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DEAN'S MESSAGE

Community service is the very marrow of the Wayne State University School of Medicine, and has been since its founding in 1868. The services provided by our students and faculty, and the medical research related to the populations we serve, is the sinew that inextricably binds us to an urban center reinventing itself as the new Midwestern city of the 21st century.

As we celebrate our 150th anniversary in 2018, we find that students continue to choose the Wayne State University School of Medicine because of the urban clinical excellence that we provide. Our location in the heart of Detroit provides young physicians-in-training the opportunity to experience the immediate, hands-on, frontline needs of an urban population suffering from decades of health disparities, and the chance to do something about those inequities. Our students tell us that they also choose WSU because they want more than a medical education; they desire to dig into the community and help its people, even before receiving their medical degrees. And they do.

Our students, recognizing community and world needs, continuously devise methods to address those needs through an award-winning curriculum unparalleled nationally in size, opportunity and scope. Students provide their time, skills and expertise at more than 70 clinical and 100 outreach locations throughout southeastern Michigan. Our Street Medicine Detroit group sees medical students provide care for the homeless on the streets of Detroit, and our students created the annual World AIDS Day Detroit program to spotlight the need for education and testing for a vulnerable population. They treat the community’s underserved in established clinics, and in 2008 founded Michigan’s first student-led free clinic. Students also organize and present the annual Reach Out to Youth event to show young urban students from under-represented minorities in medicine that they, too, can have careers in health care and assist in meeting the needs of their community. Our students share their passion beyond Detroit’s borders as well, as evidenced by an ongoing effort to collect and donate desperately-needed medical texts to their Syrian counterparts displaced by the war in that country.

Building upon proven research conducted at WSU that reduces preterm birth by as much as 50 percent, the WSU School of Medicine leads the citywide Make Your Date program to put that method into practice with the city’s health care systems to combat infant mortality – the leading killer of children in Detroit. Incorporating a new approach to translational science and clinical research innovation, WSU improves health and health care for the people of Detroit and southeast Michigan, working with community advisory boards to determine the direction of clinical research, ensuring that studies and discoveries are applicable and available to community members.

Those who know and understand WSU School of Medicine students are not surprised by this wellspring of caring and generosity. It is only one of the reasons the WSU School of Medicine is a two-time finalist for the Association of American Medical College’s Spencer Foreman Award for Outstanding Community Service. It is the true sign of the calling our students and faculty feel, the hallmark of both our history and our future.

Jack D. Sobel, M.D., Dean
Distinguished Professor
Wayne State University School of Medicine
“You can’t be what you can’t see.”
Dive Community,

Photo By David Dalton
“We are at our best when all members of our society participate fully, and for all to participate fully there must exist the possibility for opportunity.”

Dean Jack D. Sobel, M.D.
The Wayne State University School of Medicine’s 2018 sesquicentennial provides the school, its home university and the Detroit region the opportunity to examine and celebrate a long and rich history of diversity in medical education.

The school of medicine, founded by five doctors who had served on the bloody battlefields of the Civil War, opened in 1868, just three short years after the Union victory over the South and the eradication of slavery. Those victories, however, did little to wipe away existing prejudices against black Americans, prejudices that persisted even in the North that had fought to end slavery. Blacks were now free and theoretically equal, but they continued to confront bigotry and segregation in all facets of life throughout the recently restored union.

Yet when the newly opened Detroit Medical College – the forerunner of the Wayne State University School of Medicine – graduated its first class of physicians in 1869, that group of newly-minted doctors included Joseph Ferguson, the first African-American in Detroit – and most likely in Michigan – to earn a medical degree. Ferguson was already practicing medicine without a degree in Detroit when he was admitted into the first class, treating blacks who would not be seen by white doctors or treated in white hospitals. After he received his degree, Dr. Ferguson served two terms as a city physician and continued to serve Detroit’s African-American population until his death in 1887.

Dr. Ferguson was already practicing medicine without a degree in Detroit when he was admitted into the first class, treating blacks who would not be seen by white doctors or treated in white hospitals. After he received his degree, Dr. Ferguson served two terms as a city physician and continued to serve Detroit’s African-American population until his death in 1887.

Dr. Ferguson was the first in a long line of minority physicians educated and trained by the WSU School of Medicine and its forerunners. That genealogy boasts the physician who helped found Dunbar Hospital, the first African-American non-profit hospital in Detroit; the first African-American physician to obtain an internship at a white hospital in Detroit and the first black faculty member of the school; the first African-American female physician who later became the first black female resident and chief resident of Detroit Receiving Hospital; and the first black physicians to integrate the staff of the city’s major hospitals.

That history continues today – and has widened its focus to include other populations not widely represented in medicine – but not without its hiccups.

To ensure that qualified minorities continued to have the opportunity to enter medical school, in 1969 the WSU School of Medicine established its Post Baccalaureate Program, the first program of its kind in the nation. Initially launched to address the dearth of black students entering medical schools, the free program immersed students whose applications to medical school had been rejected into a year-long education in biochemistry, embryology, gross anatomy, histology and physiology to improve their odds of future acceptance. Many who graduated from the program were accepted in the WSU School of Medicine, but the program also served as a major pipeline for black students into medical schools across the nation.

Five African-American students were admitted into the initial program, which was so successful that in 1972 it expanded to accept 10 students. The first Post Baccalaureate Program student graduated from the Wayne State University School of Medicine in 1974. The program expanded its efforts to increase underrepresented minorities (Hispanics and Native Americans) in medicine. Following the U.S. Supreme Court’s 1978 Bakke decision, the program no longer could target only minorities in medicine. The program cast a wider net yet again, accepting socio-economically disadvantaged students regardless of race or ethnicity.

Today the program, which is marking its 50th anniversary, accepts a maximum of 16 students each year. In the last 30 years, the School of Medicine has invested $35 million in the program, which has graduated 401 participants who have gone on to become physicians.

“The Post Baccalaureate Program is an extremely valuable asset, not only to our school, but to our city, to the people of our community and to medicine. The program was developed to create change, for without change there can be no growth,” said Jack D. Sobel, M.D., dean of the WSU School of Medicine. “We are at our best when all members of our society participate fully, and for all to participate fully there must exist the possibility for opportunity. The Post Baccalaureate Program is just that – an opportunity to prove oneself at this great university and in the field of medicine.”

In the 1970s and early 1980s the program served as a major pipeline for the admission of African-American
“The Post Baccalaureate Program is an extremely valuable asset, not only to our school, but to our city, to the people of our community and to medicine.”
students to medical schools across the country. During the 1980s and 1990s, the WSU School of Medicine earned the distinction of graduating more African-American physicians than any other medical school in the nation, with the exception of Howard University in Washington, D.C., and Meharry Medical College in Nashville. Representatives of U.S. medical schools flocked to Detroit to learn how WSU accomplished the achievement.

