

August 1, 2011

To: Kathleen Enz Finken, Provost

From: Bruce Riley, Interim Dean  
College of Science and Health

Re: AY2010-2011 Year-End Report

What follows (first six pages) is my summary of activities in the College of Science and Health; more detailed information is presented in the attached departmental, Murphy Learning Center, and Workload and Equity Task Force summaries for AY2010-11.

**College Staffing.** Seven new tenure-track faculty and five instructional academic staff members joined the college in August 2010.

- 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. Only one review contained notable concerns about the new faculty member in the area of teaching; the department is actively involved in helping the faculty member address the concerns.
- Three of the new faculty members participated in the College's early start program for grant proposal writing (during the month of August 2010). The results of the grant writing activity are displayed in an attachment. Unfortunately, none of the external grant proposals received funding; however, all three faculty members are revising their proposals for resubmission. It is interesting to note that an August 2009 early start faculty member revised and resubmitted her failed 2009 NSF research grant proposal in AY2010-11, and received funding for her research project.

During the year, seven new faculty and four instructional academic staff members were hired to begin in AY2011-12. These new hires fill consequential needs in the college including the areas of biochemistry, community health education, exercise science, geographic information systems, recreation management, physical education, physics/science education, and the director of the Murphy Learning Center.

During AY2011-12, the college plans to search for nine tenure-track faculty positions in athletic training, computer science, exercise science, microbiology, physical education, recreation

management, school health education, and science (biology and chemistry) education. In addition, the college is planning searches for instructional academic staff positions in the areas of biology/nutrition, computer science, geography, physician assistant studies, physical therapy, and radiation 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 carry-over 102 funds (from FY2010), extra GQ&A S&E funds, and one-time salary savings dollars to meet (some new and some long time) needs in the college, including:

- Provide S&E help to several departments (some of the extra GQ&A S&E funds were permanently allocated to these departments to address future S&E needs).
- Replace and upgrade equipment used in teaching laboratories (much of this equipment will also be used for faculty and student research projects, and was referred to as institutional resources available to grant proposal projects).
- Replace computers in departmental computer laboratories.
- Fund small classroom/laboratory modernization projects.
- Replace faculty computers (some of the extra GQ&A S&E funds were permanently allocated to a college account to address future computer replacement needs).
- Supplemental travel support for faculty (some of the extra GQ&A S&E funds were permanently allocated to departments to address future travel support needs).

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 Cowley Hall and the Health Science Center, offices in Mitchell Hall and the Health Science Center, and the move of the advising portion of the SAH College Office from Mitchell Hall into Graff Main Hall) are complete or nearing completion, so that the college's instructional, research, and office space needs should be met for AY2011-12. Additional, planning/renovations will be required to accommodate the new faculty that will be hired to begin in AY2012-13.

Starting in spring 2010 through spring 2011, faculty/departments housed in Cowley Hall participated in the development of a predesign 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 are beginning a study of (instructional, research, and office) space and renovation needs in the building. Hopefully, the results of the study will be incorporated in a fall 2011 UW-La Crosse facilities improvement proposal for "all agency funds" managed by UW System Capital Planning.

**College Programs.** Several programs, Medical Dosimetry, Physician Assistant Studies, and Radiation Therapy, received positive reaccreditation reviews, and the Athletic Training, Biology, Microbiology, and Sport Management programs completed their academic program reviews. Some of these reviews identified areas of concern that the department/program should address;

the college will assist in these efforts as appropriate (for example, the AY2011-12 physician assistant studies and radiation therapy position searches cited above are in response to staffing deficiencies noted in reaccreditation reviews).

College personnel were involved in investigations of possible new programs: the Computer Science Department established a 3+2 (BS/MSE) program with the South Central Universities for Nationalities (SCUN), the Mathematics Department received entitlement to plan a major in statistics to replace the current mathematics major with statistics emphasis (requiring no additional funding) and the Health Education and Health Promotion Department received, via a consortium of four UW institutions, entitlement to plan and authorization to implement an online B.S. degree completion program in health and wellness management. 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.

Departments carried-out several curriculum review/update projects, including: the review and revision of mathematics and science curricula as part of the establishment of the new Secondary Teacher Education Preparation (STEP) program; the introduction of a new general education course on computational thinking by the Computer Science Department; the development of evolution across the curriculum within the Biology Department; the review, revision and expansion of online course offerings by the Geography and Earth Science Department; and the change from the traditional lecture-laboratory approach to the workshop/active learning approach in the Physics Department's introductory core sequence PHY 203-204.

The mathematics and science tutoring services offered in the Murphy Learning Center (MLC), which received continuing funding for AY2011-12 from the students' academic initiatives program, continue to expand with significant increases in science tutoring activities (mathematics tutoring activities have been high for over 20 years). The science departments (biology, chemistry, microbiology, and physics) have all identified departmental staff members to help coordinate tutoring activities in their respective disciplines; the MLC director supervises/mentors all mathematics and science tutors working in the Center. The MLC director has also begun work 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 2011 request to the Academic Initiatives Program for continued MLC funding for AY2012-13. As noted above, a new (permanent) MLC director was hired to start in AY2011-12 (half-time MCL director/half-time remedial mathematics instructor).

SAH faculty members administer the WiscAMP program at UW-La Crosse (the program's aim is to increase the number of underrepresented minorities who receive bachelor's degrees in the STEM disciplines). This summer there are five WiscAMP scholars working with faculty mentors on undergraduate research projects in the sciences and mathematics.

AY2010-11 was the second year of the UW-La Crosse McNair program. There were twenty-seven McNair scholars with eleven graduating in AY2010-11; three graduates will enter graduate schools in AY2011-12, two others are completing coursework to prepare for graduate school,

and the remaining six, for various reasons, will be applying to graduate schools this year or next year. Currently, there are twenty-six McNair scholars. Of these students, fifteen are working with faculty mentors this summer on undergraduate research projects and one student is participating in an REU program at another institution. During fall 2011, Roger Haro, McNair Program director, will be preparing an application/proposal for renewal the funding for the program for the next five-year funding cycle.

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

**Scholarly Activities.** SAH faculty members were successful in their contract and grant writing efforts: 7 contracts, 18 federal grant proposals, and 21 non-federal grant proposals were funded totaling approximately \$2.2 million in direct and indirect external funds coming to the university. In addition, eight grant proposals are still pending with the potential of over \$400,000 in direct and indirect dollars.

In AY2010-11, SAH faculty members were quite active (and successful) in the area of scholarship with a total of approximately 150 research publications, over 250 talks at professional meetings, and mentoring work with approximately 230 undergraduate and 120 graduate students on research projects.

**Inclusive Excellence.** While I only minimally promoted inclusive excellence during AY2010-2011, SAH faculty and staff members were engaged in activities consistent with the goals of inclusive excellence. For example: faculty and staff members participated in various on-campus presentations and workshops related to the IE initiative, and several members participated in the UW System Women & Science Program; the Physics Department received an American Physics Society Travel Grant for Women Speakers to support expenses for physics seminar speakers, allowing the department to widen the pool of female seminar speakers; the Mathematics Department conducted a seminar devoted to a wide ranging discussion of IE topics relevant in the teaching of mathematics; the Geography and Earth Science Department is a pilot department in the NSF funded Association of American Aligned Grant Program which involves actively recruiting minority high school students into college/university geography programs; Health Professions Department faculty have incorporated case studies related to inclusivity into their courses and have designed and taught a course on diversity and culture in the Medical Dosimetry program; several faculty members are involved in mentoring minority students in the previously mentioned WiscAMP and McNair programs; the college funded supplemental instruction courses (taught by biology and mathematics faculty) for multicultural students enrolled in introductory biology and statistics courses; and the Biology and Microbiology Departments are developing mechanisms to increase inclusivity in their programs.

During AY2011-12, I must give higher priority to increasing the awareness of diversity and equity issues within the college, and encouraging departments to continue to engage in activities consistent with the goals of inclusive excellence that benefit the departments.

**College Plans for AY2011-12.** In the prequel, I mentioned several activities for the next academic year:

- Faculty recruitment.
- Addressing near future space needs in Cowley Hall.
- Cowley Hall/Science Building Project design activities.
- Comprehensive review of (instructional, research, office) space needs in Mitchell Hall, and development of a corresponding (UW System) facilities improvement proposal.
- Assisting departments to address areas of concern identified during external/academic program reviews.
- Securing continuing funding for the Murphy Learning Center.
- Securing funding for the McNair Program for the next five-year funding cycle.
- Promoting the goals of Inclusive Excellence.

In addition, I place high priority on:

- Identifying the opportunities for and well defining the goals of SAH's summer session programing, and adjusting course offerings accordingly.
- In preparation for the installation of a permanent college dean, assisting departments to identify their (5-year?) priorities/goals.
- College and departmental participation in the development of priorities for the University Advancement's new capital campaign.
- Continuing to develop and implement plans for meeting the additional responsibilities created by moving the secondary mathematics and science education programs into SAH.
- Finding ways to support faculty scholarship and professional development activities.

## Early (August 2010) Starts for New Faculty for Grant Proposal Writing

Faculty Member	August Salary	Grant Amount		Indirects	Match	Source	Grant Agency
		Requested	Funded				
<b>Biology</b>							
Gretchen Gerrish	\$5,778	\$12,470	\$12,470				UW-L Fac. Res.
		\$428,515	\$0	\$52,683			NSF-RUI
<b>Computer Science</b>							
Martin Allen	\$8,000	\$18,888	\$0				UW-L Fac. Res.
		\$238,915	\$0	\$73,944			NSF
<b>Mathematics</b>							
Jenni McCool	\$5,889	\$92,280	\$0	7,383	\$14,565	UW-L in Kind	WI ESEA
<b>Totals</b>	<b>\$19,667</b>	\$778,598	<b>\$12,470</b>	\$134,010	\$14,565		

All three faculty members are revising their external grant proposals for resubmission.

**Department Activities**  
**Biology**  
University of Wisconsin-La Crosse  
July 1, 2010 - May 31, 2011

**Department Activities Summary of Departmental Activities from the Past Year**

In 2010-2011, Biology welcomed Dr. Gretchen Gerrish (Organismal Biology) as part of our tenure-track faculty. In addition, Lisa Kobs (Nutrition) was added as an IAS instructor in Spring 2011. Formal and informal mentoring continued for the 9 untenured faculty members.

Dr. Meredith Thomsen was awarded tenure. Drs. Greg Sandland and Eric Strauss earned promotion to Associate Professor, and Faye Ellis successfully went through career progression to attain the rank of Lecturer.

