into the department, maintained a dynamic research program and supervised undergraduate research. The loss of Dr. Perroy has necessitated rescheduling of numerous courses and cancellation of three upper-level seminars. The department will be seriously understaffed until his position is filled.

Kevin Duffy, the GIS lab manager, also announced that he would be leaving at the end of June. He has already started a full-time IT manager position at Gundersen Health System. The department hired Birgit Muehlenhaus as the new lab manager, starting July 1, 2013.

2. Scholarship and Grants:

Faculty in the Department of Geography and Earth Science maintain a dynamic scholarship program, collaborating with colleagues at UW-L in the Departments of Biology, Chemistry and Physics; and in the River Studies Center. Faculty also have established or maintained external collaborations with the Upper Midwest Environmental Sciences Center (Drs. Belby, Bunbury, Chaudhuri and Berlin), U.S. National Park Service (Drs. Belby, Perroy and Berlin) and the American Geographical Society (Dr. Muehlenhaus)

Faculty were active in publication, with 11 peer-reviewed journal papers published (four) and accepted (seven), one textbook accepted for publication, 2 edited book chapters published, 2 book reviews published and one edited book published. First author publications include the following:

- **Belby, C.** (2012). Analysis of sedimentation from a small magnitude upper Mississippi River flood. *Papers of the Applied Geography Conferences*, 35, 153-162. (Accepted: July 2012, Published: November 2012).
- **Bunbury, J.,** Gajewski, K. (2013). Effects of the White River ash event on aquatic environments, southwest Yukon Territory, Canada. *Arctic*, 66(1), 17-31. (Published: March 1, 2013).
- **Bunbury, J.** (2012). *Distribution of freshwater ostracods in the Canadian North and implications for palaeoclimate reconstructions* in *Ostracoda as proxies for Quaternary climate change* (vol. 17, pp. 117-129). Amsterdam: Elsevier. (Published: December 21, 2012).
- **Chaudhuri, G.,** Clarke, K. C. How does land use policy modify urban growth? A case study of the Italo- Slovenian border. *Journal of Land Use Science*, XX. doi: 10.1080/1747423X.2012.679748.
- **Muehlenhaus, I.** (2013). *Web Cartography: Map Design for the Web and Mobile Devices* (pp. Approx. 250 pages). Boca Raton, FL: CRC Press (Engineering Division). Textbook. (Submitted: February 15, 2013, Accepted: March 2013).
- **Muehlenhaus, I.** (2013). Peek-a-Boo: The World is Watching You in Analyze *To appear in ABC-CLIO/Greenwood Publishers*, <http://www.abc-clio.com>. (Accepted: May 2013, Published: May 2013).
- **Muehlenhaus, I.** (2013). How Have New Technologies Changed Human Perception of Geography? *ABC-CLIO/Greenwood Publishers*, <http://www.abc-clio.com>. (Accepted: December 2012, Published: January (1st Quarter/Winter) 2013).
- **Muehlenhaus, I.** (2012). If Looks Could Kill: The Impact of Rhetorical Styles on Persuasive Geocommunication. *The Cartographic Journal*, 49(4), 361-375. (Published: December 2012).
- **Perroy, R.,** Bookhagen, B., Chadwick, O., Howarth, J. (2012). Holocene and Anthropocene landscape change: arroyo formation on Santa Cruz Island, California. *Annals of the Association of American Geographers*, 102(6), <http://www.tandfonline.com/doi/full/10.1080/00045608.2012.715054>. doi:

10.1080/00045608.2012.715054. (Submitted: July 26, 2011, Accepted: June 2012, Published: September 17, 2012).

During this academic year, the faculty received \$149,508 in funding. This included two external research grants (\$70,976), one external satellite data grant (worth \$64,000), and four internal UW-L grants (\$14,532). The internal UW-L grants included one Faculty Research Grant (Dr. Muehlenhaus, \$6832), two International Development/Travel Grants (Drs. Ahmed and Perroy, \$6,700), and one Faculty Development Grant (Dr. Muehlenhaus, \$1,000). The external grants and faculty research grant include:

- **Belby**, Colin (Principal), **Perroy**, Ryan (Co-Principal), *Lead transfer from shot contaminated soils in the La Crosse River Marsh, Upper Mississippi River*, The National Great Rivers Research and Education Center, \$5,997.
- **Belby**, Colin (Principal), **Perroy**, Ryan (Co-Principal), King-Heiden, Tisha (Co-Principal), Gerrish, Gretchen (Co-Principal), *Monitoring and Assessment of Legacy Lead Contamination in the La Crosse River Marsh*, U.S. Environmental Protection Agency, \$64,979.
- **Chaudhuri**, Gargi, *SPOT Imagery Grant*, Planet Action, Astrium GEO-Information Initiative, value of imagery: \$64,000.
- **Muehlenhaus**, Ian. UW-L Faculty Research Grant: *Is Seeing Believing? Measuring Trust, Recall, and Reaction to Different Styles of Persuasive Maps*, \$6,832.

The faculty was very active in presenting papers at academic conferences, including 3 international conferences, 12 national conferences, 3 regional meetings and two at the UW-L Faculty Research Day (Drs. Belby and Muehlenhaus). Conferences presented at include the following:

- Applied Geography Conference (Belby and Berlin)
- Association of American Geographers, (Ahmed, Bunbury, Chaudhuri, Muehlenhaus, Slocum, Perroy)
- Cartographic and Geographic Information Society (Muehlenhaus)
- European Confederation of Soil Science Societies, Bari, Italy (Perroy)
- Geological Society of America (Bunbury)
- International Geographical Congress, Cologne, Germany (Ahmed)
- NASA Land Cover Land Use Change International Regional Science Meeting, Coimbatore, India (Chaudhuri)
- NASA Goddard Space Flight Center Meeting (Muehlenhaus)
- North American Cartographic Information Society (Muehlenhaus)
- Mississippi River Research Consortium (Dr. Bunbury)
- Westlakes Division Association of American Geographers (Cravins)
- Wisconsin Geospatial Summit (Muehlenhaus)

3. Resources and facilities:

The department gained a new research lab space in Cowley Hall 149 for Dr. Bunbury and Dr. Belby. This lab has been designated as the Paleoclimatology lab and is a “clean” space since it now houses high-tech microscopes and other high-end equipment used for pollen and other sensitive data analysis. Soils and other contaminants are restricted to the soils and field labs, both

of which are used heavily by students as well as faculty and are over-crowded. Maintenance of the department's GIS labs presented numerous challenges over the past academic year. These labs and the GIS lab manager play a critical role in supporting not only the department curriculum, but also the GIS activities of numerous other departments and programs (e.g., Biology, River Studies, Archaeology, Business). The management of these systems required almost a full-time position, and the ESP position is less than 50% time. The lab server was also becoming over-extended, the storage capacity limited and desktop computers in the Cowley Hall room 204 lab outdated. Thus the lab server and storage capabilities, along with software license management, will transition to IT over the summer.

Section 3: Outreach Activities

1. Inclusive Excellence activities:

For the past two years the department participated in the Association of American Geographers Aligned Grant, funded by the National Science Foundation. This grant program involves actively recruiting minority high school students into the department as freshmen and retaining students already in the program. During this year the department began the implementation of the recruitment process. This included creating a comprehensive recruitment plan, forming a Diversity Student Recruitment Committee, and meeting with UW-L admissions personnel. This fall several members of the department will attend recruitment days at high schools in the Milwaukee area.

Dr. Belby was also active with the FastTrack and FYRE programs for incoming freshmen students, meeting with students over lunch hours during August 2012.

2. International activities and opportunities:

During this past academic year, three faculty members attended international conferences. Dr. Ahmed attended the International Geographical Congress in Cologne, Germany; Dr. Perroy attended the European Confederation of Soil Science Societies in Italy; and Dr. Chaudhuri attended the NASA Land Cover Land Use Change International Regional Science Meeting in Coimbatore, India.

Dr. **Cravins** travelled to Cuba in August 2012 and established connections with Geography faculty at local universities. He plans to return to Cuba with a group of students for a study tour in summer 2014.

Dr. **Perroy** also continued his research into soil contamination in Albania, travelling there in July 2012.

Dr. **Ahmed** served as Dissertation Examiner for two Ph.D. candidates at Aligarh Muslim University in Aligarh, India.

3. Engagement:

Faculty in the department maintain an active service program to UW-L, professional organizations and the community. Engagement included extensive service to the University, CSAH, the department and profession. Only a few selected examples are provided here:

- Dr. Belby served on the College of Science and Health Ad Hoc Assessment Committee and on the Dean's Distinguished Fellowship Grant Committee. He also organized two symposiums for the International Society of River Science and the Partnership for River Restoration.
- Dr. Perroy chaired the Geography Department Diversity Student Recruitment Committee and supervised the UW-L vermi-composting project.
- Dr. Bunbury served on the CASH Student Travel and Supplies Grants Committee.
- Dr. Chaudhuri organized GIS Day events in the department.
- Drs. Chaudhuri and Cravins judged for the Graduate Student Research Celebration.
- Drs. Berlin and Cravins moderated sessions at the National Conference on Undergraduate Research.
- Dr. Muehlenhaus served on the Committee on State Cartography and on the organization committee for the Cartography and Geographical Information Sciences competition.

The department faculty and students are also engaged in the La Crosse community, including:

- Involvement with the Myrick-Hixon Forest Ecopark. Dr. Belby organized the Myrick Park Restoration and Cleanup with geography student volunteers. Students were involved in cleaning up trails and the park areas. Drs. Berlin, Bunbury and Chaudhuri and Jeff Kueny gave tours of the La Crosse River Marsh to UW-L students.
- The Geography Department research on lead contamination in the La Crosse River Marsh was the subject of four news items. The La Crosse Tribune published an interview with Dr. Belby (August 22, 2012). Dr. Belby was also interviewed by local TV stations WXOW and WKBT, and WIZM Radio.
- Dr. Chaudhuri provided GIS data collection and mapping services to the Outdoor Recreation Alliance of the 7 Rivers Region.

Section 4: 2013-2014

1. Plans and focus for 2013-2014:

For the upcoming academic year, the Department of Geography and Earth science has three main goals: (1) revise the GIS major and minor concentrations to reflect advances and current trends in the discipline, (2) complete the APR process, and (3) replace departing faculty (see challenges and opportunities below).

As noted, the Geography and Earth Science Department has initiated the process of a major redesign of the GIS major and minor program. Drs. Chaudhuri and Muehlenhaus received a curriculum re-design grant for this summer and upcoming year. They will work with colleagues in the department to modify the curriculum to reflect current trends and technology advances in GIS.

The department has been delayed in beginning the Academic Program Review process for the seven-year review. The chair has recently started the self-study process, and will complete this part of the review over the summer. The department will focus on finalizing the review over the next academic year.

2. Challenges and opportunities:

With the departure of Ryan Perroy and non-retention of Rachel Slocum beyond this upcoming academic year, the department will need to conduct search and screens for new faculty. The loss of Dr. Perroy is especially difficult for the department, since his position is vital to maintaining a strong and dynamic physical geography program and environmental geography major concentration. The environmental geography program, with its geomorphology core, attracts more students than any other concentration within the department. This, however, does present the opportunity to review our course offerings and potentially expand on our current research agenda.

The human/cultural/regional program within the department has suffered during the past several years, primarily due to limitations with faculty. The departure of Dr. Slocum at the end of this upcoming academic year offers an opportunity for the department to revitalize this part of the curriculum with a new faculty hire.

The return of both of these positions to the department will be critical to further developing a strong program, attracting diverse majors and minors, and maintaining the faculty's already dynamic research program.

SUMMARY OF ANNUAL ACTIVITY
HEALTH EDUCATION AND HEALTH PROMOTION DEPARTMENT
(June 1, 2012 - May 31, 2013)

Section 1. Student accomplishments/success; changes to student mix; changes to existing program; additional monitoring or redesign of programs (needed); new non-curricular programs.

The CHE Program developed and implemented a course focused on Motivational Interviewing and Behavioral Screening Intervention designed to enhance the skills of students interested in clinical settings.

The Public Health for the Educated Citizens course (CHE 200) was approved as a General Education course in Self and Society.

The CHE program has developed a Global Health Course that will be put forward as a general education course this.

The CHE program has been evaluating the curriculum and will be making a number of changes in the fall of 2013.

15 students (a mix of CHE and SHE) participated in the Society for Public Health Education annual Advocacy Summit in Washington DC during the first weekend in March.

AAHE Major of the Year Award - Ellen Lowry (School Health Education) and Grant Dvorak (Community/Public Health) both participated in the ceremony at AAPHERD this year in Charlotte, NC and the convention itself.

There will be 5 single SHE majors student teaching in the fall of 2013.

The SHE program is making revisions that will assist MC- EA students in earning the minor.

The reading requirement component was removed from SHE program and imbedded through the SHE Program.

Meghan McClellan completed her undergraduate research and presented it at NCUR, "Self-Reported Understanding of ADHD among Undergraduate Students at a Midwestern University".

Liang Yuanying published her thesis in the International Electronic Journal of Health Education, " Stress and Communication across Cultural Boundaries in the U.S. Location of a Chinese Business"

Our CHE students who complete the National Certification exam score well above the national average and greater than 90% pass.

Seniors initiated programs addressing the following issues in the local community: risky drinking, painkillers as a gateway to heroin, sex trafficking, strong women against osteoporosis,

food insecurity, preventing suicide, oral health in elders, preventing STIs, and stress management for college students.

The HWM on line collaborative degree completion program continues to grow rapidly – with the first graduates in Dec. 2013.

