

**Career Pathways Project
University of Wisconsin – La Crosse Site Visit
4-6 March 2012**

Site Visit Team

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I. Context

A. The Institution

The University of Wisconsin – La Crosse (UW-L) is a public university within the University of Wisconsin System. UW-L has approximately 10,000 students, and about 9,000 of them are undergraduate students. The other students are enrolled in master's and educational specialist programs, or in the Doctorate in Physical Therapy program, the one doctoral degree offered by UW-L. Departments with strong reputations include accounting, archeology, sociology, music, biology, chemistry, physics, and physical therapy.

The physics department currently consists of nine tenure/tenure-track faculty members, with one new hire slated to begin in August 2012, and two half-time instructional staff members. Students can graduate with a traditional physics major or:

- A physics major with an emphasis in astronomy, computational physics, or optics
- A physics major with a biomedical or business concentration
- A dual-degree in physics and engineering with UW-Madison, UW-Milwaukee, UW-Platteville, or the University of Minnesota
- A dual-degree in physics and physical therapy
- A B.S. in physics education

As of January 2012, the department had a total of 151 majors. By far the most popular degree options are dual-degree physics-engineering, traditional physics, and physics with a biomedical concentration. The physics education degree was introduced in the fall of 2011.

B. The Site Visit

The AIP Career Pathways Project seeks to learn, and then disseminate, the effective practices of physics departments that are successful in placing students who receive the bachelor's degree into STEM (Science, Technology, Engineering, and Mathematics) careers. UW-L was chosen for a site visit on the basis of data collected by the AIP Statistical Research Center (SRC) indicating that it had both a strong record of granting physics bachelor's degrees compared to other physics departments within their type of institution and was among the national leaders in terms of the percent of their recent physics bachelor's recipients who entered the STEM workforce within one year of earning the bachelor's

degree. In addition, the UW-L physics department was chosen on the basis of a subjective examination of its website, with an eye to how well career issues are discussed there.

The site visit itinerary appears as an appendix. The team met with Department Chair Gubbi Sudhakaran (Sudha), Chancellor Joe Gow, Vice-Chancellor and Interim Provost Betsy Morgan, Dean Bruce Riley, Director of Admissions Kathryn Kiefer, Associate Director of Career Services Tim Tritch, Ex-Provost Ron Rada, and Assistant to the Dean Carla Burkhardt. The site visit team also met with all of the physics department faculty and staff, a few of the department alumni, and several current students.

II. The Department

A. The Faculty

The Physics Department at UW-L currently consists of three full professors, two associate professors, and four assistant professors. This provides a combination of both experience and youth that serves to maintain a high level of energy and innovation. The department has doubled in size since the mid 1990's and three of the nine current faculty positions are held by women, thereby offering a level of gender diversity that is rare among physics departments nationwide. The new faculty member set to begin in August will further enrich the diversity among faculty members, as she is an African American female. In addition to the nine professors, there are also two lecturers in the department.

Led by their department chair, Dr. Gubbi Sudhakaran, the hallmark of this department is the student-centric approach that pervades all of the department's efforts. From the recruitment of prospective students to the advising of existing students; to the immersion of students in research, community outreach, collaborative programs within the University and the 3/2 engineering program; to careful hiring decisions, the department and its faculty are proactive on every front. This provides an almost "cradle-to-grave" approach to nurturing and providing for the students within the physics department.

The success of the program in recruiting, retention, and career placement can be traced to a combination of aggressive advising and flexible options designed to meet the needs and career goals of each student. Through multiple program options such as physics education (recently bolstered by the hiring of a specialist in the field, Dr. Jennifer Dockter), a 3/2 program that offers a means to pursue engineering options, and a collaboration with the Physical Therapy program, the department makes an effort to appeal to a wide variety of students and prepare them for a wide variety of careers.

In discussions with students, support staff, administrators, and physics faculty members, it was abundantly clear that the mindset of the department is "students first." The faculty has a wealth of talent that is directed towards conceiving of and developing new ways to meet the needs of every student who desires a background in physics. There is no doubt that the physics faculty at UW-L is extremely dedicated to their students and that this has translated into a nationally recognized program.