From 1977 to 2005, incoming classes included 250 to 260 students. Those smaller classes included an average of 35 African-American students at the peak of a diversified medical student class. To address a shortage of physicians nationally and in Michigan, the School of Medicine began accepting 290 new medical students each year beginning in 2006.

The number of minority students, however, began to dwindle in the late 1990s and early 2000s, the unintended victim of financial restraints and budget cuts. The decrease bottomed out with the incoming class of 2015. That year’s class of 290 first-year medical students contained five African-American students and two Hispanic students, the lowest number in those categories in the school’s modern history.

The lack of minority students led to a citation by the Liaison Committee on Medical Education in June 2015. The national accrediting body gave the school of medicine two years to remediate the issue.

But it didn’t take anywhere near that time to address and remediate the issue, thanks to the sensitivity of Dean Sobel, who recognized the lack of diversity in the student body a full six months before the LCME report.

It is perhaps no surprise to those who know him that Dean Sobel acted to reverse the trend before the LCME finding. His road to appointment as dean, in 2015, has been a long one, and has its origins in South Africa. He was born, raised and educated during that country’s apartheid era, in a mining town of nearly 50,000, located about 20 miles from Johannesburg. His parents and grandparents were native South Africans whose Jewish ancestors had migrated from Lithuania to escape prejudice and violence. He attended the University of the Witwatersrand in Johannesburg, traveling one hour by train each way to and from college daily, and graduated with his medical degree in 1965. After residency, he was drafted into the South African Army and served one year as a medical officer.

Upon exiting the military, Dr. Sobel became a physician in a hospital in Soweto, the segregated black township. It was there that he further saw the degradation and the “absolutely soul-crushing” poverty and conditions created by apartheid, which further convinced him and his wife that they needed to leave South Africa with their two young children. “There was no way we were going to raise our children under apartheid,” he said. “It was so entrenched that if you told me in late 1968 or 1969 that apartheid would end, I never would have believed you.

“It was terrible, just terrible,” he added, shaking his head at the memories. “You lacked the medicines, the infrastructure to care for the people. In some ways it was worse than the Deep South here (during the Jim

Dean Jack D. Sobel, M.D.  Herbert Smitherman Jr., M.D, M.P.H.  WSU President M. Roy Wilson, M.D.
“Attracting top-tier students with an interest in health disparities is important to the future of our School of Medicine.”

– WSU President M. Roy Wilson, M.D.
Crow laws and separate-but-equal period). There were no black physicians because blacks were not allowed to attend university in South Africa."

At the beginning of 2015, six months before the LCME citation, Dean Sobel formed the Wayne State University School of Medicine Diversity and Inclusion Task Force to address the paucity of minority students. Chaired by Herbert Smitherman Jr., M.D., M.P.H., the then-assistant dean of Community and Urban Health for the School of Medicine, and Jane Thomas, Ph.D., a member of the school's Board of Visitors, the task force developed a number of recommendations and presented its findings to the dean in May 2015. Those recommendations included creating the position of vice dean of Diversity and Inclusion, as well as securing funding to establish the Office of Diversity and Inclusion, and to resurrect student recruitment efforts.

WSU President M. Roy Wilson, M.D., and the university's Board of Governors provided a budget to do just that. Other improvements included bringing the school's student pipeline programs, such as the Post-Baccalaureate Program, Wayne Med-Direct and the C2 Pipeline, under a single office, where they complement additional outreach programs such as Reach Out to Youth and the Michigan Area Health Education Center.

The only program of its kind in Michigan, Wayne Med-Direct is designed to attract top-tier students with an interest in battling health disparities. Developed in 2015 in line with the university's mission to develop a pipeline of high-quality students from disadvantaged socioeconomic backgrounds, the program guarantees 10 eligible high school students each year advanced admission to WSU’s School of Medicine, four years of paid undergraduate tuition, four years of paid undergraduate room and board, and four years of paid medical school tuition.

Created by President Wilson, Wayne Med-Direct's eligibility requirements include a minimum 3.5 grade-point average and a 1340 SAT or 30 ACT score. Preference is given to students from disadvantaged socioeconomic backgrounds who are also interested in studying health disparities. Incoming freshmen in the program arrive on campus in the summer for enrichment courses in chemistry, biology, physics and writing. They also participate in seminars, workshops and hands-on research and clinical training while undergraduates. Other benefits include free MCAT and GRE preparation, travel to conferences and symposia, and access to cutting-edge research facilities on campus.

"Attracting top-tier students with an interest in health disparities is important to the future of our School of Medicine," President Wilson said. "As we advance toward becoming a national hub for health disparities research, it is crucial for us to get future medical practitioners and clinical scientists committed to Wayne State University as soon as possible."

The C2, or College to Careers, Pipeline is sponsored by Wayne State University's College of Nursing and operates in 15 Detroit area high schools. The program focuses on increasing graduation rates, improving academics and ensuring ninth- through 12th-graders are college and career ready. After-school programming operates for 32 weeks during the academic school year. C2 Pipeline also offers six weeks of summer programming that includes a number of labs on the WSU campus. The program's emphasis is on science, technology, engineering and math, and health care professions.

The Michigan Area Health Education Center was established by the WSU School of Medicine and the College of Nursing in 2010 to improve access to primary care for Michigan residents, especially those residing in areas with too few health professionals. Federal and state government statistics indicate 79 of Michigan's 83 counties have at least a partial designation as primary care health professional shortage areas. In addition, 76 have a shortage of dental professionals and 45 have a shortage of mental health professionals. MI-AHEC aims to address these shortages by working with schools, community organizations, government agencies and health providers to prepare underrepresented and disadvantaged youth for health care careers, promoting clinical training opportunities for health professions students in shortage areas and providing professional development programs for health professionals.

Through recruitment and retention initiatives, as well as special clinical education programs, MI-AHEC
In the Kado Clinical Skills Center at the WSU School of Medicine, high school students learn about health care and health care professions as part of the C2 Pipeline Program.
Since its launch, more than 7,017 students have participated in MI-AHEC activities.
exposes disadvantaged students to health care career opportunities. One of its main goals is to increase the pipeline of underrepresented minority students to health professions via awareness, outreach and enrichment efforts across the state. Since its launch, more than 7,017 students have participated in MI-AHEC activities and 1,847 students gained hours in clinical rotations. More than 80 percent of health career pipeline program participants were either underrepresented minority or disadvantaged students.