The Dept. is redesigning all of the program assessment in order to better evaluate the knowledge and skills of our graduates.

Section 2. Staffing situation (new hires, GQA, retirements); scholarship and grant activity; resources and facilities (emphasis on changes, challenges and other developments).

Lori Reichel (SHE) and Anders Cedergren (CHE) were hired.

Dept. is searching for an IAS to work in the area of Public Health Nutrition.

We have a need for more office and storage space; additionally space for GAs would be useful and provide them with an enhanced experience.

The Dept. Chair and ADA are located away from the rest of the faculty given the current space limitations in Mitchell.

We have had a number of faculty publish journal articles, book chapters, submit grants (internal and external), and present at local, regional and national conferences and meeting.

The faculty are very active in service with most serving on university and providing professional service to the American Public Health Association; Society for Public Health Education; American Alliance for Health Education; American School Health Association, The American College Health Association; - many of these are in leadership roles.

Section 3. Inclusive excellence opportunities, events, ideas put forward; international activities and opportunities; fundraising and community engagement activities attempted and outcomes.

HED 703: students attended an ATP presentation; I invited a speaker from the LCHD to class

PH 717: students attended Jane Fernandes' presentation on white privilege and power in the deaf community; students attended Bill McKibben's presentation on climate change; I invited a speaker from the La Crosse Warming Center to class

HED 345: students attended Marc Eliot's presentation on Tourette's syndrome; I invited a speaker from the Campus Climate office to class; students documented incidents of stigma toward selected groups (e.g., individuals with Tourette's syndrome, individuals who are obese, individuals who identify as LGBT, etc.) and created social marketing materials to raise awareness/reduce stigma associated with a selected target group

HED 472: I invited speakers from the Pride Center to class

A number of our classes participated in Diversity Dialogue Day
Our students have developed a Health Newsletter and posted them in Mitchell Hall
Volunteer Opportunities in La Crosse Community ~ a number of our courses have this as a
require service learning component of the course.

Section 4. Plans and focus for 2013-2014; foreseeable challenges and opportunities going forward.

We continue to look at expanding our Public Health Nutrition options in order to address the obesity issue among adults and children.

We are exploring the implementation of a PH degree.

The CHE program has been modifying the curriculum to enhance our students' skills in a number of areas to include advocacy, community organization, motivational interviewing, mental health, communication, health literacy and the possibility of different tracks depending on student interests.

The CHE program has been work to complete its self-study for Council on Education for Public Health Accreditation for both the MPH-CHE and the BS-CHE degrees.

The Dept. of HEHP is continuing to develop our strategic plan, which we would like to complete early in the fall semester.

Resources continue to be an issue - faculty, dollars and space – salaries are a problem both starting and for those who have been here for sometime.

SUMMARY OF ANNUAL ACTIVITY
HEALTH PROFESSIONS DEPARTMENT
(June 1, 2012 - May 31, 2013)

Section 1: Students and Programming

- The department consists of a total of 29 core faculty/ IAS (26.5 FTE) plus additional part time adjunct faculty. Five of the core faculty/IAS are UW-L alumni.
- 143 students representing 32 undergraduate majors were admitted into 6 programs (Medical Dosimetry (Admissions still being accepted), 26 Occupational Therapy, 19 Physician Assistant, 45 Physical Therapy, 20 Nuclear Medicine Technology, 19 Radiation Therapy)
*NOTE - DOS Certificate program is no longer accepting applications. Current students will finish their coursework and this will no longer be offered. The Radiation Therapy and Nuclear Medicine Technology programs offer Bachelor of Science degrees. Three programs offer masters degrees: Occupational Therapy (MS in OT), Physician Assistant Program (MS in PAS), and Medical Dosimetry (MS in DOS). The Physical Therapy Program offers a Doctor of Physical Therapy (DPT) degree. The Medical Dosimetry program is phasing out their certificate program.
- Student demand for all six Health Professions programs continues to be strong and application for admission remains very competitive. For the cohorts beginning in summer/fall of 2012:
 - Medical Dosimetry (MS degree 38 applications thus far).
 - Occupational Therapy (26 admitted/100 applications).
 - Physical Therapy (45 admitted/*a record 560 applications*).
 - Physician Assistant (19 admitted/336 applications).
 - Nuclear Medicine Technology (25 applications).
 - Radiation Therapy (20 admitted/76 applications).
- 691 undergraduates took three general courses taught in the HP Dept (Fall 2012, Spring 2013, Summer 2013 - SAH 105 (Analysis of Health, Wellness and Disease for the Healthcare Consumer, which is a general education course), HP 250 (Medical Terminology), and HP 106 (Introduction to Health Careers). Also, 10 PHY 498 Physics and Astronomy research and several internships were provided to undergraduate physics students relative to biomechanics research collaboration with R. Ragan (Physics) and T. Kernozek (HP).
- Health Professions faculty taught students from Physics, Exercise and Sport Science, Athletic Training, Biology, Nurse Anesthetist programs as well as teaching students outside of their programs within the department. Inter-departmental teaching as well as cross-departmental teaching has continued.

The student outcome measures for the department continue to remain excellent:

- Graduates of all programs were exceptionally strong on their national professional terminal certification examination scores:
 - Occupational Therapy – 100% pass rate (national average is 85% pass rate)
 - Physical Therapy – 100% pass rate (scored about the national average).
 - Physician Assistant – 100% pass rate (Class of 2012 Top 1% nationally on exam).
 - Radiation Therapy – 100% pass rate (92nd percentile nationwide).

- Medical Dosimetry – 80% pass rate, 100% Completion Rate.
 - Nuclear Medicine Technology – 100% pass rate.
- Employment rates are strong with most students finding employment within 3-6 months upon graduation in all programs.
- Employers and alumni provide very positive feedback regarding program quality.
- Students are actively involved in professionally related community service in their free time as well as course related despite very high credit loads and high expectations for performance.
 - Patient related service activities and wellness programming were delivered by the Occupational and Physical Therapy Programs to the following community organizations: Tomah Middle School, Providence Academy, Bethany Lutheran Homes (Senior & Assisted Living Facilities), La Crosse Public Schools (Lincoln Middle School, Longfellow Middle School, Emerson Elementary School, Harry Spence Elementary School), Western Technical College, UWL, Viterbo University, Dynamic Recycling, La Crosse School, YMCA), Willows Assisted Living facility, Salvation Army, Holmen School District, Eagle Crest, Salzer Square, Ona Terrace, La Crosse Housing Authority, Springbrook, Hillview Terrace, Carroll Heights, Woodmans, Shopko, Shelby Terrace, Salem Terrace, Prairie Home, Laurel Manor, UW-L Childcare Center, Moser Home, Onalaska Fire Department, Kwik Trip, Coulee Rock Church and RAVE. In the Physical Therapy program alone, wellness programs resulted in over 300 student/client interactions in our community.
 - Occupational Therapy, Physical Therapy, and Radiation Therapy student clubs were actively involved in fundraising and made large financial donations to various community organizations (i.e. Gundersen Lutheran Cancer Center, Sarah's Purse, Relay for Life, Children's Miracle Network, Kaitlin's Table, Easter Seals Camp, Stepping Out in Pink, New Jersey OT students – victims of Hurricane Sandy, OT Political Action Committee, Project FunWay – Inclusive fashion event at Valley View Mall).
- Students in all programs in the department have applied for UW-L, state, and national scholarships to help support their education. Radiation Therapy, Nuclear Medicine Technology and Physical therapy students received the most scholarships from their state/national professional associations than other state programs. Physical Therapy program implemented the Straker Clinical Excellence Scholarship and Erin Melin Memorial Scholarship.
- Students are actively engaging in scholarly activities. Two Medical Dosimetry Students published in their professional journal (Medical Dosimetry). Three Occupational Therapy Students presented posters at Mid-west Dean's conference (March 2013), Two Occupational Therapy Students submitted articles to AOTA for publication (waiting for a decision), 25 Occupational Therapy Students completed inter-rater reliability study with a poster as the product (Spring 2013) and completed a systematic review of literature for a public presentation for students, faculty and outside clinicians (Fall of 2012). Other outcomes include co-authorship on over 10 peer-reviewed publications and numerous presentations at state and national level in Physical Therapy Program. Many physical therapy graduate students presented posters at the UW-L Research and Creativity Day. Thirteen of 18 NMT

students had abstracts be accepted for presentation at the Annual meeting of the Society of Nuclear Medicine and two students presented posters at NCUR. Three Radiation Therapy students won the first 3 places in paper competition at the annual Chicago Area Radiation Therapists Student Seminar and Review Bowl. They also took 3rd place in the poster competition. Physician Assistant Program student Nicole Lepinski had an article accepted for publication in the Journal of Dermatology for Physician Assistants entitled, “Dermoscopy significantly improves the accuracy of diagnosing malignant melanoma”,

- Students are engaging in professional activities and attending conferences. The RT Class of 2011 participated in the Chicago Area Radiation Therapists Student Review Seminar and Review Bowl in Chicago where students placed 2nd and 3rd in the paper writing competition. Seven students received top awards at the Annual Society of Nuclear Medicine (NMT Program) in June of 2012: notable awards were Best overall student technologist paper, first place abstract presenter for the Oncology Council Awards, Best Cardiology abstract presentation, best instrument abstract presentation. NMT students won the Student Quiz Bowl Championship, beating out rivals such as University of Michigan in Ann Arbor and Indiana University! Physician Assistant students participated in Challenge Bowls at WAPA and MAPA conference, Members of the Physician Assistant Student Society put in numerous hours of volunteerism at the Breast Cancer Walk, Run from the Cops Water Station, Medication Drop-off program, WAPA book drive, and the La Crosse warming shelter. The RT club participated in Steppin' Out in Pink Bake Sale at Cartwright Center raised funds for and made over 25 fleece blankets and holiday gifts for the cancer patients in radiation oncology at Gundersen Lutheran. La Crosse Colleges Relay for Life and hosted a DKMS Bone Marrow Drive at Cartwright Center where over 100 new donors were added to the registry. Occupational therapy students participated in Relay for Life, Rotary Lights, Project Funway, and raised money for occupational therapy students affected by Hurricane Sandy in New Jersey.
- Thomas Almonroeder (Physical Therapy, DPT Spring 2013) accepted a PhD fellowship to UW-Milwaukee to study Human Kinetics.
- 60 Occupational Therapy Students, 4 faculty, and 4 clinicians received training in the Assessment of Motor Processing Scale (AMPS) organized by Vanessa Jewell (January 2013).
- Occupational Therapy International Student Exchange: 1 UWL student traveled to Aberdeen, Scotland, 2 UWL students traveled to Brighton, England over spring break. OT student hosted 7 students from Robert Gordon U, Aberdeen Scotland and 5 students from University of Brighton, England. They attended classes and visited local health care organizations.

Section 2: Staffing, Resources and Facilities

- Faculty teaching is excellent. As professional education programs, the curricula in each program requires students to master general scientific knowledge, discipline specific knowledge, and professional behaviors, as well as to demonstrate competence at clinical skills. In addition, the graduate programs require production of a scholarly project.

- Physical Therapy instructed highly successful elective Applied Adult Clinical Practice or EXPAND in collaboration with La Crosse Exercise and Health Program to serve community clients with movement disorders.
- All programs except the Nuclear Medicine Program are accredited by their individual professional specialty accreditation agencies and all have been successfully reaccredited within the past five years.
 - JRCERT (Joint Review Committee on Education in Radiologic Technology) extended the current five-year accreditation given 2010, to eight years with the addition of a 1.0 FTE clinical coordinator position (A. Carpenter was hired).
- Faculty regularly participates in CATL workshops on UWL campus to enhance teaching effectiveness.
- Each program's has a rigorous annual assessment process in accordance with their accreditation requirements. Student learning in each curriculum is rigorously assessed, outcomes for the program are measured and faculty performance is assessed by faculty, peers, program directors, and the students. Student evaluations of instruction through university SEI measures in the Health Professions Department are solid (above 4.0 for fall/spring).
 - A. Staffaroni is conducting the self-study this summer for the NMT program to potentially earn JRCNMT accreditation.
- The Department experienced some administrative changes
 - Dr. Sandy Sieck became new program director for the Physician Assistant Program.
 - Dr. Tom Kernozek served as the Interim Chair of Health Professions Department for spring semester.
 - Dr. Peggy Denton (Occupational Therapy and regular Department Chair) had a sabbatical for spring semester.
- Faculty in the graduate programs mentor student research.
 - Forty-five doctoral students in Physical Therapy participated in a research practicum resulting in some product (paper, presentation, or poster).
 - All twenty-five Occupational Therapy students completed a scholarly project, presentation, and written paper that will be published on the program website.
 - Nineteen Physician Assistant students complete a scholarly project and presentation.
 - All Medical Dosimetry students completed a scholarly project.
- Faculty are active in personal scholarship.
 - The La Crosse Institute for Movement Science (Movement Analysis Laboratory, Physical Therapy Program) scientists (T. Kernozek, Director, T. Greiner, S. Reardon, and J. Greasy) have published or have in press over 14 peer reviewed papers in the medical/physical therapy/exercise related scientific literature from 2012-2013. Two papers are also in press. These manuscripts (either accepted or published) were full papers (no abstracts were included in this tally of faculty scholarly productivity) and published largely in Index Medicus sources (premiere journals searchable through www.pubmed.gov).