We have continued to increase the number of lecture sections in core courses, which has allowed us to accommodate more students while decreasing lecture size. In 2010-2011 alone, one additional section was added to each of the following courses: Introductory Biology (BIO 103), Animal Biology (BIO 210), and Ecology (BIO 307). General Biology (BIO 105) was increased by 2 lecture sections. From 2005-06 to 2010-11, a total of 13 sections were added to core or general education courses\*, which increased the number of students enrolled in these courses by over 400 while at the same time reducing average lecture size from 94 to 75 students.

\* Introductory Biology (BIO 103), General Biology (BIO 105); Organismal Biology (BIO 203); Plant Biology (BIO 204); Animal Biology (BIO 210); Genetics (BIO 306); Ecology (BIO 307); and Cell Biology (BIO 315).

Biology faculty and students were active in scholarship. Biology faculty members were authors on 32 peer-reviewed publications, 4 book chapters, and 9 technical reports or similar products. Biology faculty and students participated in over 92 presentations of their scholarship at local, regional, and national meetings. Biology faculty members were principal investigator or co-principal investigator on 28 external grants or contracts, totaling over \$3.68 million. In addition, Biology faculty earned 17 campus grants. Over 105 UW-L students performed undergraduate research with Biology faculty.

**Summary of Departmental Activities from the Past Year Specific to Graduate Programs**

A new course, Effective Teaching in Labs (BIO 732) was added to the Graduate Program in Biology. In addition to providing our graduate students with formal training in teaching and learning, the course is also designed to improve the role of graduate assistants in BIO 103 & 105 labs.

Seven students finished their Master's in Biology, and another 27 were working on their Master's research. These numbers do not reflect graduate students in Microbiology or the Nurse Anesthetist program.

## Significant Program Changes

A completely revised version of Biology Capstone Seminar (BIO 491/492) was implemented in 2010-11. A four-person committee worked on strategies for revising Capstone Seminar during the 2009-10 academic year, and the committee led the Department numerous discussions during that time. This work led to a new general framework for the course. In the summer of 2010, the 11 faculty scheduled to teach Capstone in Fall 2010 met several times to finalize syllabi, assignments, and approaches to the course. Summaries of the previous version of Capstone and the revised version are provided below to demonstrate the degree of revision.

### CAPSTONE FROM 1999-SPRING 2010

- Students gave 20-minute seminar on any topic of their choosing related to their Biology degree. Each student was required to have a faculty mentor to help them develop the topic and talk.
  - Disadvantages: Faculty not involved in teaching Capstone would often have up to 10 students who they were mentoring with no mechanism for credit for their work.
  - Many students did not take full advantage of faculty mentors and thus did not develop their presentation or literature research skills.
  - Students rarely chose topics that incorporated several aspects of their biology education; so, they did not receive a true capstone experience.
  - The expectations of faculty mentors and capstone instructors were often quite disparate; thus, it was difficult to hold students to high expectations.
- Students wrote a 500-word letter to the editor as a capstone writing assignment and departmental writing assessment.
  - Disadvantage: Students did not learn this writing style in their career. Consequently, products were not of high quality; nor did they provide an accurate assessment of student writing.
- Departmental assessments were performed by administering exams and surveys to students.
- Career advice provided by Tim Tritch in Career Services.

### REVISED CAPSTONE

- Each section has a theme designed by the instructors to enable students to draw on various aspects of their biology education.
  - Advantage: Students actually learn something in their capstone experience.
- Students work in groups of three or four to produce three or four talks on different aspects of the same theme.
  - Advantages: Students develop a more complete picture of a topic by looking at it from several different subfields.
  - Students use their personal biology expertise to help their peers (I.E., Cell and Molecular Biology students help Environmental students with molecular aspects of a topic, and vice versa).
- Students write a short research review paper on the same topic that they develop for their talk.
  - Advantages: Forms a better assessment because the writing style is one they actually learn during their Biology career.



- Leads to better talks because the students receive feedback on their papers prior to their talks.
- Disadvantage: More instructor time for grading.
- Class time is allotted to research topics, share ideas, work on talks, and edit papers.
  - Advantages: Students were helped through this process in a stepwise fashion, to help ensure they had a mechanism for researching a complex topic in depth.
  - Capstone instructors were present while students worked on their topics so that the instructor could provide immediate feedback and guidance.
  - Non-Capstone instructors did not have to donate their time to work with Capstone students.
  - Disadvantage: More sections have to be offered in order to provide time for developing talks and giving talks.
- In order to cope with the extra grading, two instructors are assigned to co-teach each capstone section.
  - Advantage: Faculty bring their individual expertise to the topic, providing students with more help and insight.
  - Disadvantage: More FTE devoted to the Capstone course.

Initial evidence from both students and faculty is that although the course is more work for both, that both students and faculty felt the revised version of Capstone was a better learning and capstone experience. The Department is currently conducting formal assessment of the new Capstone.

### **Other Pertinent Program Progress**

Because Biology faculty have unanimously felt that opportunities for students to gain a sufficient understanding of biological evolution were lacking, an Evolution Across the Curriculum Committee was formed to formally assess the problems and make recommendations. The Committee consisted of Anita Baines (Chair), Kathryn Perez, Mike Ablor, Tony Sanderfoot, Gretchen Gerrish, Tisha King-Heiden, and Lee Baines. The committee developed a matrix of essential concepts in evolution, which they used to assess all the core courses in Biology. The committee led the Department in a discussion of the potential gaps and weaknesses in covering the essential concepts in evolution. The committee then met with instructors from each core course to make sure that their assessments accurately reflected the content of the core courses. At the end of the year, the committee presented ideas to the Department for remediating gaps in student exposure to evolution. The recommendations ranged from requiring a course in evolution, to revising the 200 level courses, to incorporating one or more evolution modules in each of the current core courses. The Department is currently considering their proposals and will move into the action phase in Fall 2011.

Because of the tremendous turn over in instructors since the time the Writing Across the Major in Biology program was enacted, a committee was convened to assess the Writing Across the Major program. The committee consisted of Meredith Thomsen (Chair), Faye Ellis, Scott Cooper, Tom Volk, and Nick Downey. This committee also developed a matrix, which they used to assess writing in core courses. The committee reported the results to the Department. In short, the assessment showed that individual writing assignments in individual courses had

changed quite a bit, but that students were still being taught scientific writing at least as in depth as in the original Writing Across the Major proposal. In another meeting, the committee and department clarified the roles of each core course in the writing program. The committee is also in the process of revising and updating the Communication in Biological Sciences website. The Department will revisit the organization of the writing program in Fall 2011 to insure that all faculty involved in core courses understand the role of their course in the writing program.

**Estimated Number of IFTE Used for Graduate Education: 4**

**Sabbaticals:** Cooper, Scott, Molecular Mechanisms Underlying Clotting Prevention in Hibernating Ground Squirrels, Spring Semester

### **Departmental Goals for 2011-2012**

- Begin implementation of an Evolution Across the Curriculum program.
- Complete revision of the Communication in the Biological Sciences website.
- Implement updated version of Writing Across the Major Program.
- Develop a Departmental five year plan that addresses:
  - Mechanisms to increase inclusivity for faculty and students in the Department
  - Curricular review and plans for curriculum change
  - Mechanisms to reach faculty/IAS work equity in terms of class size, class assignments, credit for research with undergraduates and graduates, and advising load.

**Department Activities**  
**Chemistry**  
University of Wisconsin-La Crosse  
July 1, 2010 - May 31, 2011

The Department of Chemistry welcomed one new IAS member (Friesen) to its ranks this year and ran three search and screens, two of which were successful (Grilley, biochemistry faculty, and Anderson, IAS). We will re-run our search for a new Chemical Education faculty member in 2011-12 and also seek a replacement for retiring IAS member Toce. Successful promotion portfolios were advanced for Bryan (Professor), Kirsch (Associate Professor) and Gustafson (IAS Lecturer). One faculty member was tenured (Kirsch).

The Department thoroughly reviewed and revised its curriculum for the new STEP program and changed the name of CHM 325 to aid students seeking admission to PA and other health professions programs. In addition to normal teaching loads, several faculty members assisted in special outreach teaching programs, including Young Scholars (37 students), Gifted and Talented Network programs (90), the Goblet of Fire competition (76) and the Chemistry "Magic" Shows (>550). Chemists also offered special laboratory safety workshops for all Cowley departments three times throughout the year, and these were archived on the web for independent viewing. We offered the year-long *General Chemistry I* course for advanced West Salem HS students for the fifth time (Osterby). Department members also continued the Chemistry Teaching Discussion Group, meeting regularly throughout the year. We completed and submitted our required "periodic review" (5-year) for the American Chemical Society (ACS), our external accreditation body, and also completed and submitted our UW-L APR Report to the Dean's Office. We await final word from the ACS. We continued work on General Chemistry/General Education assessment, as well as assessment of our new Writing in the Major program. Our General Chemistry instructors completed and introduced two new laboratory manuals to all sections of our CHM 103L and 104L courses. These are prepared and printed in house and sold to students at great savings to them as compared to using external publishers/manuals.

Outside the classroom, chemists collectively mentored or co-mentored 49 undergraduate research students (average of 2.8 students per faculty) and sat on the M.S. thesis committees for 7 graduate students in programs outside of chemistry (primarily BIO and MIC). Department members collectively wrote several grant proposals for external (and internal) funding and were fortunate to receive some good awards this year. The inter-departmental/inter-institutional Emerging Technology Center in Pharmaceutical Development was established. Department members and their students made numerous scholarly presentations at professional conferences and collectively published 7 peer-reviewed manuscripts and 1 non-provisional patent application. Numerous reviews of grant proposals and manuscripts were completed.

Chemistry faculty members were widely engaged service and university governance at all levels. Likewise, most department members were active in professional and community service. The department awarded over \$24k in scholarships to its majors, executed three different lab modernization efforts, was involved in several planning sessions for the new science building,

and continued replacing and upgrading several pieces of failing capital equipment and instrumentation. Several faculty and students received training on our new pieces of modern instrumentation. A number of faculty members participated in workshops focused on Inclusive Excellence (CATL), and we continue to study how math proficiencies affect student success in General Chemistry.