Energized by the new vision provided by President Wilson and Dean Sobel, and additional staff and resources, in 2015 the administration set out to actively recruit qualified students from segments of the population the Association of American Medical Colleges defines as underrepresented minorities in medicine: African-American students, Hispanic/Latino students, Native American students and students from socio-economically disadvantaged backgrounds.

Under the renewed emphasis, the number of enrolled students underrepresented in medicine began to increase. The 2016 incoming class contained 11 African-American, four Hispanic/Latino and 53 socio-economically disadvantaged students. In 2017, the uptick continued, with 31 African-American, 26 Hispanic/Latino, four Native American and 61 socio-economically disadvantaged students.

The numbers continue to climb. The class of 290 medical students that will graduate in 2021 contains 33 African-American students, 25 Hispanic/Latino students, five Native American students and 65 students from socioeconomically disadvantaged backgrounds.

This turnaround was accomplished without lowering expectations in grade-point average or MCAT scores.

The AAMC so swiftly recognized the turnaround that it invited Dr. Smitherman, now the vice dean of Diversity and Community Affairs, to give a presentation during the organization's 2016 annual meeting in Seattle on the school's experience and success. His panel mates included Barbara Barzansky, Ph.D., LCME co-secretary and director of the Division of Undergraduate Medical Education for the American Medical Association; Veronica Catanese, M.D., LCME co-secretary and senior director of Accreditation Services for the AAMC; and M. Lourdes Winberry, M.P.H., associate dean for Health Affairs for the George Washington University School of Medicine and Health Sciences.

Dean Sobel's directives, backed by the LCME findings mined from reaccreditation visits, Dr. Smitherman said, were a "disguised blessing and "the impetus to change."

"Without it, the School of Medicine would not have been able to do what needed to be done, which included a change in leadership and a commitment of resources to rectify the situation," Dr. Smitherman said. "Shifting U.S. demographics means we need to have a greater understanding of a variety of different cultures. In the 21st century, knowing how to work within our culturally diverse society is essential to meeting the health care needs of the nation, improving health outcomes, reducing health disparities and eliminating health inequities, especially among underserved populations."

"We anticipate conducting ongoing annual reviews of our recruiting process," Dr. Smitherman said. "While in one sense this commitment to diversity will never be completed and will require continuous vigilance, if Wayne's School of Medicine is, within five years, able to return to our historic norm of being No. 1 among U.S. medical schools at successfully graduating underrepresented minorities in medicine, or at least in the top 5 percent of all medical schools in the nation, we believe we would be achieving our goal in this critical area."
Reaching Out to Urban Youth

Opening world of medicine to underrepresented minority children serves as pipeline to medical education, careers
Rynita Bohler had her small audience of elementary school students eating out of the palm of her hand. In her other hand, she held a human brain.

Bohler, a second-year medical student at the Wayne State University School of Medicine, is one of dozens of medical students who volunteer to show urban children the world of medicine and science during the annual Reach Out to Youth Day.

“It's cool to give back and help these children explore different careers in the medical field,” said Bohler, of Detroit.

That's the mission of Reach Out to Youth Day, entering its 30th year.

Presented by the School of Medicine's Black Medical Association chapter, the event seeks to introduce children ages 7 to 11 in underrepresented populations to the possibility of careers in science and medicine. Reach Out to Youth provides urban youth a window into the world of medicine and an understanding that they can cultivate careers in that world. Students explore medicine and science through hands-on workshops and activities presented by medical students and faculty.

“I attended Detroit Public Schools up until the sixth grade, which is why I am especially passionate about this program,” said Zoe Smith, a third-year medical
student and co-president of the WSU School of Medicine chapter of the Black Medical Association/Student National Medical Association, which presents Reach Out to Youth each year. “I see a part of myself in every student who participates. Reach Out to Youth is important because it gives us an opportunity to give back to our community. You can’t be what you can’t see. It is important for us as medical students to be role models for disadvantaged students.”

The theme of 2017’s Reach Out to Youth was “Play it Safe: Brain Safety.” Young visitors explored the anatomy of the human brain and heart using real organs. They also listened for heart auscultations and conducted pupillary reflexes in a clinical skills area. The organizers added a segment on self-esteem last year. The 2018 edition, on Feb. 24, is titled “Fitness and Nutrition: Don’t Just Think About It, Be About It.”

While the hundreds of student visitors delve into medicine and science, their parents attend workshops on topics ranging from preparing children for careers in medicine to learning about FitKids360, a Detroit-based program in which medical students pair with children and families to emphasize the importance of regular exercise. In the “Parent to Parent” panel, parents of medical students share their experiences with parents of the young attendees who have aspirations of medical careers for their children.

Smith has served as a Reach Out to Youth Parent Program Committee chair. She plans to pursue a career in Dermatology – with a special interest in skin of color – and is conducting research this year at Massachusetts General Hospital in Boston, Harvard’s teaching hospital. “The parent program is especially important to me, because I believe we must educate and empower parents as well. By providing parents with resources and guidance, we can ensure that their children reach their full potential,” she said. “Reach Out to Youth not only lets children live their dreams of being ‘doctors for a day,’
“We want these children to be immersed in the medical arts and sciences, and see that there are careers for them in those fields...”
“We need more black people to get involved in medicine here, but also so that they can go to Africa to assist the people there,” said Aubin Sandio, whose family lives in Cameroon. “White doctors do a good job, but we need more blacks in medicine so that they can help with conditions in Africa.”
it inspires curiosity and builds confidence in our youth. It is particularly important during Black History Month, which is a time of historical reflection, celebration and service. Hosting the event in February allows BMA/SNMA to celebrate the successes of those who came before us, while inspiring future generations."

About 400 children annually register for Reach Out to Youth, a program founded by Carolyn King, M.D., a 1993 graduate of the WSU School of Medicine, and Don Horakhty Tynes, M.D., a 1995 graduate. Dr. King continues to serve as an adviser for the event.

“We want these children to be immersed in the medical arts and sciences, and see that there are careers for them in those fields,” said Dr. King, who grew up in Detroit and saw the need for a program that introduced urban children to the possibility of medical careers. “When you live in an urban area, you need to be aware of the resources around you and what those resources can provide. They need to see people who look like them and know that they can do that too.”

Student organizers and volunteers appear to get just as much out of Reach Out to Youth as do the guests and their parents.

