

## MEMORANDUM

To: Sherry Queener, PhD  
Associate Dean of the IU Graduate School  
Chair of the Graduate Affairs Committee

From: Maryellen Gusic, MD  
Executive Associate Dean for Education  
IU School of Medicine

Carole Kacius, PhD  
Associate Dean for Education and Training  
IU Richard M. Fairbanks School of Public Health

Date: August 30, 2013

Re: Proposal for the MD-MPH Joint Degree Program at IUPUI

Attached is the proposal for the MD-MPH joint degree program. This will involve two existing programs; the Doctor of Medicine and the Master of Public Health. Funding from a \$1.4 million Health Resources and Services (HRSA) grant will be used to develop the public health content online and provide stipends to students who are interested in pursuing the MD-MPH degree.

The joint MD-MPH program is designed to allow students to obtain the MD and MPH degrees in five years. It also provides students with unique opportunities for interdisciplinary, interprofessional work in medicine and public health. Students in the joint MD-MPH program are required to gain independent acceptance to the IU School of Medicine and the IU Fairbanks School of Public Health.

A number of students on the IUPUI campus have already obtained both an MD and MPH degree. This proposal integrates the curricular requirements where synergies exist and lessens the time for completion. Instead of the typical six years (four years for the MD and two years for the MPH), this joint degree will take five years to complete. We anticipate an increased interest in the MD-MPH in the coming years.

Thank you for reviewing this proposal.

## Program Description

- I. Characteristics of the Program
  - a. Campus(es) Offering Program: Indiana University Purdue University Indianapolis will administer the MD-MPH and offer it on all nine School of Medicine campuses.
  - b. Scope of Delivery (Specific Sites or Statewide): The MD-MPH Program will be administered from IUPUI and available to students on the nine sites in which the IUSM medical curriculum is delivered.
  - c. Mode of Delivery: This program will be delivered in multiple ways: through coursework online, on-site, and in a blended format.
  - d. Other Delivery Aspects: In addition to didactic coursework, clinical and practical experiences are part of the MD-MPH curriculum.
  - e. Academic Unit(s) Offering Program: The MD-MPH Program is administered on the IUPUI campus by the IU School of Medicine and IU Richard M. Fairbanks School of Public Health.

- II. Rationale for the Program

- a. Institutional Rationale

- i. Why is the institution proposing this program?

The joint MD-MPH program is being proposed to allow students in our state to obtain interprofessional education in medicine and public health. This proposal integrates the curricular requirements and practical experiences where synergies exist, and allows students to complete the MD-MPH in five years. The two IUPUI schools are proposing this joint degree for the following reasons:

1. There is national interest in population approaches to solving complex health issues.
2. Each year, several IU medical students leave Indiana to pursue their MPH at another institution that will allow them to complete the MD-MPH in five years.
3. The Deans of the health programs on the IUPUI campus are interested in expanding opportunities for interprofessional education.

4. As the health sciences campus for the state, IUPUI is well-positioned to provide the MD-MPH to students on the nine medical campuses.

ii. How is it consistent with the mission of the institution?

The new MD-MPH program is a natural evolution of IUPUI's mission as the health sciences campus because it advances the intellectual growth of Hoosiers through research, teaching and service in a graduate (MPH) and professional (MD) program. The joint MD-MPH degree will be able to offer content in areas that prepare a public health physician to function as a clinician, an administrator, public health leader, a researcher, and a policy planner.

iii. How does this program fit into the institution's strategic and/or academic plan?

This joint degree supports IUPUI's strategic planning goals for 2025, particularly as they relate to leveraging the strengths of its health and life sciences programs. The MD-MPH program fits with the institution's strategic plan in the following ways:

- It supports the goals of the Center for Interprofessional Health Education and Practice through internal and external acquisition of funds. The two schools recently received a \$1.4 million dollar HRSA grant titled: *Interprofessional Public Health Education at Indiana University School of Medicine* to support the development of this joint degree.
- It facilitates collaborative engagement of students and faculty from medicine and public health in the classroom, in clinical medicine and in public health practice settings.
- It prepares students for the need to address issues of quality, patient satisfaction and cost effectiveness from both an individual patient perspective as well as from a population health perspective.

iv. How does this program build upon the strengths of the institution?