B. The Support Staff

The support staff within the physics department consists of two individuals, Sharon Aalseth, Program Assistant, and Steve Harris, Electronic Technician. In our discussions with the support staff, faculty members, and students, it became clear that these two individuals serve in capacities that go well beyond their job titles. Sharon serves to keep the department running smoothly and on top of things while Steve serves as a “Jack-of-all-trades,” repairing damaged equipment, setting up laboratories, placing orders, working with students, etc. From all accounts, the support staff plays a vital role in the day-to-day operation of the department, enabling the faculty members to focus on teaching and mentoring students.

C. The Curriculum

Flexibility and adaptability are the best descriptors for the curriculum at UW-L. The department has developed a program designed to accommodate any student interested in physics, independent of academic preparation or career goals. Majors can choose from a traditional degree program with an emphasis in such topics as optics, astronomy, and computational physics. Students can choose a track that provides a business or biomedical concentration. There is a physics education degree and a dual physics/physical therapy degree. The department has successfully implemented a 3/2 program leading to an engineering degree in collaboration with an engineering program at a major research institution, e.g., UW – Madison or the University of Minnesota – Twin Cities.

To learn about the wide variety of opportunities available to physics degree recipients, and to help students explore their own interests, freshman physics majors are encouraged to take a weekly physics seminar course that features speakers from high-tech companies, research universities, national laboratories, and the four engineering schools with which UW-L partners. The seminar also focuses on job skills and the art of resume/CV preparation, helping students understand how and where they will be able to make use of the physics expertise that they are acquiring.

The introductory physics sequence is structured such that any math background can be accommodated and students are able to jump from one track to another as their math skills improve—students that take the algebra-based introductory physics sequence (instead of the calculus-based sequence that most physics majors take) can still major in physics without having to re-take introductory physics. The department recruits about 10 physics majors from the algebra-based sequence each year. This kind of flexibility is not common among physics departments nationwide.

Students are required to take a number of laboratory classes throughout their time in the physics department, although the requirements vary with each track. There seems to be a growing emphasis on software and computational skills within the labs. The department has recently introduced a computational component to its Experimental Physics course that uses MatLab software (which is commonly used in industry and academia). In addition, there is an elective two-course sequence of computational labs, and the department is currently developing an advanced experimental course that will introduce students to Labview programming and additional research tools.

The physics department recognizes how important it is for physics students entering the workforce to have good communication skills, and so it incorporates writing activities and oral presentations into

many of the courses. Two required courses strongly emphasize writing skills—Experimental Physics and Circuits. Seniors are also required to take a Capstone class that addresses their content knowledge and communication skills.

Although not specifically a part of the curriculum, the department maintains an active SPS chapter and Women in Physics Club. Both of these organizations serve as a means to make students feel included and welcome within the department and, in many ways, serve as a support mechanism for students as they navigate their way through the curriculum.

D. Research and Outreach Opportunities

Students are actively encouraged to be involved in research with faculty members, and internships and student research opportunities are readily available on campus. Support for obtaining summer positions on campus and through collaborations with other institutions is available. In addition, the department has a bulletin board that features summer research opportunities at other locations and students are encouraged to apply to these programs. The department also offers paid teaching assistant and tutoring positions to its majors.

Some of the department's success in recruiting students and gaining administrative support stems from its hosting of physics-oriented programs that foster interaction with the community. One example is the Distinguished Lecture Series. Every year the Physics Department hosts a Nobel Laureate through its Distinguished Lecture Series in Physics. Over a three-day span, the Nobel Laureate gives a public lecture and physics colloquia as well as attends classes and meets with students, faculty, and administrators. Another successful effort that advertises the physics program, while simultaneously providing a unique educational experience for their students, is the active involvement of both students and faculty members in programs such as *The Physics and Light Show Extravaganza*. In addition, the department offers very popular Planetarium programs to school groups, private groups, and the public.

