Welcome to the first annual report from the Indiana University Richard M. Fairbanks School of Public Health at IUPUI.

During the last academic year, we celebrated our fifth anniversary as a school. Anniversaries are a time to reflect on the many accomplishments of our young school. From the feasibility study funded by the Lilly Foundation, to the generous gift of the Richard M. Fairbanks Foundation, to the many accomplishments we have made these past five years, we have hit milestones that each play an integral role in our journey. I am immensely proud of the faculty, staff, students, alumni, and supporters who have all helped to make the Fairbanks School of Public Health what it is today.

Because of our school, we now have graduates who are leading agencies, hospitals, departments and who are key to the success of the health of Indiana. It is remarkable to be surrounded by so many who are passionate about improving health outcomes for all Hoosiers. To continue building on our already robust foundation, we have developed strong partnerships and active community engagement to ensure everyone has the opportunity to live a long and healthy life.

Here in Indianapolis, not everyone has that chance. Some communities are less healthy than others. Within 10 miles in our city, life expectancy drops 14 years.

Good health starts long before we ever see a doctor – it starts in our homes, jobs and communities. In Indiana, we are ranked 48th of 50 in the United States for public health funding and 41st overall in health. And we know, based on good research, if we increase the level of funding for public health we will see increased life expectancy and reduced medical care costs. If we really want to make a difference in the lives of Hoosiers, we need to look at the whole picture, including our investment in public health.

Public health matters now more than ever, and our goal to advance the public’s health and well-being can only happen through education, innovation and leadership. We have developed new degree programs that meet the growing demand for public health education in Indiana. Our practitioners, researchers, students and alumni are developing novel approaches to address the opioid epidemic, providing nuanced research on health care and our school is leading a project in partnership with Eli Lilly to improve the prevalence of diabetes in three Indianapolis neighborhoods.

These and other stories in our annual report reflect the work we do each day to improve the health of our community, our state and our nation. There has never been a more exciting time to be involved in public health.

Over the last two years, Indiana has become a focal point for health in the nation. While there is a strong division in our country and state, we know that disease spreads across party lines, and that prevention benefits people of all political persuasions. The underlying needs of our society and the benefits of public health have not changed. What we do matters.
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First Lady Holcomb Supports Grassroots Maternal and Child Health Leadership Training Project

Jack Turman, Jr., PhD, professor of social and behavioral sciences, has established the Grassroots Maternal and Child Health Leadership Training Project at the IU Richard M. Fairbanks School of Public Health at IUPUI. The project inaugurated its first five women one year ago who have completed their initial training to be grassroots maternal and child health leaders in zip codes at high risk for infant mortality.

First Lady Janet Holcomb, wife of Indiana’s 51st Governor Eric Holcomb, attended the inauguration to provide remarks and present certificates to the recipients. During the inauguration, each woman shared their personal stories and photos.

“We are very grateful for the support of First Lady Holcomb and Dr. Jen Walthall, secretary of Indiana Family and Social Services Administration,” Dr. Turman said. “Mrs. Holcomb and Dr. Walthall were incredibly supportive and encouraging to the women, stressing the need for community based approaches to reduce infant mortality.”

The GMCHL project aims to train and mentor leaders who are skilled in fostering social change that results in healthy birth outcomes. The leaders work to understand the root causes behind high infant mortality rates and work to build a community where every pregnancy and baby has an opportunity to thrive.

Through mentorship, each participant is trained to foster her professional development, survey community needs regarding pregnancy and infant development, connect with local infant mortality reduction programs within the community, develop media products highlighting her grassroots work, and develop and advocate for policies that promote healthy birth outcomes.

Since launching, 17 women have been trained across nine zip codes at high risk for infant mortality. These leaders are divided into four groups focusing on various challenges to maternal child health, including affordable housing, the re-entry population, social policy barriers, and rural health as it pertains to teen pregnancy and poverty.

This initiative is a partnership of the Indiana University School of Medicine, Department of Pediatrics, and the IU Fairbanks School of Public Health, with funding support from The Riley Children’s Foundation.
Dr. Constantin Yiannoutsos, professor of biostatistics at the Fairbanks School of Public Health, uses his research to combat the HIV/AIDS epidemic by utilizing mathematical techniques to make sense of the data collected on people living with HIV/AIDS around the world.

His ultimate goal is to understand which drugs and modes of care are best in terms of the outcomes of these patients. Through these mathematical techniques, Dr. Yiannoutsos also assesses the magnitude of the problem to help state, governmental and international organizations best plan and respond to their national epidemics and coordinate the international response to the HIV/AIDS epidemic.

“The recurring theme of my research is to turn the beauty of mathematics into actionable decision making that is anchored to evidence, rather than wishful thinking,” Dr. Yiannoutsos said.

Most recently, Dr. Yiannoutsos’ work has shown that in resource-limited settings, such as Africa, HIV-related mortality may be underestimated by as much as 80 percent. Through a series of articles, his team described how tracing patients who fail to come to the clinic in the community, and using new statistical methods, his team can make very close estimates. These estimates are not affected by the under-reporting of patient death in places where vital registries do not exist or are not functioning efficiently.

“We’ve published a series of articles that have generated better estimates of mortality in adults living with HIV around the world, and refined estimates of pediatric HIV, which led to a massive adjustment by the United Nations and World Health Organization in the estimated number of children and adolescents living with HIV around world,” Dr. Yiannoutsos said. “We have also contributed data and analyses to the recent international guidelines of the World Health Organization for Universal Test and Treat (Treat All) policies.”

This has in turn allowed these countries to better gauge the extent of their national HIV epidemic and optimize the deployment of resources needed to control the HIV/AIDS epidemic there. Results like this are what drives his commitment to HIV-related research.

“My personal driver that has made me remain in this field for almost three decades, is that I feel I am making a difference with my science in the ability of governments and local, national and international organizations to effectively respond to an epidemic which has ravaged the youngest, most productive members of our society and the poor around the world.”

Public health leadership has been analyzed and written about, but few studies have examined the personal characteristics and experiences of state health leaders and what their leadership looks like in the context of their state.

In partnership with the Association of State and Territorial Health Officials (ASTHO) and the de Beaumont Foundation, the Fairbanks School of Public Health conducted the State Health Officials Career Achievement and Sustainability Evaluation (SHO-CASE) study to explore the experience of state health officials (SHOs) through interviews, surveys, and research.

By determining the model of a successful SHO, governors and secretaries will have a tool to better understand and analyze the qualities and backgrounds of potential candidates, to best prepare them for the job and to avoid career derailment.

In his recent commentary published in the Journal of Public Health Management and Practice (JPHMP), Dr. Paul Halverson, founding dean of the Fairbanks School of Public Health, shared a snapshot of the history and data from the SHO-CASE study.

Serving as the leaders of state public health departments or agencies, state health officials are appointed by and report directly to governors, state secretaries of health, or boards of health. This poses several implications as to how SHOs are selected and how much autonomy they have in carrying out their duties. And interestingly, SHOs are currently experiencing the shortest tenures of the last 5 decades.

As of 2016, 33 of the 50 SHOs were appointed by the governors of each state, seven were appointed by the secretary of health, and five were appointed by a health board or commission.

Additionally, 24 states have structures in which SHOs report directly to governors; 16 states have SHOs who report directly to the state health secretary; and in 10 states, SHOs report directly to a board of health.