1. This program builds upon the strengths of IUPUI by integrating academic programs at the IU School of Medicine and IU Fairbanks School of Public Health. The IUPUI campus is known for its expertise in the life sciences as well as in epidemiology and biostatistics. Through teaching, research and service, faculty and students in this joint degree program will lever the investments of IUPUI's academic programs and build on the strengths its centers and institutes, including the IU Simon Cancer Center, Center for Bioethics, Regenstrief Institute, Center for Health Services and Outcomes Research, Polis Center, Bowen Research Center, Center for Health Policy, Center for Law and Health, Survey Research Center, Institute of Action Research for Community Health, Center of Excellence in Women's Health, Center for Aging Research, and many others.
2. Appendix 1: This appendix contains the link to IUPUI's strategic plan (<http://strategicplan.iupui.edu/>).

b. State Rationale

The joint MD-MPH degree addresses state priorities reflected in *Reaching Higher, Achieving More* in the following ways. (1) First, the program recognizes the changing needs of students in this discipline. Medical students will function in leadership and research roles in the new healthcare system if they have an MD-MPH degree. (2) Second, the MD-MPH degree draws upon the distinct role of the faculty on the IUPUI campus in meeting the need for graduates who are uniquely trained in both clinical medicine and public health. Given Indiana's poor health indicators, our state is in dire need of physicians who will help reduce our burden of disease, disability and death. (3) Third, the joint MD-MPH was specifically designed based on the knowledge and skills that are needed by professionals

in this discipline. Attainment of a joint MD-MPH degree will enable graduates to address complex health issues in Indiana, the country, and the world.

c. Evidence of Labor Market Need

The need for graduates with joint MD-MPH degrees is growing, and institutions around the country recognize the demand for physicians who are uniquely trained in both clinical medicine and public health. They will have the skills needed to understand and reduce the risks of disease, disability and death in individuals and in population groups. As a result, institutions around the country continue to develop and increase enrollment in joint MD-MPH programs, including:

- Boston Univ
- Columbia Univ
- Drexel Univ
- Emory Univ
- Harvard Univ
- Johns Hopkins Univ
- New York Medical College
- Ohio State Univ
- St. Louis Univ
- Tulane Univ
- Univ of Alabama at Birmingham
- Univ of California at Los Angeles
- Univ of Illinois Chicago
- Univ of Iowa
- Univ of Nebraska Medical Center
- Univ of North Carolina Chapel Hill
- Univ of Oklahoma
- Univ of Pittsburgh
- Univ of South Florida
- Univ of Southern California

III. Cost and Support for the Program

A \$1.4 million grant was secured in September to develop and support this program for the first five years. After the grant expires, the program will be self-sustaining and no new funds will be needed to support the joint MD-MPH joint degree program. Existing faculty and staff will provide the teaching and supervision needed for this program.

IV. Similar and Related Programs

There are no five-year joint MD-MPH programs currently in Indiana. There are over 20 joint MD-MPH programs in the country, including programs in our neighboring states of Illinois and Ohio.

The IU Richard M. Fairbanks offers programs between public health and other professions, such as law (JD-MPH), social work (MSW-MPH), healthcare administration (MHA-MPH), and bioethics (MS-MPH).

V. Quality and Other Aspects of the Program

The IU School of Medicine has the country's second largest medical student enrollment. The IU Richard M. Fairbanks is the newest school on the IUPUI campus. The five-year program being proposed by these two schools offers much more than simply two separate degrees; the HRSA funding allows us to create an integrated curriculum that addresses the knowledge, skills and experiences that are fundamental to the competencies required of a public health physician.

VI. Projected Headcount and FTE Enrollments and Degrees Conferred

As outlined in the HRSA grant proposal for funding to support this program, the following table represents the minimum projected headcounts.

	2014	2015	2016	2017
Estimated Number of New Students Pursuing the MD/MPH Program	5	6	7	8

## **Proposal for Joint Degree in Medicine and Public Health**

### **Indiana University School of Medicine Indiana University Fairbanks School of Public Health**

#### **Goal/Objective**

This proposal is for a joint degree in Medicine and Public Health at Indiana University-Purdue University Indianapolis (IUPUI). Students who successfully complete this joint degree program will receive a Doctor of Medicine (MD) degree from the Indiana University School of Medicine and a Master of Public Health (MPH) degree from the Indiana University Richard M. Fairbanks School of Public Health. While a number of students have earned their MD and MPH degrees from IUPUI, they have not been able to apply certain learning experiences toward both degrees. The MD-MPH program is designed to accommodate public health curriculum without the need to replace any existing courses in the MD curriculum. This is accomplished by:

- Enrolling in MPH core courses the summer between Year 1 and Year 2 of medical school;
- Completing public health content as part of the new medical school curriculum;
- Completing advanced MPH coursework in Year 4 of a 5-year program
- Transferring some credits from the MD coursework to the MPH degree.

