

## College of Science and Health 2018-2019 Annual Report

### Summary

In academic year 2018-2019 the College of Science and Health (CSH) celebrated the completion of the Prairie Springs Science Center, an 189,000 square-foot building that provides 36 teaching and 23 research laboratories for programs in Biology, Chemistry & Biochemistry, Geography & Earth Science, Microbiology, and Physics. The fall opening of the building included the installation of more than \$1.5 million in instructional equipment and supplies. Over 220 students were mentored in independent research projects that were supported, in part, by \$1.3 million in external grants competitively awarded to College faculty. In addition to student-focused research, student learning was enhanced through service activities, such as in Health Professions where over 800 students engaged in health and wellness, health screenings, course-related clinical experiences, and inter-professional education. Moreover, faculty-lead courses and research in Australia, Belize, Germany, Guatemala, Iceland, Nepal, New Zealand, and Rarotonga provided international experiences to students. The College successfully implemented the new *Assurance of Progress to Degree After 60 Credits* policy that will facilitate student degree completion. CSH continued to extend its educational mission beyond campus boundaries by engaging the public in seminars and programs, such as physical education offered weekly to 100 home-schooled children, adult and pediatric clinics in occupational and physical therapy, the Exercise Program for People with Neurological Disorders (EXPAND), and the establishment of a local *Best Buddies* club whose goal is to create one-to-one friends opportunities, employment, leadership, and inclusive living for people with intellectual and developmental disabilities. The First Year Research Exposure (FYRE) program received the Wisconsin State Council on Affirmative Action's 2018 Program Achievement Award and National Science Foundation renewed the WiscAMP project, a partnership with UW-Madison that is a key bridge program for under-represented minorities in STEM at UWL. Eighteen new faculty and instructional staff were recruited for academic year 2019-2020 to replace personnel who retired or resigned. Goals for the 2019-2020 academic year include the completion of strategic planning within the college and investigating the potential for adding new programs.

**Section 1: Success Stories**

- The Prairie Springs Science Center opened in August and included installation of more than \$1.5 million in new equipment and supplies to support instruction. Hard work by staff and faculty resulted in all instructional materials and laboratory equipment being moved from Cowley Hall to Prairie Springs in time for fall classes. The building was formally dedicated on November 15 with a program, tours, and dinner for donors and guests.
- The First Year Research Exposure (FYRE) program received the Wisconsin State Council on Affirmative Action's 2018 Program Achievement Award during a diversity awards ceremony on Oct. 25, 2018 at the state capitol.
- In collaboration with the UWL Foundation, CSH initiated the "20 for 20" campaign to celebrate 20 years of the Dean's Distinguished Fellowship program. Funding was obtained to provide private support for 7 of 17 Dean's Distinguished Fellowships in summer 2019.
- The Department of Computer Science celebrated its 50<sup>th</sup> anniversary in October 2018 with events that involved current students and past alumni.
- The Department of Geography & Earth Science hosted the Annual Meeting of the West Lakes Division of the American Association of Geographers, November 1-3, 2018, which included more than 150 participants.
- CSH implemented the new *Assurance of Progress to Degree After 60 Credits* policy. In total, 262 and 212 students were affected by this policy in fall 2018 and spring 2019; 27 and 21 students had holds placed on their registration in fall and spring. CSH Academic Services Directors and students felt that the new policy was effective, positive, supportive, and facilitated much-needed conversations to insure students were making progress towards a degree.
- Faculty in CSH submitted 60 proposals and were awarded more than \$1,334,000 in external grants and contracts. These awards provide research and other educational opportunities for undergraduate and graduate students within the college.
- *U.S. News & World Report* ranked the UWL Physician Assistant graduate program at 15 of 170 programs in the country; the program was previously ranked at number 30.