E. Advising

Along with flexibility in the program offerings, advising is the cornerstone of the physics program. Every student is watched over, advised, cared for, nurtured, prodded when needed, advised as necessary, and made to feel welcome in the department. The majority of the advising responsibility falls to the department chair, although there is a separate advisor for students working toward the physics degree with an astronomy emphasis and another advisor for students in the physics education program.

This model of centralized advising is time-consuming for the few faculty members that are involved, but there are many benefits. First, the faculty members that do advising are well-versed in the course requirements, program tracks, and offerings of the physics and math departments. This ensures that the students stay on track for graduation and meet all of the necessary requirements. Second, the faculty members that advise students are fully invested in the process and understand the importance of

advising. To them, the advising process does not just entail making sure that students know about requirements for the degree, it involves talking to students about their career goals right from the first meeting and together coming up with a plan for how students can best develop the skills and education that they need to reach those goals. And finally, the proactive advising of students serves to both mentor the students and to allow the department to receive critical feedback on its programs, making it possible to adapt to situations as they arise.

Everyone with whom the site visit team spoke commented on the quality of the advising that takes place in the department. Coming in for advising is not optional. Every student must come in for an advising session before they are allowed to enroll in courses. The faculty member responsible for advising takes an active role in helping each student plan out his or her program, and guiding the student towards the best preparation for his or her career goals. This is an extremely labor intensive activity on the part of the advisors, particularly for the department chair. However, the students expressed strong appreciation for these efforts and current students and alumni were unanimous in their view that these advising efforts were very helpful.

III. Students

A. Overview

The Site Visit Team met with a handful of students to discuss their experience in the Physics Department at UW-L. The students seem happy with the department and talked about their experiences positively. They commented that the coursework was challenging and that the faculty members held them to high standards, but that the department was very supportive. One student said of Sudha, “He believes that you can do it – and you can,” to which other students agreed.

Many of the students came into UW-L knowing that they wanted to major in physics, but others switched to the major even after the algebra-based introductory sequence. Going into upper level physics classes without the calculus-based physics was challenging for some of these students, but they felt supported by the faculty members and one another, and were able to make it through. The students do have access to a room with ten computers, where they often work together on homework assignments.

The students told the Site Visit Team that research opportunities were available on campus, and some were already participating in faculty research labs. The students had a sense that faculty members wanted students to work in their labs. There is a bulletin board full of flyers advertising summer research opportunities conveniently placed near the offices of Sudha and Dr. Gansen, which students tend to browse while waiting for help. This was a meaningful entry point into conversations about summer plans for some of the students who ended up applying for summer research experiences after Sudha or another faculty member caught them browsing. Among other avenues, the students utilized the UW-L Sponsored Eagle Opportunities database when looking for internships or research opportunities off campus.

The Site Visit Team met several students who seemed eager and well-qualified to attend graduate school in physics or related fields. At the same time, the team met many students who were enthusiastically considering other possibilities, such as entering the industrial physics workforce immediately after receiving a bachelor's degree in physics, earning dual bachelor's degrees in physics and engineering, or teaching high school physics. Regardless of their future plans, the students felt supported and encouraged by faculty members, and felt that they were valued by the department.

UW-L has a Society of Physics Students chapter and a Women in Physics group. Both of these groups are very active and help to create a sense of community within the department and support events such as the Distinguished Lecture Series in Physics and the *Physics and Laser Light Show Extravaganza*. The Women in Physics group, led by Dr. Shauna Sallmen, seems to play an important role in supporting the female students in the department and bringing together female students at different points in their undergraduate careers.

B. Student-Faculty Relations

The department has a clear sense of purpose and aims to serve every student with an interest in physics, not just those planning to attend graduate school. Many of the students come from rural areas and may have never even thought about pursuing an advanced degree, but the department works with them regardless of career ambition or academic potential. The students see the faculty as never being satisfied with how the students are doing, always pushing them to do better, but always being available to help and support them. The students seem to respond very well to this. The students also commented that faculty members care about whether students are learning in their classes.

Many students highlighted the approachability of the faculty members as one of the best things about the department, and the fact that they are often in their offices, even on weekends, and their doors are always open. "Everybody knows your name," said one student of the faculty members, even the professors whose classes you haven't taken yet.