#### **Relationship to Existing Programs**

Currently, a five-year joint MD-MPH program does not exist in Indiana. As the health sciences campus for the State of Indiana, IUPUI is well-positioned to offer the joint MD-MPH degree. This program would capitalize on the unique educational opportunities and resources available on the IUPUI campus, and would be available to medical students on all nine medical campuses in Indiana.

The development of this joint degree comes at an opportune time for IU School of Medicine, given that the school is in the final stages of a thorough curriculum reform process that began in 2010. Throughout the next phase of curricular reform process, the courses within the new curriculum will be designed and decisions about how and where public health content will be infused into the new curriculum for all medical students will be made. Select learning units

related to public health that will be included in the new medical curriculum.

The MD Program is fully accredited by the Liaison Committee on Medical Education. The MPH Program is fully accredited by the Council on Education for Public Health.

### **Benefits of the Program for Students, IU, and the State**

A \$1.4 million grant from HRSA was awarded to the School of Medicine in September of 2013 to establish a streamlined, clinically relevant 5-year joint degree program in Medicine and Public Health.

Medicine and public health are complementary fields of research and practice. The close collaboration between the two programs will provide stronger interaction and research among faculty, students and alumni. Successful completion of this joint degree will provide graduates with a unique set of skills, perspectives and abilities that will enable them to address pressing public health challenges at local, state, regional, national and international levels.

Beyond the foundation courses required in each program, this joint degree provides students with a broad, culturally sensitive, community-based perspective on issues related to health and well-being. This program will prepare students with both a theoretical and a systems approach to solving complex health issues that affect populations of diverse communities.

### **Rationale and Potential Market**

The need to strengthen public health in the US is well known, but of equal importance is the need to better integrate and coordinate primary care medicine and the public health system. The purpose of this proposal is to educate physicians who will provide medical care at the individual level, and, at the same time, address population health needs in their communities. In the report "Training Physicians for Public Health Careers", the IOM specifically stated that medical students should receive a basic education in the following public health areas: epidemiology, biostatistics, environmental health, health services administration, social and behavioral health sciences, informatics, genomics, communication, cultural competence, community-based participation research, global health, policy and law, and public health ethics (IOM, 2007).

The events of the last decade have dramatically changed the need for public health education and a strong public health system. As the demand for well-trained public health professionals has grown significantly, the nation has realized that there is a major shortage of training programs and expertise. There

is clearly a need to integrate public health into medical education and this is being driven by several interrelated factors:

1. The first is the changing face of disease in the U.S. The focus of healthcare has shifted to management of chronic diseases and to preventive health, including the maternal and child health area. As the lifespan for the typical American has increased, chronic diseases such as cardiovascular disease, obesity, diabetes, and pulmonary disease have become far more prevalent (IOM, 2003; Maeshiro, 2010). While drugs and medical interventions can be helpful sources of treatment, knowledge of public health can help physicians better understand the various social determinants of health, as well as the policies and environmental changes that will influence their patients to make healthier lifestyle choices (Fineberg, 2011; Monroe, 2011). The provision of preventive services is even more important, since it avoids many of the complications of both communicable and chronic diseases.

2. The second factor is the soaring cost of healthcare in the United States. The amount spent on healthcare in the U.S. reached \$2.6 trillion in 2010, with much of this due to the burden of treating chronic disease. In spite of these expenditures and advances in medicine, the rates of chronic disease have continued to rise. In order to contain costs and reduce the prevalence and impact of chronic disease, physicians will need to embrace a population health approach to treatment. Such an approach will allow physicians to look at health in a broader context so they can work to impact bigger segments of the population through changing public policy, altering social norms and behaviors, and changing the overall environment in which health occurs (Jarris, 2011; Monroe, 2011).

