TRANSFORMING HEALTHCARE EDUCATION
Greetings!

Recently, the College of Health Sciences went through a significant transformation. These changes are due to the need to rethink how we engage in health care delivery and to place a greater emphasis on disease prevention and management within the United States. The Patient Protection and Affordable Care Act has been a significant influence in producing the college changes. However, even if the legislation had not been passed, changes were needed to reform health care delivery because of the unsustainable costs and the poor efficacy associated with many aspects of the current system.

I think you will find the college changes, and more importantly the rationale behind the changes, engaging. In short, the college transformation represents an expansion from approximately 106 employees to 196 employees. The yearly expenditures have grown from approximately 10.3 million to 19.6 million dollars a year. These increases come from the addition of new academic units that include the Department of Kinesiology, School of Social Work and the addition of University Health Services. The partnership with Health Services will allow closer connections between academic efforts and the day-to-day activities associated with clinic and wellness practices within the university community, which will enhance the academic and health delivery efforts within Boise State.

As you review the magazine, I hope that you also appreciate what has happened within the college over the past five years. Through the support of the university administration, community partners, and dedicated faculty and staff, significant forward movement has occurred. Specifically, we have grown graduate programming and now for the first time we offer doctoral level programming. Furthermore, the research quality and productivity has grown dramatically. What is most encouraging are the new and future efforts that are possible because of the new college configuration.

Enjoy the magazine! As always, I welcome your input and thoughts related to the college.

Sincerely,

Dr. Tim Dunnagan
Dean, College of Health Sciences
A Bigger and Better College

Members of the expanded College of Health Sciences are excited to begin exploring partnerships, collaborations, and opportunities in teaching, research and service.

In Feb. 2014, University Health Services joined the college, transitioning from the Division of Student Affairs. By July, the School of Social Work and the Department of Kinesiology joined the college, transitioning from the College of Social Sciences and Public Affairs and the College of Education respectively.

To create more synergies in the college and across campus, a new School of Allied Health Sciences was formed with the Departments of Community and Environmental Health, Kinesiology, Radiologic Sciences and Respiratory Care. The new school will integrate clinical and health promotion sciences to emphasize the increased responsibilities for health professionals to work on disease prevention, a focus mandated in the Patient Protection and Affordable Care Act.

As a result of these changes, the new configuration of the college has three academic schools: Allied Health Sciences, Nursing, and Social Work. Health Services complements the schools, by providing integrated care, teaching and research to the campus community.

Programs Offered

The School of Allied Health Sciences provides undergraduate academic programming through four departments. Specific programming includes: Environmental and Occupational Health; Health Science Studies; Pre-Professional studies, such as Pre-Medical Studies, Pre-Dental Studies, and Pre-Physical Therapy; Athletic Training; Health Education and Promotion; K-12 Physical Education; Kinesiology; Radiologic Sciences; and Respiratory Care. The school also has graduate programming for a Master of Health Science, a Master of Athletic Leadership, and a Master of Kinesiology. Emphasis areas allow students to specialize. For example, Health Science Studies students can specialize in areas like Public Health, Health Informatics and Information Management, and Prevention and
Addiction Studies while Kinesiology students can specialize in Biomechanics, Exercise Science, and Pre-Allied Health. Emphasis areas also allow Radiologic Sciences students to specialize in particular areas, including sonography, computed tomography, and magnetic resonance imaging.

The School of Nursing generates new registered nurses through a pre-licensure baccalaureate degree and assists current registered nurses who have their associate’s degree to obtain their baccalaureate degree through the RN-BS Online/Distance Completion Track. The RN-BS Completion Track allows nurses to improve themselves and their work by obtaining their bachelor of science degree while working full-time. A nursing bachelor’s degree provides better career advancement options and equips nurses in providing better patient and community care. The School of Nursing also offers two online graduate programs: the Master of Nursing Adult-Gerontology Nurse Practitioner program, with primary and acute care options; and the Doctor of Nursing Practice program. The school plans to offer primary and acute care Adult-Gerontology Nurse Practitioner graduate certificate programs for currently licensed nurse practitioners.

The School of Social Work offers a Bachelor of Arts in Social Work and a Master of Social Work (MSW). Boise State, offering Idaho’s only public MSW program, has been designated by the State Board of Education to tackle the mission of delivering MSW education throughout Idaho. To accomplish this mission, the school has three additional sites outside of Boise: Coeur d’Alene, Lewiston and Twin Falls.

Implications for Health Sciences Students

With the integration of Kinesiology, Social Work, and University Health Services and the new structure of three schools, the college’s students will have a better experience because of enhanced programming of integrated health care. Interprofessional healthcare teams can set patient goals that consider the total health of the patient, thus providing better patient-centered care and preventative services. The university administration and the college’s community partners have been extremely supportive of this change to the college’s structure.

“The broader the base of understanding that the student has, the better they’re able to really deliver quality care,” states Tim Dunnagan, dean of the College of Health Sciences.
College of Health Sciences Dedicated to Solutions in a Health Care Reform Environment

The Patient Protection and Affordable Care Act (PPACA) is the most significant health legislation to be passed since the 1960’s when President Lyndon B. Johnson’s administration implemented Medicaid and Medicare. Depending on each state’s adoption of the Medicaid program expansion, as many as 30 million more citizens have access to health care.

In addition to expanding access, the PPACA focuses on addressing three aims: better care, better experience, and lower costs. The Act presents a number of challenges and opportunities related to how care is delivered and subsequently how students in health care professions are educated. Historically, the delivery of most health care in the United States has relied on a “fee for service” model that is physician-centric, and health prevention efforts have been largely separated from hospital and clinic-based treatment efforts. The PPACA has shifted this model toward a patient-centric model with an emphasis on population health which will use the collective expertise of health care teams, which are made up of public/community health professionals, physicians, nurses, pharmacists, dietitians, social workers, health coaches, exercise scientists, nurse practitioners, imaging technologists, respiratory therapists and others who work in a coordinated effort.