“I truly enjoyed organizing and participating in Reach Out to Youth because it helps to inspire young minds to not only get interested in medicine, but also begin to develop goals and dreams of upholding a wonderful selfless profession,” said Joshua Rivers, a third-year medical student now taking part in the National Institutes of Health’s Medical Research Scholars Program, a comprehensive research enrichment program designed to attract the most creative, research-oriented students to the NIH campus in Bethesda, Md.

Rivers, who grew up in Detroit and was educated in the River Rouge Schools and Detroit Public Schools systems, is interested in a career in internal medicine, especially cardiology, and hopes to practice medicine in Detroit. “Programs like this are essential for the developing young minds of these children,” he said. “Coming from an inner-city education system, I didn’t receive a lot of exposure to programs of this nature. Reflecting back on my youth, I often saw myself in a lot of these children, filled with curiosity of the world around them. If these children leave inspired and excited about medicine, we have truly accomplished our goal.”

Adam Milam, Ph.D., M.D., was involved in Reach Out to Youth during his entire medical education at WSU. He graduated in 2016.

“I think this is a way for us to give back to the community,” said Milam, a native of Baltimore who earned his doctoral degree in public health at Johns Hopkins University. “These kids get to see people like them going into medicine, and hopefully it sparks their interests and leads them to other programs that will continue their interest and get them into medicine.”
Tackling cancer’s disparities

By Patricia A. Ellis and Elizabeth Katz
Wayne State University, Karmanos Cancer Institute conduct nation’s largest study of factors affecting African-Americans with cancer

Wayne State University and the Barbara Ann Karmanos Cancer Institute have launched the nation’s largest study of African-American cancer survivors to better understand disproportionately high incidence and mortality rates from cancer and its impact on this specific patient population.

The study is being funded with a five-year, $9 million grant from the National Cancer Institute. Karmanos Cancer Institute Deputy Center Director and Wayne State University Professor of Oncology Ann Schwartz, Ph.D., M.P.H., and Terrance Albrecht, Ph.D., associate director for KCI Population Sciences and professor of Family Medicine and Public Health Sciences for the School of Medicine, are the principal investigators.

Drs. Schwartz and Albrecht said the Detroit Research on Cancer Survivors, or Detroit ROCS, study will include 5,560 cancer survivors to better understand major factors affecting cancer progression, recurrence, mortality and quality of life in African-American cancer survivors.

African-Americans continue to experience disproportionately higher cancer incidence rates than other racial/ethnic groups in the United States. They are also diagnosed with more advanced-stage disease and experience higher cancer mortality rates than other groups.

“Disparities in cancer survivorship that disproportionately burden African-Americans are the product of the complex interactions occurring among genetic and biological factors and social, behavior and environmental factors,” Dr. Schwartz said. “It is crucial that we better understand why African-Americans are often diagnosed with cancer at higher rates and why survival after that diagnosis is lower than in other populations.

“This study represents a critically important opportunity to bring together the extraordinary expertise of our population scientists and our laboratories and resources at Karmanos and the Wayne State University School of Medicine,” she said. “We will use the knowledge gained through

Ann Schwartz, Ph.D., M.P.H. Terrance Albrecht, Ph.D.
“...APPROXIMATELY 21,000 PEOPLE IN THESE COUNTIES ARE DIAGNOSED WITH CANCER ANNUALLY.”

this study to improve treatment outcomes, thereby improving survival.”

The Detroit ROCS study will focus on lung, breast, prostate and colorectal cancers — the four most common cancers — each of which is marked by poorer survival rates among African-American patients than white patients.

Multiple factors contribute to poorer survival among African-Americans with cancer, but most studies lack enough participants to adequately study these factors. Researchers at Karmanos and the Wayne State School of Medicine are investigating the factors that may affect cancer survival, such as type of treatment, genetics, social structures, support, neighborhood context, poverty, stress, racial discrimination, literacy and quality of life, and behaviors such as smoking, alcohol use, diet and physical activity.

“Race disparities in cancer outcomes result at least in part from preventable or modifiable factors, such as the ability to access and utilize care and also obtain other necessary health care services and resources,” Dr. Albrecht said. “This project will provide an infrastructure for designing and conducting an array of studies to reduce disparities and will ultimately lead to interventions focused on improving outcomes in African-American cancer survivors across the United States.”

A unique aspect of the study is the inclusion of 2,780 family members to understand how a cancer diagnosis affects the mental, physical and financial health of those providing care.

Detroit ROCS leverages the Detroit area population-based cancer registry, part of NCI's Surveillance, Epidemiology and End Results program, to identify African-Americans who were recently diagnosed with cancer. The SEER program supports cancer registries and provides information on cancer statistics in an effort to reduce the cancer burden among the U.S. population.

Researchers will collect comprehensive data through interviews with participants, information from medical records and biospecimens from participants who live in Wayne, Oakland and Macomb counties. These counties account for more than 70 percent of Michigan’s African-American population, and approximately 21,000 people in these counties are diagnosed with cancer annually.
“This study is critical to ensuring that underserved populations in Detroit and around the country benefit from new approaches for cancer diagnosis, treatment and prevention.”

The study also brings an added benefit to doctors who treat African-American cancer patients.

“Several of our medical oncologists are directly involved in the study and together we are already developing training programs for our residents, fellows and community oncologists,” Dr. Albrecht said. “These programs will be directly informed by what we learn about survivorship from this large group of African-American cancer survivors.”

Karmanos and Wayne State University have a long-time partnership in conducting cancer-related research within minority populations living in metropolitan Detroit. Gerold Bepler, M.D., Ph.D., Karmanos president and chief executive officer, said this project will further extend this legacy.

“As a National Cancer Institute-designated comprehensive cancer center, an important area of our focus is on population studies and disparities research,” said Dr. Bepler, chair of Oncology for the WSU School of Medicine. “We are uniquely prepared to conduct cutting-edge research because of the rich and productive synergistic collaborations among our genetic and molecular epidemiologists and our social and behavioral scientists at Karmanos and Wayne State University School of Medicine.”

“This study is critical to ensuring that underserved populations in Detroit and around the country benefit from new approaches for cancer diagnosis, treatment and prevention,” said M. Roy Wilson, president of Wayne State University. “Focusing on the complex factors that generate disparities in cancer among underserved populations, such as African-Americans, will lead to better treatments and improved approaches to cancer care for all Americans.”

An earlier pilot study, supported by a $400,000 grant from GM Foundation and additional funds from Karmanos Cancer Institute, made it possible for the scientists to collect the data necessary to secure the NCI funding for the larger study.

The grant number is CA199240.
Protecting the Littlest Patients

By Philip Van Hulle
Every mother deserves a healthy baby and every baby deserves a fighting chance at a healthy life. That’s the underlying philosophy of the researchers of the Perinatology Research Branch of the National Institutes of Health, housed at the Wayne State University School of Medicine for more than a quarter of a century.