- One National Institutes of Health Grant was submitted (NIH SBIR mechanism) in the Physical Therapy program. Funding of \$150,000 is expected in a collaborative grant between UW-Stout (B. Ezenwa) and UWL (T. Kernozek) in June 2012.
- An Innovations in Medical Technology for Human Health (IMTH²) initiatives to advance extramural grant initiatives have begun between UW Stout (B. Ezenwa), UW La Crosse (T. Kernozek), OEM Biomedical and Medical Hospital Collaborators. Additional UWL Faculty (S. Liu – Biology) has SAH College funding for obtaining preliminary data this summer for extramural funding for animal studies. Other faculty collaborations are being developed.
- Physical Therapy Faculty had 5 book chapters published or accepted, 3 national presentations, and 4 national poster presentations.
- Occupational Therapy faculty presented 5 posters at the Mid-West Deans Conference in Occupational Therapy.
- Dr. Karen Graham (Physician Assistant Program) graduated in December 2012 with PhD in Higher Education Administration. She was appointed to the Physician Assistant Education Association Research Institute and was also the 2012 Recipient of the PA Foundation Breitman-Dorn Research Fellowship.
- Libby Hilsendager (Medical Dosimetry) received her MS degree in Education at UW Stout (December 2012).
- The interim clinical coordinator for Radiation Therapy, Amy Heath presented "Radiation Therapy and Obesity" at the national ASRT (American Society of Radiologic Technologists) meeting in Miami, FL in September, 2011, at the Spring Radiation Therapists of Wisconsin bi-annual meeting in March, and later at a Q-Fix Conference in April in New Orleans, LA. Ms. Heath is currently working on a board exam review book with various members of the RT program team.
- Many faculty are nationally and internationally recognized for scholarship, contributions to professional education in their field, and leadership.
 - N. Lenards received the 2012 Fellow status for the American Association for Medical Dosimetrists and in 2013 the AAMD Award of Excellence
 - T. Kernozek (Physical Therapy) was invited to speak at the International Society of Biomechanics in Sports Meeting in Taiwan. He received an UWL international travel grant to support his travel.
 - S. Meardon, T. Kernozek, T. Greiner, J. Greany and P. Denton served as reviewers for scholarly journals. N. Lenards is the Associate Editor for *Medical Dosimetry*.
- New hires for recent Health Professions faculty turnover: Fred Kupfer (Physician Assistant), Patrick Grabowski (Physical Therapy), Angela Binsfeld (Physical Therapy), Stefanie Czosnyka (Physical Therapy)
 - Recent resignations: Stacey Meardon (Physical Therapy), Lisa Iverson-Leirmo (Physician Assistant)
- Facilities
 - Challenges remain for additional office and research space for faculty in the Health Science Center.

- All programs continue an extensive curricular analysis to align actual course delivery with workload reporting in WINGS. Many of the LX forms have been revised so courses within WINGS better reflect the workload for both students and faculty.
- Physical Therapy program continues to be involved in a workload analysis to better match faculty strengths with a reduced number of classroom preparations. This analysis has resulted in some curricular changes designed to improve student-learning outcomes. Difficulties remain due to the variety of content needed to be taught with existing faculty expertise.
- Faculty continue to work on obtaining higher degrees in addition to full workloads:
 - Occupational Therapy Program: two faculty working on doctoral degrees (one on a PhD, one on a clinical doctorate in Occupational Therapy), one PhD faculty working on a professional degree (masters in occupational therapy)
 - Medical Dosimetry: one faculty working on doctoral degree.
- Continued efforts as a department to promote inter-professional education in the department.
 - Program faculty becoming informed about inter-professional competencies students are expected to display upon graduation.
 - Continued to teach some basic science courses to students from different programs together (anatomy, physiology, pathophysiology)
 - Continued joint class sessions learning about other professions (OT-PT, OT-OTA at Western, PT-PTA at Western).

Department Challenges

- Hiring faculty with appropriate academic and professional credentials continues to be a significant challenge for Health Professions programs. For example, the Physical Therapy Program anticipates experiencing another tenure track position resignation effective Fall, 2013. Due to the continued challenges in recruiting and retaining faculty with appropriate academic and professional credentials at best we hope to refill this position for fall, 2014. The two new Physical Therapy faculty hired for the fall, 2013 will require considerable mentoring, as this is their first academic position. Maintaining the quality of Physical Therapy program's outcomes and research productivity with these staffing changes will once again be difficult. It is of major concern that the Physical Therapy program will have another resignation of a clinician/researcher/teacher in a tenure track position. The market for faculty with clinical degrees and PhDs remains very competitive and there appears to be available positions nationally with a more desirable blend of teaching (reduced number of course preparations and number of students), scholarship (more time with similar scholarly expectations over 12 month program) and service workload than our campus currently offers. The expected mentoring of these new hires will result in increases in the workload of more seasoned faculty in the program due to the small number of tenure track lines. The Physical Therapy program is hopeful that additional teaching positions will be added with further analysis of the differential budget this summer. The program needs more flexibility due to the wide array of courses and various specializations within the curriculum.
- Similar programmatic issues exist for the Occupational Therapy program. Due to the difficulty in recruiting qualified clinical and terminal degree faculty in the Occupational Therapy Program, the program has largely educated their own with three faculty earning higher or other such degrees to satisfy Occupational Therapy accreditation requirements. One faculty working on a PhD has resigned effective fall, 2013 thus increasing the workload for

the remaining faculty. Previous searches for occupational therapy faculty with doctoral degrees have lasted several years and the field has become much more competitive in the past 3 years. This resignation puts the program at risk for non-compliance, as this position was the solution to the accreditation citation for the current program director not assigned to the program full time. The current program director also serves as the department chair. Recruitment of a faculty member to fill this position will face the same challenges as noted above for the physical therapy program.

- Many of our programs have made significant curricular changes based on workload analysis to better reflect the faculty efforts in coursework. The inability to retain the two recent tenure track faculty within Physical Therapy in these past two years even more strongly affirm our belief that professional education programs need a different metric for workload accountability that recognizes the unique aspects of professional education that are not accounted for in the current metric. During the past two years, the Physical Therapy program experienced three resignations (.5 FTE Clinical Coordinator and Two Tenure Track Faculty). This is a remarkable change in an otherwise stable Physical Therapy faculty. Representatives from the department served on the Ad Hoc Professional Education Task Force with the expectation of some changes to the current workload metric. We are unaware of the Provost's specific recommendations or implemented changes based on the Ad Hoc Professional Education Task Force recommendations.
- The Nuclear Medicine Technology program is the only program that is not accredited and relies on the clinical sites that take students for the fourth year of the degree to hold the accreditation. Now many hospitals, especially those that only take UW-L students, are no longer willing to devote the financial and personnel resources required to maintain their accreditation. UW-L needs to work to obtain accreditation for the program to continue to be viable in the future. Discussions with the college office have not yet resulted in the needed resources to seek accreditation for the NMT program.
- The department inter-professional education task force has explored the possibilities for the additional competencies that are expected by all programs within the department in the future. Meeting these accreditation mandated standards will likely require curricular changes in the programs and widespread scheduling changes. These will be difficult given that the staffing for the department does not have stable staffing.

Section 3: Outreach and Service Activities

Service has been one of the strengths of the Health Professions department.

- In the past academic year, over 30 community organizations and 1,400 citizens in the region have involved in service learning activities associated with the Health Profession Department programs (this number does not reflect clinical internship affiliations).
- The majority of Health Professions students have volunteered for a community service project outside of service required in coursework.
- Health Professions faculty and staff routinely provide service to local civic and religious organizations.

- Physical Therapy Program provided pro bono service to various organizations such as Pro bono service to various organizations such as St Clare’s Health Mission, Onalaska Fire Dept. and fall prevention program – “Walk Strong- Walk Tall”.
- Physical Therapy admission committee reviewed over 550 applications for admission.
- Occupational Therapy admission committee reviewed 100 applications for admission.
- Physical Therapy Faculty served on various University committees including Graduate Council, College Committee GCC, IAS Progression, Professional Education Task Force and UW-L Foundation, and Chair of the Faculty Senate Academic Planning Committee.
- Occupational Therapy provides pro bono service to area residents who have no insurance coverage for therapy through course related adult and pediatric clinics on campus.
- Health Professions faculty have maintained leadership roles in their local, state and national professional organizations and service to their professions such as the Federation of State Boards, Examining Boards, Professional association leadership, task forces, specialty board exam item writers and editorial reviewers.
- Department programs provide continuing education to local clinicians, providing access to speakers and information to directly impact practice:
 - Occupational Therapy brought their 6th Distinguished Lecturer to the UWL Campus. Dr. Carolyn Baum, former two-time president of the American Occupational Therapy Association presented a workshop on Cognitive and Executive Function that was very well attended by local clinicians, faculty and students.
 - The Physical Therapy program continues to offer continuing education opportunities through the UW-L continuing education office to serve clinicians within the region.
- Ten Health Professions faculty participated in NCUR activities on campus for either reviewing abstracts or serving as session moderators.
- Feedback that all programs receive from their clinical internship sites is that UW-L Health Professions students have excellent professional behaviors. Mentoring students through intensive faculty advising to develop these behaviors is a primary goal for each program in the department.
- Occupational Therapy and Physical Therapy program organized the 7th annual OT/PT job fair raising over \$9,000 for student development activities and scholarships. Over 40 institutions participated. Students in both programs learn about these institutions, participate in interviews, and receive resume advice.
- Program faculty participate in department and institution recruitment activities (i.e. Health Careers night, campus close-ups, Freshman Orientation, high school advisors orientation, etc.)
- Faculty and instructional academic staff served on university, college, department, and Health Science Consortium committees.

Section 4: 2013-2014 Department Goals

1. Maintain program outcomes despite the staffing and workload challenges.

2. Continue faculty research with the expectation that productivity will be considerably lower this year.
3. Successfully recruit faculty/IAS for all available positions, add new faculty position in NMT and two positions in Physical Therapy program, and explore needs for Medical Dosimetry.
4. Develop a strategy to recruit and retain tenure track faculty in Health Professions.
5. Maintain accreditation status for accredited programs in the department; seek accreditation for the Nuclear Medicine Technology program.
6. Continue to serve in any capacity requested to help the university develop a new metric that captures the workload in professional undergraduate and graduate education programs in our department.
7. Develop a strategy across programs to implement teaching inter-professional competencies.

Respectfully Submitted:

Thomas Kernozek, PhD, FACSM; Interim Department Chair (Spring 2013)

Peggy Denton, PhD, OTR, FAOTA; Department Chair (Summer & Fall 2012)

Contributions from program directors: Michele Thorman (Physical Therapy), Sandra Sieck (Physician Assistant), Melissa Weege (Radiation Therapy), Aileen Stafferoni (Nuclear Medical Technology), Nishele Lenards (Medical Dosimetry).

**SUMMARY OF ANNUAL ACTIVITY
MATHEMATICS DEPARTMENT
(June 1, 2012 - May 31, 2013)**

Enrollment Information

Enrollment records indicate that there were 150 declared mathematics majors in 2012-13, distributed among the various categories. Of these 150 majors, approximately one-third are regular math majors, another one-third are math education majors, and the remaining third consists of students with majors in the math/engineering, applied, actuarial or statistics emphases. For the first time in many years, the number of regular math majors is larger than the number of math education majors. Of the remaining categories, the actuarial emphasis continues to be the most popular.

		Fall 2009	Fall 2010	Fall 2011	Fall 2012
MAJORS	Mathematics	40	38	53	57
	Mathematics Education	64	68	64	55
	Statistics Emphasis	10	13	6	2
	Actuarial Emphasis	8	20	22	26
	Applied Math Emphasis	5	12	12	5
	Math/Engineering	8	7	9	5
	Total	135	158	166	150
MINORS	Mathematics	46	68	70	84
	Mathematics Education	77	66	52	50
	Statistics Emphasis	2	6	6	5
	Total	125	140	128	139

Table 1: Number of Majors/Minors per year by Type

As a traditional academic discipline, mathematics is involved in the academic programs of virtually all UW-L students and the curriculum offered by the Mathematics Department serves many different needs for the UW-L student population. There are non-credit remedial courses for those students who need to improve their mathematics background before taking college level math courses, general education and service courses which provide all students with a solid foundation for their area of study, and there are the courses for the mathematics majors/minors. Student demand for mathematics courses continues to increase as the student population grows.

Semester	Course Type	Number of Sections	Enrollment	SCH
Fall 2012	Remedial	8	305	691
	Gen. Ed./Service*	54	2158	8809
	Major/Minor	32	655	2425
	Sp. Topics/Ind. Study	6	6	9
	Total	100	3124	11934
Spring 2013	Remedial	7	236	531
	Gen. Ed./Service*	49	1845	7506
	Major/Minor	30	669	2467
	Sp. Topics/Ind. Study	9	16	37
	Total	95	2766	10541

Table 2: Student Enrollment by Course Type (Through MTH 207, not counting MTH 135/136)*

Curricular Changes

The Mathematics Department continues to review its curriculum to strengthen courses and programs to meet the changing needs of students enrolled in mathematics courses. This past year, the Department made several curricular changes in response to student needs in math and in other programs, changes in math requirements for math education students made by the Department of Public Instruction, and assessment of student learning.