IV. The College Administration

A. Background

Any useful consideration of the role played by the administration in the development of the Physics Department at UW-L requires recognition of where the program once was. In the late eighties, the University of Wisconsin wrote a letter of intent to shut down the Physics Department. At the time, there were five faculty members graduating about one physics bachelor's degree recipient every other year. The former Provost, Dr. Ron Rada, who was then a Biology professor, told the Site Visit Team, "I don't think the Physics Department at that time recognized the value of good teaching." At that time, Rada recommended that his majors minor in Chemistry because they would learn more physics with a Chemistry minor than a Physics minor. Rada stated that the Physics Department was in "dire straits."

In the early nineties, UW-L was working hard to develop a quality reputation in the sciences, but it was clear that the Physics Department was not coming along. However, the Dean realized that growth in the

sciences was integrally tied to a vibrant Physics Department and that discontinuing the department would be a huge step backward. As a result, the administration decided to revitalize the department by hiring a new department chair from outside of the university. The person they chose insisted on being able to bring at least one other established faculty member with him. Although the new chair only stayed a couple of years and moved on, the second new faculty member, Sudha, became the chair and remains in that position to this day.

Only one person, Dr. T.A.K Pillai, remains from the department's "famine years." Pillai stated that since then "everything has changed." The first and most important change he listed was the administration's support. The University decided it needed the Physics Department, so it hired an outside chair and other faculty. It reduced the teaching load of the physics faculty members by a third (from 18 hrs/wk to 12 hrs/wk contact time). The administration also provided additional funds for equipment.

B. The Academic Administration

The Chancellor

The Site Visit Team had an interesting meeting with the Chancellor, Dr. Joe Gow. Gow talked mainly in generalities about the sciences, but he did mention that the Physics Department emphasizes research more than most as the figure of merit used for promotion and tenure and that the department does well at placing students into graduate programs. He also stated that even though all UW-L professors must be outstanding teachers, the physics professors had a reputation for being very popular with the students because they are "down to earth and approachable."

Gow mentioned the following areas of general support for the sciences by UW-L: a strong undergraduate research tradition, small research grants that are funded through student fees, a campus-wide undergraduate research day, and a strong push resulting in promised funding for an \$80 million science building.

The Provost

Interim Provost Betsy Morgan stated that the Provost's role in all of this was "not to screw it up," and to keep things decentralized and be as responsive as possible to expressed needs. She said that Physics is known at UW-L for its growth, and that the department has made a conscious effort to be aware of national trends in physics.

The Provost also mentioned the Dual-Degree Engineering Program, seminars (particularly the yearly Nobel Laureate visits funded by a local donor), and the department's willingness to reach out and collaborate with other programs such as Physical Therapy. In addition, the university administration is very supportive of undergraduate research, providing internal grants for student research, and "credit banking" for professors, in which supervising student research counts toward their teaching load.

The Provost also cited the chair, Sudha, as being the "shepherd and guidance counselor" of the department. One example mentioned was his written expectations related to the hiring of a faculty member with expertise in physics education research.

The Former Provost

At the recommendation of Sudha, the Site Visit Team also met with the former Provost, Dr. Ron Rada. He said that because he had been at UW-L since starting as a Biology professor in 1975, he has been in an ideal position to observe the resurgence of the Physics Department.

According to Rada, after the Dean decided to push Physics in the early nineties, there was a reallocation of resources, primarily space and money. He brought in a new chair from outside UW-L and agreed that the chair could bring in another professor. The new faculty members concentrated on making physics classes more relevant to students. Although some on campus opposed this change saying it was “dumbing down” physics, Rada asserts that this was simply not true. Rada observed that Suda, who was brought in during this time, shoots high, keeps looking forward, and is constantly looking for improvement. He described Sudha as “a master at collaboration.”