3. The third factor driving the need to integrate medicine and public health is the initiative to reform the US healthcare system and focus more intently on disease prevention and population health. The Affordable Care Act National Prevention and Health Promotion Strategy is an example of this change in priorities, and patient and population long-term outcomes have become essential measures of the success of new innovative health programs. The National Prevention Strategy is focusing on seven goals: tobacco free living, preventing drug abuse and excessive alcohol use, healthy eating, active living, injury prevention and violence free living, reproductive health and sexual health, and mental and emotional well-being. (National Prevention Council, 2010). Physicians will need to understand and embrace public health in order to help this prevention initiative move forward (Monroe, 2011).

Indiana is strongly affected by all three factors, and, in comparison to other states, has even more severe challenges to its medical and public health systems. Indiana's chronic disease rates rank among the worst third of the US.

The United Health Foundation's America's Health Rankings reports the following rankings for Indiana: overall -38th, determinants-41st, smoking -41st, diabetes -36th, and obesity-37th. The incidence of lung cancer for the State is 15% higher than the US average. In the last five years, diabetes increased from 8.3 % to 9.8 % of the population. In the past year, the rate of preventable hospitalizations increased from 75.6 to 78.4 discharges per 1,000 Medicare enrollees, indicating a need for care management programs that bridge the gap between public health programs and clinical medicine. Indiana also ranks among the bottom 20 states for all of the maternal and child health indicators measured with the America's Health Rankings including infant mortality (31), low birthweight births (30), preterm births (33), early prenatal care utilization (40), teen birth rates (31), childhood immunization (34), and number of children in poverty (43). The percentage of children in poverty increased from 18.6 % to 25.2 % in the last five years. Indiana's infant mortality rates have declined in the past 20 years, but its current infant mortality rate of 7.3 per 1,000 live births is still higher than the national rate of 6.7. Indiana has higher percentages of preterm births (11.7%) and low birthweight births (8.3%) than the national average. The teen birth rate has remained relatively stable over the past 5 years, but is still higher than the national rate. Prenatal smoking, which can cause significant maternal and fetal complications, has an average rate of 19% in Indiana, compared to 11% nationally. . The State has seen improvements in the majority of these indicators over the past five years, but public health agencies are overwhelmed and underfunded. The integration of medical and public health training would enable Indiana's physicians to be leaders in addressing these issues.

There are also serious health disparities in minority populations in the State. Minorities comprise almost 15% of the State population of 6.5 million. The Indiana Minority Health Coalition (IMHC) is a statewide network of non-profit organizations focused on reducing health disparities. IMHC reports that in Indiana:

- Blacks are more than twice as likely to die from diabetes, as compared to Whites.
- Stroke deaths among Blacks are 1.4 times higher as compared to Whites.
- Asian/Pacific Islanders are almost twice as likely to die from stomach cancer compared to Whites.
- Cancer and heart disease deaths among Blacks are 1.2 times higher as compared to Whites
- Infant mortality rates for Blacks are two times higher as compared to Whites.

The Fairbanks School of Public Health has had a close partnership with the Indiana Minority Health Coalition in investigating social determinants of health that relate to these statistics, but these research findings need to be more widely

applied in primary care settings. Knowing the determinants and risk factors for particular diseases can help physicians offer more preventive guidance to their patients. The leading cause of death in Indiana is heart disease, which can be treated clinically, but can also be prevented since public health has identified risk factors and interventions that can reduce a patient's long-term risk. As an example, statistics from the 2010 Indiana Behavioral Risk Factor Surveillance System (BRFSS) show that education and income are highly correlated with a number of chronic conditions, including stroke. This information should inform and guide our preventive strategies in the state.

Indiana has recently begun to address the Healthy People 2020 goals related to social determinants of health. The INShape Indiana program is focused on "better eating habits, increasing exercise, and avoiding tobacco use". Legislation recently expanded smoke-free areas in public establishments and these programs have received strong support from the leadership in our state. But, the public health workforce in Indiana is one of the smallest in the US, at only slightly more than one third the national average of public health workers per capita.

County health officers in Indiana are required to have a medical degree, and although many county health officers have extensive public health experience, only one of them has an MPH degree. Primary care shortage areas also exist in both urban and rural settings, with Medically Underserved Areas (MUAs) in 66 out of 92 counties. This shortage of medical providers in these areas puts a large burden on the public health system, resulting in significant health disparities related to geographical location. As an example, preventive health screening procedures, such as colonoscopy, occur at a significantly lower rate in rural areas of the state. Rural areas of Indiana experience much higher rates in years of potential life lost than in Indiana's urban areas.