In addition to the two searches we will conduct in 2011-12 (see above), we aim to make some additional significant “curricular” changes: 1) change name of Department to the “Department of Chemistry and Biochemistry” to better highlight the biochemistry major, 2) introduce a new course in Advanced Organic Chemistry (CHM 403) to address the lower student scores in this area on the standardized Major Field Test in Chemistry, and 3) seek to make MTH 150 a firm pre-requisite for CHM 103 because institutional research data shows that only 50% of students co-enrolled in these courses pass chemistry. We aim to prepare several videos demonstrating basic lab techniques in general and analytical chemistry as pre-lab enhancements for our students. The Core Imaging Facility will be established following acquisition of our final microscope this summer. We hope to continue upgrading instrumentation with assistance from the Dean’s and Provost’s offices, and possibly other sources of financing. In particular, our highest priorities will be acquisition of a new GC-MS instrument and an AFM console controller.

**Department Activities**  
**Computer Science**  
University of Wisconsin-La Crosse  
July 1, 2010 - May 31, 2011

**Department Activities**

**Summary of Departmental Activities from the Past Year**

The 2010-11 academic year has again been a productive one for the UWL Computer Science department in all areas of instruction, scholarship and service. This summary focuses on activities of the whole department as opposed to individual scholarship and service activities.

Approximately 140 students declared CS as their major with another 20 students declared as CS minors. In addition, through its CS 101 General Education course the department provided instruction for approximately 400 non-majors this year. The department is no longer offering CS 103 & 104 since CBA's decision to no longer require those courses. Department enrollment trends in the major continue to be consistent with national trends, which remain well below the peak of 2001.

The disparity between enrollment in CS programs and the demand for software developers continues to be a problem of national significance. The U.S. Department of Labor projects that computer software engineers will be among the fastest growing occupations through 2016 with an overall growth of 38%. Many national organizations including the National Science Foundation and the Association for Computing machinery are putting substantial effort into addressing this situation. On a local level our students are finding ample job opportunities with many well paying internship opportunities with local companies going unfilled. Graduates of the MSE program are receiving salary offers greater than the salaries offered to new assistant professors.

The five-year track for completing the BS in Computer Science and Master of Software Engineering degrees continues to attract a significant number of students. This year, a total of 12 students (not counting the contract programs) completed the MSE program approximately half of which were five-year track students.

This year the department proposed and received approval to offer a new General Education course centered on the ideas of Computational Thinking. This course, CT 100, is intended for a broad audience and will cover the essential ideas of algorithmic computation and problem solving that have become ubiquitous in all areas of our society. The department received Instructional Development funds to support development of the course this summer with pilot sections to be offered in Fall 2011. We plan to continue offering sections of CS 101 as long as demand continues but the intention is to over time move our instructional efforts to CT 100. There is a national movement to replace the existing high school AP computer science course with a course focused on the ideas of

computational thinking. Offering this course places the department at the forefront of national curriculum standards. The department has plans to incorporate the CT 100 course into the teacher education major and may also introduce a minor in computational thinking.

The department also proposed and received approval for a new course in Web Design (CS 202). This course is intended for majors and non-majors interested in the technologies used in implementing web based applications (e.g. HTML, XHTML, XML, CSS, Javascript). These topics are highly technical but are taught without requiring prior experience in software development. The department hopes that this course will be of interest to a wide audience and will provide early exposure to web application development for computer science majors.

The department continues to evaluate the introductory software development sequence (CS 120, 220 & 340). Department discussions have produced some changes to the distribution of topics between the 3 courses and the department has agreed upon corresponding outcomes. The department plans to pursue increasing CS 220 from 3 to 4 credits in the next year. A significant number of students find this second course very challenging and the department believes the additional credit will help with this situation.

The Computer Science department continues to engage in a number of outreach activities such as the La Crosse Chamber of Commerce Jobs Expo, to both high school students and employers. These efforts are intended to help promote the study of computer science and to support a better public understanding of employment opportunities in computer science and software engineering.

The department continues the pilot program started last year to offer CS 120 through West Salem High School. High school teachers taught the curriculum with the assistance and over sight of CS department faculty. The department specifically reviewed examination and project performance of the students to ensure that appropriate expectations were maintained. This program involves small numbers of students but is a useful mechanism for promoting the study of computer science.

The department also has been talking with employers about national trends. We have found that employers are increasingly aware that it is to their long-term advantage to contribute to the promotion of computer science in high schools and universities. We have found interest in both creating scholarships and participating in cooperative activities with high school students and teachers.

The Midwest Instructional Computing Symposium is a regional conference in computer science drawing attendees from the upper Midwest. This year the conference was hosted by the College of Saint Scholastica in Duluth. In addition to student and faculty talks it includes a programming contest and a robot contest. Approximately 20 students from UWL attended the conference this year. One of the UWL robot teams took first place this year.

The department is operating two NSF funded S-STEM scholarship programs. The first program awarded scholarships to its fourth cohort this last year. The focus has been broadened to include undergraduate CS majors as well as MSE students. So far, 23 students have received support under this program. The second program is a joint program with Western Technical College. This program is focused on students transferring from WTC to UWL.

The department continues to develop contract programs for international students. This year the fifth cohort, consisting of 14 students from the South Central Universities for Nationalities (SCUN), completed their MSE degrees at UWL. This 1+1 program, the last cohort of which will be at UWL in 2011-12 is being replaced by a 3+2 program the agreement for which was signed this year. Students at SCUN are specially recruited for this program and take separate coursework at SCUN for their first 3 years. They then transfer to UWL where they will complete the 4th & 5th years of the 5-year BS/MSE track. The department's contract program with Wuhan University continues to send a few students to UWL each year.

This spring two longstanding members of the department (one faculty and one academic staff) choose to retire. It is critically important that the department successfully fill these positions as soon as possible since their absence will make it extremely difficult for the department to offer its usual array of courses in the next year.

This year the department started operating a Eucalyptus Cloud. This is open source software 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 server, over which they have complete administrative control, to use in course projects. In the spring semester the Open Source Development course extensively used this capability to great advantage. It provided students with direct access to a technology that would otherwise be unavailable to them. We expect the cloud to see use in many courses such as the Database course and the Web Development course.

In the next year most of the department's curricular energy will be focused on completing the introduction of the Computational Thinking course. The department will also look at reorganizing its teacher education tracks to fit with the new STEP structure on campus. The department will continue to refine the initial software development sequence including discussions with the mathematics department about the role and content of the discrete mathematics offering. The department will continue to monitor the Computer Science accreditation program offered by ABET to ensure that our program continues to meet these standards should the department choose to pursue accreditation. The department will continue our various outreach efforts with high schools as part of an effort to address the national decline in computer science majors. The department will work with the Mathematics department to recast the Computational Science Minor as a joint emphasis within the Computer Science and Mathematics majors.

## **Assessment - Additional Commentary**

This was the third year in which the department completed the General Education assessment process for CS 101 and CS 120. This year the department reviewed the results of last year's assessment and while generally pleased with the results the department determined that the exam questions and grading rubric required refinement to better distinguish student performance. These revised questions were used this year with the results submitted to the General Education assessment process. The department will review these results next fall.

This is the fifth year that the department has used the Major Field Exam as an assessment tool for the undergraduate major. The average score of UWL students taking this exam 162 out of 200. UWL mean sub-scores improved slightly over last year. The department remains pleased with these results and will continue to monitor the performance of our students on this exam. The department does note that the number of schools using this exam is changing rapidly which means that year over year comparisons may have limited validity.

**Estimated Number of IFTE Used for Graduate Education: 1**

## **Lecture, Conference and/or Arts Events**

Title of Event: Distinguished Lecturer in Computer Science - Thacker

Scope: Regional

Event Sponsors:

UW-L College of SAH and UW-L Alumni Foundation

Number of Performances: 1

Size of Total Audience: 130

Audience Composition: Mixed Audience

Description:

This year's lecturer was Dr. Charles Thacker winner of the 2010 ACM Turing Award and leader of the Computer Architecture group at Microsoft.

## **Student Activities**

The Midwest Instructional Computing Symposium is a regional conference in computer science drawing attendees from the upper Midwest. This year the conference was hosted by the College of Saint Scholastica in Duluth. In addition to student and faculty talks it includes a programming contest and a robot contest. Approximately 20 students from UWL attended the conference this year. One of the UWL robot teams took first place this year.



**Department Activities**  
**Exercise and Sport Science**  
University of Wisconsin-La Crosse  
July 1, 2010 - May 31, 2011

Attached is the 2011 annual report summary. We had 32 faculty/academic staff and six ad hoc instructors for the 2010-2011 academic year. A summary of the important facts found in the summary follows:

**Teaching:**

1. One staff created pedagogical innovations and four staff created new instructional materials.
2. Fifteen faculty members chaired or served on thesis committees. Thirty-two theses advised by these individuals.
3. Three faculty members mentored six undergraduate research projects.
4. Twenty-six of our staff were academic advisors for over 600 undergraduate students and six faculty advised 50 graduate students on campus and two faculty advised 30 graduate students off campus.
5. Twenty-four faculty members attended 47 conferences, seminars, and workshops.
6. Twenty-two staff attained 34 certifications and licenses.

**Scholarship:**

1. Fifteen of our staff produced 22 refereed publications.
2. Concerning non-refereed publications:
  - a) Three faculty members wrote two textbook chapters.
  - b) Two faculty members produced instructional manuals.
  - c) Eight faculty members wrote four journal articles.
3. Concerning scholarly presentations:
  - a) Sixteen faculty members gave 38 presentations.
4. Five faculty members engaged in editing/reviewer activities.
5. Concerning grants and contracts:
  - a) Seven faculty members wrote 7 grant/contracts that were funded.
  - b) Four faculty members wrote research grants with undergraduate students that were funded.

- c) Two faculty members wrote two service oriented grants that were funded.
  - d) Three faculty members wrote research grants with graduate students that were funded by UW-L.
6. One faculty presented four choreographic productions.

**Service:**

1. All the staff in the department serve on at least one department committee.
2. Four faculty members served on 7 college committees.
3. Fifteen faculty members occupied 27 spots on university committees.
4. Ten faculty members assumed department administrative roles and four of our staff directed service programs.
5. Ten of our staff provided service for professional organizations.
6. Six of our staff were advisors for six university students clubs.
7. Four staff received professional recognition and honors.
8. Ten staff engaged in 12 professional activities in the community.