The PPACA places a greater focus on disease prevention by seamlessly connecting prevention and care. Given this mandate, the scope of work expected of nurses and allied health professionals will expand to provide care for millions of U.S. citizens insured through PPACA. The increased need for clinical and prevention services such as immunization, cancer screenings, depression screenings/treatment and wellness visits will be significant and much of this care will be provided.
by allied health professionals. Allied health professionals are health care workers who deliver services involving the identification, evaluation and prevention of diseases and disorders; dietary and nutrition services; and rehabilitation and health systems management. Allied health professionals comprise nearly 60 percent of the healthcare workforce and include areas such as dental hygienists, diagnostic medical sonographers, dietitians, medical technologists, occupational therapists, physical therapists, radiographers, respiratory therapists, and speech language pathologists.

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The Act “authorizes heavy investment in bolstering a primary care workforce that can promote prevention.” Additionally, almost 75 percent of health care costs can be attributed to chronic conditions such as asthma, diabetes, cancer, arthritis, heart disease and stroke, which are strongly influenced or exacerbated by unhealthy lifestyles. In fact, many of these diseases exist or are worsened because of sedentary lifestyles, poor nutrition, substance abuse and non-adherence to medications. Therefore, there will be a strong and ongoing need for allied health professionals who can help facilitate healthy behaviors through individual, group and environmental interventions.

Prevention as a Practice

In a population health model, the goal is to minimize the need for care through prevention and to provide better care at lower costs in hospitals and clinics. The term prevention is used to describe prevention at three levels. The primary level includes preventing people from experiencing premature disease or injury through healthy lifestyles (exercise, diet), legislation (seatbelt use), etc. The secondary level refers to interventions used after a serious risk factor is found or illness/injury has occurred, e.g., more frequent testing for known risk factors. At the tertiary level, prevention is focused on more complicated long-term problems such as diabetes, cancer, etc. The goal of the prevention efforts in these instances is to prevent further deterioration and enhance quality of life through treatment, rehabilitation, support groups, etc. Thus, the future student will work both within and outside hospitals/clinics and must be educated in prevention and the implementation of a patient-centric approach.
These realities will require prevention and clinical services professionals to embrace enhanced responsibilities associated with prevention. Consequently, faculty in the health professions must create graduates who can provide prevention efforts in the community, at worksites and in schools that seamlessly integrate into hospital and clinic strategies for effective prevention, care and management efforts. The ability of Boise State to provide such graduates will be enhanced by coordinated programming through the three schools within the College of Health Sciences. The Schools of Nursing, Social Work, and the newly formed Allied Health Sciences will provide a deeper and more comprehensive delivery of prevention and treatment education and better reflect the prevention and health care delivery environment created by the PPACA.

There is a natural synergy between the School of Social Work and the College of Health Sciences that allows for innovative collaboration in student field placements, course offerings, and research conducted by faculty. The academic and mission contexts are a logical match. Seven of the top field placements and careers for social work students and graduates are found in mental health, community mental health, health, aging, and substance abuse. All of these placements align closely with the other health disciplines in the college and can add depth and synergy within teaching, research and service efforts. Social Work is the second largest graduate program at Boise State with more than 180 students studying in four cities in the state. The School of Social Work routinely places more than 200 students each year in 356 active agencies to prepare graduates for beginning social work practice with individuals, families, groups, organizations and communities and for advanced social work practice with individuals and families. All of these efforts, including the coordination of care, are critical items outlined in the PPACA that social workers will help address in a health care reform environment.

**College of Health Sciences Response to PPACA**

The change to patient-centric health care, with its emphasis on disease prevention, requires higher education institutions to educate students outside departmental and college silos in order to work as interdisciplinary teams. This new way of educating students in the health
professions is referred to as interprofessional education. Boise State’s College of Health Sciences has begun and will continue the required work to deliver interprofessional education. Faculty are infusing interprofessional education experiences throughout the curriculum.

All fields in higher education are examining teaching approaches, including flipped classrooms, case studies, field experiences and “real life” learning. Students need exposure to meaningful instructional strategies that create learning. Faculty in professional disciplines, such as the health sciences, should have the opportunity to augment their instruction and research through actual practice within their professions. The student need for real life learning, coupled with the faculty need for practice, made a strong case to expand the scope of health sciences education to include University Health Services.

Current programming through Boise State University’s Health Services is progressive, with a focus on integrated delivery necessary to effectively promote prevention and create value within the environment of health care reform. Also, moving University Health Services and the School of Social Work completely under the College of Health Sciences better supports the overall mission of Boise State. Faculty may have shared appointments within Health Services, in order to enhance their practice efforts and more effectively promote interprofessional education. Health Services also provides services to targeted populations within the university through a “teaching and research clinic.” Finally, employee and student wellness programming can be expanded.

The overall initiative unites student service and academic programming within the College of Health Sciences. The union allows for additional faculty through shared appointments of providers in Health Services with academic units and for faculty in academic units to provide care through Health Services. It also expands student involvement through clinical experiences, research and learning about interprofessional education in a setting where faculty and practitioners apply what they are teaching. Graduate and undergraduate students in nursing, respiratory care, radiologic sciences, health promotion, exercise physiology, biomechanics, public health, athletic training, public/health policy and social work now have the ability to work interprofessionally with faculty in a prevention/treatment setting. In addition to providing services, the college can conduct research studies tied to prevention and treatment. By better integrating the tripartite mission of teaching, research and service, the creation of a teaching and research clinic using current facilities provides for more meaningful and higher quality instruction, education and research experiences.
Health and Education Go Hand in Hand

Some may find a health clinic residing in an academic college a little strange or surprising, but the staff of Boise State University Health Services think it’s a perfect fit.