The only center of its kind in the nation, the Perinatology Research Branch is a component of the Eunice Kennedy Shriver National Institute of Child Health and Human Development.

Brought to the Wayne State University School of Medicine through an initial 10-year contract with the National Institutes of Health, the Perinatology Research Branch also serves as a major hub for the development and training of physicians and scientists who have pioneered diagnostic tests and treatments in maternal-fetal medicine.

The PRB is strategically located to serve a high-risk population that requires the full spectrum of services the branch offers, including the most advanced three-dimensional and four-dimensional ultrasound for prenatal diagnosis. Since locating at the Wayne State University School of Medicine the branch has assisted more than 25,000 at-risk mothers from Detroit and the region, most of them uninsured, who also have participated in research at the PRB and received care from WSU faculty members.

“Wayne State University is proud to host the Perinatology Research Branch of the Eunice Kennedy Shriver National Institute of Child Health and Human Development,” said Jack D. Sobel, M.D., dean of the WSU School of Medicine. “The PRB was established by an act of Congress to address complications of pregnancy that are the leading cause of infant mortality in the United States and worldwide. Congress was cognizant that minorities are disproportionately affected by such complications, which include preeclampsia, preterm birth, fetal and neonatal death, and intrauterine growth restriction.”

Led by Roberto Romero, M.D., chief of the PRB and deputy clinical director for Obstetrics and Maternal-Fetal Medicine, Intramural Division, NICHD, the branch’s mission is to conduct research into the mechanisms of disease for obstetrical complications, and develop diagnostic, prognostic and therapeutic strategies to reduce infant and maternal death.
Discover the first biomarker of maternal vascular lesions of underperfusion in the placenta
– these lesions underlie unexplained fetal death, intrauterine growth restriction and preeclampsia, as well as preterm labor in a subset of patients.

Identified the first biomarker for unexplained fetal death
– a condition for which there was no biomarker or method of prevention in the third trimester. Through the work done in Detroit, a biomarker has been discovered that identifies 80 percent of late fetal deaths with a 10 percent false-positive rate based on a simple blood test. This may lead to better assessment, and a randomized clinical trial to prevent fetal death in patients at risk is being planned.

Identified that 1 in 4 preterm births occurs in a mother who has a “silent” infection, and that genital mycoplasmas are the most frequent organisms causing these infections. These infections can be transmitted to the baby, and calls for a re-examination of the standard antibiotic therapy in preterm and term newborns.

Described the fetal inflammatory response syndrome, a condition that affects unborn babies of mothers with premature labor, and is akin to an adult systemic inflammatory response. This multi-systemic disorder can cause neuroinflammation and fetal cardiac dysfunction, and the finding is a major conceptual breakthrough in the understanding of prematurity, and why premature babies are at risk for cerebral palsy.

Made pioneering advancements in fetal endoscopic surgery, such as the first case of twin arterial perfusion syndrome (New England Journal of Medicine), the first fetal cystoscopy (Lancet), laser ablation of posterior urethral valves (Lancet) and the development of a patch to treat the rupture of membranes after amniocentesis or surgical procedures (Lancet).

Invented intelligent navigation sonography, and in particular, fetal intelligent navigation echocardiography, which can be used for the screening of congenital heart disease, the most frequent congenital anomaly by organ system, often undiagnosed before birth.

Invented an approach for the treatment of cerebral palsy using nanotechnology.

Invented the role of cytokines in the onset of labor.
An estimated 15 million babies are born preterm worldwide annually.

More recently, a study published November 2017 in the American Journal of Obstetrics & Gynecology provided additional support for treatment with vaginal progesterone to reduce the risk of preterm birth, neonatal complications and infant death in pregnant women with a short cervix. A shortened cervix is the most powerful predictor of preterm birth.

An estimated 15 million babies are born preterm worldwide annually. Preterm birth and its attendant complications are responsible for nearly 1 million deaths each year. Complications of preterm birth are the leading cause of child mortality. Infants who do survive run the risk of further complications, including acute respiratory, gastrointestinal, infectious, central nervous system, hearing and vision problems, as well as long-term disabilities such as cerebral palsy.

A meta-analysis of individual patient data by PRB researchers further validated the use of vaginal progesterone to decrease the risk of preterm birth and improve perinatal outcomes in women with a single pregnancy found via sonography to have a short cervix. Vaginal progesterone therapy to reduce preterm birth was developed at the PRB in 2011.

The findings are welcome news in the fight against preterm birth, the leading cause of death in children younger than 5. The March of Dimes annual report on preterm birth for 2017 indicated that the rate of preterm birth in the United States climbed for the second consecutive year in 2016 after nearly a decade of decline.

The 2017 March of Dimes Premature Birth Report Card provides preterm birth rates and grades for all 50 states, plus the District of Columbia and Puerto Rico, based on birth data from the National Center for Health Statistics. The latest report card put the national preterm birth rate at 9.8 percent (a C grade), an increase from the rate of 9.6 percent in 2015. Preterm birth rates worsened in 43 states, the District of Columbia and Puerto Rico. Only four states received an A grade. Michigan, with its 10.1 percent rate, ranked worse than 26 states and received a C grade.

More than 380,000 babies are born preterm in the U.S. each year, according to the March of Dimes. With the recent increase in the percentage of preterm births in the nation, 8,000 more babies were born prematurely in 2016. The economic impact of premature birth in the U.S. is more than $26 billion annually, according to the March of Dimes.

Among the 100 U.S. cities with the greatest number of births in 2015, Detroit had the second highest rate of preterm delivery with 13.9 percent. Only Cleveland had a higher rate of preterm birth with 14.9 percent. Both cities earned an F grade from the March of Dimes.

Births occurring before the 37th week of pregnancy are considered preterm. In preparation for birth, the cervix (lower part of the uterus) thins and shortens during pregnancy. In some women, the cervix shortens prematurely. The natural hormone progesterone, inserted in the vagina either as a gel or tablet, has been associated with a reduction of the risk for preterm birth associated with a short cervix in multiple studies conducted by PRB and WSU investigators.

To confirm progesterone’s effectiveness, the researchers investigated randomized controlled studies that compared women who received vaginal progesterone with those who received a placebo or no treatment for a single birth and a mid-trimester sonographic cervical length of less than 25 mm.