With recent spending cuts in both federal and state agencies, the public health workforce may decrease even further. To address the public health workforce shortage, we need to harness the impact of medical providers in all disciplines to address population health needs. We have an excellent opportunity to develop a public health perspective, preventive skills, and a community focus during physician training that will benefit areas throughout the State. Without this combined approach of individual medical care and preventive, population-based health programs, our State health system will not be able to address the severe problems that confront us.

The costs of chronic diseases have also had a profound impact on Indiana. In addition to direct expenditures for medical conditions, national corporations have found that chronic disease conditions in the State have led to serious economic implications for their businesses, such as higher insurance premiums

and lost productivity. Indiana is ranked 33rd in premature death by the United Health Foundation report, which significantly impacts the State economy in several ways. National corporations have reported that their Indiana workforce has some of the highest costs from chronic diseases in the nation. Indiana businesses are now very supportive of the inclusion of more preventive measures to curb the rate of long-term complications from chronic diseases.

The IUSM has over 1300 medical students and 1000 residents. IUSM has over 1800 full time faculty members, with a 27% minority representation, and a gender distribution of 34% women and 66% men. Approximately one half of all physicians practicing in Indiana received some portion of their medical training at IUSM.

During the last several years, one or two IUSM medical students have elected to enroll in the MPH program each year, and complete both degrees concurrently in a six-year period. To increase the number of medical students in the MPH Program, there needs to be a more tailored, streamlined program that meets the needs of medical professionals and provides a structured schedule that is more feasible. Some medical students have elected to go out of state to complete an intensive one-year MPH degree and other students have decided against pursuing both degrees at the same time, after showing an initial interest. This proposed joint degree would deliver public health courses that focus on integration of clinical medicine and public health. We anticipate that an integrated, concentrated curriculum would attract more medical students to a joint MD-MPH program.

There is a close, collaborative working relationship between and among the IU School of Medicine and IU Fairbanks School of Public Health. These relationships will facilitate the development of the joint MD-MPH program and address the Institute of Medicine's (IOM) recommendations in the report "Training Physicians for Public Health Careers" (IOM, 2007). As indicated in the IOM, in today's world, all public health is global and our students need to have a much more expansive vision of their "community" – one that encompasses the world. To achieve these IOM goals, medical students require public health training that is integrated into the medical curriculum.

Interdisciplinary approaches to promoting population health have led to an increased interest in public health among medical students and employers. Public health physicians are able to connect patients to community resources that help prevent illness and reduce healthcare costs.

The integration of medicine and public health uses a research-based approach to identify and address problems that affect the health status of population. The joint MD-MPH program will prepare graduates to work at the interface of clinical

medicine and public health practice, research, planning, policy development, prevention and administration. Graduates of this joint degree will have a solid foundation in population health sciences including epidemiology and biostatistics, human behavior and the social environment, and practical experiences with populations-at-risk.

By assessing the health needs of populations, public health physicians work with other health and human service professionals to assure that all persons have access to health care and social services. Public health physicians provide direct services, conduct research, plan and evaluate programs, and assure the health and social needs of the total population. Public health physician practice uses a research-based epidemiologic approach to identify and address social problems that affect the health status and social functioning of population groups.

#### References

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- Monroe, J. A. (2011). Exploring the context: Contemporary public health. *American Journal of Preventive Medicine*, 41 (4S3), S155-S159.
- 2011 America's Health Rankings, United Health Foundation.
- Nearly 40 percent of IU School of Medicine graduates enter primary care specialties.

#### **Alignment with the IUPUI Campus Mission**

The joint MD-MPH degree supports the IUPUI campus mission to offer distinctive master's degrees that promote the educational, cultural, and economic development of central Indiana and beyond through innovative collaborations, partnerships with external agencies (i.e. Indiana State Department of Health, Family Social Services Agency, Marion County Health Department) and a strong commitment to serving the needs of diverse populations.

The IUSM has a strong history of collaborating with other Schools in the training of physician-scientists in a number of disciplines. With initial support from the Lilly Endowment, the current Chair of Pediatrics transformed a small MD-PhD training program at the School of Medicine into an NIH sponsored MSTP. Over the first

five years of program development, the applicant pool changed from approximately 30 candidates mostly from Indiana small colleges, to over 120 applicants from major Universities across the United States. At that time the program competed and was designated an NIH MSTP program. Over the past 5 years the program has continued to expand and now accepts 8 students per year from over 175-200 applicants across the United States. These examples illustrate the infrastructure available at IUSM and the commitment to interprofessional education (IPE) on the IUPUI campus.