“The College of Health Sciences faculty and staff understand health care and its challenges and nuances,” said Vincent Serio, MD, medical director for University Health Services. “Being part of an academic college feels like home for a profession that values life-long learning and is still a place where the apprenticeship model is alive and well—we must be involved in training the next generation of health professionals, to inspire and mentor them, and provide a platform upon which they can learn. An educational mission enriches the professional experience and places the importance of higher education front and center.”

Boise State’s Health Services is one of the few campus health centers in the nation with fully integrated medical, wellness and counseling services, allowing them to provide their patients the best possible care in the four areas of Health Services: Medical Services, Wellness Services, Counseling Services, and Health Insurance and Billing Office. While Counseling Services limits their care to students, the other three also care for faculty, staff, and the dependents of both students and employees.

Health Services cares about the health of the Boise State community, which is why they incorporate their understanding of campus rhythms and resources when treating their patients.

We must be involved in training the next generation of health professionals, to inspire and mentor them, and provide a platform upon which they can learn.
“Students have a finite time to be successful in class; an illness or other health problem may affect their success,” said Tara Brooks, director of patient and business services for Health Services. “Faculty and staff want to be able to work: teaching and serving the students on this campus. It is important we recognize that time is of the essence for them as well.”

However, the staff doesn’t just want students and employees to be healthy during their time on the Boise State campus. The staff is committed to empowering patients in lifelong health. The staff in all four areas already incorporate health education into their work with patients, taking a little extra time to make sure that patients understand their health and have tools that are needed to create healthy habits.

After undergoing a strategic planning process, the Health Services staff decided to further their education commitment. In fall 2014, they announced their vision to be “America’s Healthiest Campus Community.”

“We’re passionate about empowering people to be educated about their health - the same way they might be educated about their area of study,” Brooks said. “We really want people to be able to achieve their goals and to do that they need to be healthy. That’s where we come in.”

Wellness Services will play a large part in creating this vision. Wellness Services is a collaborative team of full-time employees and student health educators. Together, they provide innovative programming and quality services to foster lifelong health, academic success and a sense of campus well-being. Wellness Services offers many free workshops and programs targeting students or employees. The student health educators can often be found at student fairs, in the quad or at the Student Union Building engaging their peers. Employees are encouraged to participate in incentive programs, workout classes, wellness and nutrition classes, and wellness release time for exercise and stress relief activities. The Wellness team also offers some services for a nominal fee, such as nutrition counseling and health coaching, where clients can set specific health-related goals and work with a trained coach to achieve the goal.
Education is also part of the Insurance and Billing office. The staff in the office not only process the insurance claims and billing for the other three units, but will assist patients with health insurance questions and concerns, and help people understand health insurance terminology, options and processes so they can become better consumers of medical, counseling and wellness services.

_We’re passionate about empowering people to be educated about their health._

Health Services staff think big. Not only have they set an ambitious vision for themselves and the campus, but they are also excited for the research and scholastic opportunities that being a part of an academic college gives them. The staff want to contribute to the health sciences fields, demonstrating the importance and value of patient-centered business functions and evidence-based care.

“Partnerships and research opportunities will provide a better understanding of the health care issues that our population faces,” said Karla West, director of Counseling Services. “This allows us to properly identify the appropriate evidence-based approaches that will contribute to our provision of health care, resulting in the improvement of our patients’ overall health.”

Michelle Ihmels, director of Wellness Services, adds that “Health Services and the college are all moving towards the same goal of creating great future professionals in the field of health. We all want to work together to develop a well-rounded health professional.”
Strong Partnerships Lead to Improvements

Partnerships allow the sum of all involved parties to be better than they are individually. The College of Health Sciences' partnerships are vital to creating and sustaining quality education for tomorrow's healthcare practitioners.

Partnerships also allow College of Health Sciences faculty researchers to bring their expertise to community organizations in order to produce meaningful research. As faculty researchers recruit students for their research projects, students are able to develop valuable connections to local healthcare organizations.

“In order to transform healthcare, it is essential that we have critical partnerships with our educators in order to provide the teamwork and the workforce we need in the future to do the things we need to do to improve the health of people in our region and in our population,” said Chris Roth, senior vice president and chief operating officer of St. Luke’s Health System. “Our partnership with Boise State is essential. Not only do we have research but we also rely on Boise State in our partnership for our educated workforce. I’m so excited about the opportunities we have to partner with Boise State University to look at training healthcare professionals of the future in a team environment as opposed to individualized professional care. It’s going to require a team to do the things we need to do in the future.”

These are only a few reasons why Dean Tim Dunnagan created the Board of Ambassadors, an advisory council made up of administrators in healthcare organizations located locally and across the country. The ambassadors provide insight into what skills, knowledge and qualities will be needed in healthcare organizations in the changing healthcare environment. The ambassadors are also able to advocate for additional partnerships with Boise State because they have up-to-date knowledge on the current initiatives in the college.

One of the most favorable initiatives is the integration of interprofessional education into the curriculum. Interprofessional education is when students from one or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes. Healthcare administrators agree that team-based care is the future of healthcare.

“As a team, you have a better ability to solve problems with the patient at the center: to come up with goals to have better outcomes for the patient utilizing the patient experience
“Interdisciplinary teams will be one of the most essential things that is going to have to happen in health care,” said Zelda Geyer-Sylvia, president and CEO of Blue Cross of Idaho. “When you look at a person, a person’s needs are going to be medical but they are also going to be social. I know many of us are probably caring for elderly relatives and you can really see that in order to have them functioning at the highest level, it’s not just what they need from a medical standpoint but that they might also need physical therapy or home services. All of those things need to come together so that people can really have the highest quality of life.”