## Section 2: Programming

### Update on New Programs/Initiatives

- Department of Biology created the M.S. Biology: Environmental Science Concentration and graduated its first student.
- Department of Mathematics & Statistics initiated the M.S. Statistics in fall 2018.
- Department of Recreation Management and Therapeutic Recreation received approval to offer an online degree program, M.S. Recreation Management-Professional Development.
- The Academic Advising Center piloted a combination of the proactive advising model and centralized, professional advising for first-year students with declared majors within the departments of Biology, and Exercise and Sport Science.
- A new undergraduate certificate in Geographic Information Systems (GIS) was approved and can be used to satisfy CSH core requirements.

### Changes to Existing Programs/Initiatives

- Faculty Senate accepted the following CSH Departments/Programs Academic Program Review (APR) Reports during 2018-19: *Undergraduate*: Statistics; Chemistry and Biochemistry; Health & Wellness Management (Online collaborative); *Graduate*: Physician Assistant; Community Health Education;
- M.S. Biology: Certified Registered Nurse Anesthetist program welcomed its first class merging the M.S. degree from UWL with a DNP (Doctor of Nursing Practice) from Viterbo University.
- The M.S. Athletic Training program began in June 2019.
- The Doctorate in Physical Therapy program was re-accredited for 10 years (maximum possible) by the Commission on Accreditation for Physical Therapy (CAPTE)..
- The program in Therapeutic Recreation admitted their first students to the 4+1 BS/MS degree program.

**Section 3: Educational Enhancements**

- Faculty in Biology, Health Education and Health Promotion, and Geography & Earth Science, and Physics undertook field work with students in Australia, Belize, Germany, Guatemala, Iceland, Nepal, New Zealand, and Rarotonga,
- Service learning activities in Health Professions engaged over 800 students in health and wellness, health screenings, course-related clinical experiences, inter-professional education or research. Inter-professional programs involving Viterbo University and the Go Baby Go project continue to bring students together for unique learning activities from different HP programs.
- More than 220 students enrolled for credit to conduct independent research projects mentored by faculty

**Section 4: Staffing, Resources and Facilities****Overview of Staffing and Consequent Changes**

- In AY 18-19, CSH conducted searches for 21 faculty and instructional academic staff positions; three positions remain unfilled and recruitment efforts for these positions will continue in AY 19-20. Notably, all vacant positions in Physical Therapy were filled for the first time in eight years. Twelve faculty, instructional and non-instructional academic staff in CSH resigned or retired.
- In AY 19-20, CSH anticipates recruiting 11 faculty and staff to replace individuals who have resigned or retired.
- Recruiting faculty and staff in Health Professions is increasingly difficult due to a paucity of candidates that is a result, in part, of credential requirements mandated by accreditation agencies. CSH will contract with an external consulting firm to increase the pool of qualified candidates for select positions in Health Professions.

**Status of Resources and Facilities: Changes, Challenges, Development**

- Phase 1 of the Prairie Springs Science Center has resolved most issues associated with overcrowded and inadequate laboratory facilities in Cowley Hall. However, as with most new buildings, some issues remain to be rectified, including the continuous availability of reagent-grade water for chemical analysis and the shielding of highly sensitive equipment from the magnetic field produced by the Nuclear Magnetic Resonance Spectrometer (NMR). We anticipate that these concerns will be corrected in the near future.
- Though not approved by the state legislature in the 2019-2010 biennial budget, Phase 2 of the Prairie Springs Science Center is still critically needed to provide offices, GIS laboratories, active-learning classrooms, greenhouse space, and other instructional facilities for the College.
- As a result of static 102 and 131 budgets, the inability to carry over funds between fiscal years, and minimal return of indirect funds to the College, CSH will struggle to continue highly successful programs such as the Dean's Distinguished Fellowships. Moreover, CSH has solely funded start-up packages for new faculty and staff this year. The College has only annually fluctuating levels of salary savings to meet unanticipated expenditures (e.g., equipment repair) and the ability to creatively provide new opportunities is limited.