**Department Activities**  
**Geography and Earth Science**  
University of Wisconsin-La Crosse  
July 1, 2010 - May 31, 2011

The 2010-2011 academic year saw a continuation of the change and innovation started in the department during the previous year. Dr. Rachel Slocum joined the Department as a new tenure-track faculty member in fall 2010. Dr. Greg Chu retired at the end of the fall semester 2010 after a distinguished career at UW-L that included a term as Department Chair. A successful search was conducted in fall 2010 for the cartographer position faculty replacement for Dr. Chu. The new faculty member joins the Department in August 2011.

Faculty members in the Department maintain a dynamic scholarship program. They collaborate with colleagues in other UW-L departments and externally, including with the Upper Midwest Environmental Sciences Center (Drs. Belby, Perroy and Berlin), Departments of Geography at the University of Minnesota (Dr. Slocum) and the University of Wisconsin-Milwaukee (Dr. Lin) and with Silla University in South Korea (Dr. Ahmed). During this academic year, they received 6 internal UW-L grants, 3 UW-System grants and one external grant (Ryan Perroy, Innov-X Grant); and submitted two proposals for external grants (to the National Science Foundation and the National Park Service). Faculty also produced three peer-reviewed published or accepted journal articles (one by Dr. Lin and two by Dr. Slocum) and a book chapter (Dr. Lin). Numerous papers were presented at academic conferences, including 10 at national conferences, 4 at regional meetings, two on the UW-L campus, and one international conference (Dr. Slocum, in Adelaide, Australia).

The faculty continue to be actively involved in undergraduate research, advising 16 students on research projects. Two students presented posters at the UW-L Annual Celebration of Undergraduate Research and Creativity (I. Johnson, advisor: Dr. Berlin; S. Leschisin and M. Falk, advisor: Dr. Perroy); one presented at the national Annual Meeting of the Association of American Geographers in Seattle, WA (T. Flaherty; advisor: Dr. Perroy); three presented at the Green Energy Summit in Milwaukee, WI (L. Schiller, J. Kotnour and K. Wandsnider; advisor: Dr. Perroy); and one presented at the Annual Meeting of the Association of American Geographers West Lakes Division in Malcolm, IL (B. Hill, advisor: Dr. Perroy). Drs. Belby and Perroy jointly supervise the research of geography major Sara Erickson, who is both a McNair Scholar and recipient of the SAH Dean's Distinguished Fellowship.

Although the Department does not have a graduate program, Drs. Berlin, Lin and Perroy serve as graduate faculty. Dr. Berlin served on two Biology graduate student thesis committees (Katri Laukkanen and Jessica Bolwhan).

The Department faculty continues to maintain high-quality instruction and innovative pedagogy. This year the Department began an extensive examination of the course offerings with a view of enhancing the program and revising the current offerings. The Department continued to revise its on-line courses, including developing an on-line section of GEO 200 (Conservation of Global Environments) that was offered for the first time during the first summer session. Innovations

included the introduction of regular field trips and field activities into the physical geography courses.

Faculty in the Department maintain an active service program to UW-L, professional organizations and the community. This spring the Department started a major revision of the departmental by-laws, including reviews of procedures for tenure, promotion and merit. All Department members actively participated in this process. Faculty continued to serve on senate committees and the SAH College Committee.

Establishing an assessment process for the Geography program was a challenge for the Department. However, assessment of geographic knowledge and skills was conducted for the first time of all graduating Geography majors. The assessment was conducted in the capstone course offered fall 2010, using tools available through the Association of American Geographers. The results indicate that a high percentage of graduating seniors (~85%) met either the satisfactory or above average levels of geographic knowledge. This assessment process will be ongoing, with revisions included in fall 2011. Instructors who taught Gen Ed courses actively participated in the assessment of the Gen Ed classes. The results indicate a relatively high percentage of students tested satisfactory or above.

#### Goals for 2011-2012

For the upcoming academic year, the Department has established goals to (1) complete revision of the Departmental by-laws; (2) review the current course offerings; and (3) recruit more majors from traditionally under-represented groups.

The Department will continue with the current by-laws revision and course reviews. In addition to this, the Department recently began participating as a pilot department 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. The Department is currently developing recruitment goals and ideas for implementation, which should become part of the Department's response to inclusive excellence for the coming academic year.

**Department Activities**  
**Health Professions**  
University of Wisconsin-La Crosse  
July 1, 2010 - May 31, 2011

Background:

- 141 students representing 37 different undergraduate majors were admitted to 6 programs (13 Medical Dosimetry, 26 Occupational Therapy, 19 Physician Assistant, 45 Physical Therapy, 18 Nuclear Medicine Technology, 20 Radiation Therapy).
- 801 undergraduates took three general courses taught in the Health Professions department (SAH 105, HP 106, HP 250).
- Applications for admission to Health Professions programs continue to be strong.
- 29 faculty & IAS (26.5 FTE) plus affiliated faculty in the department. Four are UW-L alumni.
- All programs are fully accredited.

Students:

- Graduates of all programs were exceptionally strong on their professional terminal certification examination scores:
  - Occupational Therapy -100% pass rate (scored above national average)
  - Physical Therapy -100% pass rate (scored above national average)
  - Physician Assistant – 100% pass rate (scores above national average, in the 99<sup>th</sup> percentile nationally)
  - Radiation Therapy – 100% pass rate (in 92<sup>nd</sup> percentile nationally)
  - Medical Dosimetry – 100% pass rate for students in formal program (scores above national average).
- Employment rates typical within 3-6 months upon graduation in all programs.
- Employer and alumni feedback very positive regarding program quality.
- Students are highly involved in service activities related to classroom and open time despite high credit load and demanding coursework.
- Students have received scholarships to support their education in Physician Assistant, Physical Therapy, and Radiation Therapy.
- Students are actively involved in research. Outcomes include co-authorship on over 12 peer reviewed publications in Physical Therapy, 1<sup>st</sup> and 2<sup>nd</sup> place awards at the Central Chapter of the Society for Nuclear Medicine and 1<sup>st</sup> – 3<sup>rd</sup> place scoring in the best paper competition of the Chicago Area Radiation Therapists Student Seminar. Over 15 students were co-authors with faculty at professional meetings. 25 Occupational Therapy research papers were published on the program web site.

## Faculty:

- Faculty are productive in scholarship:
  - 18 peer reviewed papers are either published or in press.
  - 6 papers are currently in review.
  - 21 presentations provided at professional conferences (many with student co-authors).
  - 45 DPT students, 2 physical therapy residents mentored in research projects with many resulting in publication/presentation.
  - 7 guest lecture /continuing education programs provided.
  - 4 graduate student thesis committees (3 UWL, 1 UWM).
  - The La Crosse Institute for Movement Science (LIMS) submitted an R21 NIH grant with UW Stout for over \$100,000 related to multifrequency vibration use and diabetes (Bertram Enzenwa UW Stout, Tom Kernozek UWL).
- Faculty teaching is excellent. The curriculum in each of the programs is well designed and taught.
  - Medical Dosimetry program submitted their self-study in December and will have accreditation visit in summer.
  - Physician Assistant program was re-accredited for a maximum of 7 years, ranked # 1 of all programs in a recent Journal of Physicians Assistant Education study.
  - PT completed its UWS 5 year review of Consortial DPT Degree with UWM
    - The Physical Therapy, Occupational Therapy, Radiation Therapy and Medical Dosimetry programs were successfully re-accredited within the past 5 years.
  - Student evaluation of instruction scores for the department are strong (4.1-4.2: fall/spring semester department average SEI)
- Many faculty members are nationally and internationally recognized for scholarship, contributions to professional education in their field, and leadership.
  - Nishele Lenards received an ARST scholarship for her doctoral studies.
  - Paul Reuteman completed his t-DPT degree and was recertified as an Orthopedic Clinical Specialist.
  - Erin Hussey was certified in vestibular rehabilitation and Parkinson's disease wellness recovery.
  - John Greany was named as a Fellow of the American Association of Cardiovascular and Pulmonary Rehabilitation Society (AACVPR)
  - John Willson, Tom Kernozek, Stacey Meardon, John Greany, Thomas Greiner, and Peggy Denton serve as reviewers for scholarly journals.
  - Tom Kernozek and Peggy Denton served on external tenure review committees for other universities.
  - Michele Thorman, Gwyn Straker, Stacey Meardon, John Willson, Tom Kernozek served on committees for professional organizations such as the APTA, WPTA, Clinical Instruction, WPT Examining Board, and ACSM Awards Committees.
  - Peggy Denton served on the Board of Directors for the National Board for Certification of Occupational Therapy
  - Fundraising by Radiation Therapy, Occupational Therapy, and Physical Therapy programs through club activities and Career Fair (Melissa Weege - Radiation

Therapy, Joan Temple – Occupational Therapy, Michele Thorman, John Willson  
–Physical Therapy)

Service has been one of the hallmarks of the Health Professions department for faculty and students.

- Over 30 community organizations and 1,400 Coulee region citizens were involved in service learning projects in Health Professions program's curricula this past year (exclusive of internships).
- The majority of Health Professions students have participated in a service project outside of their coursework.
- Health Professions faculty and staff routinely serve clients at St. Clare's Health Mission, local civic and religious organizations.
- Health Professions faculty has maintained leadership roles in their state and national professional organizations and service to their respective professions to maintain program accreditation.
- Occupational Therapy and Physical Therapy programs each brought a nationally renowned distinguished lecturer to campus.
- The Physical Therapy Program provides low-cost continuing education opportunities for local clinicians.
- Faculty/IAS served on other university and college committees.

Inclusive excellence initiatives were handled at the programmatic level:

- The Medical Dosimetry faculty designed and taught a course on Diversity and Culture.
- Occupational Therapy faculty revised a minimum of one case study in each course to include inclusivity. In addition, the program culture inclusivity survey was designed and will be administered in 2011-12.
- Physician Assistant faculty members attended one lecture/seminar on the Diversity calendar each semester, inclusive excellence has been added as a weekly faculty meeting agenda item, reviewed and discussed the LGBTTSQI terminology for awareness and to self-identify areas of personal bias, each week the discussed an article, story, or piece of literature that explored cultural, racial/ethnic, disadvantaged, minority or gender differences related to healthcare (example: "Care of the Transgender Patient" N Engl J Med 364;13 Gooren LJ Mar 31 2011). Physician Assistant students receive instruction in diversity issues within the Physician Assistant curriculum including: Cross-cultural communication, discovery, acknowledgement, and on-going awareness of personal biases, impact of personal biases and "blind spots" on provider/patient relationship, strategies to approach cultural differences in a meaningful and effective manner, monthly lectures on different ethnic patient populations and cultures provided at Capstone seminar dates, and each student must incorporate literature and/or evidence-based practice recommendations for varied culture/ethnic, race, gender, and diverse patient populations into their Capstone project (both in written and presentation forms). The Physician Assistant program has instituted a standing Diversity Chair position into their student society to inform their fellow students regarding IE initiatives and volunteer opportunities within the UW-L campus community, the local and regional communities, and those within our partners institutions, Gundersen Lutheran and Mayo.