Former Provost Rada then ticked off a number of factors that he thinks contributed to the resurgence:

- An outstanding Chair
- The recruitment of good faculty members
- A focused effort to retain and nurture faculty members
- Successfully obtaining internal and external funding
- A high priority placed on recruiting prospective students
- The foresight to develop a Dual-Degree Engineering program
- An emphasis on undergraduate research (In 1995 this was institutionalized at UW-L in three primary ways: an office for research, student research grants, and an annual celebration of research.)

The Dean

The Site Visit Team also met with Dean Bruce Riley who is in his 27th year at UW-L, the first 24 years of which he was a professor in the Math Department. He became chair of the Math Department the same year that Sudha started as the chair of the Physics Department. Dean Riley gave several bullet point answers to the question, “How did the Physics Department develop into what it is today?”:

- The department built a curriculum that was attractive to students.
- Initially the department narrowed its research focus to facilitate the incorporation of students, starting with optics.
- The department hires new faculty members who are passionate about teaching. They are good, talented faculty who exhibit leadership and work with students. They “do not draw lines between those students in algebra-based physics and calculus-based physics.” They are inclusive and reach out to students. The old faculty, largely replaced, “wanted only to work with elite students,” he said. That attitude has changed, but has not negatively affected the elite students.
- They hold regular department seminars.
- There is close coordination with the Math Department, which teaches a course in Mathematical Physics.

- The Dual-Degree Engineering program draws students.
- The department continues to expand by adding programs that attract students, such as the joint program with Physical Therapy and most recently the development of a Physics Education program.

Assistant to the Dean

The Site Visit Team met separately with the Assistant to the Dean, Ms. Carla Burkhardt. One of Burkhardt's primary responsibilities is to handle all things regarding students, such as petitions and credits. She helps with troubled students, and also tracks those who leave on the Dual-Degree Engineering program. She arrived in 1998, in her words, "after Suda had already worked his magic."

Freshman registration occurs during June and lasts seven business days. During this time, students meet with faculty advisors, and in this regard "Physics shines," Burkhardt told the Site Visit Team. "They are very willing to reach out to students. If I asked them to be there fifteen days [instead of seven], they would say 'we are on it.' Clearly Physics does a good job with advising because their students rarely are missing required courses."

Burkhardt stated that the Physics Department works really hard and they "pave the way for students" with a personal touch. She said Sudha has mentored all of the new faculty members and they have bought into the program and philosophy of the department.

Although it came up in several meetings, the collaboration between the Physics Department and the Physical Therapy program was discussed more thoroughly with Burkhardt than with others. She described it as a four-year program for students with the intent of going to graduate school in Physical Therapy. The four years of undergraduate work consist of essentially three years of a physics major and one year of physical therapy courses. However, that year of physical therapy courses counts towards the graduate program at UW-L, so if the student is admitted, this saves the student a year of grad school. To the Site Visit Team this sounded like a concrete example of Sudha's successful efforts at collaborating with other programs and departments.

C. The Admissions Office

Ms. Kathy Kiefer, the Director of Admissions, met with the Site Visit Team. She has worked for twenty-five years in the Admissions Department, where she started as a counselor. Kiefer said that her department is very competitive and wants to, "get the most and the best students." One of the key approaches they utilize for drawing students are Campus Close-Up Days—four in the fall and two in the spring. These events rely on the individual departments, and this is where "Physics really shines." For example, the Physics Department voluntarily holds an open house at the end of each visit day.

According to Kiefer, Physics faculty members are in general very helpful. She told the Site Visit Team, "They are a department that gets it, we have a fantastic relationship. I know they roll out the red carpet." Sudha often comes in on weekends and during spring break to meet with prospective students, and even calls prospective students at the request of the Admissions Department.

Kiefer was very impressed with the Physics Department's web page. She said it is very friendly and highlights research opportunities, which High School students appreciate. She also noted the existence of popular clubs within the major, such as the Women in Physics group, which helps to recruit students. More than once, Kiefer stated that when the Admissions Office finds a "student they want," they send the contact information to the Physics Department and they always follow up. The way they treat prospective students is "above and beyond," she said.