Taking a closer look, SHOs appointed by a board of health averaged more than eight years in office compared with an average of just less than four years for those appointed by governors or secretaries of state agencies. Due to variations in how state health departments are configured, each state determines its own minimum qualifications for the appointment of SHOs.

According to research from the SHO-CASE study, 11 states require that SHOs be a physician; 12 states require a medical degree with public health, health administration, or management experience; two states require a medical degree and a graduate degree in public health or health administration; and nine states had no educational requirements for SHOs.

In his commentary, Dean Halverson added that this research, supported by the de Beaumont Foundation, reveals incredible insights into the educational attainment and professional experience trends of SHOs.

Of those who participated in the SHO-CASE study, 65 percent have a medical degree, 48 percent have a formal public health degree, 70 percent have previous governmental public health experience, and 57 percent worked in governmental public health immediately before becoming an SHO.

To learn more about the SHO-CASE study, seven articles have been published to date, including:

1. Preventing Leader Derailment—A Strategic Imperative for Public Health Agencies
2. What State Health Officials Wish They Had Known and How They Learned Best
3. High Turnover Among State Health Officials/Public Health Directors: Implications for the Public’s Health
4. State Health Officials—Defining Success and Identifying Critical Success Factors
5. Public Health Senior Deputy’s Perceptions of State Health Officials’ Success Factors: Professional Characteristics, Personal Attributes, and Signs of Derailment
6. State Health Officials: Backgrounds and Qualifications
7. State Health Official Career Advancement and Sustainability Evaluation—Description of the Methods Used in the SHO-CASE Study

More findings from this study are forthcoming in the JPHMP along with tools and infographics for those who appoint and support new SHOs. The research team included Dr. Nir Menachemi, Dr. Valerie Yeager, Corey Jacinto, and Dr. Hugh Tilson.
The Average State Health Official (SHO)

- 61% are male
- 65% have a medical degree
- 48% have a formal public health degree
- 70% had previous governmental public health experience
- 57% worked in governmental public health immediately before becoming a SHO

The proportion of SHOs that were female increased significantly by decade from 5.6% in the 1970s/80s to 46.4% in the 2010s. Currently, state governmental public health workforce is 72% women.

Trends Among SHOs 1980 – 2017

SHO tenure is the lowest it has ever been

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SHOs in states in the highest quartile of health rankings had significantly longer average tenures (6.5 compared to 4.7 years)

*United Health Foundation's America's Health Rankings

Most Common Reasons for Turnover

- 45.8% Voluntary
- 22.9% Accepting another position in anticipation of a change in state administration
- 19.3% A new administration appointed another SHO
- 12.0% Terminated

What Former SHOs Wish They Had Known

**Political Processes**
- How to relate to the governor’s office
- How best to relate to the governor’s senior staff
- Better understand, relate to, and influence the legislative process

**How State Government Works**
- Better understanding of governmental budgeting and finance and how to defend the agency’s budget
- How to manage governmental change
- Overcoming silo issues, changing organizational culture, and workforce development strategies

**Partnership Development Approaches**
- Cross-sectoral partnership development approaches
- Ways to work more effectively with other agencies of state government
- Better understand relationships with the federal government including grants and other policy issues

Defining SHO Success

**Team Building**
1. Support formal development for existing team members
2. Conduct formal leadership succession planning
3. Recruit and retain new talent to address skill gaps
4. Enhance team cohesion through team-building experiences

**Organizational Accomplishments**
1. Policy change, including laws, regulations, and departmental policies that support evidence-based interventions
2. Program development through a new or enhanced public health agency organizational focus
IUPUI Project Wins State, National Awards

An application designed by a team of IUPUI and Regenstrief Institute researchers is winning state and nationwide honors and could help reduce the costs of healthcare, while helping patients lead healthier lives. The app, called Uppstroms, was developed by a team led by Dr. Paul Halverson, founding dean and professor at the IU Richard M. Fairbanks School of Public Health at IUPUI, and Dr. Joshua Vest, associate professor and director for the Center for Health Policy at the Fairbanks School of Public Health.

Dr. Vest and his colleagues, Drs. Nir Menachemi, Shaun Grannis and Suranga Kasthurirathne, developed a series of algorithms that take into account multiple indicators that make up the social determinants of health, including environmental, social and behavioral factors, and combine them with clinical data to identify what services patients might need.

With that information, care providers can refer patients to the wraparound services that will help them most, such as behavioral health, dietician or financial counseling services. The app has been in use for about a year in Eskenazi Health clinics, and has already shown in preliminary results that it increases referrals for services.

A new research paper from Eskenazi Health and the Fairbanks School of Public Health shows that wraparound services can save potentially millions in hospitalization costs. Wraparound services were associated with a reduction in the number of hospitalizations and emergency room visits, saving hospitals money, according to the paper.

Uppstroms won the first-ever BioCrossroads Inject Tech Challenge, a digital health competition that seeks to catalyze the creation of new, disruptive solutions designed to improve patient outcomes. The app also recently won the Pitch IT competition at the American Medical Informatics Association 2018 conference, a program designed to accelerate the application of innovative, standards-based terminology solutions to problems in healthcare.

For both Dr. Halverson and Dr. Vest, both awards are validation for what they and their colleagues are doing, because others view their work as important. Their hope is that the technology will continue to be used by more healthcare providers, helping to improve the health of people and entire populations.

Social and environmental factors have a significant impact on people’s health, and issues such as transportation and access to healthy food complicate the delivery of care, Dr. Vest said.

“Addressing those factors will be helpful for all involved,” said Dr. Vest.

Dr. Vest and his colleagues disclosed the Uppstroms innovation to the Indiana University Innovation and Commercialization Office (IU ICO), which protects, markets and licenses intellectual property developed at Indiana University so it can be commercialized by industry. IU ICO seeks partners to license and commercialize the technology.

This project was funded by the Robert Wood Johnson Foundation’s Systems for Action Grant Program.


Wraparound Services Hold Promise for Reducing Health Costs and Improving Outcomes

When Eskenazi Health in Indianapolis began offering onsite dietetics, social work and other wraparound services at its clinics, it did more than improve patient outcomes. It potentially saved millions of dollars in hospitalization costs.

Co-located within the primary care setting of the large urban safety-net health provider, wraparound services were associated with a reduction in the number of hospitalizations and emergency room visits, according to findings from a new paper co-authored by Dr. Lisa Harris, CEO of Eskenazi Health; Dr. Paul Halverson, founding dean of the Fairbanks School of Public Health (FSPH); Dr. Joshua Vest, lead author of the paper and an associate professor of health policy and management at FSPH; Dr. Dawn Haut, CEO of Eskenazi Health Center and associate professor of clinical pediatrics at the IU School of Medicine; and Dr. Nir Menachemi, professor of health policy and management and chair of the department of health policy and management at FSPH.

“Providing nonmedical wraparound services in conjunction with primary care is one strategy to improve patient outcomes and reduce overall health care spending,” said Dr. Vest.

Researchers estimated that wraparound services potentially saved $8.2 million from 2011 to 2016, based on median hospitalization costs. The estimate represents an average of $1.4 to $2.4 million potential cost savings per year. The potential savings were calculated by estimating the number of hospitalizations that could have been expected among those receiving wraparound services had the services not been offered.

