

Contact: Diana Gonzalez

**REQUEST FOR NEW PROGRAMS AT THE UNIVERSITY OF IOWA:
BACHELOR OF ARTS AND BACHELOR OF SCIENCE PROGRAMS IN PUBLIC HEALTH**

Action Requested: Consider approval of the request by the University of Iowa to establish new Bachelor of Arts and Bachelor of Science Programs in Public Health in the College of Public Health.

Executive Summary: The proposed programs are expected to lead to the development of an increased number of qualified public health workers. This proposal was reviewed by the Board Office and the Council of Provosts and is recommended for approval. No concerns were raised when it was presented to the Iowa Coordinating Council for Post-High School Education. The proposed program addresses the Board of Regents Strategic Plan priorities to “provide educational excellence and impact as well as economic development and vitality” and Goal #8 – “Iowa’s public universities and special schools shall be increasingly efficient and productive.”

Background:

- ◇ **Description of proposed program.** The proposed programs will provide students with a basic understanding of the five core public health knowledge areas – biostatistics, social and behavioral sciences, epidemiology, health policy and management, and environmental health sciences. Both programs will have breadth in the social, economic, quantitative, geographic, and educational issues that impact the health of populations and health disparities within and across populations.

The Bachelor of Science Program will have depth in the basic sciences for students who are interested in working in a laboratory setting or preparing for advanced education in such programs as biostatistics, dentistry, environmental health, epidemiology, medicine, nursing, occupational health, pharmacy and veterinary medicine. The Bachelor of Arts Program will focus on the community and behavioral aspects of public health for students interested in working in health education, health communication, health program development, and public health policy in local, federal, or international governmental or non-governmental agencies. The Bachelor of Science Program will have more required coursework in the sciences and fewer electives than the Bachelor of Arts Program.

Undergraduate students will be admitted directly into the College of Public Health. Each program will consist of 120 semester hours and include content in public health science, natural science, social and behavioral science, quantitative reasoning, and the arts and humanities. Students in both program will complete a three semester hour capstone experience that will provide opportunities to integrate, apply, and synthesize public health knowledge outside of the typical classroom setting. As an integral part of their education, students will also be exposed to public health professionals and agencies that engage in population health practice. Students in either of the proposed programs will be prepared to enter the public health workforce or pursue an advanced degree in public health, the clinical health professions, or other related fields.

- ◇ **Academic objectives.** The proposed programs will prepare individuals to:
 - ⇒ Understand the five core public health knowledge areas – biostatistics, social and behavioral sciences; epidemiology; health policy and management; and environmental health sciences.

- ⇒ Identify the social, economic, quantitative, geographic, and educational issues that impact the health of populations and health disparities within and across populations.
 - ⇒ Exhibit the basic knowledge and skills necessary for entry-level practice in the field or for advanced education in health or in health-related sciences and humanities.
- ◇ Need for proposed program. The Healthy People 2020 report released in 2010 by the U.S. Department of Health and Human Services recommends an increase in the proportion of four-year colleges and universities that offer public health or related major and/or minors. This report states that public health infrastructure is key to all other topic areas in Healthy People 2020. Emerging issues in public health infrastructure include Tribal public health, disparities, community interventions, policy and law, and standardizing services provided by public health agencies. This is in addition to providing the capacity to prepare for and respond to emergency threats and ongoing threats to the public's health (Healthy People 2020, 2014).

The release of this report and the 2003 Institute of Medicine report, Who will keep the public healthy?: Educating public health professionals for the 21st Century, which recommends that "all undergraduates have access to education in public health" (Institute of Medicine, 2003) has drawn attention to the importance of public health and the workforce opportunities for trained public health workers. In addition to the increase in the breadth of the public health workforce, there are also concerns about both the current public health workforce not having a formal education in the field and nearing retirement. National studies of the public health workforce have shown that only 20% of public health staff have formal education in the field (Centers for Disease Control and Prevention, 2001). In addition to the lack of formal training, the workforce is aging and declining in numbers. Approximately 110,000 public health workers, nearly 25% of the current workforce, were eligible to retire in 2012 (Association of Schools and Programs of Public Health, 2008). By 2020, the Association of Schools and Programs of Public Health reports the U.S. will face a shortage of 250,000 public health workers. With the aging of the public health workforce, experts fear the number of trained workers available will be insufficient to replace the number retiring in the next decade (Association of State and Territorial Health Officials, 2008; National Association of County and City Health Officials, 2014). Additionally, changes in health care systems in the U.S. and globally are providing expanded opportunities and employment prospects for students with population health knowledge and skills.