As the US struggles to find solutions to healthcare reform, it is evident that technology will play a large part in the final plans. Multiple resources are available on the IUPUI campus to support experiential learning for physicians in public health. For example, the Indiana Health Information Exchange (IHIE) connects hospitals, rehabilitation centers, long term care facilities, laboratories, imaging centers, clinics, community health centers and other healthcare organizations. The Regenstrief Institute is internationally recognized as a leader in biomedical informatics and healthcare research. The Regenstrief Institute developed one of the nation's first electronic medical record systems, which is used in numerous hospital systems throughout central Indiana. This network has formed the Indiana Health Information Exchange (IHIE), which is the nation's largest health information exchange. The challenge for public health is to utilize this large data repository to develop and monitor population-based health interventions, as well as to improve delivery of healthcare to individuals. There is great potential to utilize IHIE and the Regenstrief Institute in developing effective preventive health programs, but it is critical to have physicians who have been trained with a public health perspective to translate this information and research into interventions focused on population health. More exposure and training is needed for medical students and physicians in the application of informatics for improving public health.

### **Employment Outlook**

Healthcare systems recognize the importance of hiring physicians who value both intervention and prevention. Social changes such as the economic downturn, globalization and increased migration, natural and man-made disasters, chronic diseases, and health disparities affect millions of people and create major challenges nationally and globally. Each year, approximately \$2 trillion is spent on health care in the United States. Only 5% goes to prevention of disease, disability and injury.

### **Expenses**

No new University costs will be associated with the joint MD-MPH degree, as both programs currently exist on the IUPUI campus.

## Admissions Requirements

Applicants to the joint MD-MPH degree must apply and be admitted to each program separately and must adhere to the admissions requirements and prerequisite courses stipulated by each program. The student's decision to complete the joint MD-MPH degree must be declared to the MD and MPH programs before the end of the second semester of the first year of medical school.

### Admission Requirements to the Doctor of Medicine (MD) Program

1. Ninety (90) credit hours from an accredited U.S. or Canadian institution although most applicants will matriculate with a B.A. or B.S. degree
2. One year (8-10 credit hours) each of General Chemistry, Organic Chemistry, Biology, and Physics must include a lecture and lab (each lab must be a minimum of 2 credit hours)
3. Courses in Humanities and Social and Behavioral sciences
4. Competency in written and spoken English
5. Medical College Admission Test (MCAT) [www.aamc.org/MCAT](http://www.aamc.org/MCAT)
6. Biochemistry, Psychology, and Sociology required beginning application year 2014 (June 1 - December 15, 2014) for the class matriculating in fall 2015.

### Eligibility Requirements

1. Indiana residents with a minimum 3.2 science and overall GPA, and a 26 MCAT with no individual score below 7 will be eligible for interview.
2. Nonresidents with or without Indiana ties will be reviewed on an individual basis. However, nonresidents with significant ties to the state of Indiana may be given greater consideration.
3. All International applicants (including Canadian citizens) must have a permanent resident visa, prior to application, in order to be eligible for consideration. Additionally, required science courses must have been completed at an accredited university in the U.S. or Canada.

### Early Decision Program (EDP)

1. Minimum 3.6 cumulative and science GPA and a 30 MCAT with no individual score below 8.
2. Exclusive to applicants who wish to make a commitment to attend Indiana University School of Medicine.
3. AMCAS application due by August 1.
4. Accepted applicants may not apply to other medical schools.
5. EDP applicants not accepted during the EDP process will be placed in the regular applicant pool and may apply to other medical schools after October 1.

### Class Selection

1. Scholarship, character, personality, references, MCAT and personal interview.
2. Indiana University is a state school; therefore Indiana residents may be given preference although a number of nonresidents are offered acceptances annually. Rules of residency may be viewed at [www.registrar.iupui.edu](http://www.registrar.iupui.edu).
3. Technical Standards for Admission and Retention in Medical School. The medical school faculty has specified the following non-academic criteria ("technical standards") that all applicants/medical students are expected to meet in order to participate in the medical education program and practice of medicine. Read the IUSM Technical Standards online. Applicants requesting accommodations should visit <http://msa.medicine.iu.edu/files/3113/3252/6774/disabilitiesaccommodationspolicy.pdf> and contact Mary Alice Bell, [mbell@iu.edu](mailto:mbell@iu.edu).
4. Applicants not selected for admission are encouraged to contact the Office of Admissions for consultation and reapply.