- PT Program faculty made multiple presentations to various groups of diverse students at UW-L and Winona with the intent of exposing a variety of student populations to the PT profession (Pre-PT Club presentation, beginning of year introduction to admissions, health professions night, Introduction to Health Professions class, HP 105, middle school students experiential learning in biomechanics lab). In addition, individual the faculty members have participated in Inclusive Excellence activities. Erin Hussey has developed a case study initiated a project in two courses (PTS 742 Practicum course progressing to PTS 854 Capstone course) related to an individual with disabling medical condition that has limited mobility. This student/faculty project targets regaining independence and safety in home and societal roles. Stacey Meardon and Erin Hussey attended technology training in 1/11 on "high impact practices" to promote student learning. This review included assessment of how these methods may impact inclusion across student types. Gwyn Straker facilitated opportunity with a clinical affiliate (Wheaton Franciscan Health Systems) for two PT interns to travel to Guatemala and participate in a medical mission trip. Gwyn Straker also initiated communication related to medical mission trips to South Dakota as well as Haiti. John Greany developed an exercise programming within the PTS 742 course with martial arts for children with autism. John Greany has also dedicated time to read books about individuals who live with chronic diseases. Michele Thorman promotes problem solving and advocacy for individuals with health needs and limited/no financial resources in course (PTS 733/OT 641). Michele Thorman also coordinates local PTs and PT students to serve at St. Clare's Mission, a community pro bono clinic. John Willson reported that the Pre-PT club would be making a donation to a community organization this fall that will encompass Inclusive Excellence. Dennis Fater has been working extensively with a Hmong gentleman (Shamanic (Neng) Xiong) getting him certified to teach hunter safety education classes for the DNR. They have collaborated on efforts to eliminate the segregated hunter safety classes in La Crosse (some all Hmong, the rest all Caucasian). Paul Reuteman continues to be involved in the "Chileda Friends of Autism" non-profit organization that teams up undergraduate psychology college students with children who have been diagnosed with autism to assist them with school activities. Last year, they serviced 8 to 10 families throughout the academic year. Tom Kernozek has been involved in several research collaborations with faculty members in Taiwan; one recent collaboration has resulted in a manuscript being accepted to a scholarly journal. Tom Kernozek, John Greany and a DPT student have been involved in a research project on the plantar loading patterns of Native Americans. Currently, this project is being finalized for submission for publication.
- Radiation Therapy and Nuclear Medicine Technology surveyed the students in their programs to determine if the language and references used in the classroom is inclusive of all students.



The goals for 2011-2012:

- Maintain excellent educational outcomes for all programs in the department
- Maintain excellent research productivity outcomes
- Successfully retain/promote faculty/IAS
- Successfully recruit all open faculty/IAS positions
- Maintain accreditation status of all programs in the department
- Increase interdisciplinary activities in the department

## **Department Activities** **Mathematics**

University of Wisconsin-La Crosse  
July 1, 2010 - May 31, 2011

**Teaching/Curricular and Related Activities:** 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-college courses to improve the mathematics backgrounds of students so they can then successfully pursue college level courses. The general education and service courses provide the mathematics and statistics foundations necessary for many academic programs. Finally the mathematics major/minor courses serve students pursuing academic programs in computer science and the physical sciences as well as students pursuing the various tracks within the mathematics major. Enrollment records indicate more than 140 declared mathematics majors (approximately half are secondary education mathematics majors) and more than 110 students with mathematics minor programs. Student demand for mathematics courses continues to increase and the department responded by scheduling additional sections of entry-level courses to meet this demand. In Fall 2010 the courses offered by the department consisted of 7 sections of non-college, 47 sections of general education/service, and 31 sections of major/minor with a total student enrollment of 2800 students. For Spring 2011, the courses consisted of 6 sections of non-college, 41 sections of general education/service, and 30 sections of major/minor with a total enrollment of 2457 students.

Beyond these regularly scheduled teaching activities, several department faculty are involved in other forms of instruction. For example, faculty supervised thirteen students in undergraduate research projects, developed mathematical enrichment offerings for area youth, and provided numerous in service programs for Wisconsin teachers. UW-L continues to be well represented by its student population in state, national, and international mathematical modeling competitions. For example, in the international COMAP contest, UW-L sponsored nine teams. Four teams earned “Meritorious” ranking (top 14%) while three other teams received “Honorable Mention” ranking (top 40%). Only one other USA institution placed more teams in the top 40%.

In conjunction with the establishment of the UW-L STEP Program, curricular changes were made in the Mathematics Major with Education Emphasis. Discussion of additional adjustments for this program will continue in 2011-2012. With regard to our proposal to transition the Mathematics Major with Statistics Emphasis into a Statistics Major, we have been granted “Entitlement to Plan”. In 2011-2012 we will pursue the next step in the process, which involves “Authorization to Implement”. The Department is continuing its assessment activities for the general education courses MTH 126, 145, 150, 151, 175, and 207, 208, 265 by measuring student performance relative to certain selected student learning outcomes. Results will be reported to GEAC and used to develop any appropriate course modifications.

The Friday afternoon departmental mathematics seminar series continued to provide faculty opportunities to share their interests and recent work with colleagues. As it did in 2009-2010, the department responded to the Inclusive Excellence Initiative by scheduling one seminar

session devoted to a wide ranging discussion of IE topics relevant in the teaching of mathematics. The session was jointly organized by a department faculty member (who is also a member of the UW-L Inclusive Excellence Taskforce) and a representative from UW-L Student Support Services.

**Departmental Staffing:** Currently (June 14, 2011) search and screen activities are still ongoing for the IAS position of Director of the Murphy Learning Center/Associate Lecturer in Mathematics. If we are not successful in filling this position from the existing pool of candidates, we plan to search again in 2011-2012. For 2010-2011, the list of department members included twenty-six faculty and seven instructional academic staff. Of the twenty six faculty, several had no or reduced teaching assignments (one is serving as interim Dean of SAH, another serves as faculty assistant in the Office of the Provost and is also the director of IIURL, a third served as Faculty Senate Chair, another served as director of the Statistical Consulting Center, a fifth has a joint appointment with and is chair of the Computer Science Department, a sixth serves as STEP director, a seventh was assigned SOE committee duties by the Provost, three more had grant funded “course buy outs”, and the department chair has a reduced teaching assignment).

**Scholarship:** Department faculty compiled an impressive record of scholarly achievement during the past year. This list of accomplishments includes 29 research papers published or accepted for publication. In addition, faculty were involved in more than 45 presentations at local, regional, national, and international professional conferences as well as participating in a number of grant proposal submissions. These latter efforts have resulted in awards of more than \$400,000 while several proposals are still under review.

**Service:** Members of the department also have a strong record of university and professional service. The Chair of the Faculty Senate and the chairs of several Faculty Senate Committees and other University Committees are members of the Mathematics Department. Beyond our own institution, department members held leadership positions in professional organizations, refereed and reviewed research papers and book chapters, reviewed grant proposals, and served as consultants to other academic institutions or professional organizations.

D. W. Koster, Chair, Department of Mathematics

June 14, 2011

**Department Activities**  
**Microbiology**  
University of Wisconsin-La Crosse  
July 1, 2010 - May 31, 2011

The Microbiology Department had a successful 2010-2011 school year. The department was fully engaged in the core areas of teaching, scholarship, and service. Collectively, the department members were very active in revising and delivering general education, required, and graduate courses. They contributed significantly to the scholarship and were involved in various service projects. The major activities of the department for the year 2010-2011 are highlighted in this report.

**Teaching:** The department continued the tradition of offering a wide range of core and elective courses to meet the needs of microbiology majors and microbiology minors. With the addition of a new Instructional Academic Staff member to the team, we were able to offer multiple lab sections of Pathogenic Bacteriology and other courses required for Clinical Laboratory Sciences degree. This in turn helped ease the pressure on core courses and at the same time provided a few additional options to the students in regards to scheduling. This past year we fielded two freshman level general education courses, *Microbes and Society* (MIC 100) and *Global Impact of Infectious Disease* (MIC 130). Both these courses were popular among non-science majors. Drs. Bratina and Taylor taught another general education course, *Changing the Culture: Women in Science* (SAH 307). This was well attended.

**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 publications in a peer reviewed journals. Five of these publications are coauthored by the graduate and/or undergraduate students.
- Twenty-two presentations at local, regional and national meetings.
  - Five presentations at local meetings.
  - Twelve presentations at regional meetings.
  - Five presentations at national meetings.
  - Twenty of these presentations have undergraduate and/or graduate students as coauthors/presenters.
- Theses advisors to eighteen graduate students.
- Independent Research advisors to twenty undergraduate students.
- Received two extramural grants totaling \$404,500.
- Received one UW-L Grant for \$3,250.
- Submitted one Intellectual Property Application.
- Ongoing research works on grants worth \$810,000. A number of these grants are collaborative grants with the Departments of Biology and Chemistry.
- Many of our faculty have worked closely with undergraduate and graduate students and have helped them secure research funds, travel grants, supplies grants, McNair fellowships and other financial aids.

**Service:** Microbiology faculty and staff continued their strong record of service to the college, university, community, and the profession. The department members actively served on and provided leadership to the College, UW-La Crosse Faculty Senate and University committees. The department members were also active outside of the university by taking up leadership roles in professional organizations, reviewing journal articles and grant proposals, and serving on community organizations. Below are a few examples of types of service our faculty and staff members were engaged in, this past year. Members had leadership roles on many of these committees.