**Partnerships in Research**

College of Health Sciences faculty researchers have partnered numerous times with entities like the Idaho Department of Health and Welfare, the Idaho Department of Juvenile Corrections, and Healthwise, a global, Boise-based nonprofit that develops health information and tools for a variety of uses by insurance companies, hospitals, and consumer health portals. Lee Hannah, associate professor in the School of Allied Health Sciences, and Dunnagan evaluated a pilot study that Healthwise conducted about software that connects patient demographics and diagnostic codes so patients receive relevant health information about their conditions when they have a medical appointment. In their assessment, Hannah and Dunnagan found that not only did the software work well for patients and providers, but that patients were more interested in receiving health content than providers had expected.

Respiratory Care faculty and students are collaborating with people around the world on research about early mobility ventilator patients. The Boise State faculty and students began partnering with alumni who are now employed by the University of Washington, Seattle Children’s Hospital and Tokyo Bay Medical Center as well as a clinician at Kameda Medical Center in Japan in spring 2014. They hope to determine which mode of ventilation will work best on patients who are in the early stages of walking while still connected to a ventilator.
Teamwork as a Learning Strategy

Meeting and working with other disciplines can be both exciting and intimidating as a student. The College of Health Sciences is encouraging students to interact with peers and faculty from other disciplines as part of the curriculum in the college.

Interprofessional education is when students from one or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes. Interprofessional education allows students to bring their expertise in their discipline to the table and learn about other disciplines. It also offers students a chance to refine their soft skills, including communication, teamwork and problem solving.

“Dr. Dunnagan has taken the approach that’s really going to benefit us in the healthcare environment because when a patient walks in the door they don’t see one person, they see a team. They see a team of caregivers from a nurse to a physician, to a respiratory therapist, all levels of care,” said Rodney Reider, president of Saint Alphonsus Regional Medical Center. “The person needing care may not know the whole difference. They just want to get better, they want good outcomes, and so having providers come into our environment that are highly educated, that have interprofessional experience and can step into roles that improve the care of the patient really benefits us and the community. And so we really appreciate Dr. Dunnagan’s vision. It’s an exciting time.”

Jaime Sand, interim director of interprofessional education for the college, has led a team of faculty in developing competencies for interprofessional education in the college. These focus on patient/population-centered care, collaboration, teamwork and leadership, communication, addressing ethics from an interprofessional team perspective, problem solving and decision making, self-reflection, conflict management, and understanding and embracing one’s own and others’ roles.

Sand states “preconceived notions can affect interprofessional interactions. If students learn with other disciplines in school, they may be more likely to think to involve them when faced with a patient or population
problem. Additionally, the patient is part of the interprofessional team. All are equal and must participate equally. Communication is essential. Everyone needs to feel that it is safe to communicate and that they will be listened to.”

**College of Health Sciences Interprofessional Courses**

Currently, students are participating in an interprofessional capstone class during their senior year. Additionally, an interprofessional patient skills lab has been offered since 1999. This interprofessional team-based course allows nursing, radiologic sciences, and respiratory care students to learn basic patient care skills and interventions that will restore and then protect patient health. Interprofessional courses and projects are interspersed throughout the college’s course offerings and the number of interprofessional encounters is expected to increase as more faculty develop interprofessional educational experiences and implement them as part of their courses.

The faculty’s creativity is apparent as they develop interprofessional courses and projects. For example, Uwe Reischl, faculty teaching in the Master of Health Science program, is collaborating with Jaap Vos, faculty teaching in the Master of Community and Regional Planning program, to teach Health Care Systems Organization and Administration, an interprofessional course for students that revolves around a community health assessment. Another example includes Bonnie Kenaley, faculty in the School of Social Work, and Cathy Deckys, faculty in the School of Nursing, who had their graduate social work students and their undergraduate nursing students collaborate on an ethical dilemma in order to demonstrate the similarities and differences in the two professions’ ethical decision making processes. Similar shared experiences are taking place in nutrition, policy, and clinical courses in Health Science Studies, Nursing, Kinesiology, Radiologic Sciences, and Respiratory Care. Finally, a new interprofessional course in care coordination is also being offered.

The interprofessional education trend is also appealing to students. The students have recently formed several interprofessional student clubs including the Public Health Club, Timmy Global Health chapter, and the Campus-Community Emergency Response Team and Moulage Club. The established discipline-specific clubs are also collaborating on a fundraising event, including students from athletic training, nursing, pre-dentistry, pre-medicine, radiologic sciences, and respiratory care.

Sand is working on offering more interprofessional education for faculty and college-wide student activities. Sand hopes that the college can be nationally recognized as a strong example of interprofessional education in both clinical and nonclinical disciplines. She hopes that as the college continues to find creative solutions to logistical complications, interprofessional education will become a natural consideration in course planning and development.
Helping Students to be Academically Healthy

Student health goes beyond mental and physical health. Academic growth and success is an additional facet of student health. To help students remain academically healthy, the college unified its programs’ advisors in a central advising office in 2011.

College of Health Sciences Student Services and Academic Advising houses six professional advisors and an administrative assistant. Together they help keep students on track in their degree progression and advise students on how to continue on to professional graduate programs, including medical school, dental school, and more. Academic and career advising within the College of Health Sciences are integrated because there is a strong relationship for most students between their educational and career goals. Based on students’ individual circumstances, personal development and skills, advisors provide information and support and foster a sense of responsibility in students to achieve their own goals as they develop into a health care professional.