Having an adequate and appropriately educated public health workforce continues to be a concern in Iowa. Through Healthy Iowans, a state-wide health assessment and health improvement planning process was conducted by the Iowa Department of Public Health (IDPH). IDPH classified the needs identified by counties into six focus areas, one of which is "Strengthen the Public Health Infrastructure", that includes the workforce. Public health undergraduates will be well-positioned to make significant contributions to ensuring Iowa has a public health workforce that understands and supports the health of Iowans. Career opportunities include entry-level employment in health education, research, clinical settings, and non-profit and state agencies. Students will also be prepared to pursue an advanced degree in public health and other related fields.

Schools of public health across the United States have embraced the Institute of Medicine recommendations, as have many institutions without graduate public health education. Today, close to half of all accredited schools of public health offer undergraduate programs. At the same time, national health promotion and disease prevention initiatives, such as Healthy People 2020, include objectives that will continue to nurture the growth of undergraduate public health education at four-year institutions.

There are currently no accredited schools of public health in the state of Iowa that offer an undergraduate program in public health. Those in the region offering similar undergraduate programs include the University of Illinois at Chicago (BA in public health) and Saint Louis University (BS in Public Health). The University of Iowa College of Public Health is top 10 nationally ranked among publicly supported schools of public health, has an extensive network of community partners, has a track record of offering high-quality degrees, many of which are collaborative, and has a highly-productive faculty with expertise in all disciplines of public health. These strengths position the College of Public Health to be successful in attracting students from Iowa, the region, and nationally and to train the future generation of the public health workforce.

Increasing the number of undergraduate students exposed to public health has been a topic of discussion with the College of Public Health leadership team, faculty, and Board of Advisors which includes practice and academic partners who advise and assist the College in all aspects of its work. The Board has shown great support for this initiative and is interested in the opportunities the proposed programs will provide for faculty, staff, and students in the College and the state of Iowa.

- ◇ Link to institutional strategic plan. The principles of public health education and training are evident in the mission, vision, and goals of the College of Public Health, as well as in the strategic plans of the College and the University. The College was established in 1999 as the major component of the Public Health Initiative of the University, Board of Regents, and state of Iowa. The College's mission is to promote health and to prevent injury and illness through commitment to education and training, excellence in research, innovation in policy development, and devotion to public health practice. The College serves Iowa and the Midwest as one of the nation's premier public schools of public health and leads the global community in rural public health education and training, research, and practice. The core values reflect those of the University – Excellence, Learning, Community, Diversity, Integrity, Respect, and Responsibility. The College seeks to implement these values in ways that enhance the health and well-being of all Iowans, especially the most vulnerable segments of Iowa's population. All activities within the College are motivated by a commitment to social equity and fairness, a spirit of compassion for all persons, and a desire to apply the tools of scientific knowledge to pressing societal health concerns. The College seeks to improve the conditions in which everyone lives and contributes to the formation of a health and just society.

The College of Public Health aspires to:

- ⇒ Provide outstanding public health education for both academic degree programs and non-academic training and education programs.
- ⇒ Conduct innovative, collaborative, interdisciplinary research that advances public health theory, methods, and practice.

- ⇒ Enhance community health and improve quality of life in Iowa, nationally, and internationally through translation and promotion of the College's education and research programs, public service, and creative partnerships.

The College's long-term strategy in its strategic plan has been to expand its offerings to include undergraduate education. The College is responding to the national movement toward increasing undergraduate public health education and Iowa's need for public health trained professionals. The College is committed to training students from Iowa who can use their knowledge and skills to improve the health of Iowans through the efforts of institutions, agencies, and organizations devoted to public health service and research. The College has highly ranked graduate and professional programs which were supported by the growth of the College during the past 15 years. The College's stability provides a strong foundation to offer a full complement of degree programs, including undergraduate programs. The College is the only nationally accredited school of public health in Iowa.

- ◇ Relationship to existing programs at SUJ. The release of the 2003 Institute of Medicine report, *Who will keep the public healthy?: Educating public health professionals for the 21st Century*, recommends that "all undergraduates have access to education in public health" and "public health education is an essential part of the training of citizens" (Institute of Medicine, 2003). The Association of Schools and Programs of Public Health, Institute of Medicine, the Association for Prevention Teaching and Research, the Council of Colleges of Arts and Sciences, and the Association of American Colleges and Universities has each endorsed aligning public health content with liberal arts content in undergraduate educational programs. These programs are not duplicative of other existing programs at the university. Students in other programs will benefit from taking public health courses that will add broad public health knowledge to their skill set. The field of public health is broad and can accommodate students with interests including geography, anthropology, environmental science, sociology, psychology, engineering and math, in addition to those seeking advanced science and clinical health degrees.
- ◇ Relationship to existing programs at other colleges and universities. No college or university in Iowa offers a four-year undergraduate program in public health. Several schools in Iowa offer programs of study with a public health concentration or public health content. Allen College offers a bachelor of health sciences program with a public health emphasis. The program was launched in fall 2014 as an on-line, upper-level degree (36 semester hours only) designed for students who complete community college prior to application to this program. The proposed programs are different from Allen College's program in terms of the student target population – students will be admitted directly into the program as freshman rather than as transfer students and the mode of delivery – the proposed program will be offered on-campus rather than distance-based.