D. Career Services Office

The Site Visit Team met with Mr. Tim Tritch, the Associate Director of Career Services. Tritch said that the Career Services Office and Physics Department talk a lot with each other, and once every few years he speaks during the first-year student seminar. He told the Site Visit Team that the Physics Department encourages physics majors to visit the Career Services Office to learn about the market for their major and how to sell themselves. Students can also get help with graduate school applications, participate in mock interviews, provide resume writing assistance, and take advantage of other career-related resources. Tritch asserted that the Physics faculty are proactive, looking at resumes and giving ideas to students regarding jobs. The Physics Department also has guest lecturers from the outside who speak about career opportunities.

The Career Services Office has licensed a product from a national vendor that allows them to post on their website off-campus internship and job opportunities that are relevant to UW-L students (known as "Eagle Opportunities"). They also utilize a state-wide consortium with a centralized website that only employers can access, and then import those opportunities into the UW-L website.

According to Tritch, the Dual-Degree Engineering program is both a blessing and a curse. Employers have figured out that UW-L has students who are "kinda in engineering" and have therefore opened up internships to them. However, because the students leave UW-L to complete their engineering degree, it is hard for the office to track what jobs they ultimately get.

V. The Alumni

Most of the students who graduate from the Dual-Degree Engineering program go directly into careers in industry, but the traditional majors are fairly evenly split between industry, teaching, and graduate school. Many of the students that go directly into the workforce stay in the Wisconsin/Minnesota area and end up working for places such as Trane Company or Fastenal as engineers or in information technology; these types of positions are commonly held by physics bachelor's degree recipients across the country.

The Site Visit Team met with four graduates of the Physics Department over dinner one evening. Two of them are working in industry, one is now a faculty member in the department (Dr. Eric Gansen) and one is in graduate school. One of the graduates now working in industry was hired by a company that he interned with while working on his dual degree in physics and engineering, and the other was hired by a physics graduate (from another school) after being connected through a friend. Overall, the alumni were

pleased with their undergraduate program and felt prepared for their current positions, even if they didn't yet have their ideal job.

Like most departments, the UW-L Physics Department has stayed connected to its alumni largely through individual correspondence between faculty members and former students. However, the department has taken some recent steps to formalize their efforts-- establishing a committee charged with developing an alumni newsletter, and establishing a Facebook page for alumni. In addition, the Department created an electronic alumni survey in 2011 to help assess how well the program has helped prepare students for their careers. The Department is currently tracking down alumni for participation, and has received some responses already.

VI. Conclusions

A. Observations on Preparation for STEM Careers

The physics department at UW-L is exemplary. It has succeeded in placing students with bachelor's degrees in physics in STEM careers at an exceptional rate. While it is the outstanding work of the department as a whole that achieves this distinction, we believe that a number of individual factors contribute significantly to this success.

- The department and individual faculty members are student-oriented and focused on the academic and career success of every student, not just the elite. The students have a strong sense of this support from the faculty.
- A department culture that values helping students identify and prepare for their desired careers. This is reflected in the freshman seminar course that highlights career options, the fact that physics faculty members are proactive about reviewing resumes and discussing job leads with students, the emphasis on writing and presentation skills in physics courses, and in how the department encourages physics majors to take advantage of resources provided by the Career Services Office.
- A proactive approach to advising that takes into consideration the career goals and academic abilities of each student every semester, from the first meeting to graduation.
- Many attractive options for students to pursue, including some that are closely tied to common careers areas among physics bachelor's degree recipients. Examples are the different emphases in Optics and Computational Physics, a Physical Therapy track, and the Dual-Degree Engineering program.
- A willingness and drive to partner with other departments on campus (and other institutions, in the case of the Dual-Degree Engineering program), such as Math, Biology, Physical Therapy, and Career Services, in order to make the degree more relevant to students and potential employers.
- The Dual-Degree Engineering option – being trained and educated as an engineer is likely a primary reason that many students enter the workforce immediately after graduation.

- An administration that supports and promotes undergraduate research with both funding and celebrations, and a department that encourages all students to engage in undergraduate research.