“Early intervention and effective chronic disease management are vital to keeping people out of the hospital and reducing the burden of illness on the patient and on the health care system,” said Dr. Harris. “We know, based on our research, that our best opportunity to improve the lives of our patients and, by extension, the health and vitality of our community lies in helping individuals stay well.”

In 2011, Eskenazi Health began employing various providers of wraparound services including behavioral health, social work, dietetics, respiratory therapy for asthma education, patient navigation, pharmacist education, financial counseling and a medical-legal partnership. Wraparound services were also associated with a 5 percent reduction in the number of emergency department visits in the year after the services were provided. Researchers did not estimate potential cost savings for emergency department visits because emergency department costs were not available.

“Given that health and health care use are largely driven by social situations, environmental context and individual behavior, we believe that addressing these issues holds great promise for reducing costs and improving health outcomes,” said Dean Halverson. “Historically, the health care system has not addressed these drivers of health and health care costs.”

All patients in the study received at least one wraparound service. Counseling from a dietitian was the most common wraparound service, at 49 percent, followed by consultation with a social worker at 29 percent and behavioral health at 10 percent. Given that wraparound services were co-located with primary care, caution must be taken in generalizing the study’s findings to settings that rely on referrals to outside social service providers, the researchers said.
The Precision Health Initiative, the first recipient of Indiana University’s Grand Challenges Program, is investing $120 million to transform biomedical research, health care innovations and the delivery of health interventions in Indiana. The initiative builds on IU’s legacy of biomedical breakthroughs—like the structure of DNA—to transform health through the application of research results.

Precision medicine is a highly personalized approach to prevention and treatment that takes into account individual variables in genes, environment and lifestyle. This customized approach allows doctors and researchers to more accurately predict which treatment and prevention strategies will be effective for each patient.

Additionally, precision medicine is in direct contrast to a more generalized one-size-fits-all approach, which aims to develop treatment and prevention plans for the average person, without attention to the myriad personal and environmental factors that impact each individual’s health. The goal is to find the right medicine for the right patient at the right time – right here in Indiana.

PUTTING OUR BEST FOOT FORWARD WITH DR. HONGMEI NAN

Leading to the Precision Health Initiative is Dr. Hongmei Nan, associate professor of epidemiology. She has made enormous strides in colorectal cancer research, elevating the field particularly with novel genetic and molecular contributions. Her work clearly embodies the concept of “precision medicine” and the translation of genetic profiling into individually tailored preventive-care plans.

Dr. Nan participated in several epidemiological investigations of the genetic interactions underlying the effects of aspirin intake on colorectal cancer risk. These large-scale, high-profile epidemiologic studies included a number of national and international population-based cohort studies. Dr. Nan’s work on aspirin and colorectal cancer strongly demonstrates her unwavering commitment to precise medical research at the highest level.

Among her recent first-author papers on the genetic modification of aspirin and colorectal cancer risk, one was published in the Journal of the American Medical Association (Association of aspirin and NSAID use with risk of colorectal cancer according to genetic variants) and another in the Journal of the National Cancer Institute (Aspirin use, 8q24 single nucleotide polymorphism rs6983267, and colorectal cancer according to CTNNB1 alterations.).

A CLOSER LOOK AT DR. NAN’S PRECISION MEDICINE RESEARCH

In the JAMA paper, Dr. Nan and her colleagues reported the results of a genome-wide geneenvironment interaction study examining the effect of the interactions between genetic polymorphisms and regular use of aspirin or other nonsteroidal anti-inflammatory drugs (NSAIDs) on the risk of colorectal cancer.

This study combined data on more than 8,500 case-control pairs from 10 observational studies that have been ongoing for more than four decades in four different countries. Dr. Nan led the team and determined that about two-thirds of people in the small subset of subjects who showed no aspirin benefit had a relatively uncommon genetic variant on chromosome 15, located in the general vicinity of genes known to be involved in inflammation.

The remaining one-third—individuals whose aspirin/NSAID use was positively associated with a greater risk of invasive colorectal cancer—shared one or two even rarer genetic variants on chromosome 12, also located near genes involved in inflammation. Intriguingly, some of these genes regulate prostaglandins, a group of inflammatory compounds proposed to play a central role in driving colorectal cancer.
In summation, the article helps explain why aspirin and other NSAIDs may prevent colorectal cancer in some people but not in others.

**MAKING NOTABLE PROGRESS AND SUBSTANTIAL CLINICAL IMPACT**

JAMA’s editorial commentary on Dr. Nan’s work reads in part as follows: “this case-control study is scientifically noteworthy for four distinct reasons:

- First, the study advances understanding of how to conduct research designed to detect gene-environment interactions.
- Second, the study illustrates that interventions can be genetically targeted not just to direct treatment but also to direct preventive interventions.
- Third, the study provides insight into the mechanistic understanding of how aspirin alters colorectal cancer risk.
- Fourth, the study highlights the need to conduct implementation research to ensure clinicians are prepared to apply gene-environment research in daily practice.”

In his blog, NIH Director Dr. Francis Collins specifically commented on Dr. Nan’s JAMA paper. The title of his article is “Precision Medicine: Who Benefits from Aspirin to Prevent Colorectal Cancer?”

Dr. Collins used Dr. Nan’s work to illustrate the concept of precision medicine, stating he is “heartened by the progress we are making towards more precise prevention strategies for colorectal cancer.”

Dr. Nan’s research findings have had substantial clinical impact for many years. As highlighted in the JAMA editorial commentary: “This study adds complexity to a clinical question that the cancer control community has grappled with for years: Should healthy adults take aspirin regularly to reduce their risk of colon cancer? The study by Nan et al. simultaneously illuminates a path to tailoring this decision and makes the decision substantially more complex. There is no meaningful clinical difference between the 31 percent reduction in risk of colon cancer found in the entire study population vs the 34% reduction seen in the 96 percent of the population with protective genomes.

However, evidence is now available to suggest that the other four percent of the population may have a genome that interacts with aspirin to substantially increase the risk for colon cancer. If subsequent trials validate this gene-environment interaction, patients will need to be counseled about this small, but not insubstantial, risk.”

The Fairbanks School of Public Health has established a program in precision medicine and molecular epidemiology and uses this platform to build multidisciplinary collaborations across its five departments. The Precision Health Initiative will become the school’s umbrella program, working directly with the IU Grand Challenge Precision Medicine Initiative team at the university and campus level.

Dr. Nan is leading this effort, given her substantial track record and particular expertise in precision medicine. The school has now added two outstanding assistant professors – Drs. Xin Li and Yuan Lin – in this research area, and will offer a graduate course overview of precision health – the very first one of its kind at Indiana University.

**STORIES OF IMPACT**


The IU Richard M. Fairbanks School of Public Health at IUPUI had three projects in phase one of the IU Addictions Crisis Grand Challenges initiative. Dr. Robin Newhouse, dean of the IU School of Nursing, announced 16 pilot projects that will target critical needs in addictions crisis as part of IU’s $50 million commitment to prevent, reduce and treat addictions in Indiana. The Fairbanks School of Public Health conducted three of those projects in phase one, which included the 2018 Indiana Public Health Conference, the launch of the ECHO Center, and the Legal and Policy Best Practices in Response to the Opioid Epidemic project.