- STEP Committee
- SOE Portfolio Committee
- SUFAC
- Undergraduate Research Committee
- Institutional Biosafety Committee
- CGAAF
- Graduate Council
- Select Committee on Internationalization
- Editorial Board – Journal of Industrial Microbiology and Biotechnology
- Gundersen-Lutheran Medical Foundation Research Committee
- Faculty Senate
- College Committee
- Editorial Board – World Journal of Critical Infectious Diseases
- Editorial board – Journal of Biomedicine and Biotechnology
- Councilor – North Central Branch of the American Society for Microbiology
- Community Foundation Board

Other key highlights of the 2010-2011 school year include:

- Approval of Academic Program Review by the Faculty Senate and Provost.
- Welcomed Mr. Michael Lazzari as Instructional Academic Staff.
- Welcomed Ms. Lori Lazzari as Instructional Specialist. She joined in spring.
- Cosponsored (with Biology, Chemistry, ESS and others) the presentation by Dr. Polly Matzinger, National Institutes of Allergy and Infectious Disease. Dr. Matzinger was 2010-2011 Distinguished Speaker in Life Sciences.
- Hosted a presentation, *Investigating the role of Calcium in Bacteria*, by Dr. Jodi Enos-Berlage, Luther College. IA.
- Hosted a seminar by Dr. Lara Pereira, Emory Vaccine Center, Atlanta, GA.
- Shared the progress we have made in the area of Inclusive Excellence with Dr. Deb Hoskins.
- Outreach activities with Blair-Taylor High School, Aquinas High School, Central High School, and Highland School District. Supplied media and materials for the science experiments. Faculty visited some High Schools and demonstrated various science experiments and provided training to the science teachers.
- Hosted 15th Annual Symposium on Industrial and Fermentation Microbiology. This was one-day long scientific meeting and featured six speakers. About 95 people attended this

event. More than five thousand dollars were raised in private contributions to support this event.

- Hosted freshman social to welcome freshman and to introduce them to the upperclassmen and faculty.

With the help of generous support from the College Office during the past year, the department was able to upgrade a variety of laboratory equipment, acquire new equipment and replenish consumables such as media, reagents and laboratory supplies. The one-time infusion of funds from the College Office has helped us maintain our teaching laboratories well supplied. However, the challenge is to maintain the current rigor of our program into the future years when resources are expected to become tight. In the anticipation of a future resource crunch, we are examining our course offerings and laboratory exercises to achieve efficiency without compromising the quality. Another challenge, perhaps a greater one, we face is the recruitment of undergraduates into our program. Since students do not take our introductory microbiology course until they are in their second year, it poses unique challenge in regards to the introduction of our program to the incoming freshman. We are working toward finding a solution to this unique situation by exploring various ways to keep freshman engaged.

The department is working diligently to promote the graduate program. For a department of our size, the number of graduate students we serve is the testament of our commitment to the graduate program. We will continue to promote both general microbiology and clinical microbiology masters programs and explore the options of initiating others such as Professional Science Master (PSM) Program as suggested by the external reviewers of our Academic Program.

Another challenge is to find adequate number of internship (clinical preceptorship) sites for the students majoring in Clinical Laboratory Science. With the increased enrollment in this program, there is more demand for the clinical sites. Dr. Diane Sewell and Mr. Michael Lazzari are taking on the task of strengthening our relationship with current clinical partners and identifying new clinical sites for the future. Dr. Sewell and Mr. Lazzari are making steady progress in this area.

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. During December, in a meeting with Dr. Deb Hoskins, we shared the progress the department has made on this front. Dr. Hoskins was impressed with our commitment to the Inclusive Excellence. She gave us some pointers to further strengthen our involvement. We plan to act on these in coming years. Through our involvement in McNair Program, Women in Science course, tutoring sessions we remain fully engaged in the University's Inclusive Excellence initiative.

The department has worked very diligently to meet all of its obligations in terms delivering curriculum, maintaining strong scholarship, and commitment to service. We will continue to work toward reaching excellence in all of the core areas. The specific items we would like to focus during 2011-2012 include, but not limited to:

- Complete the work on bylaws and bring them up to date to meet college/university requirements.

- Conduct a successful search for a tenure track microbiologist.
- Examine undergraduate course offerings and make necessary changes. For example, examine the logistics of uncoupling Immunology lectures and labs.
- Examine graduate course offerings and make necessary changes.
- Develop and submit *Entitlement to Plan* document to initiate Professional Science Master's Program.
- Redouble the efforts to recruit and retain undergraduates.
- Redouble the efforts to recruit graduate students.
- Work with current partners and explore the opportunities to bring in new partners to expand Clinical Microbiology Master's Program.
- Work on bringing well-known microbiologists to campus to present seminars and interact with students.
- Establish and strengthen the relationships with alumni.
- Find creative ways to reduce the work load of faculty and encourage them to seek external funds.
- Continue the working relationship the department has established with the area high schools' science teachers.
- Expand outreach programs to middle and high schools beyond immediate vicinity
- Continue to work on inclusive excellence.

S.N. Rajagopal, Ph.D.

Chair

June 17, 2011

**Department Activities**  
**Physics**  
University of Wisconsin-La Crosse  
July 1, 2010 - May 31, 2011

**UW-L Physics Department Ranked 6<sup>th</sup> in the Nation**

Each year the American Institute of Physics (AIP) Statistical Research Center publishes a list of Bachelor's-only departments averaging 10 or more physics bachelor's degree per year in its Physics Undergraduate Enrollments and Degrees data in the nation. This year UW-L Physics Department was ranked 6<sup>th</sup> in the nation averaging 20 graduates per year for classes 2006 through 2008 ([www.aip.org/statistics](http://www.aip.org/statistics)).

During 2010-2011 the physics department graduated 25 physics, physics/engineering majors.

**UW-L Physics Department selected for a site visit by the AIP**

The American Institute of Physics (AIP) has selected UW-L's physics program for a site visit in the fall of 2011. The National Science Foundation awarded AIP a grant to learn about and promote effective practices for STEM career pathways to increase the size and diversity of our Nation's workforce. UW-L physics program was selected because of its strong record of preparing students with bachelor's degrees in physics and placing them into careers in STEM fields.

**UW-L Physics Faculty Seth King featured in the WiSys Newsletter**

UW-L Physics faculty Seth King received \$42,700.00 research grant from WiSys for his proposal entitled "ZnO/Graphene Nanolaminate Materials for Photovoltaic Applications".

Dr. King was also featured in an article entitled "Discoveries and the People Making Them: Seth King" in the spring 2011 WiSys newsletter (Volume 7, Issue 2).

**UW-L Physics Majors fare well in Undergraduate Research and Physics Competition at the National Level**

Sean Harrington (Mentor: Dr. Gansen) was selected for the prestigious 2011 NIST-Boulder Summer Undergraduate Research Fellowship (SURF) program.

Angeline Klemm (Physics-Engineering) was selected for the 2010 Summer University of Minnesota NNIN REU experience. She co-presented a poster at the Magnetism and Magnetic Materials Conference 2010 in Atlanta, which won the best poster award.

Patrick Copp (Mentor: Dr. Leshner) was accepted to the summer 2010 Research Experience for Undergraduates (REU) program at the University of Notre Dame, Nuclear Structure Laboratory.



Patrick Copp presented his work at the APS meeting Division of Nuclear Physics Nov 2011 in Santa Fe, NM.

Cody Hunt, Ali Khalili (Physics) and Hoang Vo earned the rank of Bronze Medal winner in the 2010 University Physics Competition at the national level (Advisor- Ragan).

### **Distinguished Lecture Series in Physics (DLS)**

The Physics Department celebrated the eleventh anniversary of the successful Distinguished Lecture Series in November 2010. Dr. Anthony Leggett, a 2003 Nobel Laureate and Professor of Physics at the University of Illinois, Urbana Champaign, IL, served as the UW-L Physics Department Distinguished Lecture Series speaker on November 11-12, 2010. Dr. Leggett gave a public lecture entitled “Why can’t time run backwards?” and a physics seminar entitled “Does the Everyday World Really Obey Quantum Mechanics?”

### **Faculty Accomplishments**

Dr. Seth King (Co-PI) and Dr. Eric Gansen (Supporting) are currently working on a NSF funded grant entitled "MRI-R2: Acquisition of a Scanning Electron Microscope (SEM) and Atomic Force Microscope (AFM) for a Multidisciplinary Core Imaging Facility, funded for \$524,145 (2010-2013).

Dr. Eric Gansen received the Wisconsin Space Grant Consortium 2011 Special Research Seed Grant Award for \$10,000 for his proposal entitled “Using Resonant RLC Circuitry to Enhance the Performance of Quantum-Dot Based Single-Photon Detectors”. He also received the 2011 UW-L Faculty Research Grant for \$12,331 for his proposal entitled “Enhancing the Performance of Quantum-Dot Based Single-Photon Detectors”.

Dr. Barnes published a research paper entitled “Entropy Production in Collisionless Systems. I. Large Phase-Space Occupation Numbers” in *the Astrophysical Journal*, 728, 136, 2011.

Dr. Shelly Leshler received the Wisconsin Space Grant Consortium 2011 Research Infrastructure Award for \$4,999 for her proposal entitled "Study of the Origin of the Elements”.

Dr. Shelly Leshler (Nuclear Physics) published three research papers in the Physical Review C journal and one in *Nuclear Instruments and Methods in Physics Research A* journal.

Dr. Gubbi Sudhakaran co-authored a vignette entitled “Creative Research Funding Strategies at UW-La Crosse” in the Council on Undergraduate Research Quarterly Summer 2010.

Dr. Lyndon Zink co-authored a paper "Measurement of Optically Pumped CH<sub>3</sub><sup>18</sup>OH Laser Frequencies Between 3 and 9 THz" which was published in the IEEE journal of Quantum Optics, Volume 147, pages 386-389 (March 2011).

UW-L Physics faculty (Drs. Barnes, Gansen, King, Leshler, Ragan, and Sallmen) mentored 20 undergraduate students for research during 2010-2011.

Drs. Barnes, Gansen, King, Lesher, Ragan, Sallmen, and Sudhakaran presented papers at state and national conferences.

Drs. Ragan, Sudhakaran, and Verrall served on M.S. and Ph.D. thesis committees as external examiners.

### **Student Accomplishments**

UW-L physics graduates Krystian Wsul (U. Minnesota) and Kyle Danielson (Wright State University) received research assistantships to pursue graduate studies and Andrew Veres will be pursuing the graduate program in Medical Physics at the Wayne State University Medical School starting fall 2011.

UW-L physics majors John Nehls (Mentor: Dr. Gansen) and Benjamin Oleson (Mentor: Dr. King) received 2011 Wisconsin Space Grant Consortium (WSGC) Undergraduate Scholarships.

UW-L physics majors John Nehls (Mentor: Dr. Gansen) and Benjamin Oleson (Mentor: Dr. King) received UW-L Summer 2011 Dean's Distinguished Fellowships.

UW-L physics major Sean Harrington (Mentor: Dr. Gansen) presented papers at the 2011 National Conference on Undergraduate Research (NCUR) held at Ithaca, NY in April 2011.