- This past year saw the first offering of two new courses designed to improve the preparation of teacher candidates:

MTH 321 Teaching Mathematics with Technology

MTH 421 Teaching and Learning Mathematics and Computer Science in
the Secondary School

- The Department's statistics group completed the "Request for Authorization to Implement a Bachelor of Science in Statistics" and successfully took it through the appropriate campus approval process. The proposal is on the agenda for the June 2013 Board of Regent's Meeting. All indications are that the proposal will be approved. The effect of the proposal will be to change the Mathematics Major with Emphasis in Statistics to the Statistics Major, and the Mathematics Major with Concentration in Actuarial Science to the Statistics Major with Concentration in Actuarial Science.
- The requirement of a grade of "C" or better in any math prerequisite course for all math courses was approved by the Undergraduate Curriculum Committee in March 2013, and will be effective for registration for Spring 2014 classes.
- The prerequisite for MTH 135 was changed from MTH 051 to MTH 050.
- MTH 411 was moved back to 3 credits, rather than 4, along with the subsequent content adjustment for the MTH 411-412 sequence.

Departmental Staffing

The instructional staff of the department consisted of 22 faculty members and 8 instructional academic staff in the Fall 2012 semester, and 21 faculty members and 8 instructional academic staff in the Spring 2013 semester. During the academic year the department chair had release time, one member taught half-time in the Mathematics Department and served half time as the director of the UW-La Crosse Statistical Consulting Center, one member (with a .5 appointment in mathematics) had release time as Faculty Senate Chair, and taught half-time (and is the Chair) in the Computer Science Department. In addition, to help partially meet student demand for mathematics courses, two faculty members taught overload courses in the Fall 2012 semester. Instructional FTE are summarized in the table below.

	Faculty FTE	IAS FTE	Overload FTE
Fall 2012	20	6.15	.67
Spring 2013	20	6.21	0

Table 3: Mathematics Department Instructional FTE 2012-2013

Retirements:

David Koster retired as of December 31st, 2012

New Faculty:

Eric Eager joined the department in August 2012. Eric received his Ph.D. in Mathematical Biology from the University of Nebraska-Lincoln.

Searches:

The department had a particularly busy, and successful, year in hiring. Seven new tenure-track faculty, filling four new GQA positions and three replacement positions, were hired in three separate searches. One search for a new GQA position in statistics, initiated in 2011-12, was completed in November 2012. The department also successfully filled two positions in mathematics education in December 2012. One position was a replacement, the other a new GQA position. In the final search, the department filled two new GQA positions in computational mathematics and two replacement positions. This search was completed in March 2013. All seven of the new faculty requested and received early-start funding and will join the department on August 1, 2013.

New assistant professors beginning Fall 2013:

- Douglas Baumann, Ph.D., Purdue, Statistics (2013)
- Joshua Hertel, Ph.D., Illinois State University, Mathematics Education (2013)
- Matthew Chedister, Ed.D., Boston University, Mathematics Education (2013)
- Song Chen, Ph.D., Auburn University, Applied Mathematics (2013)
- Chad Vidden, Ph.D., Iowa State University, Applied Mathematics (2012)
- Tushar Das, Ph.D., University of North Texas, Mathematics (2012)
- Edward Kim, Ph.D., University of California – Davis, Mathematics (2010)

Student Activities/Accomplishments

UW-L continues to be well represented by its student population in state, national, and international mathematical modeling competitions. This year there were four 3-student teams that participated in the Interdisciplinary Contest in Modeling and the Mathematical Contest in Modeling through COMAP (the Consortium for Mathematics and its Applications). For the second year in a row, students also participated in the Midwest Undergraduate Data Analytics Competition held at Winona State University in April 2013.

Student participation is also increasing for the William Lowell Putnam Mathematical

Competition - or simply the Putnam Exam. This year three UW-L students participated along with over 4000 others. In an exam where the median score is “0”, our students did very well. Thong Le got 20 points (rank 713 out of 4277) and Douglas MacFarland got 9 points (rank 1627 out of 4277). Our UW-L team score was 29.

Our math education students have been actively participating in outreach to local schools and other venues. For four Saturdays in April and May, 70 elementary preservice teachers were involved in a service learning project at the Children's Museum, engaging children in mathematics. Also, 20 elementary preservice teachers from our methods courses put on West Salem Family Math Night in April. Finally, in May, 23 current and former preservice teachers gave 7 different presentations at the Wisconsin Math Council's annual conference in Green Lake. They presented to an audience of primarily inservice teachers of mathematics.

Our students were also well represented at the National Conference on Undergraduate Research (NCUR), held on campus in April. Of 19 students involved in undergraduate research projects with mathematics faculty, 9 of them presented their work at NCUR.

Faculty and Staff Activities/Accomplishments

The Mathematics Department faculty continue to be active and engaged in teaching, scholarship and service. This is shown by our faculty on a daily basis, but this year it is highlighted by the following special recognitions:

- Robert Allen was awarded one of six inaugural Provost’s Teaching Excellence Awards.
- Three faculty successfully applied for promotion to Associate Professor – Robert Allen, Melissa Bingham, Huiya Yan.
- The Wisconsin Mathematics Teacher, a journal of the Wisconsin Math Council that is co-edited by Jennifer Kosiak, Jenni McCool and Maggie McHugh, was awarded the National Council of Teachers of Mathematics Publication Award given to an outstanding affiliate journal.

Teaching

In addition to their regular teaching assignments, 9 different faculty members advised or co-advised 19 students in undergraduate research projects. Some of these projects were funded through the NSF Collaborations on Riverine Ecology (CORE) grant or WiscAMP. Results of these projects were presented by the students at various local, state, national and international venues including the College of SAH Summer Research Poster Session, the Wisconsin Section Meeting of the MAA, NCUR, and the AMS/MAA Joint Mathematics Meeting in San Diego. Faculty members also taught 9 different special topics/independent study courses in areas such as Mathematical Ecology, Topology, and Advanced Numerical Integration.

Another non-traditional form of instruction that was new this year was the FastTrack program, a UW- System funded program. Led by Maggie McHugh, Jenn Kosiak and Bob Hoar, FastTrack is a hybrid summer mathematics enhancement program, 6 weeks online followed by one week on campus, where incoming freshmen who placed into remedial math courses could develop their

mathematical skills. They retook the math placement exam at the end of the summer with the goal of placing into a credit-bearing mathematics class. The program was very successful with all but one participant placing into MTH 150 or 151 at the end of the program.

The FastTrack program was also the model for the widely popular College Readiness Math MOOC (Massive Open Online Course). The MOOC uses the materials developed for FastTrack to provide the same type of mathematical skill enhancement to a much broader audience, free of charge. There were over 1000 participants from all over the world, making the MOOC not only a teaching activity, but a service activity as well.

Scholarship/Creativity

Department faculty have compiled an impressive list of publications and presentations this past year. Six journal articles and one book review were published by 6 different faculty members, all but one written entirely by newer faculty (4 or fewer years at UW-L). The journal articles were published in a variety of journals:

- Mediterranean Journal of Mathematics
- Journal of Agricultural, Biological, and Environmental Statistics
- Journal of Mathematical Biology
- The American Naturalist
- Journal of Urban Mathematics
- Wisconsin Mathematics Teacher

Ten additional journal articles were submitted. There were another 16 articles published in conference proceedings, 9 as presenter and author or co-author, and 7 as co-author only. Three mathematics faculty were invited to give presentations:

- Robert Allen gave the invited keynote address to the MAA Maryland-DC-Virginia Section Meeting.
- Eric Eager gave an invited seminar talk at the North Dakota State, Minnesota State-Moorhead and Concordia College's Tri-College Math Colloquium.
- Huiya Yan gave an invited seminar talk at Shandong University of Technology, Zibo, Shandong Province, China.

In addition, 20 different presentations were given by 9 different faculty at state, national and international conferences.

Eight different faculty members reviewed a total of 30 articles for a wide variety of journals, including the College Mathematics Journal, Discrete Mathematics, Mathematics Magazine, AMS Math Reviews and the Journal of Mathematical Biology.

The grant writing activity of department faculty has brought in over \$230,000 this year. Most of the grants are local or UW-System grants, including one summer Faculty Research Grant, two Faculty Development Grants, one International Development Fund Grant, and two UW System Grants. One of the UW-System grants was a 3-year grant for over \$120,000 to fund the FastTrack Program. The second was a \$50,000 grant for increasing student retention and

graduation. The one new external grant from the Bill and Melinda Gates Foundation, used to fund the College Readiness Math MOOC, grew out of the FastTrack Program and received lots of attention. Funding also continues for the NSF Collaborations on Riverine Ecology (CORE) grant (October 2010-December 2013).

In a less familiar area of mathematical scholarship/creativity, Karl Kattchee displayed 4 different pieces of mathematical art at two different juried exhibitions; the Exhibition of Mathematical Art at the AMS/MAA Joint Mathematics Meetings and the Exhibition of Mathematical Art at the Bridges Towson Conference.

Service

The Mathematics faculty are involved in a wide range of service activities at the departmental, college, university and professional level. The success of a department depends, in great part, on faculty involvement in all areas involved in the running of the department. Every department member is actively involved in one or more departmental activities. Along with annual department activities such as merit reviews, retention and promotion, running the Math and Statistics Club, etc., this year faculty were involved in 3 separate search and screen committees (for 7 positions), various curricular committees, math modeling contests, and much more. The department also finally reviewed its bylaws and put them into the template created several years ago.

At the college and university levels, math faculty and staff left their mark as well.

- Chairing 4 major university committees
 - Faculty Development – Barb Bennie
 - Research and Grants – Karl Kattchee
 - Promotion, Tenure and Salary – Sue Kelly
 - Graduate Curriculum – Dave Reineke
- Membership on over 15 different college- or university - wide committees including:
 - College Committee (2)
 - Undergraduate Research Search and Screen committees for positions outside of the Mathematics Department, including the Murphy Library Director, English Education and Content Literacy for the Department of Educational Studies
 - Undergraduate and Graduate Curriculum
 - Graduate Council
 - NCUR Steering Committee

Mathematics faculty are also very involved in professional and community service activities. Activities for the past year included the following:

- NCUR – (some of these activities could also be considered university service)
 - Robert Allen was Chair of the Poster Session Committee
 - Karl Kattchee was the Abstract Review Coordinator for math and computer science
 - Nearly half of the department reviewed abstracts for the conference
 - Many faculty served as session moderators

- Board of Governors of the Mathematical Association of America (Andy Matchett)
- Editorial Board of the College Mathematics Journal (Heather Hulett and Todd Will)
- Editors of the Wisconsin Mathematics Teacher (Jennifer Kosiak, Jenni McCool and Maggie McHugh)
- Higher Education representative on the Wisconsin Math Council Board (Jennifer Kosiak)
- Judging high school/undergraduate posters and research papers and various science fairs
- UW-L Girls/Boys in Science Program Director (Sue Kelly)
- Consulting and providing professional development focused on the Common Core State Standards for teachers in local school districts

The Mathematics Department ADA, Karry Auby, is also very active in service to the department and the university. The Department is very lucky to have Karry's help in organizing all aspects of the Employment Registry at the AMS/MAA Joint Mathematics Meetings. At the meetings this past year, Karry also gave three presentations and helped direct a special session on Learning Centers. In addition to her regular job duties on campus, Karry ran training sessions for ADAs on using Online SEI's, served as Chair of the Classified Staff Council and the Search and Screen Committee for the Web Content Manager, Designer position and was a member of 4 other important campus committees.

SUMMARY OF ANNUAL ACTIVITY
MICROBIOLOGY DEPARTMENT
(June 1, 2012 - May 31, 2013)

The Microbiology Department had a successful 2012 - 2013 school year. The major accomplishments in the areas of *Teaching*, *Scholarship*, and *Service* are highlighted below. The department was involved in several activities during the year that do not fit under above categories. These items are listed under *Other Key Highlights*. I would like to call your attention to some unique items listed under this heading. If you would like the report in a different format or need additional details, please contact me.

Teaching

The department continued the tradition of offering a wide range of General Education, Core and Elective courses to meet the needs of not only Microbiology and Clinical Laboratory Science majors but also the students majoring in other science and non-science disciplines. As in the past, our *Global Impact of Infectious Disease* (MIC 130) course was a very popular course. This course served 152 students during the year. Although there was demand for more seats, we could not offer more sections of this course because the instructors who routinely teach this course, Drs. Hoffman and Schwan, were either on sabbatical or on reassigned time to attend to NCUR duties. The other two introductory microbiology courses, *Microbes and Society* and *Fundamentals of Microbiology* also had very good enrollment. This year, it was our department's turn to teach *Women in Science* (SAH 307) course. Drs. Bratina and Taylor were involved in teaching the course. Overall, we had good enrollment in all of our courses. In addition to teaching in formal classroom setting, the faculty were actively engaged in one-on-one mentoring of undergraduate and graduate students. During the year, faculty and instructional academic staff:

- Served as thesis/project advisors for twenty-one (21) graduate students.
- Served on the graduate committees of another fourteen (14) students.
- Provided opportunity and mentored thirty-three (33) undergraduates as they pursued independent research.
- Advised four (4) students as they pursued internships at City Brewery and Davy Laboratories.

Scholarship

Microbiology faculty and instructional academic staff remained very active in their pursuit of scholarship and professional development endeavors. Highlights of scholarship activities include:

- Six manuscripts were published in the peer reviewed journals.
 - Two graduate and two undergraduate students are coauthors on three of these publications.
- Two manuscripts have been submitted to the peer reviewed journals for publication.