Headed up by Joan M. Duwve, MD, associate dean for practice and associate professor at the Fairbanks School of Public Health, the 2018 Indiana Public Health Conference engaged a diverse set of statewide stakeholders to host a conference that advocated for a comprehensive public health approach to harm reduction, with a focus on its life-saving and cost-saving impact and policy merits.

Dr. Duwve also leads the ECHO Center project, a web-based learning hub that empowers local clinicians with expert medical education to help meet the need for diagnosis, treatment and extended care for patients throughout the state. This effort is a partnership with IU, the state department of health, and MediQ.

The first Project ECHO, launched by the Fairbanks School of Public Health, addresses the growing epidemic of hepatitis C in Indiana by using videoconferencing to conduct virtual clinics between specialists in Indianapolis and primary care doctors in rural Indiana. Many rural counties where the outbreaks are occurring in tandem with the opioid crisis have few, if any, doctors who specialize in liver care or infectious diseases. “So patients there often must travel to a large city to see a specialist, or in some cases just don’t get care,” said Dr. Duwve to John Russell of the Indiana Business Journal. Since launching, the ECHO Center has added an HIV, Cancer and LGBTQ+ ECHO teleclinic.

Fairbanks School of Public Health professor of health policy and management, Ross Silverman, conducted the third project, tackling substance abuse issues through phase one of the IU Addictions Crisis Grand Challenges initiative, but from a legal standpoint. Professor Silverman worked with Nicolas P. Terry, the Hall Render Professor of Law and executive director of the Hall Center for Law and Health, and Aila Hoss, visiting assistant professor and IU Grand Challenges Fellow at the McKinney School of Law, to develop a series of evidence-based law and policy recommendations that improve substance use health outcomes as part of the Legal and Policy Best Practices in Response to the Opioid Epidemic project.
The researchers’ recommendations call for broader and more robust harm-reduction strategies, programs to reduce the stigma of substance use disorder, the creation of broader drug take-back programs, and more expansive “wraparound services” such as job training or housing assistance to support those recovering from substance use disorder.

More specifically, the report offers local, state and federal governments an array of strategies for mitigating the opioid addictions crisis, including:

- Prioritize harm reduction: Communities should increase the availability of the overdose-reversal drug naloxone; encourage the work of syringe exchange programs; and support first responders by investing in safe spaces as a route to treatment.
- Remove legal impediments that hold up effective responses: improve Indiana’s Good Samaritan and drug paraphernalia laws; better coordinate federal privacy law; and make it easier for those with substance use disorder to receive Medicaid services.
- Invest in more and better evidence-based treatment services: pay for improved care coordination and wrap-around services such as safe housing; and make resources available to offer counseling, help those re-entering society, and care for children born with neonatal abstinence disease.

The researchers drew insights from interviews with key stakeholders from community agencies, the health care industry, law enforcement, court officials and government leaders, among others.

“It is vital that policymakers put evidence-based harm reduction and treatments at the center of our policy discussion in order to create meaningful progress toward solving this epidemic,” said Nicolas Terry, the Hall Render Professor of Law and executive director of the William S. and Christine S. Hall Center for Law and Health at the IU Robert H. McKinney School of Law. “After extensive research, we believe these recommendations will be most readily implementable and impactful to the communities that adopt them. These are necessary changes. The reality is that some current laws and policies are barriers to the implementation of effective interventions.”

This report comes as part of IU’s Responding to the Addictions Crisis Grand Challenge, which brings together IU’s world-class faculty, as well as its business, nonprofit and government partners to create a comprehensive plan to reduce deaths from addiction, ease the burden of addiction on Hoosier communities, and improve health and economic outcomes. As part of IU’s Grand Challenges program, this collaborative, statewide initiative is the nation’s largest and most comprehensive university-led response to the opioid addictions crisis.

In 2018, the Fairbanks School of Public Health, in partnership with Eli Lilly and Company, launched a new neighborhood-based, data-driven pilot in Indianapolis to help address the city’s high incidence of diabetes: the Diabetes Impact Project Indianapolis (DIP-IN). Building on similar efforts Lilly has developed in lower-income communities in Mexico, India and South Africa, the $7 million, five-year program is focusing on three Indianapolis neighborhoods with significant health disparities and high rates of diabetes: the Coalition of Northeast Neighborhoods, Northwest Neighborhood and Near Westside Neighborhood.

This pilot will target people with diabetes or at risk for the disease in three communities that were selected based on high prevalence of diabetes, socioeconomic factors and highly engaged community members and organizations.

Globally, 425 million people have diabetes, with a prevalence rate of 8.4 percent. In the three target neighborhoods in Indianapolis, an estimated 10,000 people live with diabetes, and prevalence rates are as high as 17.5 percent.

“Despite all our strengths and assets, Indiana ranks 38th among states for overall health status,” said Dave A. Ricks, Lilly chairman and CEO. “Through this effort, we are applying what we’ve learned from our global health work in underserved communities around the world with the expertise of our local partners and the passion of the people living in these neighborhoods. Together we’re going to find new solutions for closing these health disparity gaps.”

Lilly and the Fairbanks School of Public Health at IUPUI are implementing the pilot with Eskenazi Health, Local Initiatives Support Corporation Indianapolis (LISC) and the Marion County Public Health Department. DIP-IN will deploy a model that hires new community health care workers to help identify people with diabetes and connect them with quality care. In addition, community members will help identify and propose solutions for cultural, social,
environmental, economic and policy barriers that increase the risk for diabetes, such as the lack of healthy food options and public spaces for exercise.

“Good health starts long before we ever see a doctor – in our homes, jobs and communities,” said Paul Halverson, founding dean of the Fairbanks School of Public Health. “If we really want to make a difference in the lives of Hoosiers, we need to look at the whole picture, including our investment in public health. By addressing diabetes in three neighborhoods, we will focus on a chronic disease that has stolen years of productive life from these communities.”

Led by Dr. Lisa Staten, associate professor, social and behavioral sciences department chair, this project will test the hypothesis that the implementation of a multi-pronged community health worker model will reduce complications for those with diabetes and reduce risk factors for people at high risk of developing diabetes by:

- Increasing screening-seeking behavior for those at high risk
- Improving access and continuity of care for people with diabetes
- Fostering a physical and social environment that supports diabetes control and prevention, such as better access to healthy food and exercise options

The pilot uses Lilly’s global health framework, which includes studying key research questions, reporting what works and what doesn’t, and then using the data to advocate for the scale up of the most effective solutions. The program will contribute to Lilly 30x30, the company’s goal to create new access to quality health care for 30 million people in underserved communities every year by 2030.

“By working in equal partnership with community members to identify the root causes of what makes us sick and the
best solutions to address those causes. DIP-IN will help reduce the barriers that keep Indianapolis residents from living a long and healthy life,” said Dr. Staten.

The pilot has the potential for adoption by the Eskenazi Health system in Indiana, as well as other communities and health systems across the United States. It also directly supports the newly signed Indiana bill that requires the development of a statewide strategic action plan to significantly reduce the prevalence of diabetes.