Over the past two years, they have averaged more than 3,000 per year fact-to-face appointments with enrolled students and they also converse with students through more than 48,000 phone calls and emails each year. As if these numbers didn’t already fill their schedules, they also try to make time to see prospective health sciences students who are visiting campus. Social Work and Kinesiology students will also be receiving full advising support during the 2015/2016 year through the office. Despite their busy schedules, the advisors succeed in assisting students. More than 80 percent of recently surveyed students said that the advisors met their needs well.

To help the professional advisors manage their load, exceptional students in select, high-volume majors are hired to advise their peers. These peer advisors see on average more than 650 enrolled students.
The peer advisors focus on advising the freshman and sophomore students, as upper division enrollment can be more complex. Currently, there are three peer advisors focused on pre-nursing students, pre-professional students, and kinesiology students. The advisors carefully select and train the peer advisors. The peer advisors offer students a unique perspective as they can address questions about what it’s like to be a student in particular majors with more legitimacy than the professional advisors.

“Being an advisor is extremely rewarding,” said Glenda Hill, director of College of Health Sciences Student Services and Academic Advising. “It’s exciting to personally connect with students while helping them reach their goals and to make students know that they matter. It’s particularly rewarding to hear from former students who share how they’ve succeeded and how their advisor helped them make those successes happen.”
Nurturing Research to Better the World

Research and other sponsored activities within the College of Health Sciences have grown significantly. In the past five fiscal years, the number of externally-funded contracts and grants has increased by more than 60 percent. Externally funded annual project expenditures have correspondingly increased by more than 50 percent. For the past three years, annual expenditures have been approximately $1.5 million dollars.

Currently, there are more than 30 active externally-funded projects in the college, headed by more than 15 faculty. An additional 15 faculty and professional staff are supported on external funding, along with 10 temporary positions. A dozen research assistant positions for undergraduate and graduate students have also been created by the funding from these projects. Student research assistantships are mutually beneficial to the faculty researchers and the students. Faculty researchers receive assistance with their project while the students receive a stipend and valuable experience. Some graduate research assistants also receive tuition waivers, dramatically reducing the cost of attending college.

Through the reorganization of the College of Health Sciences, the inclusion of Social Work and Kinesiology both add to the college’s grant and contract portfolio. Upon entering the college, the School of Social Work brought in two multiple year awards, totaling more than $647,000. These awards are supporting field placements and education in the school. Similarly, the Department of Kinesiology brought in three awards worth more than $70,000. Kinesiology also expands the college’s research capacity with the addition of the Human Performance Lab and two centers: the Center for Orthopaedic and Biomechanics Research and the Center for Physical Activity and Sport. The college will be making significant investments during the next three years to expand research and clinical programming through the Center for Orthopaedic and Biomechanics Research.
Spotlight on the Center for Health Policy

Centers have helped grow the college’s active research projects. The most active center in the college, the Center for Health Policy, has grown tremendously in the past five years. Researchers at the center have an increasing number of awards for an increasing expenditure amount. In the last five years, they have handled more than 60 projects worth more than $4 million. Their targeted research topics include rural physician recruitment; juvenile justice; mental health and substance abuse needs and treatment services; preventative interventions with at-risk youth; tobacco cessation among youth and adults; maternal and child health; and Medicaid services and improvements. To accomplish the increased workload, they’ve hired numerous graduate and undergraduate research assistants and added three professional staff as well as additional faculty researchers.

In the last five years, these faculty, staff and students have provided more than 20 technical reports for their constituent organizations, presented at more than 25 reviewed conferences around the nation and in Brazil and the Czech Republic, and presented at more than 35 national, regional and local conferences for organizations such as the American Public Health Association, the Idaho Academy of Family Physicians, and the Montana Hospital Association. They’ve also published more than 10 articles in journals such as the American Journal of Applied Psychology, Journal of Rural Community Psychology, Journal of Rural Health, Journal of Rural Mental Health, Journal of the American Board of Family Medicine, Psychology, Rural and Remote Health, and Western Criminology Review.

Growth in Intellectual Property

Another aspect of research that continues to grow is the college’s strong intellectual property portfolio. In 2014, the College of Health Sciences held 50 percent of the university’s total patent licenses, 84 percent of the total university copyright license agreements, and had 16 percent of the total new patents issued to the university.
Investment in Research Support Infrastructure

Research will continue to expand as the staff in the College of Health Sciences Office of Research find new ways to support and promote research efforts in the college. The college’s Office of Research was created in July 2011 to provide support to Health Sciences faculty and staff related to research and other sponsored activities and to help facilitate connections for people outside of the college who are looking to engage with the college’s faculty or learn more about the research they do.

“The office supports faculty to become more competitive for funding at a national level,” states Terri Soelberg, director of the College of Health Sciences Office of Research. “We can accomplish this in a few ways, depending on an individual investigator’s level of experience. We offer pilot study planning and publication support to those who are newer to research. This helps them to collect preliminary data and start/enhance their track record of publication in peer-reviewed journals. For those who are further along, we assist with evaluating grant solicitations for ‘goodness of fit’ and once identified, we can assist with strategic positioning of their work against the larger body of literature and with contributing to grant applications. In addition, we are frequently conduits that can connect faculty to other collaborators and resources. Lastly, and this is a newer initiative, we are trying to promote and market their good work through our website to enhance the researchers and the college’s visibility both locally and nationally.”

The college has received funding in recent years from some prestigious entities, including the National Institutes of Health - National Institute for Environmental Health Sciences, the Centers for Disease Control - National Institute for Occupational Safety and Health, the Health Resources and Services Administration, and Sigma Theta Tau International.
College of Health Sciences Students Excel at Making a Difference

College of Health Sciences students excel at many things. They compete exceptionally well at state, national and even international research competitions. They serve their local communities through service-learning courses and through their student clubs. Naming all the students’ combined accomplishments is not feasible, but there are patterns of excellence that can be highlighted.