- Three presentations were made at National/International meetings. These have been published in proceedings.
- Fifteen additional presentations were given at Local/Regional/National/International meetings.
 - Three of these were presented/authored or coauthored by the graduate students.
 - Seven undergraduates authored/coauthored/presented six research papers.
- Reviewed seventeen manuscripts for prestigious journals such as Journal of Medical Microbiology, Journal of Applied Microbiology, International Journal of Nanomedicine, American Journal of Infection control, British Microbiology Research Journal, Journal of the World Aquaculture Society, Enzyme and Microbial Technology, and Journal of Industrial Microbiology and Biotechnology.
- Reviewed two grant proposals.
- Submitted one discovery to the United States Patent Office.
- Received \$146,513 in new grants.
 - Two UW - L grants (three members) for \$22,648.
 - One individual WiSys/System grant for \$45,888.
 - Three collaborative WiSys/System grants for \$77,977.
- Research activity on continuing grants worth \$760,923 is progressing well.
- Two grant applications for a total of \$715,440 are under review
 - One is a collaborative project between departments of microbiology, biology, and chemistry and biochemistry, and seeking funding from the System.
 - Another is a collaborative project involving researchers from UW-L, UW-Madison, Emory University, Scripps Research Institute, Japan and Australia.

Many faculty members have worked closely with a number of undergraduate and graduate students and have helped them secure Dean's Distinguished Summer Research Fellowships (awarded one this year) and RSEL grants (awarded three this year).

Service

Microbiology faculty and staff have established a strong track record of service to the college, university, community, and the profession. This past year the department members actively served, in various capacities, on the College, and University Committees. The department members were also active in professional organizations serving in leadership roles, on editorial boards of journals, reviewing journal articles and grant proposals. The department members remained engaged in the community through the outreach activities and by serving on community organizations. Below are a few examples of types of service activities our faculty and staff were engaged in during this past year. Members had leadership roles on many of these committees.

University and College Service

- Faculty Academic Representative (FAR) - Ms. Anglehart is one of two NCAA required FARs on campus.
- Instructional Academic Staff – Chair.

- School of Education Portfolio Committee.
- Academic Program Review – Chair.
- Faculty Senate.
- WiscAMP - UW-L Liaison.
- International Education Committee.
- Provost’s Select Committee on Internationalization.
- Graduate Curriculum Committee.
- CSAH Assessment Ad hoc Committee.
- Dean’s Distinguished Summer Fellowship Committee.
- SAH 307 Oversight Committee.
- HSC Safety Committee.

Professional Service

- Editorial Board Member.
 - World Journal of Clinical Infectious Diseases.
 - Journal of Biomedicine and Biotechnology.
 - Journal of Industrial Microbiology and Biotechnology.
- Provide resources to the laboratories that have adopted the *Molecular Biology Manual: Unraveling DNA*. Drs. Rott and Winfrey are coauthors.
- Alternate Councilor, North Central Branch of American Society for Microbiology.

Other Key Highlights

- Sue Anglehart was the recipient of Provost’s Teaching Excellence Award.
- Welcomed a new tenure track faculty member, Dr. Peter Wilker.
- Hosted Two Visiting Scholars from China.
 - Dr. Bin Chen, Associate Professor of Microbiology, College of Environment and Resources, Guangxi Normal University, Guilin.
 - Dr. Huang Zhi, Professor, College of Environment and Resources, Guangxi Normal University, Guilin.
- Sue Anglehart led a group of students through UW-L Study Abroad Program to learn about Rural Healthcare in India.
- Faculty members reviewed abstracts, served as Program Chair, and Session Moderators during 2013 NCUR meeting.
- Hosted a Public Lecture and Professional Seminar by Mr. Brian Deer, Investigative Reporter from the United Kingdom. This event was part of *Distinguished Lecture Series in Life Sciences* and cosponsored by the UW-L Foundation, CSAH, Departments of Microbiology, Biology, Chemistry and Biochemistry, other campus organizations.
- Hosted two speakers under *Distinguished Speakers in Microbiology* series.
 - Dr. Thomas Friedrich, Department of Pathobiological Sciences, University of Wisconsin-Madison.
 - Dr. Douglas B. Weibel, Departments of Biochemistry, and Biomedical Engineering, University of Wisconsin – Madison.

- Hosted 17th Annual Symposium on Industrial and Fermentation Microbiology. This was one-day long event and featured six speakers. About 90 people attended this event.
- Ms. Tanya Larson, Microbiology graduate was the recipient of UW-L Murphy Award.
- Brought in more than \$12,000 dollars to UW-L Foundation to support scholarships and industrial microbiology symposium.

Section 1: Students and Programming

Last year we had proposed to uncouple the lecture and laboratory components from the Immunology (MIC 406/506) course and replace it with two new immunology courses. We received necessary approvals to implement this change. Beginning Fall 2013 we will be offering the Immunology (MIC 310) lecture only course and the Immunology Laboratory (MIC 410/510) course. During this year, we will continue to work on Clinical Laboratory Science - Master's in Biology: Clinical Microbiology Concentration dual degree program, and Master's in Biology: Clinical Microbiology Concentration - International Track.

A notable accomplishment was the one hundred percent success rate of CLS students in the National Board of Registry exam.

Section 2: Staffing, Resources and Facilities

Like many other programs we have similar concerns in terms of resources, especially, regarding long term sustainability of supplies and expense budgets. With the help of supplemental funding, so far we have been able to manage our resources prudently. However, reliance on supplemental infusion of funds is not going to provide the long term solution to the problems associated with the laboratory supplies budget. The department would like to work closely with the College Office to find necessary funds to strengthen our laboratory curriculum.

This past year we had one faculty member (Dr. Hoffman) on sabbatical leave and one member (Dr. Schwan) on reassigned time to attend to NCUR activities. The department did not recruit any individuals to replace Drs. Hoffman and Schwan. The department managed the loss of services from Drs. Schwan and Hoffman by not offering the Virology Laboratory course and internal reassignments. Dr. Peter Wilker coming on board helped ease the pressure a bit. With the retirement of Dr. Diane Sewell at the end of this school year, the department will be reexamining the staffing issues again very soon.

Section 3: Outreach Activities

The department is strongly committed to outreach activities, including reaching out to various Middle and High Schools in Wisconsin and Minnesota. This past year, the department members were involved in the following activities:

- UW-L Young Scholar Camp.
- Taught 2nd and 3rd grade students about bacteria - St. Patrick's School, Sparta.

- Provided technical and material resources to two middle school students from La Crescent - Hoakh School District for their Science Fair projects and participated in judging science fair projects.
- Development of microbiology and molecular biology labs for a laboratory techniques course at Blair-Taylor High School.
- Gel electrophoresis workshop for Onalaska High School Students.
- PCR workshop for Logan High School Students.
- Molecular Biology workshop for Onalaska High School Students.

Inclusive Excellence: The department is fully committed to the University's Inclusive Excellence initiative. Our faculty and staff have participated in various on campus presentations and workshops related to this initiative. Through our involvement in McNair Program, Women in Science course, tutoring sessions, Young Scholars program and outreach activities with high schools, we remain fully engaged in the University's Inclusive Excellence initiative. A couple of our faculty members are also involved with the UW System Women and Science Program and have participated in various workshops. The department will continue to draw on their experience to stay focused on the Inclusive Excellence program.

Section 4: 2013 - 2014

During 2013-2014 school year, the department wants to focus on a number of items to improve the efficiency of the program so that we can deliver the curriculum more effectively. To this end, the department is having a retreat end of June to discuss the curriculum and the graduate program. More specifically, during next year we would like to focus on:

- Recruiting majors.
- Establishing and strengthening relationships with alumni.
- Seeking additional Clinical Preceptor sites for CLS Program.
- Identifying internship sites.
- Expanding outreach activities.
- Addressing work-life issues.
- Updating and modernizing laboratory equipment and instruments.
- Actively engaging in fund raising with the help from UW-L Foundation.

S.N. Rajagopal, Ph.D.
 Chair
 June 2013

SUMMARY OF ANNUAL ACTIVITY
PHYSICS DEPARTMENT
(June 1, 2012 - May 31, 2013)

ACCOMPLISHMENTS

UW-L Physics Department Receives National Award

The UW-L Physics Department received the 2013 American Physical Society (APS) Award for Excellence in Undergraduate Physics Education which recognizes physics departments and /or undergraduate-serving programs in physics that support the best practices in education at the undergraduate level. The other recipients of the award are the Massachusetts Institute of Technology (MIT), Kettering University, and the Colorado School of Mines. The awards were presented on April 13, 2013 at the APS April Meeting Award Ceremony in Denver, CO. The UW-L Physics Department is the first department to receive this award in the state of Wisconsin.

UW-L Physics Department Ranked 3rd in the Nation

Each year the American Institute of Physics (AIP) Statistical Research Center publishes a list of BS-granting departments producing the most physics bachelor's degrees in the nation in its Physics Undergraduate Enrollments and Degrees. The UW-L Physics Department was ranked 3rd in the nation, averaging 23 graduates per year for classes 2008 through 2010. (www.aip.org/statistics).

During 2012-2013, the Physics Department graduated 24 physics and physics/engineering majors.

UW-L Physics Department Receives PhysTEC Grant

The UW-L Physics Department received funding for three years for the revitalizing Physics Teacher Education Program (\$152,203 - Docktor and Sudhakaran). This grant is sponsored by the Physics Teacher Education Coalition (PhysTEC) via the National Science Foundation (NSF) and the American Physical Society (APS).

The UW-L Physics Education Program was showcased in the article "APS-led Teacher Preparation Program Announces Seven New Funded Sites" for receiving the PhysTEC Award, APS News, June 2012, Volume 21, No. 6.

Distinguished Lecture Series in Physics (DLS)

The Physics Department celebrated the thirteenth anniversary of the successful Distinguished Lecture Series (DLS) in September 2012. Dr. John Mather, a 2006 Nobel Laureate and a Senior Astrophysicist in the Observational Cosmology Laboratory at NASA's Goddard Space Flight Center in Greenbelt, MD, served as the UW-L Physics Department DLS speaker on September 13-14, 2012. Dr. Mather gave a public lecture entitled "History of the Universe from Beginning to End" and a physics seminar entitled "Engineering Challenges and Scientific Capabilities of

the James Webb Space Telescope”.

Public Lecture Series in Physics (PLS)

The Physics Department introduced a new lecture series called the Public Lecture Series (PLS) during the spring of 2010. This series is based on the successful Distinguished Lecture Series and brings to La Crosse a physicist who can enlighten the public, students, and faculty with topics of current interests. Dr. Mildred Dresselhaus, professor of physics at MIT, visited the campus on April 25-26, 2013 and presented a public lecture entitled “Looking Back at My Fifty- year Career in Nano-science” and a physics seminar entitled “Why has Carbon Nano-science Become Popular?”

UW-L Society of Physics Students Chapter Receives the 2012 SPS Outstanding Chapter Award

The UW-L Society of Physics Students (SPS) received the American Physical Society (APS) 2012 Outstanding SPS Chapter Award for its involvement in local, national SPS meetings, outreach efforts to grades K-12 or the general public, participation in community service, and interactions with department alumni. This is second year in a row the UW-L SPS Chapter has won this national award.

UW-L Physics Education Major Ben Sturomski Receives 2013 Strzelczyk Award in Science and Health

Ben Sturomski (Physics Education, class of 2013) was selected as the recipient of the 2013 Strzelczyk Award in Science and Health which recognizes an outstanding senior in the College of Science and Health for academic achievement and service to the campus and community

UW-L Physics Program Undergoes Academic Program Review

The UW-L Physics Department successfully underwent Academic Program Review (seven-year cycle) during the 2012-2013 academic year. The Physics Department APR report was very well received by the UW-L APR Committee and the UW-L Faculty Senate

Faculty Accomplishments

- Dr. G. R. Sudhakaran (PI) and Dr. J. Docktor (Co-PI) received the Wisconsin Department of Public Instruction, Mathematics and Science Program Partnerships Program grant for their proposal entitled “A LOT of Science” for \$156,436 for the third year of the grant period (2013-2014).
- Drs. S. Leshner and T. Hawkins received the Wisconsin Space Grant Consortium (WSGC) grant for \$3,846 for their proposal entitled “Promoting Women in Physics & Astronomy Through a Distinguished Lecture Series at UW-La Crosse” (2013-2014).
- Dr. S. King received the UW-System grant for his proposal entitled “Spray Pyrolysis

Fabrication of Zinc Tungstate Thin films for Photovoltaic Applications” for \$44,434 (2013-2014).

- Physics faculty members (Drs. E. Barnes, J. Docktor, T. Hawkins, and S. Leshner) published four papers in refereed national/international journals.
- Physics faculty members (Drs. E. Barnes, J. Docktor, E. Gansen, T. Hawkins, S. King, S. Leshner, R. Ragan, and S. Sallmen) mentored 41 undergraduate students on various research projects during 2012-2013.
- Drs. E. Barnes, J. Docktor, E. Gansen, T. Hawkins, S. King, S. Leshner, R. Ragan, S. Sallmen and G. R. Sudhakaran, presented 28 papers (contributed, invited, and keynote) at national/international conferences during 2012-2013.
- Drs. R. Ragan, G. R. Sudhakaran, and S. Verrall served as external evaluators/ examiners on Promotion and Graduate thesis committees.

Student Accomplishments

- C. Egerer (Mentor: Dr. E. Barnes) and T. Laszczkowski (Mentor: Dr. S. Sallmen) received the 2013 Wisconsin Space Grant Consortium (WSGC) Undergraduate Research Fellowships.
- L. Hildebrand (Mentor: Dr. E. Barnes), E. Dinauer (Mentor: Dr. S. King), and Y. Talhouarne (Mentor: Dr. E. Gansen) received the UW-L Summer 2013 Dean’s Distinguished Fellowship.
- R. Allenby, J. Krueger, A. Prudhom, and J. Nehls won first prize (\$2,000) in the Wisconsin Space Grant Consortium (WSGC) Rocket Competition (non-engineering category).
- A. Prudhom was recognized as one of the Society of Physics Students (SPS) 2012 Herbert Levy Scholarship awardees and received a scholarship of \$2,000.
- UW-L Physics majors presented 14 papers (Oral and Posters) at the National Conference on Undergraduate Research (NCUR 2013) held at UW-La Crosse during April 11-13, 2013.
- E. Tennyson received admission with a fellowship to attend the University of Maryland Graduate Physics Program. A. Prudhom received admission with assistantship to attend the University of North Carolina, Chapel Hill. B. Sturomski received admission with assistantship to attend Illinois State University.