A CLOSER LOOK AT COMMUNITY RESOURCES
Sonja Buckner, community liaison at the Marion County Health Department, works with neighborhood associations, churches, businesses, and other entities, making sure they all receive information in regards to what the health department does. Having insight into the northeast community, Buckner said access to healthy food options is an issue the community suffers from. She explained that unless northeast neighborhood residents have a car or someone to take them to a grocery store, residents often pick up items like bread from the nearest gas station, where the food selection is limited.

“They couldn’t get vegetables,” said Buckner. “They couldn’t get fruit or any protein.”

Having been a resident of the area for nearly a decade, and a community liaison for 25 years now, Buckner has long pushed for improvement in the northeast neighborhoods, including the time when a local Walgreens, located beside an alcohol beverage store, also wanted to begin selling alcohol.

“The community got together, talked with the people from Walgreens,” Buckner said. “They protested, picketed Walgreens, and they sat down and told them, ‘if you want to do something in our neighborhood, put some fresh fruit and some vegetables we can come in there and buy.’ And guess what? The Walgreens did that. That just lets you know what a community can do if they put their heart to it.”

According to recent research, those facing such challenges don’t just have a tougher day-to-day existence. They also could end up with significantly shorter life spans. Life expectancy in this community and the two communities chosen for the pilot can be 14 years lower than in neighborhoods just 10 miles away. “In life expectancy terms, that’s just huge,” said Dr. Lisa Staten, associate professor of social and behavioral sciences at the Fairbanks School of Public Health, and the principle investigator of DIP-IN. The lower life expectancy rate is largely due to health disparities and is similar to rates seen in countries such as Iraq and Bangladesh.

Tess Weathers, a research associate at the Fairbanks School of Public Health, said the results of her research into life expectancy in the Indianapolis metro area are “stunning. What it really says to me is, we really aren’t living the same lives,” said Weathers. “It’s sort of like parallel societies coexisting.”

Life expectancy measures an “average of all the years of life lost too early,” she said. It is not only that years are chopped off at the end. A higher infant mortality rate or higher numbers of teenage deaths can all affect the life expectancy rate.

“It’s everything from the quality of the schooling to food access to safety to the strength of community connections,” said Weathers, adding that the starkness of the data “goes against a basic sense of fairness.”

“If you’re born into certain communities of this city right now, with a sad level of accuracy, I think we could probably predict your life is going to be a good bit shorter than if you’re born somewhere else,” Weathers said.

By partnering with the communities, leaders of DIP-IN hope to change that, and for the long run.

“My ultimate dream is that we have managed to think about, all along the way, sustainability,” said Dr. Staten.

Buckner, too, is excited about the Diabetes Impact Project, adding that the Marion County Public Health Department has long been and will continue to be an advocate for the community.

“We are here, not just as the health department, but as good neighbors,” she said. “We know we can’t do it all in one day, but we’re working to make Marion County a better place to live.”

For more information on the project, please visit diabetes.iupui.edu.
Research Reveals Herbicide Glyphosate in Pregnant Women

The first birth cohort study of its kind has found more than 90 percent of a group of pregnant women in Central Indiana had detectable levels of glyphosate, the active ingredient in Roundup, the most heavily used herbicide worldwide.

Researchers from Indiana University and University of California San Francisco reported that the glyphosate levels correlated significantly with shortened pregnancy lengths.

“There is growing evidence that even a slight reduction in gestational length can lead to lifelong adverse consequences,” said Dr. Shahid Parvez, the principal investigator of this study and an assistant professor in the department of environmental health science at the Fairbanks School of Public Health.

The study is the first to examine glyphosate exposure in pregnant women in the United States using urine specimens as a direct measure of exposure.

Dr. Parvez said the main finding of the study was that 93 percent of the 71 women in the study had detectable levels of glyphosate in their urine. “We found higher urine glyphosate levels in women who lived in rural areas, and in those who consumed more caffeinated beverages,” he said.

“One thing we cannot deny is that glyphosate exposure in pregnant women is real,” Dr. Parvez said. “The good news is that the public drinking water supply may not be the primary source of glyphosate exposure, as we initially anticipated. None of the tested drinking water samples showed glyphosate residues. It is likely that glyphosate is eliminated in the water-treatment process. The bad news is that the dietary intake of genetically modified food items and caffeinated beverages is suspected to be the main source of glyphosate intake.”

Use of glyphosate is heaviest in the Midwest due to corn and soybean production. Its residues are found in the environment, major crops and food items that humans consume daily.

Although our study cohort was small and regional and had limited racial or ethnic diversity, it provides direct evidence of maternal glyphosate exposure and a significant correlation with shortened pregnancy,” Dr. Parvez said.

“The magnitude of glyphosate exposure in pregnant women and the correlations with shorter gestation length are concerning and mandate further investigation,” he said.

“We are planning, contingent upon funding, to conduct a more comprehensive study in a geographically and racially diverse pool of pregnant women to determine if our findings are the same.”

The study, “Glyphosate exposure in pregnancy and shortened gestational length: a prospective Indiana birth cohort study,” was recently published in the Environmental Health journal and has been featured by the likes of Beyond Pesticides, Reuters, Consumer Affairs, Laboratory Equipment, Romper, Genetic Engineering and Biotechnology News, Hindustan Times, Science Daily, Aperture Games, The Siasat Daily, TheHealthSite, Zee News, Northeast Indiana Public Radio, and The Indian Express.

Courier & Press, part of the USA Today network, featured Dr. Parvez’s glyphosate and pregnancy risk study. “It is a worldwide problem. Glyphosate is everywhere,” said Dr. Parvez. He added that there isn’t enough information yet to definitively say the high glyphosate levels caused the women’s shorter pregnancies or how they were exposed, but as a precautionary measure people might want to try to eat organic foods.

In a separate interview with The Flyer Group, Dr. Parvez shared that, “In the scientific community, we know very little about glyphosate. It’s interesting that we have been using this weedicide or herbicide for the last two decades, and essentially nothing is available as far as when it comes to human studies.”
The primary driver of Fairbanks Foundation’s interest is an effort to improve the public health of residents of Indiana by creating a well-educated group of public health professionals and an entity that through research can influence public policy.

Leonard J. Betley, Former President and CEO, Richard M. Fairbanks Foundation

History

1969 – Master of Health Administration program established in the IU School of Medicine

1997 – Master of Public Health established in the IU School of Medicine

2012 – September 12, IU Richard M. Fairbanks School of Public Health founded

Left: First Master of Health Administration students
Right: Two of the first Master of Health Administration graduates
The State of Indiana’s Health

In 1991, Indiana was ranked 26th out of 50 states for overall health. Indiana has since dropped to 41st in the nation. A wide range of behaviors, community and environmental conditions, policy and clinical data contribute to our overall health.

Indiana has a long way to go toward becoming healthier. The state needs to improve its infant mortality rate, fight back against tobacco addiction and increase public health funding. Ranking 48th for public health funding, Hoosiers receive only $51 per person, compared to the No. 1 state which receives $281 per person.

The number of residents who smoke increased from 21.1 to 21.8 percent, ranking Indiana 44th in the nation. It ranked 41st a year ago. In Indiana, one baby dies every 14 hours, which equals 12 babies per week. This unfortunate statistic places the state 43rd in the nation.

Why a School of Public Health in Indiana

We face extraordinary challenges, but we have also been given the unique opportunity to transform the health of people in Indiana and beyond. At the Fairbanks School of Public Health, we’re committed to creating a healthier state, nation, and world by improving strategies to prevent illness, disability, and injury and by improving how healthcare services are delivered.