UW-L physics majors Sean Harrington (Mentor: Dr. Gansen) and Beth Tennyson (Mentor: Dr. Sallmen) presented paper/poster at the Wisconsin Space Grant Consortium Annual Space Conference held at Sheboygan, WI on August 20, 2010.

UW-L physics majors Lorelee Bilke, Benjamin Oleson, and Ian Smith (Mentor: Dr. King) presented posters at the UW-System Annual Symposium for Undergraduate Research and Creative Activity, April 2011.

UW-L physics majors Beth Tennyson (Mentor: Dr. Sallmen), Sean Harrington (Mentor: Dr. Gansen), and Chase Hanson, Jordan Rudolph (Mentor: Dr. Ragan) presented papers/posters at the UW-L's Annual Celebration of Research and Creative Activity on April 15, 2011.

### **Assessment Summary**

The Physics Department constantly monitors its curriculum and courses using several assessment tools. Instructors in all of our courses continue to make modifications in response to both direct and indirect measures. In addition to numerous refinements individual instructors have made to courses, assessment has led the department to implement a wide range of programmatic improvements.

First, the department has created a "Capstone in Physics" course (PHY 491) for senior that directly challenges students in several specific program goal areas. This course provides us with a reliable stream of information from students that have been shaped by our program.

Second, numerous courses have been added based on feedback from students that have advanced to graduate or engineering school, as well as directors of dual-degree engineering programs. Classes such as Statics and Circuits prepare dual-degree engineering students to hit the ground

running once they transfer to an engineering school. Advanced Quantum Mechanics and Advanced Classical Mechanics have better prepared students moving on to graduate school in physics.

Third, based on “Capstone” findings, we are currently overhauling our two course introductory sequence to improve retention and understanding of fundamental topics. Fourth, the need to assess our third program goal has led us to implement an online survey of UW-L physics alumni that will provide us with data regarding career success and the role that our program has played. Finally, and perhaps most importantly, we have created an atmosphere where assessment data is regularly utilized to improve the quality of the learning experience for students at UW-L.

### **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.

Dr. Eric Gansen and student members of the Physics Club conducted an Electronics and Electricity workshop for the *Girl Scouts of America* on July 9, 2010. This program helped the scouts earn a badge in Electronics and Electricity. Student Helpers included Sean Harrington and Chintan Modi.

Dr. Robert Ragan led a program of the *Young Scholars* entitled “*Fun with Physics*” where 5<sup>th</sup> through 9<sup>th</sup> graders performed experiments involving the laws of motion, buoyancy, circuits, optics and lasers. He also led a program on light and color for *Girls in Science* in the summer of 2010. *Young Scholars* and *Girl in Science* are UW-L sponsored programs aimed at providing school children hands-on learning experiences in math and science.

Dr. Gubbi Sudhakaran conducted a Physics and Laser Light Show for parents and children from *Kid’s Camp* in Tomah, WI in June 2010. Student, Chintan Modi, helped with the presentation.

Dr. Steven Verrall presented planetarium shows for local schools and organizations throughout the year.

Dr. Gubbi Sudhakaran incorporated 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.

Dr. Eric Gansen, Dr. Robert Ragan, and Dr. Seth King conducted Physics and Laser Light Shows for approximately 700 local elementary and middle school students. UW-L physics student helpers included; Patrick Copp, Lorelee Bilke, Joe Krueger, John Nehls, Angelina Klemm, Elizabeth Rosendale, and Yanting Tan. The group presented 8 shows between May 17 and May 25, 2011 including an off-campus show performed at Crucifixion Elementary School in La Crescent, MN.

### **Recent Department Inclusive Excellence accomplishments:**

1. Our department recognized the need for greater diversity among our faculty and staff and students. Including recent hires, fifty percent of our faculty is currently diverse (2 women, 2 minorities)
2. Our department created an Inclusive Excellence Committee to explore possible ways to improve our recruitment and retention of underrepresented groups.
3. All faculty members attended the workshop: “Five Steps to Bring Diversity into Your Course” from the UW-L Conference on Teaching and Learning (1/19/10)
4. We received an APS Travel Grant for Women Speakers to support expenses for Physics seminar speakers, which allowed us to widen the pool of women seminar speakers.

### **Current Department Inclusive Excellence Goals:**

1. Re-write the department recruitment letter to be more welcoming to all.
2. The committee will explore the research on how various pedagogical choices affect underrepresented groups in STEM courses, attempting to identify possible changes that could be made. For this, we will be using the Diversity Resources Literature Review available at the Center for the Integration of Research, Teaching & Learning: <http://www.cirtl.net/>.

### **New Initiatives:**

#### **PHY 203-204: Changing the Way We Teach.**

Based on years of assessment results, the UW-L physics department will be implementing an active-learning environment in the introductory calculus-based physics courses (PHY 203 and PHY 204). Until now, these courses were taught in the traditional lecture-lab format but will be switched to an inquiry-based format starting in fall of 2011.

During this transition from lecture-only to active-learning styles, the department will investigate a) how an active-learning approach in the introductory sequence affects performance in upper-level physics classes and b) student attitudes. Two faculty members will be directly involved in the implementation, and the remaining faculty will be brought into the active-learning mode in the future. We are confident in our ability to accomplish the transition since the department has successfully incorporated the inquiry-based teaching model in the Physical Science for Educators (PHY 106) course developed specifically for elementary education majors.

The department has received a UW-L Curricular Redesign grant and additional equipment funds from the Dean's office to purchase the activity/laboratory equipment needed for both courses. However, there remain a few challenges facing the department to fully implement the new format.

The first challenge is an enrollment problem. The new teaching format requires that the enrollment in the course be limited to 30 students per section. We have opened two sections (30 per section) of PHY 203 for the fall 2011 semester and, currently, the total enrollment stands at 41. During the annual freshman registration we normally get 30-35 physics and physics/engineering majors and most of them will be placed in PHY 203. Since the classroom can only accommodate 30 students we may be forced to open a third section of PHY 203 for fall 2011 semester.

The second challenge is a space problem. Currently, we are using Cowley Hall Room 221 as PHY 106 course classroom on Monday and Wednesday. We plan to use the same room for teaching two or three sections (each 2.5 hours long) of PHY 203 on Tuesday and Thursday. Unfortunately, these two classes cover very different topics and have wildly different equipment requirements. The technician has to dismantle the PHY 106 activity and demo equipment after 2:30 p.m. on Monday and Wednesday and immediately set-up the activity and demo equipment for PHY 203. The same process has to be repeated on Tuesday and Thursday to dismantle the PHY 203 equipment and set-up the activities and demo equipment for PHY 106 course. Tearing down and putting up equipment for two different courses in the same room will be a logistic nightmare for the technician. Much of the difficulty would be removed if the department could get an additional classroom similar to Room 221 in Cowley Hall.

### **Secondary Physics Education: Preparing High School Physics Teachers for the 21<sup>st</sup> Century**

The UW-L Physics Department is initiating a new undergraduate program “Secondary Physics Education” starting fall 2011 semester. 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 has hired a new tenure track assistant professor with expertise in Physics Education Research (PER) to spearhead this new program. However, there remain a few challenges facing the department to fully develop this new program.

The first challenge is to attract students into this major. The department has to publicize this new program statewide and aggressively recruit high school seniors into this program. The department will seek funding from external agencies such as National Science Foundation (NSF) and American Physical Society (APS) PhysTEC programs to solicit scholarships for students interested in majoring in this program.

The second challenge is to develop new content courses for this new program. Most of the physics courses currently offered by the department are geared towards the traditional physics and physics-engineering majors. Developing new content courses would be a long-term goal due to limited resources we have in terms of personnel and equipment needed for this task.

Finally, the department must provide support for the duties and requirements of this new position, which are considerable, including advising of physics and non-physics education majors, coordinating the supervision of pre-service teachers, and participation in teacher education in college, university and community committees.

**Department Activities**  
**Recreation Management and Therapeutic Recreation**

University of Wisconsin-La Crosse

July 1, 2010 - May 31, 2011

- 1) Accommodate the university's new target enrollment goals, by striving to increase its enrollment, updating departmental web-sites, publishing new program brochures and possibly increasing enrollment caps, provided the new cap levels do not adversely impact program quality. (Objective A, Strategy 6)
  - a) ACCOMPLISHMENTS: Editorial changes were made to the department website pages. A few changes need to be made yet. Brochures and flyers were updated and will be published this summer or as soon as the supply is depleted. Both Therapeutic Recreation and Recreation Management have started FACEBOOK Pages, which will be used as a popular social media recruitment tool as well as a means to connect alumni with current students and faculty. Enrollment is high and stable in the undergraduate therapeutic recreation program [170's] as well as the graduate recreation management and therapeutic recreation programs [150's]. The recreation management program was low for several semesters, but rose above a 100 again. Hopefully, with new marketing efforts it will rise to its normal 150's
  
- 2) Acquire feedback from professionals on the curriculum and curriculum revisions by having faculty internship supervisors will periodically elicit feedback from professionals supervising our intern's semester. (Objective A, Strategy 15)
  - a) ACCOMPLISHMENTS: Names of practitioners were selected from our department's therapeutic recreation and recreation management internship supervisor lists. They will receive a letter this summer inviting them to join our practitioner review board. If they accept, they will annually review our curriculum and its annual changes. The commitment would be for three years. Abbreviated forms of the department's syllabi have been prepared and will be sent to them in late summer in preparation for a focus group discussion in early fall semester. This focus group session will be facilitated by the program directors and department chair.
  
- 3) Ensure proper course offering and sufficient course section offerings by monitoring the effectiveness of the department's over-enrollment management system. (Objective A, Strategy 18)
  - a) ACCOMPLISHMENTS: The program directors, department chair and academic department associate have carefully monitored the course scheduling and course section offering to ensure every student is given ample opportunity to graduate in a timely fashion. All students who followed their advisors' advice as well as the printed curricular sequence instructions flyer have been able to acquire and complete the appropriate courses so they graduate on time. Some adjunct had to be hired to cover staff on leave and cover extra sections in therapeutic recreation where course enrollment exceeded course capacity.