B. Recommendations for the Department

The Site Visit Team came to UW-L to learn from the department because of its measurable success in placing students with bachelor's degrees into STEM careers, and we have learned a great deal about this topic. In addition, there are a few general comments that we would like make regarding the department.

- The department is an inspiring place to be—the Site Visit Team was truly impressed by the dedication and hard work of the faculty, and the supportive environment for the students. The department is clearly committed to helping students succeed and be ready for the transition from student to professional. In addition, the department's relationship with the university administration and other departments, such as the Career Services Office and Physical Therapy Department, is a model for other departments and we encourage continuation of these efforts.
- It is clear that Sudha's leadership has transformed the Physics Department from a low-producing department on the verge of a shutdown to a thriving, model department. His efforts have led to collaborations that brought the program back to life and revitalized the major. His passion and vision are an inspiration. In this context, the Site Visit Team would like to encourage the department to continue discussing how to sustain the strength and vibrancy of department while making it less subject to transitions among the faculty.
- We encourage the department to continue its efforts to solicit feedback from and stay connected with alumni and to establish a formal system for keeping track of alumni. Alumni might act as potential colloquium speakers, student mentors, mock interviewers, department advisors, and potential employers.

C. Closing Thoughts

The American Institute of Physics is grateful to UW-L for welcoming the Career Pathways Project site visit team into the physics department and arranging the various meetings on which this report is based. The UW-L physics department has a strong record of preparing undergraduate students for STEM careers, and we appreciate the opportunity to explore some of the factors that contribute to this success. The findings from this and other site visits will provide the foundation for a set of resources that the Career Pathways Project is developing to help schools better prepare undergraduate students to enter the STEM workforce. We commend your work and thank you for contributing to this project.

Appendix

Site Visit Itinerary

University of Wisconsin-La Crosse
Department of Physics
Cowley Hall
La Crosse, WI 54601
Phone: (608) 785-8431

American Institute of Physics Visit Itinerary for
Brian Beecken, Jim Eckert, and Kendra Redmond

March 4-6, 2012

Sunday, March 4, 2012

Evening AIP Site Visit Team Members Arrive
7:00 p.m. Dinner at Manny's in Onalaska with Physics Alumni (Gansen)

Monday, March 5, 2012

9:00 - 9:30 a.m. Meeting with Chair Sudha (Room 20, Cowley Hall)
9:30 - 10:00 a.m. Dept. Facilities Tour (Gansen)
10:00 - 10:30 a.m. Meeting with Eric Gansen (Room 20, Cowley Hall)
10:30- 11:00 a.m. Meeting with physics faculty (Room 20, Cowley Hall)
11:15 - 1:00 p.m. Lunch at Piggy's with faculty (Gansen and Harris)
1:00 - 1:30 p.m. Meeting with physics staff Aalseth and Harris (Room 20, Cowley Hall)
1:30 - 2:00 p.m. Meeting with physics faculty (Room 20, Cowley Hall)
2:00 - 2:30 p.m. Meeting with Chancellor Gow (Sudha)
2:30 - 3:00 p.m. Meeting with Provost/Vice-Chancellor Morgan
3:00 - 3:30 p.m. Meeting with Dean Riley (Sudha)
3:45 - 4:30 p.m. Meeting with Students (Gansen) (Room 20, Cowley Hall)
6:00 p.m. Dinner at the Waterfront Restaurant with physics faculty

Tuesday, March 6, 2012

- 9:00 – 9:30 a.m. Meeting with Assistant to the Dean Burkhardt (Room 20, Cowley Hall)
- 9:30 – 10:00 a.m. Meeting with Ex-Provost Rada (Room 20, Cowley Hall)
- 10:00 – 10:30 a.m. Meeting with Director of Admissions Kiefer (Room 20, Cowley Hall)
- 10:30 – 11:00 a.m. Meeting with Tim Tritch, Associate Director, Career Services and the Academic Advising Center (Room 20, Cowley Hall)
- 11:15 – 1:00 p.m. Lunch at Olive Garden with faculty (Gansen and Harris)
- 1:30 – 2:00 p.m. Meeting with Chair Sudha (Room 20, Cowley Hall)