The University of Northern Iowa School of Health, Physical Education, and Leisure Studies, Division of Health Promotion and Education, offers a Bachelor of Arts Program in Health Promotion. While this program requires content primarily in health promotion or environmental health, the proposed program requirements will include content in all five core areas of public health, as required by accreditation standards set forth by the Council on Education for Public Health (CEPH). The proposed program will also include a capstone experience which will provide students with an opportunity to apply public health principles outside the typical classroom setting.

Iowa State University, Department of Kinesiology, offers a Bachelor of Science Program in Kinesiology and Health with a community/public health option. The coursework centers on science and human development. The focus is on health promotion and the plan of study does not include required content in all core five areas of public health, as required by accreditation standards.

The University of Iowa, Department of Health and Human Physiology offers a Bachelor of Arts Program in Health and Human Physiology with subtracks in health promotion, exercise science, and health studies. The focus is on the behavioral aspects of health and the plans of study do not include required content in all core five areas of public health as required by accreditation standards.

- ◇ Unique features. The College of Public Health is the state's only accredited school of public health and is well-positioned to develop a new undergraduate public health program, building upon areas of recognized strength, including:
 - ⇒ A track record of successful graduate and professional programs;
 - ⇒ A collaborative and productive faculty with expertise in all disciplines of public health;
 - ⇒ Existing collaborative programs with academic programs across colleges at the University, as well as joint programs with ISU (DVM/MPH) and private institutions such as Grinnell College (BA/MPH);
 - ⇒ An extensive network of community partners supporting students' experiential learning, practica, community-engaged research, and service projects; and
 - ⇒ Top 10 national ranking among public schools of public health.
- ◇ Duplication. There are four other programs in the state that address some aspect of public health – Allen College offers a Bachelor of Health Sciences program in Public Health; UNI offers a Bachelor of Arts program in Health Promotion; ISU offers a Bachelor of Science program in Kinesiology and Health; and the University of Iowa offers a Bachelor of Arts program in Health and Human Physiology. No other college or university currently offers a four-year program in public health.
- ◇ Resources. A review of personnel, facilities, and equipment needs was completed and a plan was developed to ensure a successful, high-quality program. This plan includes identification of the need for leadership for the undergraduate program; faculty to develop and teach courses and advise and mentor students; student services personnel for recruitment and marketing; classroom space; student services facilities; and IT support. The College of Public Health moved into a new building on campus in 2012. The building was designed for future growth and with state-of-the-art classroom space. The College has nationally and internationally recognized faculty who teach and conduct research in all of the core areas of public health. They are assisted by staff who are dedicated to student and educational support. The College and individual departments are highly ranked which is an indicator of the quality of existing educational programs.

- ◇ Student demand. The College has offered selected classes to undergraduates since 1999. These classes are well attended and demand continues to grow. A recent example is the Fundamentals of Public Health course that was offered for the first time as a distance course in Spring 2011 and on-campus in Fall 2013. Enrollment has steadily increased leading to the addition of a spring on-campus offering in 2015. The Fall course enrollment more than doubled in one year (from 28 to 57 students) and the total enrollment over both semesters for on-line and on-campus sections has increased from 15 to 151 students. Course instructors interviewed students in this course during Fall 2014 to ascertain student interest in an undergraduate program in public health. There was considerable enthusiasm expressed for development of the undergraduate programs. In addition, a rapidly increasing number of accredited schools of public health are offering public health undergraduate programs and enrollment in these programs has increased significantly during the last five years.

In the 2009 article published in the *Chronicle of Higher Education*, public health was identified as one of five college majors on the rise. The article states “Between 2003 and 2007, the number of bachelor’s degrees awarded in public health doubled...” (Fischer and Glenn, 2009). “The Educated Citizen and Public Health initiative encourages faculty members and administrators to take advantage of this opportunity by applying the insights of an expansive vision of high-quality liberal education to the burgeoning field of undergraduate public health.” An analysis by the Educated Citizen and Public Health initiative showed public health to be a growing presence in undergraduate education (Hovland et al, 2009).