- 4) Encourage and reward faculty scholarship by ensuring the department merit process contains policies/guidelines that foster scholarship. (Objective B, Strategy 1)
  - a) ACCOMPLISHMENTS: All faculty members had the opportunity to submit requests for travel monies to present at regional and national conferences. Eight out of the 10 faculty members received monies to present at a conference, participate in education training, or attend a board meeting as an elected board member. One faculty member on a tenure-track appointment received funding for two conferences. This unique two conference funding was given because department policy gives precedent to those who are working on either tenure and/or promotion. The department gave a three-credit/contact hour reduced teaching load to Dr. Jearold Holland to write chapters for a book that will hopefully be published in the near future. This is considered a release-time appointment that department faculty members compete for each year. Currently, only one is given out for the fall semester each year.
  - b) To see the collective productivity of faculty in the scholarship area, review the Scholarship section on the chart at the end of this report.
- 5) Maximize productivity and visibility by preparing annual goals for faculty and the department. (Objective B, Strategy 4)
  - a) ACCOMPLISHMENTS: Department has a policy where all faculty are to submit annual goals to the department chair. These goals were not collected for the 2010-11 year. The department also formulates department wide goals and submits them to the administration. These department goals were formulated and accomplishments for each goal were reported.
  - b) To see the collective productivity of faculty in the areas of Teaching, Scholarship and Service, review the chart at the end of this report.
- 6) Maintain academic quality by retaining the 10 full-time tenured faculty positions it had prior to recent cuts and offer competitive salaries. (Object E, Strategy 5)
  - a) ACCOMPLISHMENTS: Stephen Lewis was hired this year to teach in therapeutic recreation area. This brought the department to a nine full-time tenured faculty member level. In addition, Jin Young Chung was recruited and hired to start next fall, which will finally bring the department back to its 1990 original level of 10 faculty members and one instructional academic staff. The department also discussed requesting one more Growth Quality and Access position that would be filled in FY 2013 if approved by the administration.
- 7) Become familiar with new accreditation standards and begin formulating plans on how to restructure curriculum to meet new standards. (Objective A, Strategy 7)
  - a) ACCOMPLISHMENTS: The national accreditation council formulated new accreditation standards. The department chair reviewed them and shared them with the program directors, but little else was done. These new standards need further discussion in preparation for the next reaccreditation and self-study review.
- 8) Review Status of work efforts on Writing in the Major and ensure Writing Standards are being met in the previously prescribed courses. (Objective A, Strategy 3)
  - a) ACCOMPLISHMENTS: Nothing was done in this area.



- 9) Design and construct a Leisure Skills Laboratory, which is to be housed in the HSC and replaces the old Wittich Hall Leisure Lifestyle Center.
- a) **ACCOMPLISHMENTS:** The Leisure Skills Laboratory in the Health Science Center was approved and will be completed this summer. Two spaces, a classroom 4024 and a laboratory 4002, will be shared with other health professions programs. Both rooms are being remodeled to meet the teaching and lab needs of TR. A third space, 4016, is being remodeled and developed for storage space. It will house all of the therapeutic recreation equipment and supplies that cannot be housed in the shared classroom and lab spaces on fourth floor. Finally, a lounge and eating area with one-way viewing windows between the two areas will be completed as well. This is to be utilized by TR for students to observe instructors and students working with TR clients. This space will also be shared with other health professional programs housed in the building. It is to be used as an eating area, meeting area and lab area.
- 10) **Bylaw Revisions:**
- a) **ACCOMPLISHMENTS:** The following RMTR department bylaw topics were revised and the complete bylaws are enclosed:
- i) Faculty and IAS Staff duties, responsibilities and expectations in the area of Teaching, Scholarship and Service
  - ii) Summer session priority of teaching assignments and supervision of internship policies were revised as requested by former interim Dean.
  - iii) Post-tenure review policies were revised as requested by former interim Dean.
  - iv) Faculty and IAS Salary Equity Adjustment bylaws were revised to bring further clarity to how the review process should be conducted and detail what information should be provided in an equity adjustment request.
  - v) Responsibilities for department chair, program directors and internship coordinator were rewritten to better clarify the administrative responsibilities for each of these elected departmental appointments.
  - vi) Student advising policy was added. It further delineates the specific duties faculty and IAS are to follow in advising department students.
- b) There are some bylaw changes pending pertaining to student appeals. They are other minor bylaw changes as well that still need addressing in 2011-12. This will then complete the faculty senate's stated requirements.

**Recreation Management & Therapeutic Recreation  
2010-2011 Department Faculty Workload Goals  
[9 Faculty, 1 Instructional Academic Staff, 1 Adjunct]**

	<b>Dept Goals*</b>	<b>Faculty submitted Goals</b>	<b>Goals Accomplished 2010-2011</b>
<b>TEACHING</b>			
Teach a course of more than 50 students	<b>1</b>		<b>0</b>
Attend teaching workshop	<b>8</b>		<b>8</b>
Advise graduate thesis or project	<b>20</b>		<b>8</b>
Undergraduate research grant	<b>2</b>		<b>4</b>
Teaching grant	<b>1</b>		<b>3</b>
<b>SCHOLARSHIP</b>			
Refereed article published	<b>3-4</b>		<b>5</b>
Non-refereed article published	<b>4</b>		<b>2</b>
Book published	<b>1</b>		<b>1</b>
Book chapter published	<b>2</b>		<b>1</b>
External grant approved	<b>1-2</b>		<b>0</b>
Internal grant approved	<b>2</b>		<b>1</b>
National presentations	<b>6</b>		<b>12</b>
Regional presentations	<b>6</b>		<b>10</b>
<b>SERVICE</b>			
University Committee	<b>5</b>		<b>11</b>
College Committee	<b>2</b>		<b>5</b>
Chair of a Campus Committee	<b>1</b>		<b>0</b>
Department Committees	<b>9</b>		<b>35</b>
National Professional Committee	<b>3</b>		<b>4</b>
Chair of National Organization Committee	<b>1</b>		<b>1</b>
Regional or State Professional Committee	<b>2</b>		<b>5</b>
Service Presentations	<b>6</b>		<b>1</b>

\*Summary of tasks department faculty will collectively attempt to complete.

## **Murphy Learning Center Activities**

University of Wisconsin-La Crosse

July 1, 2010 - May 31, 2011

This year the Murphy Learning Center continued to improve. There was more involvement from other departments in the Sciences. The Center was used extensively by the Mathematics Department and quite regularly by Biology, Chemistry, Microbiology and Physics. Although the sign in sheets indicate approximately the same amount of usage as in 2009 – 2010, the level of activity I observed seemed to indicate a significant increase in usage. The Learning Center was open with mathematics tutors available approximately 60 hours each week. Tutors from other departments were available less often.

This past year we involved more tutors in helping Mathematics Education students. There were special tutors assigned to these students because of the slightly different curricula in MTH 126 and MTH126.

This year Chemistry appointed a person to coordinate tutor activities for chemistry students. Other departments have done this informally as well. With what appears to growing usage, it will become necessary to coordinate Learning Center activities better.

The technology in the Learning Center continues to improve. There are now 3 desktop computers in the Learning center, one of which is quite old. There is a Smartboard ready to be installed. This new technology will be important for education students. One issue relative to technology that needs to be considered is wall outlets. Many students come into the learning Center with their laptops and need to plug them in. There is a shortage of outlets. The need for laptops is based on the number of instructors using WebWork or something similar. The tutors regularly help students with these assignments.

The Learning Center has proved to a valuable asset to all who are in there, both tutors and those needing tutoring. The tutors have created a pleasant learning atmosphere; it is casual yet the students seem to learn a lot. We have asked students to fill out evaluation forms at the end of each of the last two semesters. The responses were unanimously positive. Comments such as “I could not have passed this course without the help I got in the Learning Center” were quite common. I think the tutors benefitted in more than one way. They all learned a lot of mathematics by explaining it. They also got a better understanding of those who struggle with mathematics. The informal discussions we have had concerning topics ranging from how to best help with a particular problem to what graduate schools are all about to what careers are available were very beneficial as well. Each year a few of the tutors head off to graduate school or a professional position. These students all seem to have benefited from their experience in the Learning Center.

The director of the Learning Center met with colleagues from other tutor services such as Student Support Services and Multicultural Student Services to discuss how we could better help students across campus and coordinate efforts. These collaborations should continue.

The success of the Learning Center cannot be discussed without mentioning the work of Karry Auby in the Mathematics Department. Karry dealt with budget issues and handled the payroll for the tutors as well as taking care of clerical help in general.

Probably the most significant event involving the Learning Center was the appointment of a new Director. The Mathematics Department conducted a search during the spring semester resulting in the appointment of Maigread McHugh to the position. I am very confident that under Maggie's leadership the learning center will improve significantly.

James Sobota  
Director, Murphy Learning Center

## **Workload and Equity Task Force Report, April 5, 2011**

Enilda Delgado  
Kerrie Hoar  
Tom Kernozek

Brenda Leahy  
Becky LeDocq  
Charles Martin-Stanley

Bruce Riley  
Keith Sherony  
Jennifer Wilson

### **Task Force Work Groups**

#### **Summer School/J-Term Compensation for Instruction**

- Reviewed current summer session compensation plans employed by the three colleges as well as various compensation plans developed/(proposed?) over the past several years.
- Developed a compensation plan and tested the plan against the salaries actually paid faculty/IAS during summer session 2010 for instruction.
- Currently revising the plan to address several complications, and determining whether or not the summer session compensation plan might also be applicable to J-Term compensation.
- Expect to have a summer session compensation proposal for review by the Provost and Deans' Council by the end of the spring 2011 semester.

#### **Faculty Workload Guidelines and Reporting**

- Reviewed UW-La Crosse faculty and IAS workload policies, last year's FAR reports, and workload guidelines and reporting plans employed at various colleges/universities across the country.
- Developed a proposed interpretation of the UW-La Crosse workload policies. The proposed interpretation is intended to provide a framework for assigning and reporting faculty and instructional academic staff workload. Members of the work group have solicited and received preliminary feedback from some CLS faculty members and SAH chairs on the proposed interpretation
- Currently developing a survey for department chairs to obtain comment on the interpretation of the UW-La Crosse workload policies and, more importantly, obtain detailed information regarding how departments assign variances to the normal teaching load.
- Expect to implement the department chairs survey at the end of spring semester 2011, and to analyze the results of the survey during summer 2001. The results of the survey are expected to be the basis for the task force's future work regarding workload guidelines and reporting.

#### **Non-Instructional Academic Staff Issues**

- In consultation with Human Resources and Academic Staff Council, developed a survey for non-instructional staff members to help identify workload issues for NIAS. The results of the survey would be used to develop recommendations (for supervisors) to help address the issues.
- Bruce will consult with the work group on implementation of the survey.