The Success in Credentialing

College of Health Sciences students consistently do well on their licensing and credentialing exams. Athletic Training, Nursing, Radiologic Sciences and Respiratory Care students are often well above the national pass rates. Their demonstrated commitment to research, service and excellence will undoubtedly continue after graduation. As they begin their careers they will continue to make an impact on their local and global communities.

Extraordinary Accomplishments

Every school in the College of Health Sciences has courses that integrate research into the course-work. Additionally, faculty researchers hire both undergraduate and graduate research assistants. Many students participate in Boise State’s Undergraduate Research Conference and Graduate Student Research Symposium. Students also successfully compete in state and national research competitions. For example, Radiologic Sciences students often place in the top three in the Idaho Society of Radiologic Technology competition. In 2014, the Radiologic Sciences students swept the Royal Domingo Student Essay Competition at the Association of Collegiate Educators in Radiologic Technology Conference. In the past three years, two Radiologic Sciences students have been accepted to the annual student leadership development program of the Society of Radiologic Technologists. In another example, Respiratory Care students have won international research fellowships in 2005 and 2014, where they were competing against not just other respiratory therapy students, but professional respiratory therapists and researchers from around the world.

The College of Health Sciences students also compete successfully at the national level for scholarships, internships, and leadership opportunities. Students from the Environmental and
Occupational Health Program are frequently selected, after a highly competitive application process, to intern with the U.S. Public Health Service. Athletic Training students have been selected for prestigious summer internships with professional sports teams. Students from nearly every field in the college have received a national scholarship from an organization in their discipline, which demonstrates the high caliber of students enrolled in the college.

At their regional Air and Waste Management Association conferences, Environmental and Occupational Health students apply concepts they have learned in their Boise State course work in an Environmental Challenge Competition. Teams of students are given a scenario, which usually revolves around an environmental issue that the conference’s host city has experienced, that requires an innovative solution to address multiple constituency concerns. Boise State student teams have done well in the annual competition, often placing in recent years. In 2011, Boise State took first and second place in the regional competition which allowed a Boise State team to compete at and win the 2012 National Air and Waste Management Competition.

Paying It Forward

Service is ingrained in the College of Health Sciences students. Service-learning courses integrate a community service activity that meets community needs and through reflection offers students opportunities to gain further understanding of course content and their discipline while also enhancing their sense of civic responsibility. Service-learning courses in the College of Health Sciences include Community and Population Health Nursing, Introduction to Social Work, Foundations of Social Work, and Kinesiology’s Personal Health. Additionally, the student-formed clubs participate in volunteer activities organizing health fairs for local elementary schools, participating in city-wide events like Rake Up Boise, sponsoring events such as a low-cost small animal spay and neuter clinic and more. Students have even created service specific clubs such as Timmy Global Health, which is a chapter of a national organization that sends teams made up of medical service students and healthcare professionals to developing countries to support the work of international partner organizations in community based health and development projects. Additionally, School of Social Work’s Theta Psi, a chapter of the national Phi Alpha Honor Society for Social Work, has won the chapter service award for consecutive years.
Graduating from Boise State without Setting Foot on Campus

Two degree completion programs in nursing and in respiratory care are helping students with associate degrees further their education, enhance their ability to provide excellent patient care and advance their careers.

These programs are designed for the working professional. By taking a few courses a semester, students complete 30 credits in their profession. Because the programs are online, students do not have to physically come to campus, which allows them to remain at home with their families and focus on their work.

Both programs started in 2008 and have grown exponentially. The RN-BS Online Completion Program has approximately 700 nurses currently enrolled and has graduated more than 450 registered nurses who now have a baccalaureate degree. The Respiratory Care Degree Completion Program has more than 150 respiratory therapists currently enrolled and has graduated more than 200 registered respiratory therapists who now have a baccalaureate degree.

Advancing Knowledge and Careers

The programs were initiated to assist students in obtaining their bachelor’s degree and both programs generate revenue, which supports additional full time and adjunct faculty and staff to assist with running the programs. In 2010, the Institute of Medicine and the Robert Wood Johnson Foundation released a report, “The Future of Nursing: Leading Change, Advancing Health,” that advocated for eighty percent of nurses to hold a bachelor’s degree by 2020. Bachelor’s degree nursing programs provide additional competencies in community and public health, gerontology, care coordination, and more that associate degree and diploma nursing programs do.

Online Commute Degree completion students take online classes, which offer them more flexibility with their work and family lives.
not include. These skills, as well as experience with technology, policy development, and organizational systems, are necessary as the healthcare environment becomes more and more complex. Bachelor’s degrees in respiratory care are rapidly being required for positions in critical care, education, and supervision or management. Bachelor’s degrees in these fields give students enhanced knowledge, preparing them to be better at evaluating research and giving patient care.

Students from both programs have continued on to graduate school. Several graduates from the Respiratory Care degree completion program have obtained their master’s degree and have become full time faculty at other institutions. Other respiratory care graduates have entered physician assistant or medical school. Respiratory Care graduates report that completing the Boise State program has opened doors for them in leadership and management roles and that they have deeper job satisfaction and enhanced knowledge of their profession and of patient management.

**Flexibility at a Reasonable Cost**

Both programs offer intangible value to their students at a very reasonable cost. Idaho respiratory care students pay a little more than $8,000, which includes the cost of books, to complete the program. Out of state respiratory care students pay a little more than $9,600 for the program including books. The nursing program costs $12,000, including books. Students in both programs are supported by their employers, with a fair number of employers offering tuition reimbursement options.