ASSESSMENT OF STUDENT LEARNING

The Physics Department is committed to assessing its courses and making sure that it is meeting all of its program goals. Our instructors employ several assessment tools and regularly modify their courses in response to both direct and indirect measures of student achievement. The Physics Department has a special committee that oversees its assessment activities and strives to assess all of its program goals by monitoring both the knowledge and skills of its current students and the achievements of its alumni. In addition to assessing individual courses, the Department has developed a “Capstone in Physics” course (PHY491) for seniors that directly measures student proficiency in several program goal areas. It also developed an alumni survey to assess how well the program prepares its students for jobs and graduate studies, and to determine the impact the physics program has played in the lives of its alumni. In addition, the Department tracks the grade-point averages of its many dual-degree students at their engineering schools to measure the success of these students in their engineering coursework.

Notable results of this year’s assessment activities include the following:

- **Impact of changing PHY 203 and 204 to workshop format:** A substantial curricular modification we have made recently focused on the format of our introductory calculus-based physics sequence (PHY203/204). In 2011/2012, we changed the format of these courses from the traditional lecture and lab format to workshop style, where there are no lectures and hands-on laboratory activities are incorporated directly into the class period. This change was made in response to nation-wide assessment data that shows that students perform better on standardized physics exams when the workshop format is used. To track how the format change has impacted our students’ knowledge and problem solving skills in the areas of Newtonian mechanics and electricity and magnetism, we have been implementing the Mechanics Baseline Test (MBT) in PHY203 and the Conceptual Survey and Electricity and Magnetism (CSEM) in PHY204. These are nationally recognized assessment tools that are used at many universities and colleges. A summary of recent results is given in the Table below.

PHY 203: MBT Results	2010	2011	2012
Pre-Test Average Score (%)	42.2	41.7	39.0
Post-Test Average Score (%)	55.4	57.8	54.7
Average Gain (%)	22.7	27.6	25.7

PHY 204: CSEM Results	2011	2012	2013
Pre-Test Average Score (%)	28.4	27.8	29.4
Post-Test Average Score (%)	56.6	56.9	56.3
Average Gain (%)	39.3	40.5	38.9

The results indicate that the change in format has not negatively impacted student learning in these courses. Our students continue to perform at or above the national averages on these exams, and their gains and the post-test scores have remained fairly constant during the changeover. In addition, initial indications are that the format change has positively impacted student retention within the physics major. Indirect measures

indicate that many students do like the hands-on nature of the new format, although some feel the class period (2.5 hours, two days a week) is too long. Starting in the fall of 2013, we will change the class schedule to 2 hours, Tuesday and Thursday, and 1 hour on Friday.

- **Assessment of undergraduate research:** One of the hallmarks of the UW-L Physics Program is its dedication to undergraduate research. This year we began assessing our undergraduate research program with a focus on determining how many of our physics majors are getting involved in research, either with UW-L faculty or through an external REU, and how many are presenting their research results, either at conferences or through published papers. Overall, we would like to know how getting involved in undergraduate research impacts the ability of our students to gain acceptance and funding to graduate programs or to obtain jobs in STEM fields.
- **Offering two sections of PHY 321 in the fall of 2013:** Classical Mechanics (PHY321) is a required course for our physics majors and physics/engineering dual-degree majors. Currently, the course is taught using an engineering-specific textbook to accommodate the curricular requirements of our partnering engineering programs and to maintain continuity with our Statics (PHY 320) course. In response to student feedback, we will be offering an additional section of PHY 321 in the fall of 2013 that is better suited for our physics majors. The course will be taught using a physics-specific textbook and will emphasize concepts and topics that are particularly important for graduate studies in physics. It will also better prepare our physics majors to take our new Advanced Classical Mechanics (PHY 421) course that was recently developed.

OUTREACH ACTIVITIES SUMMARY

One of the hallmarks of the Physics Department is its dedication to community outreach and recruitment activities. Faculty, staff, and students organize a number of activities to promote interest in science and technology in people of all ages and to attract attention to UW-L's Physics Program.

- Drs. E. Gansen, T. Hawkins, and R. Ragan conducted Physics and Laser Light Shows for approximately 700 local elementary and middle school students. UW-L physics student helpers included A. Kubicek, L. Sedbrook, Z. Tully, and H. Vo. The group presented eight shows on May 21-24, 2013.
- Drs. E. Gansen and S. King conducted Physics and Laser Light Shows for "Boys in Science: Physics Action" and for "Girls in Science: Physics in Action" on June 24, 2012. UW-L physics student helpers included J. Krueger and L. Sedbrook.
- Dr. S. King coordinated an introduction to atomic force microscopy for students at Antigo High School (approximately 200 students) and Winniconne Middle School (approximately 60 students). This outreach program gave students an introduction to the instrumentation utilized in nanoscience and technology, and allowed them to image a cellulose acetate array 1/1000 the diameter of a human hair!

- Mr. R. Allen, Planetarium Director, presented planetarium shows for local schools and organizations throughout the year. A total of 178 presentations (total attendance of 4,542) were done in the planetarium, broken down as follows:

Astronomy Students - 46 presentations (lab classes)	1,033
University Groups - 6 presentations	92
Album Encounters - 27 presentations	466
Private Groups - 32 presentations	687
School Groups - 43 presentations	1,755
Public Programs - 24 presentations	449

The biggest hurdle facing the Department in keeping the planetarium running is the fiscal resources needed to hire a Planetarium Director. This is a 25% temporary position and requires approximately \$15,000 in annual salary. We point out that all of the paid directors have spent far more than the 25% for which they have been compensated.

- Dr. J. Docktor continues to incorporate service learning into PHY 106 (Physics for Educators). Students in the course performed interactive demonstrations and activities at the La Crosse Children's Science Museum on Saturdays during the fall and spring semesters.
- Dr. J. Docktor coordinated a physics demonstration show and physics fair for sixth graders at Lincoln Middle School on May 7, 2013. There were seven UW-L students who also volunteered (three physics majors and four students from PHY106). The show started with a whole-group demo show (air bazooka, bed of nails, hovercraft) followed by six stations set up where groups of students could rotate through each station of demos. There were three classes of middle school students (approximately 70 students) who interacted with the demos.

INCLUSIVE EXCELLENCE SUMMARY

To encourage recruitment and retention of historically underrepresented groups in physics, we continue to send out a revised recruitment letter which is more welcoming. In addition, various faculty members have completed professional development activities relating to student retention issues in STEM. The department's Inclusive Excellence committee has identified potentially useful research on how various pedagogical choices affect under-represented groups in STEM courses, and will be disseminating this information to the department, as well as investigating further. In Spring 2013, the woman speaker for our Public Lecture Series met with Women in Physics and Women in Science students – a trend we hope can continue. Finally, the department faculty is becoming increasingly diverse: including recent hires, sixty percent of our faculty will be diverse in Fall 2013 (four women, four minorities).

NEW INITIATIVES

PHY 203/204 (General Physics I and II)

In the fall of 2011, we introduced a new, integrated version of our introductory, calculus-based physics sequence. Rather than having separate lecture and laboratory sections, students participate in active-learning sessions punctuated with hands-on activities. Each class period is prefaced with an online pre-class quiz based on readings related to the upcoming material. During class, students work in groups of three (ensuring that women are majorities in their groups) to a) make predictions and form conclusions for interactive lecture demonstrations; b) perform experiments, make measurements, and calculate quantities; and c) practice problem-solving techniques. Experimental activities take advantage of the latest technologies; for example, free-fall is investigated by making a movie of a dropping ball with a digital video camera and a laptop with image processing capabilities. The movie can be analyzed frame-by-frame to provide raw data which can then be modeled by a number of mathematical descriptions. Students must decide which model best describes the data and then interpret the parameters of the model in terms of physical quantities. Problem-solving techniques are modeled by the instructors. Students are regularly required to present solutions to problems, during which time they are questioned by their peers as well as the instructors. Another important component of this new approach is that each student completes a weekly journal to provide informal feedback on successful aspects as well as on areas of confusion.

The department faced several challenges with PHY 203 and 204 including space constrictions, lack of equipment, and increased enrollment numbers. Now, with room 252 in Cowley Hall being assigned to the physics department and with funding from the Dean to address our equipment needs, two of these challenges seem to have been overcome for now.

Secondary Physics Education (Physics Education Major)

The UW-L Physics Department introduced a new undergraduate program “Secondary Physics Education” in the fall of 2011. Under this program a student can earn a B.S. degree in Physics Education with Wisconsin teacher certification in four and a half years. This integrated program provides an excellent background in physics and certification to teach at the high school and/or middle school level. The rationale for introducing this new program is to ensure that more qualified physics teachers will be part of the educational infrastructure in Wisconsin, resulting in increased student learning and performance in STEM (Science, Technology, Engineering, and Mathematics) areas.

The department hired Dr. Jennifer Docktor, who has expertise in Physics Education Research (PER), to spearhead this new program. She is also responsible for Secondary Teacher Education Program (STEP) admissions, advising, and student teacher supervision. She has already received funding from PhysTEC for three years to recruit students to the program.

The following is a list of selected outcomes for the last two years including successes and challenges with regards to Recruitment and STEP Collaboration:

Recruiting Students to the Program

Successes

- The number of students majoring in Physics Education rose from six in 2011-2012 (with one graduate) to nine in 2012-2013 (with three graduates).
- Three of the four new students were recruited from the pool of physics majors.
- A Physics Education student (Ben Sturomski) was selected as the recipient of the 2013 Strzelczyk Award in Science and Health which recognizes an outstanding senior for academic achievement and service to the campus and community. Another Physics Education student (Liz Rosendale) was selected to speak at the December 2012 Commencement ceremony.

Challenges

- The physics education major includes a substantial number of education courses which cannot be taken concurrently, which lengthens the degree completion time for students who switch majors late in their program.
- The GPA requirement for being admitted into the School of Education impacts the progress of some students through the teacher program.

STEP Collaboration

Successes

- Discipline-based education faculty members in Physics, Biology, Chemistry, and Math have successfully taken on new roles with the Secondary Teacher Education Program and the School of Education to improve the experience of teacher candidates.
- The Physics Department is very actively involved in outreach events and professional development workshops with local schools, and involves undergraduate students in these events.

Challenges

- The Physics Department receives more requests for outreach events than it can reasonably respond to (especially demonstration shows).
- Local schools recently instituted a new policy which requires all visitors to complete a Volunteer Criminal Background Check two weeks in advance of an outreach event.
- There is a heavy time commitment on the part of content faculty involved in teacher education, especially to attend meetings and supervise student teachers.

**SUMMARY OF ANNUAL ACTIVITY
DEPARTMENT OF RECREATION MANAGEMENT
AND THERAPEUTIC MANAGEMENT
(June 1, 2012 - May 31, 2013)**

The 2012-2013 academic year may represent the second year of a three-year transition for the Department of Recreation Management and Therapeutic Recreation. With retirements, new GQA positions, changes in personnel within Department administration, fresh ideas are working their way through the various programs in the Department. Details of some of the changes and accomplishments follow:

Section 1: Programming

All four academic programs in the Department made changes to their curriculum.

Recreation Management Undergraduate The most significant curricular revisions in the Department took place with the Recreation Management undergraduate program. These changes were due to a shift in the overriding purpose for the curriculum. For at least 20 years, the program has focused almost exclusively on professional preparation. While professional preparation continues to be a high priority, the new curriculum is infused also with an emphasis on the importance of leisure in society and with an individual's personal wellbeing (as opposed to various management skills associated with the rec profession). Some content was changed in select courses; an outdoor recreation course (Rec 306) went from being an elective to being a required course, and a newly developed civic engagement course (Rec 351) was added as a required course.

Therapeutic Recreation Undergraduate The TR undergraduate program expanded its offerings this past year. RTH 314 Wheelchair Sports and Recreation was offered for the first time this spring. The Department also developed a series of three on-line elective TR courses (disabling conditions, coping with pain, and coping with grief) through continuing education. This is part of an already solid TR presence in continuing education offerings.

Therapeutic Recreation Masters The Masters program in Therapeutic Recreation (TR) made three improvements to its program. First of all, it offered for the first time RTH 702 Foundations in Therapeutic Recreation. This is a graduate level introduction into the TR profession. Previously students were required to take a series of undergraduate courses to gain this background; now the content is combined into a single introductory course designed specifically for graduate students. Second, with the increased number of TR graduate students, the Department has been able to offer distinct 500-level sections of courses separate from their 400-level counterparts. This means that, for the first time, graduate students are able to take required slash courses that are "graduate students only." These two steps are tangible steps to distinguish the graduate program from the undergraduate program. Finally, probably because RM&TR now offers its own graduate research methods course (Rec 720), a significantly larger percentage of TR graduate students are choosing to complete a graduate project or thesis (as opposed to taking a comprehensive examination).

Recreation Management Masters While lacking resources to add graduate only courses, the Department did elevate the level of difficulty of two current 400-level courses, so that they might be offered as elective slash courses. These are courses in planning (Rec 400/500) and budgeting (Rec 404/504). The Department also revised the RM graduate program's deficiency courses, so that all REC deficiency courses would be at a 300-level.