The study examined data from 974 women (498 assigned to vaginal progesterone and 476 assigned to placebo) who
Roberto Romero, M.D., chief of the National Institutes of Health's Perinatology Research Branch at Wayne State University, and Sonia Hassan, M.D., WSU’s associate dean for Maternal, Perinatal and Child Health, have pioneered the use of progesterone as a simple, low-cost preventative in reducing preterm birth.
The progesterone findings led to a citywide effort in Detroit to reduce the number of preterm births.
participated in one of five trials. The use of progesterone was associated with a significant reduction in the risk of preterm birth at less than 33 weeks gestation. Progesterone use also significantly decreased the risk of preterm birth from less than 36 weeks to 28 weeks gestation. Women who used progesterone delivered closer to their due date than did women supplied with placebos.

The use of progesterone also significantly decreased the rate of respiratory distress syndrome, neonatal death, low birthweight and admission to neonatal intensive care units for newborns with no deleterious effects on childhood neurodevelopment.

“Our meta-analysis demonstrates that vaginal progesterone reduces the rate of preterm birth from less than 28 weeks to less than 26 weeks in women with a sonographic short cervix. Moreover, vaginal progesterone reduces admission to NICU, respiratory distress syndrome and composite neonatal morbidity,” Dr. Romero said. “Our results, coupled with those of cross-effectiveness research and implementation research, shows that universal cervical screening of the uterine cervix with the administration of vaginal progesterone is cost-effective and can be implemented in the real world.”

The study’s authors, including Sonia Hassan, M.D., associate dean for Maternal, Perinatal and Child Health and professor of Obstetrics and Gynecology for WSU, and director of the Center for Advanced Obstetrical Care and Research for the PRB, have recommended universal transvaginal cervical length screening at 18 to 24 weeks gestation and administration of vaginal progesterone for women found to have a short cervix.

“This study confirms what we’ve previously shown – vaginal progesterone is a critical treatment for women and babies at high risk for preterm birth,” said Dr. Hassan, who published the initial findings of the beneficial effects of vaginal progesterone on preterm birth. “This treatment is of particular importance to the pregnant women of Detroit and the State of Michigan.”

The progesterone findings led to a citywide effort in Detroit to reduce the number of preterm births. Make Your Date, co-led by Dr. Hassan, was formed in 2014 to help Detroit’s expectant mothers deliver healthy full-term babies. The campaign provides a consistent approach among local health care providers in how they deliver support and care to expectant mothers.

A not-for-profit organization, Make Your Date provides increased access to care and education, including free prenatal education, the latest in pregnancy care, transportation to medical appointments, and constant contact and support throughout pregnancy.

The program has expanded and is on track to assist more than 10,000 pregnant women by the end of 2018. For more information about Make Your Date, visit https://makeyourdate.org/.

Sonia Hassan, M.D., associate dean for Maternal, Perinatal and Child Health, also leads the Make Your Date program in Detroit, which expects to help 10,000 mothers bring their pregnancies to term by the end of 2018.
Hayley Thompson, Ph.D., associate professor of Oncology for the Wayne State University School of Medicine and leader of the Population Studies and Disparities Research Program for the Barbara Ann Karmanos Cancer Institute, has spent her career addressing health disparities and collaborating with community groups and others to find solutions to improve health outcomes for those most vulnerable.

Dr. Thompson launched the Detroit HealthLink for Equity in Cancer Care in 2016 and most recently expanded the program to engage LGBTQ communities in Detroit to help close the gaps on cancer disparities.

Dr. Thompson received a two-year engagement award of $250,000 from the Eugene Washington Patient-Centered Outcomes Research Institute for “Partnering with Sexual and Gender Minority Communities to Address Cancer Disparities in Detroit.” Working closely with LGBT Detroit – an African-American-led grassroots organization – Wayne State University, Michigan State University, with consulting by SAGE Metro Detroit (Services & Advocacy for LGBT Elders), the program engages sexual and gender minorities, or SGMs, living with cancer and their caregivers, and invites them to share their voice related to their cancer experience for the purpose of gaining a greater understanding of the
Establish two SGM Cancer Action Councils with community stakeholder members

Train at least 20 members using an existing curriculum to increase their capacity to serve as Patient-Centered Outcomes Research partners

Identify cancer-specific Patient-Centered Outcomes Research needs among racially and socioeconomically diverse SGM adults through focus groups

Develop a report of cancer-specific research priorities generated by the SGM Cancer Action Councils and informed by the data collected from the focus groups

Create a network of cancer researchers interested in SGM Patient-Centered Outcomes Research to whom these research priorities will be disseminated.

Curtis Lipscomb, executive director of LGBT Detroit, sees this engagement as a critical opportunity to help improve awareness, understanding and cancer information related to the LGBTQ community.

“There is emerging evidence that sexual and gender minorities are disproportionately burdened by cancer,” Dr. Thompson said. “This partnership and project to build Cancer Action Councils in LGBTQ communities is a crucial step in addressing cancer disparities in screening rates, age of diagnosis and quality of life for survivors in SGM communities. Cancer Action Council members will develop research priorities, implement research and obtain data that can move health policy forward, improving the lives of LGBTQ community members impacted by cancer.”

The objectives of Detroit HealthLink with the LGBTQ community are to:

- Establish two SGM Cancer Action Councils with community stakeholder members
- Train at least 20 members using an existing curriculum to increase their capacity to serve as Patient-Centered Outcomes Research partners
- Identify cancer-specific Patient-Centered Outcomes Research needs among racially and socioeconomically diverse SGM adults through focus groups
- Develop a report of cancer-specific research priorities generated by the SGM Cancer Action Councils and informed by the data collected from the focus groups
- Create a network of cancer researchers interested in SGM Patient-Centered Outcomes Research to whom these research priorities will be disseminated.

Karmanos Cancer Institute’s LGBTQ HealthLink project was selected for PCORI Engagement Award funding for its commitment to improving the capacity for patients and other stakeholders to engage in patient-centered research and its potential to increase the usefulness and trustworthiness of the research PCORI funds,” said Jean Slutsky, PCORI’s chief engagement and dissemination officer. “We look forward to following the project’s progress and working with Karmanos Cancer Institute and Wayne State University to share the results.”

There is emerging evidence that sexual and gender minorities are disproportionately burdened by cancer, Dr. Thompson said. “This partnership and project to build Cancer Action Councils in LGBTQ communities is a crucial step in addressing cancer disparities in screening rates, age of diagnosis and quality of life for survivors in SGM communities. Cancer Action Council members will develop research priorities, implement research and obtain data that can move health policy forward, improving the lives of LGBTQ community members impacted by cancer.”