Both RN-BS and the Respiratory Care degree completion programs have articulation agreements with a number of colleges and universities. An articulation agreement allows students who have earned an associate degree in nursing or respiratory therapy to transfer from their previous college/university with the knowledge of exactly how their courses will be accepted by Boise State. The agreement must be signed by many people at each institution including the program director, chair, dean, registrar and provost. It provides a very
specific list of courses required to complete the bachelor’s degree. It makes the transition from their associate’s degree to bachelor’s degree seamless.

**Recognized for Excellence**

Both programs are well respected, with high satisfaction from graduates, who are recommending the programs to their colleagues. The RN-BS Degree Completion program was highlighted as one of the top six accredited online nursing programs in the United States by Degree Scape, an online education guide for accredited programs.

The Respiratory Care Degree Completion Program fills a particular niche. There are fewer than 50 bachelor’s degree respiratory care programs in the United States, which makes it difficult for practicing respiratory therapists to advance their formal education. Because of the online and flexible nature of the Boise State degree completion program, these registered respiratory therapists can advance their knowledge and career.

While more than 75 percent of the RN-BS students are from Idaho, the majority of respiratory care students are from outside the Gem State. Respiratory Care has had applicants from all 50 states as well as Saudi Arabia, Japan, Taiwan, and Canada while graduates represent 31 states, Saudi Arabia, Japan, and Taiwan. Additionally, respiratory therapists serving in the US military have been able to complete their bachelor’s degree while deployed in Afghanistan. Both the nursing and the respiratory care programs have American students working on their degrees while living abroad.
Simulated and Interprofessional Scenarios - the Future of Health Education

The College of Health Sciences Simulation Center is one of the college’s most popular features. This unique center is changing the way that faculty educate students.

When they think of students participating in simulation education, many people imagine students working with high-tech manikins, which allow faculty to control breathing, heartbeat and bowel sounds. While this is true, the technology should not define simulation education. Simulation at its essence is students observing each other, followed by a faculty facilitator led debriefing where students reflect on the experience: discussing what did and did not work and providing their peers with feedback. Case studies are a form of simulation as they expose students to a new situation, followed by meaningful conversation and reflection.

This methodology closely relates to the interprofessional education initiatives in the college. Interprofessional education also relies heavily on reflection and debriefing and often uses case studies for interdisciplinary teams to bring expertise of their field to the table to solve a problem.

Immersive simulation experiences may also utilize a standardized patient rather than a manikin. A standardized patient is an actor trained to portray a patient with a particular disease or condition. More and more faculty are using standardized patients in their simulation designs as the human interaction they bring feels more realistic to students and the communication between patient and provider is more authentic.

The simulation experience can be uncomfortable for students as they’re put on the spot to perform while being observed by their peers and faculty. The debriefing following the simulation allows faculty and students to explore the choices they made in the simulation.
Ideally, faculty are able to identify a point in a student’s logic that led them to make an error in their patient care so that the next time the student encounters a similar situation they do not make the same error.

“Skilled faculty facilitators can take students to the edge of their comfort level without tipping them over,” states Becky Bunderson, director of the College of Health Sciences Simulation Center. “Students can learn a lot when they stretch their level of critical thinking - it challenges them to grow.”

**Distinctive Accreditation**

The College of Health Sciences Simulation Center is accredited in teaching and education by the Society for Simulation in Healthcare’s Council of Accreditation of Healthcare Simulation Programs. It was the first simulation center west of St. Louis, Mo., not affiliated with a major medical institution to receive such an accreditation. There are fewer than 50 accredited simulation centers worldwide and most are connected to a health system, medical center, hospital, school of medicine or other major medical institution.

“Accreditation validates all of the hard work in establishing a high quality simulation center,” said Bunderson. “It lets the community, faculty and students know that the work in the center is evidence-based and follows standards and best practices, delivering quality educational experiences to students and community partners.”

**Transforming Clinical Experiences**

“The Simulation Center will continue to be busier and busier as more and more faculty integrate simulation into their teaching,” said Bunderson. “The recently released National Council of State Boards of Nursing longitudinal, multi-site study found that there is no statistically significant
difference in learning outcomes of students who receive 100 percent of their clinical hours in a traditional clinical setting compared to students who have 50 percent of those hours replaced with simulation. This study will change how nursing education is delivered.”

Experiential learning is a key component of health care education today.

Faculty from throughout the College of Health Sciences, are integrating simulation into their courses. Six nursing faculty were early participants in the Society for Simulation in Healthcare’s certification program, successfully completing the portfolio submission and certification exam. Additionally, faculty are conducting research in the simulation center. Research topics vary from patient safety to learner retention, to how stressful experiences may affect a nurse’s ability to provide care.

Interprofessional education is a natural fit in the simulation environment, based on the fields of the students participating in the simulation. For example, three faculty, Rosemary Macy from the School of Nursing, Leslie Kendrick, chair of the Department of Radiologic Sciences in the School of Allied Health Sciences, and Lutana Haan, from the School of Allied Health Sciences Department of Respiratory Care, run an interprofessional skills lab where students from all three of these clinical disciplines are interacting with each other and learning common skills that their disciplines will use in the field. For the first time in 2015, they will conduct a large-scale interprofessional simulation where a full cohort from each discipline will participate in two immersive simulations during a semester. The cohorts will be broken into groups of approximately 10 students, with six nursing students and two students each from radiologic sciences and respiratory care. One nursing, one radiologic science, and one respiratory care student will interact with the manikin while the other seven students observe from the observation room. These types of experiences will allow the students to understand what expertise each field brings to the table so that the students will be more likely to include those professions in practice in their future jobs.