- ◇ Workforce need/demand. In addition to the increase in the breadth of the public health workforce, there are also concerns about the current public health workforce not having a formal education in the field and nearing retirement. National studies of the public health workforce have shown that only 20% of public health staff have formal education in the field (Centers for Disease Control and Prevention, 2001). In addition to the lack of formal training, the workforce is aging and declining in number. Approximately 110,000 public health workers, nearly 25% of the current workforce, were eligible to retire in 2012 (Association of Schools of Public Health, 2008). By 2020, the Association of Schools and Programs of Public Health reports the U.S. will face a shortage of 250,000 public health workers. With the aging of the public health workforce, experts fear the number of trained workers available will be insufficient to replace the number retiring in the next decade (Association of State and Territorial Health Officials, 2008; National Association of County and City Health Officials, 2014).
- ◇ Consultation with representatives of other programs. Allen College Bachelor of Health Sciences Degree in Public Health (Smruti Vartak, Director, Public Health Program at Allen College – UnityPoint Health): On January 27, 2015, Dean Curry, Associate Dean Aquilino, and Dr. Vartak discussed the proposed undergraduate programs in public health. Dr. Vartak echoed the need for well-trained public health workers in Iowa, nationally, and internationally and stated that the University of Iowa and College of Public Health can offer the full complement of undergraduate courses to students allowing them to complete a four-year degree. She also stated that the proposed programs will serve a different student population than Allen College.

UNI Bachelor of Arts Degree in Health Promotion (Michele Devlin, Professor, Health Promotion and Education, University of Northern Iowa): On February 5, 2015, Dean Curry, Dr. Devlin and Dr. Zeman discussed the proposed programs in public health. They agreed that the proposed degrees are not duplicative of UNI's BA in Health Promotion.

ISU Bachelor of Science Degree in Kinesiology and Health (Philip Martin, Professor and Chair, Department of Kinesiology, Iowa State University): On February 6, 2015, Associate Dean Aquilino, Associate Dean Uden-Holman, and Dr. Martin discussed the proposed programs in public Health. Dr. Martin stated that the University of Iowa is ideally suited to offer these degrees due to their complement of undergraduate departments in sciences and humanities and the accredited school of public health with faculty expertise in all core areas of public health. He also stated that this degree is not duplicative of the Bachelor of Science Program in Kinesiology and Health with a track in public health at ISU because their program attracts students interested in physical activity and not public health broadly.

The University of Iowa offers a Bachelor of Arts Program in Health and Human Physiology (Chaden Djalali, Dean College of Liberal Arts and Sciences, University of Iowa): Dean Curry, Associate Dean Aquilino, and Dean Djalali discussed the proposed undergraduate degrees in public health on December 18, 2014. Dean Djalali agreed that prospective student interest in public health is high and there is a high workforce demand for public health-trained employees. In addition, Dean Djalali is excited about exploring opportunities to collaborate as the proposed programs evolve.

There are letters of support from the University of Northern Iowa, Iowa State University, the University of Iowa, Allen College, Iowa Public Health Association, Iowa Department of Public Health, and Iowa Counties Public Health Association.

- ◇ Cost. The new costs for the proposed program are expected to be \$285,000 in Year One, increasing to \$1,414,000 by Year Seven. A director for the proposed programs will be necessary. A gradual increase of faculty time will be required to develop and teach new and existing courses. This will initially be accomplished with a re-distribution of existing faculty effort. As the full complement of courses is developed, additional faculty will be hired. A review of classroom space usage in the College has been completed; there is opportunity to designate specific classrooms for undergraduate teaching. Other classrooms on campus are also available. No additional equipment will be required.
- ◇ Projected enrollment. The enrollment is expected to be 25 undergraduate majors in Year Two, increasing to 500 by Year Seven. The College also anticipates that there will be 35 non-majors in Year Three, increasing to 350 by Year Seven.
- ◇ Anticipated sources of students. Students will be recruited from Iowa high schools and surrounding states and admitted directly to the College of Public Health as freshmen.
- ◇ Off-campus delivery. Off-campus delivery is not planned initially.
- ◇ Potential for accreditation. The proposed programs will be part of the overall accreditation of the College of Public Health by the Council on Education for Public Health. The next accreditation visit is July 2018.
- ◇ Articulation agreement. Articulation agreements will be developed for the proposed programs.

- ◇ Marketing plan. The College will use marketing and recruitment strategies currently in place for graduate students. The College will also use University undergraduate marketing and recruitment tools, especially the enrollment management program, website presence, special open houses, and visits with high school counselors.
- ◇ Evaluation plan. Enrollment, retention, completion, and time to degree will be tracked and reviewed annually and during the accreditation review. Expenditures in relation to tuition revenues will be evaluated annually. In addition, student and alumni surveys will be conducted to get feedback on the program.
- ◇ Date of implementation. Creation of the proposed program will become effective upon approval by the Board of Regents and will be included in the University's General Catalog. The anticipated implementation date is Fall 2015.