Our deep connections with practice and government give the Fairbanks School of Public Health an essential foundation to spark change in Indiana. Our location in downtown Indianapolis allows our students to study alongside policy makers, community activists, and groundbreaking researchers. Indianapolis is home to the largest health systems in Indiana, the Indiana State Department of Health, the Marion County Health Department, countless nonprofit organizations and top health-related companies. Not only do students witness how public health laws are made a few short blocks away at the capitol, they also regularly engage with the Indiana general assembly in research and advocacy.

Indiana’s Most Significant Challenges

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Health Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>Public Health Funding</td>
</tr>
<tr>
<td>45</td>
<td>Dentists</td>
</tr>
<tr>
<td>44</td>
<td>Smoking</td>
</tr>
<tr>
<td>44</td>
<td>Air Pollution</td>
</tr>
<tr>
<td>43</td>
<td>Infant Mortality</td>
</tr>
<tr>
<td>43/35</td>
<td>HPV Immunization (Male/Female)</td>
</tr>
<tr>
<td>42</td>
<td>Cancer Deaths</td>
</tr>
<tr>
<td>41</td>
<td>Preventable Hospitalizations</td>
</tr>
<tr>
<td>40</td>
<td>Diabetes</td>
</tr>
<tr>
<td>39</td>
<td>Obesity</td>
</tr>
<tr>
<td>39</td>
<td>Physical Inactivity</td>
</tr>
<tr>
<td>39</td>
<td>Premature Deaths</td>
</tr>
<tr>
<td>39</td>
<td>Primary Care Physicians</td>
</tr>
<tr>
<td>37</td>
<td>Cardiovascular Deaths</td>
</tr>
<tr>
<td>33</td>
<td>Drug Deaths</td>
</tr>
</tbody>
</table>
### Student Body

#### Fall Enrollment Over the Last Five Years

<table>
<thead>
<tr>
<th>Year</th>
<th>Undergraduate</th>
<th>Graduate</th>
<th>Doctoral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2019</td>
<td>305</td>
<td>249</td>
<td>91</td>
</tr>
<tr>
<td>Fall 2018</td>
<td>275</td>
<td>270</td>
<td>75</td>
</tr>
<tr>
<td>Fall 2017</td>
<td>229</td>
<td>230</td>
<td>63</td>
</tr>
<tr>
<td>Fall 2016</td>
<td>267</td>
<td>227</td>
<td>62</td>
</tr>
<tr>
<td>Fall 2015</td>
<td>254</td>
<td>256</td>
<td>56</td>
</tr>
</tbody>
</table>

**Chart Subtext:**
Measured each fall over last five years, the undergraduate and doctoral student body has continued to grow, while the graduate-level students have held steady. All data was gathered at the time of the IUPUI Fall Census.

Source: irds.iupui.edu

### Rankings

- **62nd**
  
  **Fairbanks School of Public Health**
  
  Out of 177 accredited schools and programs
  
  First-time ranking
  
  US News & World Report

- **28th**

  **Master of Health Administration**
  
  Out of 75 accredited schools and programs
  
  42nd in 2015
  
  US News & World Report

### Accreditation

- Council on Education for Public Health (CEPH)
  - Full seven-year reaccreditation in progress
- Commission on the Accreditation Healthcare Management Education (CAHME)
- National Environmental Health Science & Protection Accreditation Council (EHAC)
- Agency for Public Health Education Accreditation (APHEA)
  - European Accreditation Agency
  - Accreditation in progress

### Departments

- Biostatistics
- Epidemiology
- Global Health
- Health Policy & Management
- Social & Behavioral Sciences
Diversity, Gender and SAT Scores

Students of Color
FSPH Fall 2019: 34.6%
IUPUI Fall 2019: 28.6%

Gender of Student Body Over the Last Five Years

<table>
<thead>
<tr>
<th>Year</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2019</td>
<td>482</td>
<td>163</td>
</tr>
<tr>
<td>Fall 2018</td>
<td>485</td>
<td>135</td>
</tr>
<tr>
<td>Fall 2017</td>
<td>387</td>
<td>135</td>
</tr>
<tr>
<td>Fall 2016</td>
<td>396</td>
<td>160</td>
</tr>
<tr>
<td>Fall 2015</td>
<td>419</td>
<td>147</td>
</tr>
</tbody>
</table>

SAT Scores of Student Body Over the Last Five Years

<table>
<thead>
<tr>
<th>Year</th>
<th>Students who score 1000 and above</th>
<th>Students who score below 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2015</td>
<td>179</td>
<td>150</td>
</tr>
<tr>
<td>Fall 2016</td>
<td>205</td>
<td>145</td>
</tr>
<tr>
<td>Fall 2017</td>
<td>262</td>
<td>72</td>
</tr>
<tr>
<td>Fall 2018</td>
<td>312</td>
<td>95</td>
</tr>
<tr>
<td>Fall 2019</td>
<td>340</td>
<td>81</td>
</tr>
</tbody>
</table>

Chart Subtext:
Measured each fall over last five years, the large percentage of females to males holds true to the public health workforce gender distribution, according to the PHWins survey performed by Association of State and Territorial Health Officials. All student data was gathered at the time of the IUPUI Fall Census.

Source: irds.iupui.edu
Undergraduate Degrees

- Bachelor of Science in Health Data Science
- Bachelor of Science in Health Services Management
- Bachelor of Science in Public Health
  - Community Health
  - Epidemiology
  - Global Health Protection

2019-20 Student Body

- 5 Bepko Scholars
- 3 Academic Honors Scholarships

- 20 Academic Excellence Scholarships
- 7 Chancellor’s Scholarships

- 3 Top 100 Students
  Last five years

- 9 Top 10 Students
  Last five years

- 5 Student Athletes
- 14 Military Veterans

2018 Undergraduate Student Body Retention

- 245 Same School 89%
- 20 Different School 7%
- 10 Not Enrolled 4%
First-Generation Students

At the Fairbanks School of Public Health, we have a higher than average population of first-generation students.

First-generation students are the first in their families to attend and to graduate from college. According to NASPA, "the term ‘first-generation’ implies the possibility that a student may lack the critical cultural capital necessary for college success because their parents did not attend college."

Financial Need of Undergraduates

College is a big investment. Our students come from all over to study with world-class faculty and to prepare for careers as leading public health professionals and researchers.

But our students are also taking on grants to fill the gap and have one of the highest unmet financial needs on campus.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Unmet Financial Need</th>
</tr>
</thead>
<tbody>
<tr>
<td>40%</td>
<td>$5,498</td>
</tr>
</tbody>
</table>

Unmet Financial Need
5th highest at IUPUI, Campus Avg. $5,101

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Pell Grant Receivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>28%</td>
<td>47.6%</td>
</tr>
</tbody>
</table>

Receive Pell Grant
2nd highest at IUPUI, Campus Avg. 37.98%

Closing the Gap

Closing the financial gap for our students remains a priority for the Fairbanks School of Public Health. This year, we celebrated our second annual scholarship and alumni awards luncheon, awarding 10 scholarships to undergraduate and graduate students.