“The most important thing about Detroit HealthLink and the LGBTQ Cancer Action Councils is that people impacted by cancer who identify as LGBTQ have a unique opportunity to engage with cancer specialists. Only in the state of Michigan does this opportunity exist, which allows us to share intimate experiences with people who can help us and others like us, therefore reducing hardship and stress to this ever-increasing problem,” Lipscomb said.

“Partnering with Sexual and Gender Minority Communities to Address Cancer Disparities in Detroit” is among a portfolio of projects that Patient-Centered Outcomes Research Institute has funded to help develop a community of patients and other health care stakeholders who have the knowledge, skills and partnerships to participate in and advance patient-centered outcomes research and patient-centered comparative effectiveness research.

Hayley Thompson, Ph.D., has expanded the Detroit HealthLink for Equity in Cancer Care to include the LGBTQ community.
Wellness project for refugee women and children uses dance, art and yoga to foster healing from trauma
“I was a dancer, but then I quit.”

The words are spoken quietly by a 12-year-old boy from the Togolese Republic in Africa who moved to Michigan three months earlier. He loves to dance. He danced a lot at home. And now here, in Detroit, in a well-lit, window-lined room on the third floor of a medical office building on a hot summer day in August 2017, he dances again. He stumps his feet, spins on one foot, then leans his body back at a 90 degree angle, knees bent, one hand on the ground, the other reaching into the air, above his head. In one swift movement, his right leg circles counterclockwise toward the other. He springs upright, never missing a beat as he grooves with abandon to Taylor Swift’s self-empowerment anthem “Shake It Off,” playing from an iPhone nearby.

“I like it here,” he said.

The boy, Onction, was one of a dozen children between the ages of 7 and 12 who spent time with his peers once a week dancing as part of a wellness project for refugees. “Here” is the Wayne State University School of Medicine’s Tolan Park Medical Office Building, where in the summer of 2017 WSU researchers teamed with the Michigan-based refugee resettlement nonprofit Samaritas to pilot three creativity-based behavioral interventions for refugees now living in metropolitan Detroit after fleeing a number of countries, including Syria, Iraq and Onction’s Togo.

The 10-week program helps newly-arrived mothers and children connect with other refugees in their new home and work out their emotions regarding their journey and related trauma through weekly 90-minute classes. The classes launched in June 2017, included dance classes for children ages 7 to 12, art therapy for adolescents 13 to 17 and yoga for women 18 and older.

The project was supported by Samaritas’ School Impact program and Trauma Support team. Samaritas is the largest refugee resettlement organization in Michigan and the fourth-largest in the country.

“This is the only time she gets out of the house,” said Janet Donahue, who runs the Survivors of Torture program at Samaritas. “It is meeting a need and providing emotional support and tools to deal with the effects of trauma.”

Organizers aim to provide the women and children relaxation and social support while also reducing symptoms of anxiety, depression and post-traumatic stress disorder, said Lana Grasser, a WSU School of Medicine Translational Neuroscience Program graduate student who taught the dance portion of the program.

Grasser is focused on non-pharmacological approaches to stress in refugees, and is a member of the research team led by Assistant Professor of Psychiatry and Behavioral Neurosciences Arash Javanbakht, M.D., the principal investigator of “Risk and Resilience in Syrian Refugees,” a related study launched in late 2016 that measures the impact of violence on Syrian refugee children and families.

Results of the ongoing study to determine the mental health impact and biological correlation of civil war trauma on Syrian refugees now living in the United States showed that 30 percent of adult refugees experience post-traumatic stress disorder and 50 percent experience depression. In addition, 60 percent of Syrian children show signs of anxiety because of the trauma – very likely impacted by their mother’s PTSD, Dr. Javanbakht said.

One goal of the study is to provide culturally-tailored intervention and treatment for the affected refugees, hence the wellness project.
"I LIKE IT HERE."
“I am absolutely thrilled for our team to be starting this program serving our refugee community. As the state with the second-highest acceptance of Syrian refugees, and ranking in the top 10 overall in the United States for accepting refugees worldwide, these programs are certainly necessary for this community,” Grasser said. “We have also applied for an institutional review board to add a research component to this study, and as we apply for multiple grants we hope to be able to fund this work to expand these programs and continue to offer them in 12-week cycles to more individuals.”

WSU art therapist Holly Feen-Calligan and Blue Moon Wild Yoga Studio owner and instructor Nicole Teufel taught the art and yoga classes, respectively.

“The feedback from the women has been really wonderful,” Teufel said. “They are cutting loose in a way they’ve never done before.”

About 12 women on average attend each yoga session, many hesitant about participating. Yoga isn’t something most of the women had experienced.

“There has been a very slow process of softening in the group,” Teufel. “A practice like this takes a lot more time to lower their anxiety level. It allows them to soften that boundary a little longer. There are moments of safety.”

In yoga class, Nawal, a mother of three adult children, feels as if she’s connected to another world when she closes her eyes.

“I have time for myself,” she said.

She moved to the United States from Iraq on Aug. 10, 2016. A year later, she still has trouble sleeping at night. “Life is nice and quiet (now). Our life in the other country is war. Our life in Iraq is not peaceful,” she said.

The regulars include an older woman who spent the first few yoga classes simply sitting in a chair to the side, quietly observing.

“She was so resistant in the beginning,” Teufel said. Later, “she hugged one of us and said how much she was enjoying it.”

"They are cutting loose in a way they've never done before."
I AM

COMMITTED TO

COMMUNITY CARE!
"THE CLINIC CREATES A PORTAL FOR INDIVIDUALS WHO ARE ON THE EDGE OF SURVIVAL AND THE MARGINS OF SUSTAINABLE LIVING TO RECEIVE EVEN RUDIMENTARY MEDICAL CARE."
Caring for the underserved and uninsured people of southeast Michigan and around the world has become the calling card of the medical student attracted to the Wayne State University School of Medicine.

“We believe in service. We believe in meeting—and surpassing—the health care needs of diverse communities,” said School of Medicine Dean Jack D. Sobel, M.D. “It’s at the heart of what we do and why we do it, in research, education and clinical care.”

Equal health care and access for the city’s people, in particular the homeless, the elderly, and children and families who are less fortunate, is a regular battle cry for the physicians and faculty of the school. That joy for care, service and selflessness is reflected in the caliber of students who choose to come to Wayne State, he added.

Those students have been volunteering in medical clinics throughout the city and metropolitan region for as long as many faculty and alumni can remember. Community service has been embedded in our school’s DNA since our foundation in 1868, through our curriculum design, community engagements and outreach initiatives at 70 clinical and 100 outreach locations throughout southeast Michigan. In 2018, those traditions continue, but the efforts are more focused, organized and impressive than ever, leading to an unparalleled level of clinical competency.