### General Information

1. Grades or credits from subjects offered in the medical curriculum will not be accepted toward fulfilling the science requirements. Courses in human anatomy, histology, human physiology, medical bacteriology, microbiology, medical biochemistry, medical genetics, and medical pharmacology fall within this category.
2. Every grade becomes a part of the academic record and is calculated in the cumulative grade point average (GPA). Greater weight is given to the quality of work than to the number of hours completed. An academic record which shows a large number of withdrawals or a repetition of subjects will be less impressive than a record showing work of uniformly good quality.
3. Any major from the traditional arts and sciences curriculum is acceptable.

### **Admission Requirements to the Master of Public Health (MPH) Program**

1. A baccalaureate degree from an accredited university or college is required, or current enrollment in professional school if baccalaureate degree was not obtained.
2. An undergraduate GPA of at least 3.0 would ordinarily be expected of a successful applicant.
3. The MCAT scores are accepted in lieu of GRE scores.
4. A minimum of one year of undergraduate mathematics (e.g. algebra,

- statistics or finite math) is required.
5. Demonstration of competent written and oral communication and computing skills are required.
  6. Official scores for the Test of English as a Foreign Language (TOEFL) of 106 (IBT), 263 (CBT) or 620 (PBT). An IELTS of at least 7 can substitute for the TOEFL.
  7. Undergraduate transcripts and reference letters will be obtained from the IUSM Admissions Office.
  8. A current resume is required.
  9. A personal essay explaining why the medical student wants to pursue public health is required.

## Proposed Curriculum

All students must satisfy the requirements for both the MD and MPH program. The specialized curriculum provides medical students with foundations in the core disciplines of public health, research methods, critical thinking skills, leadership training and practical skills. Joint degree students begin their public health coursework during the summer between years 1 and 2 of medical school. Students take only public health course work during year 4 and complete their final year of medical school in year 5. Most MD-MPH Programs in the country count 9-12 credits toward both the MD and MPH degrees, and it is anticipated that the MD-MPH program at IUPUI will do the same. The MD-MPH Curriculum Taskforce, led by Maryellen Gusic, MD (IUSM Executive Associate Dean for Education), Carole Kacius, PhD (FSPH Associate Dean for Education and Training), Greg Wilson, MD (FSPH Associate Dean for Global and Community Affairs), and Rohit Das, MD, MPH (IUSM Assistant Professor), has proposed the following public health content for the MD-MPH Program:

The following five existing MPH courses will be taken by MD-MPH students starting in the summer of 2014. Each course is 3 credits. These courses will have a separate section number for MD students.

- E517: Fundamentals of Epidemiology
- B551: Biostatistics for Public Health I
- A519: Environmental Science in Public Health
- S500: Social and Behavioral Sciences in Public Health
- H501: Health Policy and Management in Public Health

The following four existing MPH courses will be available for MD-MPH students to take in their fourth year of medical school. Each course is 3 credits.

- E675: Fundamentals of Injury Epidemiology

- S631: Maternal, Child and Family Health
- P602: Public Health Internship
- P702: Public Health Culminating Project

The following courses are under development and will be available for MD-MPH students starting in 2016-17, which will be the fourth year of medical school for the first cohort of MD-MPH students. Each course will be 3 credits.

- Health Equity, Social Determinants, and Resource Allocation
- Advanced Epidemiology, Biostatistics and Public Health Informatics
- U.S. and Global Public Health, Law and Ethics
- Community-Engaged Leadership and Management for Public Health Physicians

<b>5-Year MD/MPH Curriculum</b>		
<b>Year 1</b>		
Medical School Curriculum		
<b>First 6 Weeks of Summer Between Years 1 and 2</b>		
MPH Courses	Core Foundations in Public Health I: Fundamentals of Epidemiology and Biostatistics	6 credits
<b>Second 6 Weeks of Summer Between Years 1 and 2</b>		
MPH Courses	Core Foundations of Public Health II: An Introduction to Environmental Health Science, Social and Behavioral Sciences, and Health Policy and Management	9 credits
<b>Years 2 and 3</b>		
Medical School Curriculum		
<b>Year 4 (Fall Semester) – Students Choose from Among the Following:</b>		
MPH Course	Health Equity, Social Determinants, and Resource Allocation	3 credits
MPH Course	Advanced Epidemiology, Biostatistics and Public Hlth Informatics	3 credits
MPH Course	Injury Epidemiology	3 credits
MPH Course	US and Global Public Health Policy, Law and Ethics	3 credits
<b>Year 4 (Spring Semester) – Students Choose from Among the Following:</b>		
MPH Course	Maternal, Child and Family Health	3 credits
MPH Course	Community-Engaged Leadership and Management for Public Health Physicians	3 credits
MPH Course	Public Health Internship and Culminating Project (required)	6 credits
MPH Credit for Public Health Rotations and Experiences in Medical School		9-12 credits
Total MPH Credits		45 credits
<b>Year 5</b>		
Medical School Curriculum		