Section 2: Staffing, Resources and Facilities

Perhaps the most significant change during the 2012-2013 academic year was a continued youth movement within the Department's faculty. Dr. Laurie Harmon is a new faculty member in Recreation Management. Tara DeLong is new Instructional Academic Staff (IAS) in Therapeutic Recreation. Also after a failed search for a tenure track person in Therapeutic Recreation, current IAS Lisa Savarese agreed to stay on for an additional two years in her position. Counting Dr. Stephen Lewis and Dr. Jin Young Chung, the Department has now added five new members in the past three years. Next academic year, two more people will be hired. One position comes because of the 2012-2013 failed search in Recreation Management to replace the recently retired Keith Wadell. The other will be a new search in Therapeutic Recreation, brought on by the announced retirement of Dr. Nancy Navar. That means that in 2014-2015, junior faculty will outnumber senior faculty for the first time in anyone's memory (possibly in the 53-year history of the Department).

With a recent increase in the number of faculty (from 10 to 13 people), the Department has now grown beyond its suite of offices on the second floor of the Health Science Center. In 2012-2013, one storage space (aka "the Library") was converted to an office for graduate assistants (GAs). This converted office will be used for GAs one more year (2013-2014), but in 2014-2015, it will be needed to accommodate a new faculty member – and there will be no space at all in the suite for GAs. For 2013-2014, the six GAs will be housed 1) two in "the library" office, 2) three in basement cubicles formerly used by Biology, and 3) one at a table in the office of the Department chair. During the 2014-2015 academic year, more permanent accommodations for GAs will have to be established.

Section 3: Outreach Activities

Educational inclusion, especially involving people with disabilities, and community engagement are integral parts of both the Department curricula and service responsibility. Examples are numerous and simply part of the day-to-day activities within the curriculum. All undergraduate and most graduate students provide 50-100 hours of service, then complete a full semester internship in a recreation-related agency. This is separate community involvement from the many in-class service projects that they regularly complete. A representative sample of departmental service involving inclusion and/or community engagement includes:

Inclusive Excellence

- Wheelchair Sports and Recreation (RTH 314) was offered as a course for the first time
- In conjunction with Idyll Arbor Publishers and the Forget Me Not Foundation, faculty and students developed an assessment for the Foundation
- Recreation Management students attended and reflected upon UW-L's Diversity Dialogues

Community Engagement

- Graduate students developed promotional videos for La Crosse's Irishfest
- Graduate students developed environmental education programs for Rainbow Ridge Farms
- Therapeutic Recreation faculty developed training packets to enhance the mandatory 50-hour community work/volunteer requirement
- TR students volunteered as program facilitators at Camp Yellow Ribbon for youth whose parents are deployed in the military
- TR students facilitated programs at hospital Teddy Bear Clinics.
- TR students helped both the local YMCA and Boys & Girls Club to write grants to fund recreation services for children with disabilities
- Recreation Management students provided recreation services for people residing in La Crosse Housing Authority properties
- Recreation Management students offered recreation programs at more than a dozen local recreation agencies, including La Crosse Park and Recreation, Onalaska Parks and Recreation, YMCA, Justin Trails, and UW-L Eagle Recreation Center.
- Faculty served on the boards of local recreation-related agencies, including Onalaska Park and Recreation Board (Berns), Wisconsin Conservation Corps (Simpson), Wisconsin Therapeutic Recreation Society (Lewis serving as President), Mental Health Coalition of the Greater La Crosse Area (DeLong).
- Faculty consulted several local recreation-related agencies, including La Crosse Area Visitor and Convention Bureau (Widuch), Grow Your Brain (Harmon), and North American Squirrel Association (Ardovino).

International Activities

The Department was less involved in international activities in that no travel courses were offered during 2012-2013. Faculty did make a few presentations in Europe and Asia, and two faculty members continue their ongoing research efforts in Asia.

Section 4: 2013-2014

Challenges for 2013-2014 will include:

- Filling the two tenure-track positions
- Handling the large number of students in the Therapeutic Recreation undergraduate program
- Continuing the slow, but steady increase in faculty scholarship (i.e., grants and refereed publications)

A few of the RM&TR objectives for the coming academic year include:

- Successful completion of two (2) search and screens, one in Recreation Management and one in Therapeutic Recreation
- Completion of the NRPA (National Park and Recreation Association) Accreditation Self-Study (also to be used for upcoming university program review) and preparation for the accreditation visit in the 2014-2015 academic year.
- Completion of a cooperative agreement between UW-La Crosse and Winona State University. This agreement will allow graduate students to take courses at each other's

institution. Students will pay tuition to the school offering the course, but will easily have the course apply to their respective programs.

- Progress on (completion of?) a proposed 2+2 collaborative degree program with UW-Baraboo. The program would allow a student to complete an associate degree from UW-Baraboo and a bachelor's in Recreation Management from UW-L. It would be designed to help students in the Wisconsin Dells area to prepare for a career in the tourism industry. This is one step in a larger goal to increase enrollment in the Recreation Management undergraduate program.
- Clarification of barriers to enhanced community service and service-learning (i.e., risk management, off-campus travel issues, criminal background checks)
- Continued exploration of incentives to increase faculty scholarship (specifically grants and refereed publications), including adjustments to teaching loads.
- Revision of undergraduate Therapeutic Recreation curriculum.
- A plan to address the large enrollment in the Therapeutic Recreation undergraduate program. Enrollment currently exceeds numbers that can be handled by the Department staff.
- Permanent solution to the lack of office space for RM&TR staff.

Other: Departmental Accomplishments in Scholarship and Service The faculty in the Department took steps to enhance scholarship in the Department. For example, after failing to receive a single internal UW-L grant 2011-2012, there was concerted effort to submit stronger applications during 2012-2013. The result was five (5) funded projects out of eight (8) submissions. A summary of the more significant accomplishments are as follows:

Publications, Presentations, and Grants

Four refereed articles (Chung, Murray, Simpson) were published during the past academic year. Three others were accepted (Chung, Harmon), and another dozen remain under review. Additionally faculty members appeared in two conference proceedings (Ardovino, Lewis) and as chapter authors in two edited books (Harmon). One revised book was published (Simpson) and a new book received final revisions, soon to be published (Holland). Dr. Harmon published a National Park Service technical report. Altogether, faculty made 17 presentations, three international (Ardovino, Chung), twelve national (Berns, Chung, Harmon, Murray, Simpson), and two regional (Berns, Lewis). One of two external grants was funded, it being Dr. Bern's grant with the National Tractor Pull Association. As already mentioned, five internal UW-L grants were funded (Berns, Chung, Harmon, Lewis).

Notable Service

Faculty served on six college committees and six university-level committees. One faculty member served as university graduate director on an interim basis. More notable, however, is the service to the community and the profession. As already alluded to in the Section 3 of this report, service outside of the university is a fundamental part of the department's sense of professional responsibility. In addition to the several regional and state leadership roles listed in Section 3, faculty assumed similar positions on the national level as well. These include Northeast Recreation Research Symposium Board (Harmon), American Therapeutic Recreation Association Board (Navar), Korean American Hospitality and Tourism Educators Association Conference Group (Chung), Association for Experiential Education Conference Group (Berns),

Park Resources Network of the National Recreation & Park Association (Harmon), and Journal of Experiential Education Editorial Board (Simpson).

Annual Report on the Statistical Consulting Center
August 15, 2012 to May 20, 2013
Melissa A. Bingham, Director

The Statistical Consulting Center (SCC) provides advice and assistance in various areas of statistics to members of the UW-L campus community. Over the 2012-2013 academic year, the SCC served 30 clients. This included 9 faculty members, 15 graduate students, and 6 undergraduate students. Meetings with graduate and undergraduate students were also sometimes attended by faculty advisors, who have not been included in the final client count.

While many (approximately 30%) of the SCC's clients come from the Biology Department, clients have also included those from the following areas: Finance, Medical Dosimetry, Athletic Training, Human Performance, Student Affairs Administration, Psychology, Therapeutic Recreation and Recreation Management, Accounting, Community Health Education, and Educational Studies. As such, the SCC serves a wide variety of departments and programs on campus.

The SCC also provides valuable experience for students majoring in Math with an Actuarial Science Concentration or Statistics Emphasis, as all students are required to enroll in at least one credit of MTH 440: Statistical Consulting as part of the major. This year enrollment counts for MTH 440 were 10 in the fall semester and 7 in the spring semester. Students, under supervision of the SCC director, met with and worked on projects for the clients, giving them a true consulting experience. Projects that students worked on this year included:

- Analyzing the effect of a toe sleeve on participants' pain tolerance in an ice bath
- Determining if body image perception differs across various sectors of the student body (by gender, grade classification, major, socioeconomic status, etc.)
- Investigating drinking habits, nutrition, and exercise among UW-L students via information obtained in a survey
- Analyzing the prevalence of recommending exercise as a form of psychological therapy among practicing therapists
- Examining the effects of dehydration on wrestlers' cognition (memory, visual motor skills, reaction time, and impulse control)
- Predicting first semester UW-L GPA from a variety of student characteristics (ACT score, high school percentile, gender, previous honors courses or college work, state of residency, etc.)
- Investigating the effect of first math course taken at UW-L (MTH 050, MTH 051, or MTH 145) on success in MTH 145
-

This past year the SCC also formed a working relationship with Institutional Research at UW-L, directed by Natalie Solverson. Many of the larger scale projects that are of interest to IR are perfect exploratory and open-ended projects for MTH 440 students to tackle. The last two projects included in the above list are projects that came out of IR. It is hoped that the SCC can

continue to work with IR on various projects and a couple of projects are already in the works for this summer.

Lastly, to gauge client satisfaction with the SCC, a short survey was sent out to all clients who used the SCC's services. Clients were asked to rate their satisfaction with the overall services of the SCC and the timeframe in which their questions were answered (5=Satisfied, 4=Somewhat Satisfied, 3=Neutral, 2=Somewhat Dissatisfied, 1=Dissatisfied). Averages are given in Table 1 below. Clients were also asked if they would choose to use the SCC again in the future for statistical advice, with 100% of respondents indicating that they would use the services of the SCC again. Additional comments provided by survey respondents are also provided in Appendix A. As can be seen, feedback regarding the services of the SCC over the past academic year was very positive.

Question	Average Score
How satisfied were you in the overall services you received from the Statistical Consulting Center?	4.75
How satisfied were you in the timeframe that the Statistical Consulting Center answered your questions by?	5.00

Table 1: Average scores from the SCC satisfaction survey (n=12 respondents)

Appendix A: All Additional Comments from the SCC Satisfaction Survey

- My experience with the SCC was fantastic. The SCC staff helped explain things thoroughly and was very prompt. Thank you!
- Thank you very much Dr. Bingham! Your assistance was tremendously appreciated!
- Very helpful and timely response.
- Very easy to work with and produced the material needed in a timely matter and was very detailed.
- The staff at the statistical consulting center was very helpful and explained everything in a way that I could understand it. Overall 100% pleased with all the help they provided me with.



The First Year Research Exposure (FYRE) program at UW-L is a new academic diversity initiative in the UW-L College of Science and Health (SAH) and the Wisconsin Alliance for Minority Participation, which employs an informal learning community model in order to improve achievement and retention of first-year students of color at UW-L in the STEM fields. In 2012-2013, we served 10 eligible students with the following results:

- 10/10 (100%) of FYRE students enrolled in BIO 105 participated in our twice weekly review sessions and passed the class with grades of “C” or better;
- 5/5 (100%) of FYRE students enrolled in CHM 103 participated in our twice weekly review sessions and passed the class with grades of “C” or better;
- 9/10 (90%) of FYRE students enrolled in at least one Mathematics course (MTH 050, 051, 145, 150, 151, and/or 207) and earned a grade of “C” or better;
- Students participated in 12 distinct research Exposure Modules, where they earned about current STEM research happening on campus and in the community. Examples include participation in UW-L’s Faculty Research Day; tours of Mayo Graduate School and the Gundersen Lutheran Medical Research facilities; volunteering at the National Conference on Undergraduate Research; and visiting laboratories and field sites of undergraduate, graduate and faculty researchers;
- 9/10 (90%) of FYRE students were retained in the UW-L College of Science and Health, with one student transferring to UW-Madison for the 2013-2014 academic year in order to pursue biomedical research opportunities there; and
- 3/10 (30%) of FYRE students began undergraduate research projects in the Spring or Summer terms, including one student who was accepted into a Microbiology REU program at the University of Minnesota.

Research conducted by a McNair Scholar in the Psychology department confirmed that FYRE students are more likely to be resilient in their pursuit of STEM degrees as a result of their program participation. This program has received renewal funding for 2013-2014, and will increase its number of students served from 10 to 12.



The McNair Scholars program at UW-L began in 2009 and serves 28 students annually, at least 50% of whom have STEM majors each year. Our objectives are to increase the number of underrepresented students of color, and low-income, first-generation students, who prepare for, pursue, and persist in graduate studies in fields leading to a Ph.D. It is funded through the U.S. Department of Education with additional financial support from the Provost and the College of Science and Health.

In the summer of 2013, we supported 11 on-campus undergraduate researchers. One additional student was supported with a Dean's Distinguished Fellowship, and another was chosen to participate in the Mayo Graduate School's Summer Undergraduate Research Fellowship (SURF) program.