**Activities Associated with Valuing Staff**

- CSH awarded seven faculty sabbatical leave for AY 19-20.
- CSH provided \$564,000 in start-up funds for new faculty and staff

**Section 5: Community Engagement**

- Physical Education Teacher Education (PETE) developed Physical Activity program which welcomes over 100 home schooled children to campus each Monday for exercise-based activities.
- CSH sponsored seminars that were open to and very well attended by the general public. The notable speakers included:
  - Douglas Cass, Distinguished Scholar in Exercise and Sport Science
  - Samuel Munoz, hosted by Geography and Earth Science
  - Barry Barish, co-winner of the 2017 Nobel Prize in Physics
  - Ken Leinbach, executive director of Milwaukee's Urban Ecology Center
  - John Marzluff, Warner Memorial Lecture
  - Daniel Klionsky, Distinguished Speaker in the Life Sciences
- Faculty-mentored students in Occupational Therapy and Physical Therapy have served over 100 clients through the adult and pediatric clinics and the Exercise Program for People with Neurological Disorders (EXPAND).
- Faculty in Recreation Management and Therapeutic Recreation established a local *Best Buddies* club. *Best Buddies* creates one-to-one friends opportunities, employment, leadership, and inclusive living for people with intellectual and developmental disabilities.
- The Center on Disability Health and Adapted Physical Activity provides individualized instruction in the areas of aquatics, health-related physical fitness, gross motor skill development, sport skills, and physical recreation skills to approximately 35 children and youth with disabilities, ages 3-21. In addition, the Center provides personalized health-related fitness programs to approximately 25 adults with disabilities, ages 18 years and older.

## **Section 6: Equity and Diversity**

### **Improving Access**

- College faculty and staff members, with individuals from Western Technical College, submitted a National Institutes of Health Bridges to the Baccalaureate (B2B) grant proposal in September 2018. This program builds inter-institutional collaborations to enhance the successful transition of students interested in careers in the health professions from community college to a 4-year baccalaureate university. Through not funded, NIH reviewers provided constructive feedback that will be used for proposal re-submission.

### **Closing Equity Gaps**

- National Science Foundation awarded the WiscAMP project to UW-Madison and its partners (including UWL) for another five years. The WiscAMP is a key bridge program for under-represented minorities (URM) in STEM at UWL.
- The UWL Ronald E. McNair Post-baccalaureate program successfully finished its first year of its third funding cycle (5 years). In 2018-2019, there were 10 graduates, 6 of whom (60%) intend to begin graduate school in the fall of 2019.
- The 2018-2019 First Year Research Exposure (FYRE) program cohort represented the program's 8th group of participants. Since 2012, 71 of our 89 participants (79.8%) have been retained at UWL, and in the College of Science and Health from their first to second years at UWL.
- CSH worked with the Offices of Multicultural Student Services, Financial Aid, and Graduate Studies to coordinate the UW-System's Advanced Opportunity Program as a recruitment tool to attract underrepresented graduate students to UWL. CSH awarded four \$8,000 scholarships to new graduate students entering fall 2019. In addition, CSH awarded five Graduate Assistantships in three departments to students from historically underrepresented groups.

### **Improving campus climate**

- All CSH departments now have one or more representatives serving as Equity Liaisons. Through this program, the College Office is working closely with CATL and IRAP to develop strategies for increasing academic success for all students.
- Several CSH faculty and staff members participated in the inaugural RISE UP Symposium [Racial (& Intersecting) Identity Symposium for Equitable University Progress].

**Section 7: Plans, Challenges, & Opportunities**

- Phase I of the Prairie Springs Science Center has alleviated demands for teaching and research laboratory space. Phase II is still needed to replace outdated classrooms, remaining laboratories in Cowley Hall, and a shortage of offices for college faculty and staff (many which are housed in temporary offices in Cartwright Center). The College will continue to strongly advocate for Phase II of the project.
- CSH initiated the development of a strategic plan in late spring 2019. Plan development will continue with the goal of completing the College strategic plan within the academic year.
- In addition to the development of the new undergraduate program in Computer Engineering, the College will investigate the potential for adding new programs, especially in the health professions, that capitalize on existing strengths in the College and partnerships with external institutions.