<table>
<thead>
<tr>
<th>Scholarships Awarded</th>
<th>Scholarship Established</th>
<th>Advancement Council Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

Gift level of $10,000 or more
Graduate Education

The IU Richard M. Fairbanks School of Public Health offers five master’s degree options. Whether you are interested in being involved in the practice of public health, directing the delivery of healthcare services, using analysis to discover new ways to address today’s health issues, or helping businesses protect people and the environment, we can prepare you for an exciting and fulfilling career. In fact, we’re ranked as one of the Best Public Health Graduate Schools in the country, according to the U.S. News & World Report’s Best Grad School Rankings for 2020.

Graduate Degrees

- Master of Health Administration
- Master of Public Health Environmental Health Science, Epidemiology, Health Policy and Management, Public Health Informatics, Social & Behavioral Sciences
- Master of Science in Biostatistics
- Master of Science in Product Stewardship
- Master of Science in Global Health and Sustainable Development

Graduate Student Retention

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>Fall 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Year 2</td>
<td>86.7%</td>
<td>80.7%</td>
<td>86.2%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Year 3</td>
<td>84.0%</td>
<td>71.6%</td>
<td>86.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td>80.0%</td>
<td>72.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>82.7%</td>
</tr>
</tbody>
</table>

It’s a great program! I have both enjoyed and learned so much from every class so far! I would absolutely recommend it to anyone in the product stewardship field.

Katie Benjamin, MS in Product Stewardship Student, Regulatory Specialist

I wish people knew that public health is everything around you. Public health addresses the social structure that impacts the health and daily lives of people.

Jasmine Black, Master of Public Health
**Doctoral Education**

The IU Richard M. Fairbanks School of Public Health offers four different doctoral degree options, as well as a number of doctoral minors. Ranked as one of the Best Public Health Graduate Schools in the country, according to the U.S. News & World Report’s Best Grad School Rankings for 2020, each of our doctoral programs offers a challenging curriculum taught by distinguished faculty.

**Doctoral Degrees**

- DrPH in Global Health Leadership
- PhD in Biostatistics
- PhD in Epidemiology
- PhD in Health Policy and Management

### Doctoral Student Retention

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>Fall 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Year 2</td>
<td>100%</td>
<td>100%</td>
<td>80.0%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Year 3</td>
<td>100%</td>
<td>83.3%</td>
<td>80.0%</td>
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<tr>
<td>Year 4</td>
<td>100%</td>
<td>66.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 5</td>
<td>50.0%</td>
<td></td>
<td></td>
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</tbody>
</table>
Sponsored Programs

The Fairbanks School of Public Health evolved from the Department of Public Health in the Indiana University School of Medicine and became an independent Indiana University school in 2012. Establishing FSPH marked a significant transition from a historically teaching-oriented program to one with a greater balance between teaching, research, and service. The past years have entailed hiring research-oriented faculty at all ranks, with many of these positions going to junior investigators with strong postdoctoral experiences. Each of these new faculty received competitive start-up packages to bolster the launch of their career at IU. The school has grown its small departmental research portfolio, with six awards totaling less than $200k in 2010, to a robust school portfolio of more than 50 awards exceeding $13m in total value during calendar year 2018.

### Sponsored Program Award Data (2019 – Year to Date)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Cost</th>
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</thead>
<tbody>
<tr>
<td>2010</td>
<td>651,593</td>
</tr>
<tr>
<td>2011</td>
<td>1,759,675</td>
</tr>
<tr>
<td>2012</td>
<td>2,144,845</td>
</tr>
<tr>
<td>2013</td>
<td>1,087,665</td>
</tr>
<tr>
<td>2014</td>
<td>3,078,024</td>
</tr>
<tr>
<td>2015</td>
<td>3,173,029</td>
</tr>
<tr>
<td>2016</td>
<td>8,663,783</td>
</tr>
<tr>
<td>2017</td>
<td>4,548,596</td>
</tr>
<tr>
<td>2018</td>
<td>13,474,323</td>
</tr>
<tr>
<td>2019</td>
<td>7,629,521</td>
</tr>
</tbody>
</table>
INSACCHO

The Indiana State Association of County and City Health Officials (INSACCHO) represent the physician health officers and public health professionals in Indiana’s city and county jurisdictions. This group conducts special projects to advance the practice of public health and advocate for local governmental public health issues through policy and education.

The Fairbanks School of Public Health’s Center for Public Health Practice provides executive leadership and administrative technical assistance and support to INSACCHO. Staff will work with the INSACCHO membership to advance the practice of public health and advocate for local governmental public health issues through policy and education.

IU ECHO Center

Project ECHO (Extension for Community Healthcare Outcomes) uses technology to leverage scarce resources, reduces disparities in care by demonopolizing knowledge, provides case-based learning to enhance mastery of complex information and increase impact, and uses web-based databases to monitor outcomes.

This is a cost-free partnership between local primary care providers and the Richard M. Fairbanks School of Public Health to improve access to high quality treatment for common, complex and chronic diseases in Indiana. With support from interdisciplinary teams of medical specialists based in Indianapolis, the Fairbanks School of Public Health ECHO Center uses technology to facilitate mentoring and knowledge sharing, enabling clinicians to provide best practice care locally.

- Hepatitis C (HCV)
- LGBTQ+
- HIV
- Cancer Prevention and Survivorship Care
- Integrated Pain Management

Public Health Conference

In 2018, the Fairbanks School of Public Health hosted the Indiana Public Health Conference with more than 300 attendees. This conference provided a forum in which people from diverse perspectives worked together to address Indiana’s most pressing public health issues. The theme for the 2018 conference was harm reduction, a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use. Harm reduction services and policies are effective, humane, equitable, and life-saving strategies that are vital to any comprehensive response to the opioid epidemic.

The school also hosted a pre-conference workshop that provided an opportunity for local health departments and their community partners to explore the process of engaging their communities in discussions and planning around harm reduction and syringe services programs (SSPs). Public health and harm reduction experts provided an interactive learning experience for participants. Counties at all stages of SSP development were encouraged to attend.

Public Health Conference Organizers and Keynote Speakers

(From left): Dr. Gabriel Wishik, Harm Reduction Conference Morning Keynote Speaker; Dr. Joan Duwve, Associate Professor, Associate Dean of Public Health Practice; Dr. Paul Halverson, Fairbanks Founding Dean; Dr. Robin Newhouse, IU School of Nursing Dean; Dr. Kristina Box, Indiana State Department of Health Commissioner. Photo by Sarah Cadwell.
## Budget