“Experiential learning is a key component of health care education today,” states Jaime Sand, interim director of interprofessional education for the College of Health Sciences. “Reflection is an essential part of this process.”
Spotlight on Successful Alumni

College of Health Sciences alumni are very successful. This small sample will give you a glimpse of what our alumni are doing with their degrees.

**Toni Hardesty** (1988 B.S. Environmental Health) is the state director of The Nature Conservancy in Idaho, a non-profit global conservation organization. Hardesty oversees The Nature Conservancy’s work around the state, focusing on collaborative conservation projects that protect land and water for nature and people.

Prior to working for The Nature Conservancy, Hardesty was the director of Idaho’s Department of Environmental Quality from 2004-2012 serving under three governors. As director, she was responsible for leading efforts to preserve the quality of Idaho’s air, land, and water for use and enjoyment now and in the future. Hardesty has also worked in the private sector as an environmental consultant working on projects throughout the U.S. and internationally with an expertise in issuing permits and collaborating on sensitive environmental issues with agencies, citizens, and industry.

Hardesty is an Idaho native and a graduate of Boise State University. Hardesty’s degree in Environmental Health provided a solid technical foundation for her to launch her career in the environmental field. The university’s emphasis on policy, technical writing, and strong communication skills were key to preparing her for a successful career in this important and fascinating field.

**Eugene “Gene” Lamott** (1983 B.S. Physical Education) has a proven track record in successfully building, organizing and managing health and fitness related businesses. While working as the founder, CEO, and president of Northwest Fitness LLC, doing business as Gold’s Gym, LaMott built and sold one of Gold’s Gym’s most recognized and successful chain of gyms in the late 80’s through the 90’s in Portland, Oregon and Vancouver, Washington. While working as the divisional president for 24 Hour Fitness, he grew the northwest territory by more than 500 percent in three years through acquisition and new store development.

LaMott currently serves as a business advisor for Axiom Fitness; board member chairman for TW Holding Inc.; board member for VASA Fitness, LLC; and founder and CEO of Fit To Go, a mobile health and fitness testing laboratory.
Previously, LaMott served as Boise State University’s strength coach and Idaho Sports Medicine Institute’s fitness specialist.

LaMott earned his Bachelor of Science degree in physical education with a coaching emphasis from Boise State as well as a K-12 Teaching and Coaching Certification. His hobbies include weight training, snow and water skiing, road and mountain biking, and horseback riding.

**Sherry Parks**, BSN, MS, NEA-BC, (2005 Masters of Health Science) is the vice president and chief nursing officer for Saint Alphonsus Regional Medical Center in Boise and the regional chief nursing officer for the Saint Alphonsus Health System. For the past 15 years, Parks has held numerous leadership positions within Saint Alphonsus, including director of patient safety and regulatory compliance, director of behavioral health services, and director of nursing services. Throughout her career, Parks has been passionate about improving nursing practice, nursing professionalism and creating a culture of excellence. In her current role, Parks has the honor to provide leadership and collaboration on many patient care and nursing initiatives across the region and within the Trinity Health system. Parks graduated from Boise State University in 2005 with a Masters of Health Science degree.

**Maryann Reese** (1991 A.S. Nursing) serves as the president and CEO of St. Elizabeth’s Hospital in Belleville, Illinois. St. Elizabeth’s is part of Hospital Sisters Health System, which includes 14 hospitals in two states. It includes a physician medical group that employs over 620 providers including the cardiologists from Prairie Cardiovascular.

Reese previously served as the chief operating officer at St. Vincent’s Regional Medical Center in Billings, Montana, and chief operating officer at Mercy Medical Center in Nampa, Idaho. She has also served as the chief nursing officer of Brigham City Community Hospital in Utah.

Prior to her senior roles in management, she worked as a registered nurse in the Neonatal Intensive Care Units of St. Luke’s Regional Medical Center, Boise, Idaho, and Eastern Idaho Regional Medical Center, Idaho Falls, Idaho.

Reese has a history of leading organizations to achieve top quality awards, including the prestigious “Top-100 Hospital Award,” the “Blue Cross/Blue Shield Top Hospital Award,” the “Truven Top-50 Cardiovascular Hospital Award,” the Illinois Performance Excellence Award, and numerous 5-STAR Best Healthcare Awards. Under her tenure, St. Elizabeth’s employee satisfaction has moved from the 20th percentile nationally to the 92nd percentile, physician satisfaction from the 10th percentile
nationally to the 98th percentile, and patient satisfaction has increased over 400 percent.

She has a nursing degree from Boise State University, a Masters in Healthcare Administration from University of Minnesota, and has completed her Doctorate in Health Administration from Central Michigan University. She is a Fellow in the American College of Healthcare Executives.

**Marti Wiser**  
(1999 B.A. Social Work and 2000 MSW) uses what she learned earning her bachelor’s and master’s degrees in social work at Boise State every day in her work as founder and executive director of Special Needs Adoption and Permanency Services Inc. (SNAPS), a Northwest non-profit corporation that advocates for children within the foster care system.

Wiser has served children and families seeking adoption since 1999, first as a project coordinator, then as a program administrator. She believes that advocacy for waiting children, as well as the adults who want to include them in their family, is at the heart of each SNAPS project. In her work, Wiser collaborates with youth, state agencies and Idaho news media to produce recruitment materials that invite families into adoption or guardianship. Some of her other projects assist youth and potential parents in preparing for success before, during and after transition into a permanent family.

Wiser supervises two grant sites in Idaho for Wendy’s Wonderful Kids, a program supported by the Dave Thomas Foundation for Adoption and local Wendy’s restaurant franchises. Just like Wiser, the sites are dedicated to intensive adoption recruitment efforts on behalf of waiting children.