In 2012-2013, we had 9 graduates from our program, 7 of whom (77%) have accepted offers to begin graduate study in the fall term of 2013. Their destination institutions are as follows:

- University of North Carolina-Chapel Hill (Mathematics)
- University of Wisconsin-Madison (Biology)
- New Mexico State University (Anthropology)
- University of Maryland (Molecular Medicine)
- University of Minnesota (Social Work)
- University of Michigan (Educational Psychology)
- University of Wisconsin-La Crosse (Recreational Management)

13 program alumni began or continued their graduate studies in 2012-2013, and two additional alumni will enroll as graduate students for the first time in 2013-2014. One McNair alumnus graduated with a Master's degree in Student Affairs from Iowa State University in 2013.

Murphy Learning Center 2012-2013 Year End Report

*Submitted by Maggie McHugh
Murphy Learning Center Director*

The Murphy Learning Center (MLC) provides tutoring services in Mathematics, Sciences, and Writing, housing more than 70 student employees or volunteer tutors. The following items summarize MLC activities for the 2012-2013 Academic Year. The MLC daily usage counts exceeded 8,600 students with an increase in usage from 2011-2012. MLC students routinely express their satisfaction with the tutoring services, ranking our tutors as “Above Average” or “Average” in their content knowledge, professionalism, personable attitude, and flexibility over 87% of the time.

This increased usage brought forward several challenges of adequately serving each student and having the physical space to serve those students. An MLC advisory committee was formed to discuss current MLC practices, enhance assessment practices, implement training processes, and envision the future of the MLC. The MLC implemented formalized tutor training sessions with the long-term goal of obtaining national accreditation.

From an assessment survey taken during the Fall 2012 semester, this student feedback summarizes the essence of the MLC. “The Learning Center is a great resource for all students. I find it especially helpful because I am a non-traditional student that needs a lot of assistance in my classes. I always feel welcome and respected.”

- 1) Background
- 2) Student Usage
- 3) Tutors
- 4) Assessment
- 5) Advisory Committee
- 6) Faculty and Staff
- 7) Facilities
- 8) Future Plans

Background

The Murphy Learning Center (MLC) was established in the Fall semester of 2009. Prior to that point, departments on campus offered tutoring services in classrooms, office spaces, and even the basement of the Whitney Dining Center. Student led initiatives spurred on the development of one primary location for the tutoring services. The MLC is mainly funded by UW-L Differential Tuition with departments providing some additional funds for tutoring expenses; a proposal is submitted each Fall to the Academic Initiatives Oversight Committee which allocates funding out of Differential Tuition. The MLC has been funded through AIOC since 2010.

The primary intent of developing the MLC was to house a variety of tutoring services in one area, specifically the library where students go to study and learn. In 2009, the MLC offered tutoring in the areas of Mathematics, Physics, and Writing. Throughout the ensuing semesters, the disciplines of Biology, Chemistry, Microbiology, and Earth Science also added tutoring to the MLC. The upcoming 2013-2014 school year will see the addition of the Public Speaking Center.

The mission of the Murphy Learning Center is to foster an inclusive environment where academic learning flourishes. This goal is accomplished in two main ways: 1) to enhance the academic learning and content understanding of students and 2) to enhance the skills of tutors to become content experts and peer mentors.

Student Usage

Students continue to utilize all of the resources at the Murphy Learning Center. Our student contacts continue to show a great increase in the overall number of times students frequent the MLC.

Below is a table comparing the student usage counts for the academic years of 2012-2013 and 2011-2012. Science counts include the disciplines of Biology, Chemistry, Physics, Microbiology, and Earth Science.

	AY 2012-2013	AY 2011-2012	Percent Change
Math	4550	4400	é 3.5%
Science (missing CHM Spring '13)	2250*	2400	ê 6.25%
Writing	1870	1600	é 17%
Total	8670+	8400	é 3.2%

The increase in students utilizing the MLC can be attributed to a variety of factors, including but not limited to, an increase in faculty knowledge of the MLC services, a push for faculty to put a standardized line about MLC services on course syllabi, an online presence (website continually updated), and a greater attention by tutors and front desk workers to the sign-in process.

The Spring 2013 semester saw some challenges with attention to student log-ins because of a decentralized location during construction. Additionally, the Chemistry advisor left the University before reporting final numbers for Spring 2013. Therefore, Science most likely had equal numbers if not an increase.

Tutors

The Murphy Learning Center has over 70 students who are employed or volunteer as tutors. All tutors must apply for a position; MLC advisors conduct interview with each potential tutor

before hiring. The MLC also employs work-study students to assist in front desk coverage and daily operations. Ideally, the number of work-study students for the AY 2013-2014 will increase from 2 to at least 3 or 4 to ensure nearly full coverage of the front desk. This increase coverage would ensure that the MLC attends to its mission of creating a welcoming space for all students.

Throughout the AY 2012-2013, 14 tutors participated in six, one-hour long tutor training sessions. Through active learning, tutors engaged in furthering their knowledge of concepts such as learning styles, role modeling, referral skills, critical thinking skills, active listening and paraphrasing, and modeling problem solving.

Given the lack of a centralized facility, this tutor training program did not occur in Spring 2013; however, it should continue in the Fall 2013 semester as the MLC prepares to submit an application for National Accreditation through the International Tutor Training Program Certification endorsed by the College Reading and Learning Association. (<http://www.crla.net/ittpc/index.htm>)

Assessment

During the Fall 2013 semester, a Qualtrics survey was sent out to all students enrolled in a course where tutoring is offered in the MLC. In total, 386 students participated in the survey. Students were asked whether or not they used the MLC. Some of the survey results and student comments (transcribed as written in the survey) are summarized below.

For students who responded that they did use the MLC...

- Approximately 65% of students reported going to the MLC “daily” or “weekly” as compared to “monthly” or “before tests or quizzes.”
- Over 87% of the time, tutors were ranked as “Above Average” or “Average” in their content knowledge, professionalism, personable attitude, and flexibility.
- “The Biology tutors are so helpful. I really struggle with understanding what my professor expects me to know from lecture vs. the textbook and the tutors always seem to help me make sense of all the information I have.”
- “I really think the Learning Center is the best resource for students at UWL in Math. The tutors are not only smart but also very patient. They try their hardest to help me with every problem and make me actually think about what I am doing.”

MLC Advisory Committee

Within each discipline, a faculty or staff member has committed to assisting with various processes of the MLC. The MLC Director is hired as a 50% position. Of the remaining MLC Advisors, Dr. Virginia Crank has the only paid position as she receives a quarter-time buyout to run the Writing Center. All other MLC advisors have agreed to this duty as part of their service to the department. The table below lists these advisors:

Name	Department
Maggie McHugh (2011-2013)	MLC Director, Mathematics
Dr. Virginia Crank	Writing Center Director, English
Dr. Lee Baines	Biology
Dr. Shauna Salmen	Physics
Dr. Melissa Anderson (2012-2013) ** Kate Friesen (2013-2014) ** Eugenia Turov (2014-2015)	Chemistry
Dr. Colin Belby	Earth Science
Suzanne Anglehart	Microbiology
** Dr. Tony Docan-Morgan (2013-2014)	Public Speaking Center

In the Fall of 2011, this group decided it would be beneficial to meet approximately 3 times per semester. During these meetings, we discuss issues related to best practices in tutoring, assessment strategies, promotional ideas, and future ideas for the MLC.

Faculty and Staff

Faculty and staff from the University can often be seen at the MLC throughout the course of a regular day. The MLC Advisors often assist in the tutoring center, providing a model of best practices for their tutors in addition to general supervision and evaluation of tutors.

Furthermore, faculty and staff from Mathematics utilized the MLC as a place to house office hours. In general, the faculty and staff reported an increase in the number of students who would visit them at the MLC versus their personal office. Some have attributed this to a more casual, flexible learning environment. The presence of faculty in the MLC aids the tutors in viewing more models of teaching practices.

Facilities

The Murphy Learning Center began renovations and expansion in Spring 2013. The design of the MLC provides for maximum flexibility as there are very few permanent walls. Spaces have been designated for the Writing Center and the Public Speaking Center within the MLC. All tables are on castors so that the students can create small or large study groups. Dividers are easily moved and contain white board space.

A side room with the SmartBoard is intended to be used as “overflow” for regular tutoring as well as the room for Peer Review Sessions. These sessions can be streamed live using BlackBoard Collaborate and recorded for other students to view at a convenient time. Computers for student log-in are at each entrance.

Future Plans

The MLC has many plans in place to continue growing. First of all, a brochure is being created to help provide faculty, staff, advisors, and students information about the services available at the MLC. Tutor training will continue in Fall 2013 with three, two and a half hour trainings held on Friday afternoons (decided upon by students). MLC Advisory Committee meetings must be held at regular intervals throughout the Academic Year. Advisors should take an active and regular role in tutor training.

To Do:

- *** Open House
- *** Fall Schedule (General & Stats specific) (Maggie has student submitted sheets)
- *** Work Study students for front desk
- *** Brochure- Florence Aliesch (began Fall 2012- stopped due to renovations)
- *** Change MLC website ownership & prepare for Fall
- *** MLC purchasing card (I never submitted my application for one, but I think someone should have a card to more easily streamline finances)
- *** Move into the MLC (when it is done!!!)

Early (August 2012) Starts for New Faculty for Grant Proposal Writing

Department Faculty Member	Grant Agency	Grant Amount		Requested	Match		Reviewer's	Future	Comment
		Requested	Funded	Indirect	Requested	Source	Comments	Plans	
Biology									
Barrett Klein	UWL Faculty Research Grant	\$19,244	\$7,894						
	UWL International Development Grant	\$2,753	\$2,753						
	UWL Travel Grant	\$2,030	\$2,030						
	NSF, Integrative Organismal Systems	\$0	\$0				Yes	Yes	Preproposal Rejected
Jennifer Klein	UWL Faculty Research Grant	\$12,500	\$12,500						
	UWL Foundation	\$4,000	\$4,000						
	UWS Growth Agenda Grant Program	\$20,300							Pending
	Research Corporation	\$34,984			\$12,605	SAH			Pending
	NIH AREA	\$397,255		\$97,288					Pending
	Biophysical Society	\$500	\$500						
Megan Litster	UWL Faculty Research Grant	\$8,000	\$7,350						
	UWL Curriculum Redesign Grant	\$46,300	\$0				No	Yes	To Be Resubmitted
	UWS Growth Agenda Grant Program	\$25,306							Pending
Computer Science									
Samantha Foley	UWL Faculty Research Grant	\$5,000	\$5,000						
	SIGCSE Special Projects Grant	\$5,000							Pending
Joshua Hursey	UWL Faculty Development Grant	\$7,160	\$7,160						
	SIGCSE Special Projects Grant	\$5,000							Pending
Exercise and Sport Science									
Naoko Aminaka	UWL Faculty Research Grant	\$10,750	\$9,550						
	NATA General Research Grant	\$50,000					Yes		Preproposal Accepted
Clayton Camic	UWL Faculty Research Grant	\$6,101	\$6,101						
	NSCA GNC Research Foundation	\$2,141							Pending
Atila Kovacs	UWL Faculty Research Grant	\$8,060	\$0					Yes	To Be Resubmit Externally
	NSF Behavioral and Cognitive Sciences	\$150,000							In Preparation
Geography and Earth Science									
Joan Bunbury	UWL Faculty Research Grant	\$14,439	\$14,439						
	NSF	\$80,000							In Preparation
Gargi Chaudhuri	UWL Faculty Research Grant	\$20,416	\$0						
	UWL International Development Grant	\$3,350	\$3,350						
	UWL Curriculum Development Grant	\$10,000	\$10,000						
	NASA ROSES LULCC Program	\$0	\$0					Yes	Preproposal Rejected
	Planet Action SPOT	\$64,000	\$64,000						In-Kind Value
	US National Committee to ICA	\$1,500	\$1,500						Travel Award
Mathematics									
Eric Eager	UWL Faculty Research Grant	\$7,400	\$7,400						
	BYU CURM	\$21,000	\$0				Yes	Yes	
	NSF RUI Mathematical Sciences	\$114,458	\$0	\$24,530			Yes	Yes	To Be Resubmitted
	NSF RUI	\$0	\$0				Yes	Yes	Preproposal Rejected

Early (August 2012) Starts for New Faculty for Grant Proposal Writing									
Department Faculty Member	Grant Agency	Grant Amount		Requested	Match		Reviewer's	Future	Comment
		Requested	Funded	Indirect	Requested	Source	Comments	Plans	
Microbiology									
Peter Wilker	UWL Faculty Research Grant	\$11,163	\$11,163						
	UWL Curriculum Redesign Grant	\$10,292	\$0						
	UWL CATL Learning By Design Program	\$2,500	\$2,500						
	UWS Growth Agenda Grant Program	\$20,300							Pending
	NIH Allergy and Infectious Disease	\$695,140		\$172,833					Subgrant on Madison, Pending
Physics									
Taviare Hawkins	UWL Faculty Research Grant	\$11,750	\$11,750						
	UWL Foundation Grant	\$4,000	\$4,000						
	Wisconsin Space Grant Consortium	\$3,846	\$1,000						
	Biophysical Society	\$500	\$500						
	Research Corporation	\$62,918			\$30,573	SAH			Pending
Recreation Management and Therapeutic Recreation									
Laurlyn Harmon	UWL Faculty Development Grant	\$14,060	\$6,100						
	NSF AISL Program	\$2,498,819	\$0				Yes	Yes	Preproposal Rejected
Total Intramural		\$234,108	\$127,880	\$0	\$0				
Total Extramural		\$4,232,667	\$67,500	\$294,651	\$43,178				
Totals All		\$4,466,775	\$195,380	\$294,651	\$43,178				