### Richard M. Fairbanks School of Public Health Budget Report (FY14-FY19)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td>6,115,833</td>
<td>6,885,022</td>
<td>6,772,358</td>
<td>8,241,948</td>
<td>8,980,226</td>
<td>9,152,107</td>
<td>46,147,495</td>
</tr>
<tr>
<td>State Appropriations</td>
<td>2,521,489</td>
<td>2,521,489</td>
<td>2,593,629</td>
<td>2,677,293</td>
<td>2,740,546</td>
<td>2,771,305</td>
<td>15,825,751</td>
</tr>
<tr>
<td>Student Fees</td>
<td>4,503,454</td>
<td>4,858,107</td>
<td>5,181,629</td>
<td>6,538,660</td>
<td>7,254,822</td>
<td>7,617,680</td>
<td>35,954,352</td>
</tr>
<tr>
<td>Indirect Cost</td>
<td>151,500</td>
<td>318,150</td>
<td>572,670</td>
<td>1,076,553</td>
<td>1,345,691</td>
<td>1,547,545</td>
<td>5,012,109</td>
</tr>
<tr>
<td>Recovery Income</td>
<td>(1,760,523)</td>
<td>(1,854,472)</td>
<td>(2,161,067)</td>
<td>(2,542,599)</td>
<td>(2,844,476)</td>
<td>(3,021,634)</td>
<td>(14,184,771)</td>
</tr>
<tr>
<td>Assessments-</td>
<td>663,239</td>
<td>1,000,482</td>
<td>583,585</td>
<td>489,458</td>
<td>461,707</td>
<td>218,150</td>
<td>3,416,621</td>
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<tr>
<td>Revenue</td>
<td>36,675</td>
<td>41,266</td>
<td>1,911</td>
<td>2,583</td>
<td>21,937</td>
<td>19,061</td>
<td>123,432</td>
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<tr>
<td><strong>Expenses</strong></td>
<td>(6,115,833)</td>
<td>(6,885,022)</td>
<td>(6,772,358)</td>
<td>(8,241,948)</td>
<td>(8,980,226)</td>
<td>(9,152,107)</td>
<td>(46,147,495)</td>
</tr>
<tr>
<td>Compensation</td>
<td>(6,590,822)</td>
<td>(5,905,633)</td>
<td>(7,078,956)</td>
<td>(8,094,590)</td>
<td>(8,881,901)</td>
<td>(8,368,439)</td>
<td>(45,550,341)</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>(45,500)</td>
<td>(164,986)</td>
<td>(184,061)</td>
<td>(186,227)</td>
<td>(240,627)</td>
<td>(234,627)</td>
<td>(1,056,028)</td>
</tr>
<tr>
<td>Capital</td>
<td></td>
<td></td>
<td>(33,000)</td>
<td>(16,000)</td>
<td>(5,280)</td>
<td>(54,280)</td>
<td></td>
</tr>
<tr>
<td>General Expense</td>
<td>(579,881)</td>
<td>(322,870)</td>
<td>(355,069)</td>
<td>(614,120)</td>
<td>(685,433)</td>
<td>(695,161)</td>
<td>(3,252,534)</td>
</tr>
<tr>
<td>Travel</td>
<td>(17,500)</td>
<td>(28,200)</td>
<td>(39,200)</td>
<td>(53,988)</td>
<td>(55,630)</td>
<td>(36,410)</td>
<td>(230,928)</td>
</tr>
<tr>
<td>Transfer of Funds</td>
<td>34,661</td>
<td>18,793</td>
<td>64,677</td>
<td>158,348</td>
<td>31,803</td>
<td>155,549</td>
<td>463,831</td>
</tr>
<tr>
<td>Reserves</td>
<td>1,083,209</td>
<td>(482,127)</td>
<td>1,450,251</td>
<td>581,629</td>
<td>867,562</td>
<td>32,261</td>
<td>3,532,785</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
I enjoy working with a diverse group of people and learning about other cultures.

Ann Sullivan, Administrative Assistant, Department of Epidemiology
### Bicentennial Fundraising

#### Bicentennial Fundraising Goals (as of 9/4/19)

<table>
<thead>
<tr>
<th>Goal</th>
<th>Dollars Raised</th>
<th>% Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10,000,000</td>
<td>$16,560,669</td>
<td>165.57%</td>
</tr>
</tbody>
</table>

#### Bicentennial Campaign Summary (as of 9/4/19)

<table>
<thead>
<tr>
<th>Gift Type</th>
<th>Dollars Raised</th>
<th>Donor Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash, In Kind Gifts, and Pledges</td>
<td>$1,138,168</td>
<td>428</td>
</tr>
<tr>
<td>Irrevocable Life Income Agreements</td>
<td>$0</td>
<td>0</td>
</tr>
<tr>
<td>Bequest Commitments</td>
<td>$25,000</td>
<td>2</td>
</tr>
<tr>
<td>Non-Governmental Grants</td>
<td>$15,397,501</td>
<td>56</td>
</tr>
</tbody>
</table>

**Total Campaign Progress by Gift Type**

<table>
<thead>
<tr>
<th></th>
<th>Dollars Raised</th>
<th>Donor Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$16,560,669</td>
<td>483</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Constituent Category</th>
<th>Dollars Raised</th>
<th>Donor Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumni</td>
<td>$145,206</td>
<td>249</td>
</tr>
<tr>
<td>Friend</td>
<td>$87,166</td>
<td>155</td>
</tr>
<tr>
<td>Corporations &amp; Foundations</td>
<td>$13,589,352</td>
<td>43</td>
</tr>
<tr>
<td>Other</td>
<td>$2,738,945</td>
<td>36</td>
</tr>
</tbody>
</table>

**Total Campaign Progress by Constituent Category**

<table>
<thead>
<tr>
<th></th>
<th>Dollars Raised</th>
<th>Donor Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$16,560,669</td>
<td>483</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty/Staff/Retiree (Included in Above Totals)</th>
<th>Dollars Raised</th>
<th>Donor Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>IU faculty</td>
<td>$68,382</td>
<td>57</td>
</tr>
<tr>
<td>IU staff</td>
<td>$11,104</td>
<td>34</td>
</tr>
<tr>
<td>IU retiree</td>
<td>$31,550</td>
<td>5</td>
</tr>
</tbody>
</table>

**Total Campaign Progress by Faculty/Staff/Retiree**

<table>
<thead>
<tr>
<th></th>
<th>Dollars Raised</th>
<th>Donor Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$111,036</td>
<td>96</td>
</tr>
</tbody>
</table>
Strategic Map

**Fairbanks School of Public Health Strategic Map**

Advance the Public’s Health and Well-Being through Education, Innovation and Leadership

A. Provide Premiere, Distinctive Educational Opportunities
   - Prepare Learners for Evolving Public Health and Health Care Fields

B. Cultivate and Sustain a Purposeful, Diverse Research Portfolio
   - Hire and Enable a Research Dean

C. Engage with Communities and Stakeholders
   - Provide Education, Service and Research Linked to Community Needs

D. Expand and Sustain Partnerships to Improve Population Health
   - Strengthen Partnerships with Schools and Centers

E. Strengthen Organizational Effectiveness and Stewardship
   - Promote Excellence in Scholarship

1. Expand Infrastructure to Support Programs, Instructors and Learners
   - Increase Collaboration Across Departments and Between Schools

2. Increase Exposure to and Knowledge of Public and Global Health
   - Foster and Reward Success

3. Implement Innovative Educational Models Including IPE
   - Partner with Communities to Improve Health Equity

4. Expand Learning Beyond the Classroom
   - Communicate and Disseminate Best Practices and Results

5. Explore Sources of External Validation, e.g. Certification
   - Increase Student/Alumni Involvement in Service, Learning & Applied Experiences

6. Establish a Practice-Based Research Network to Solve Contemporary Challenges
   - Integrate a Philanthropic Mindset Across FSPH

F. Support our Core Values, Including: A Culture of Collaboration, Equity, and Diversity

G. Communicate the Accomplishments of the School and Our Value to the Public’s Health

- Enrollment Growth
- Educational Infrastructure
- Community Engagement
- Faculty/Staff Development
- Research Infrastructure