### **MPH Faculty:**

Emily Ahonen, PhD, MPH	Assistant Professor
Silvia Bigatti, PhD	Associate Professor
David Everetts, MD, MPH	Adjunct Associate Professor
Paul Halverson, DrPH	Professor and Dean
Chunyan He, ScD	Assistant Professor
Stephen Jay, MD	Professor
Carole Kacius, PhD	Associate Professor
Steven Lacey, PhD	Associate Professor
Max Moreno, PhD	Assistant Professor
Ross Silverman, PhD	Professor
Lisa Staten, PhD	Associate Professor
Greg Steele, DrPH, MPH	Associate Professor
Cindy Stone, DrPH, RN	Associate Professor
G. Marie Swanson, PhD, MPH	Professor
Nancy Swigonski, MD, MPH	Associate Professor
Dennis Watson, PhD	Assistant Professor
Jennifer Wessel, PhD	Assistant Professor
Greg Wilson, MD	Professor
Eric Wright, PhD	Professor
Jianjun Zhang, MD, PhD	Assistant Professor
Terrell Zollinger, DrPH, MSPH	Professor

### **MD Faculty**

In addition to the following, all medical school Faculty who teach first, second, third and fourth year MD courses and are involved in clinic rotations will support the MD portion of the MD-MPH program:

W. Brian Aitchison, MD	Professor
Timothy Brady, MD	Professor
Jack Buckley, MD	Professor
Nancy Butler, MD	Associate Professor
Mark Di Corcia, PhD	Assistant Professor
Rohit Das, MD, MPH	Assistant Professor
Sara Jo Grethlein, MD	Professor
Richard Gunderman, MD, MPH, PhD	Professor
Maryellen Gusic, MD	Professor
Mitchell Harris, MD	Professor
Aloysius (Butch) Humbert, MD	Associate Professor
Alan Ladd, MD	Assistant Professor
Scott Renshaw, MD	Associate Professor
Mark Schnee, MD	Assistant Professor
Mark Seifert, PhD	Professor
Joseph Turner, MD	Professor
Joanne Wojcieszek, MD	Associate Professor

## Appendix 1 IUPUI Strategic Plan

<http://strategicplan.iupui.edu/>

### **A New Vision for IUPUI's Future**

[The IUPUI Strategic Planning document has been recently updated.](#) This latest iteration:

- Preserves the recommendations that have been developed by each Task Force
- Incorporates feedback received-to-date from the 3 Town Hall Meetings and input from the strategic planning website
- References information from the Higher Learning Commission's report on IUPUI's 2012 reaffirmation of accreditation process
- Provides greater context to the strategic planning process, including timeline, significance, and alignment with IU Principles of Excellence, among other items

The strategic planning document will be refined this summer and will serve as the basis for additional communication, conversation, and action concerning IUPUI's Strategic Plan.

[Download the PDF](#) of the latest draft.

Furthermore, 3 tables have been created that each provide an alternative view of the IUPUI Strategic Plan, organized around central themes of the new vision statement. Each table includes the following information:

- Primary strategic initiative
- Strategic recommendation
- Emerging performance indicators
- Related strategic initiatives
- Alignment with [IU Principles of Excellence](#)

These tables will be refined by the Steering Committee this summer and will serve as the basis for Task Force re-engagement with the strategic planning process throughout the fall 2013 semester. The purposes of these meetings this fall will be to provide implementation updates and seek additional input concerning recommendation implementation.

### **IUPUI Strategic Initiatives:**

[For the Success of our Students \[PDF\]](#)

[Advances in Health and Life Sciences \[PDF\]](#)

[Contributions for the Well-Being of Citizens \[PDF\]](#)