“Wayne State University School of Medicine students excel clinically. They have seen and responded to challenges and situations most medically students around the nation only read about. Our students are known for their clinical competence and have a reputation for excellence you don’t see elsewhere,” Dr. Sobel said.
Community members speak with medical students at a church-based clinic in Detroit.
WSU continues to lead the way among its peers, just as it did 10 years ago, when the first student-run free clinic opened in Michigan. The Robert R. Frank Student-Run Free Clinic in Detroit is just example of learning urban clinical excellence and delivering the promise of equal health care for all. The clinic was first proposed by a member of the Class of 2008, and eventually founded in 2009 by the School of Medicine's Class of 2012.

That year, the student governing body officially recognized the Robert R. Frank Student-Run Free Clinic, named in honor of a School of Medicine dean known for his commitment to the underserved. These efforts culminated in the grand opening of the clinic in the summer of 2010.

The clinic – open from 9 a.m. to noon Saturdays inside Mercy Primary Care – has provided free primary and preventive care, medications, laboratory services, mental health counseling, nutrition counseling, alcohol and smoking cessation, and social work to uninsured patients in Detroit ever since. The clinic is solely supported by sponsorships, donations and fundraisers, with 100 percent of funds raised going to patient care and operational costs. Mercy Primary Care donates its facilities. In recent years, more than 200 students and nearly 20 WSU Family Medicine physicians volunteered more than 200 hours on average, serving about 40 patients for a total of about 130 visits annually. In one year, the clinic helped transition 19 patients to insurance programs after learning they met the requirements for state and federal plans.

The Frank Clinic is one of many free clinics that WSU students either run or volunteer at, always directly supervised by senior faculty physicians, residents or other health care professionals, including nurse practitioners.
That's the case with Street Medicine Detroit, which was founded by the Class of 2015’s Jonathon Wong, M.D., with guidance from the founder of the Street Medicine movement, Pittsburgh’s Jim Withers, M.D., and local supervision from Dean Carpenter, a certified nurse practitioner affiliated with the University of Detroit Mercy.

In partnership with the Neighborhood Service Organization and Southwest Solutions, Street Medicine Detroit delivers health care and related services directly to the city’s homeless, who are often service-resistant and staying in temporary shelters or living on the streets. The medical students visit the homeless twice a week with social service providers, are supervised by Carpenter, and perform basic health procedures such as checking vitals, testing blood glucose levels, answering medical questions and distributing medications as needed.

The group's goal is to improve health outcomes in the underserved population and reduce emergency department visits and costs. The number of patients treated by the students as of 2017 was 776, while the number of encounters is 1,128.

“We are seeing repeat patients, which is great for continuity of care and rapport,” said Class of 2017 graduate Esther Chae, M.D., who joined the student organization in 2013.

The organization received WSU’s inaugural Spirit of Community award in 2017 in the Project Engagement category and the Dr. Arthur L. Johnson Community Leadership Award from the WSU Office of Government and Community Affairs in 2015.
The Cass Student Health Clinic Program, or Cass Clinic, is another School of Medicine clinical tradition, providing free physical exams, disease prevention and screenings, patient education and medication refills to those who need it most, from individuals to families. The clinic operates in Detroit every Saturday from 9 to 11:30 a.m. at 3745 Cass Ave., and at the Cass Expansion Clinic every Wednesday from 4:30 to 6:30 p.m., at 11850 Woodrow Wilson St. Both are staffed by medical student volunteers and an attending physician. The clinic is an opportunity for WSU medical students to gain first-hand experience with patient care, and is sponsored by The Aesculapians, a service-oriented student organization of the School of Medicine. The Cass Clinic is organized and operated by seven medical student coordinators each year.

The same clinic also hosts Sight Savers, a student-run ophthalmology group that provides free eye exams, and Food Medicine, a student-run nutrition group.

Like the Robert R. Frank Student-Run Free Clinic, Cass Clinic operates almost exclusively through donations.

Medical students are a gateway to health care for all by volunteering at various community health events throughout the year, including this event on the Detroit riverfront.
Another longtime student-led clinic is Project H, a bimonthly clinic established by first- and second-year homeless students in 2000 at the Wayne County Family Center in Westland, Mich. The center is the only homeless shelter in Michigan that allows families to stay together, with Project H catering specifically to shelter residents. Students practice taking histories and perform physical exams, and present their patients—adults and children—to Wayne State University physicians.

“Students can easily get lost in the hustle and bustle of medical school and lose sight of why they entered medical school in the first place, and this is where Project H is a great opportunity to remind us all that we came to Detroit to serve the community and take care of those in need,” said Edward Rooney, M.D., an alumnus who served as a clinic coordinator as a student. “Project H offers the ability to directly connect to Detroit and the community, and truly make a difference in someone’s life, even in your early years as a medical student.”

The aforementioned initiatives are only a sample of the clinical volunteer experiences students can participate in and learn from while pursuing their medical education at the School of Medicine. In all, medical students can volunteer in and earn Co-Curricular Program credits at 75 clinical locations in Detroit and the surrounding area.
CLINICAL LOCATIONS
- Farmington Hills
- Southfield
- Ferndale
- Livonia
- Dearborn Heights
- Westland
- Taylor
- Romulus
- Southgate
- Troy
- Birmingham
- Pontiac
- Sterling Heights
- Detroit

MENTORING & OUTREACH LOCATIONS
- Farmington Hills
- Southfield
- Ferndale
- Livonia
- Dearborn Heights
- Westland
- Taylor
- Romulus
- Southgate
- Troy
- Birmingham
- Pontiac
- Sterling Heights
- Detroit
Wayne’s educational model of community service-based care encourages students to lead change for a better world

By Andrea Westfall

For 150 years, the Wayne State University School of Medicine has prepared students to be health care leaders and advocates who go on to change the world, with an educational experience focused on urban clinical excellence.

Service to the people of Detroit is woven into every facet of the medical education curriculum to compliment the School of Medicine’s mission to provide local investment in the Detroit community while preparing future physicians to care for the health care needs of diverse patient populations. As such, medical students annually serve at more than 70 clinical sites and nearly 100 community-based mentoring and outreach locations, and participate in a growing number of public health policy and advocacy opportunities.

Every WSU medical student acquires an unprecedented understanding of, and collaboration with, Detroit’s vulnerable population through coursework, programs and initiatives. In 2016, Year 1 and Year 2 medical students completed more than 34,000 hours of community service, underscoring WSU’s commitment to those outside the campus borders.
Students are making an impact in the community by participating in Co-Curricular Programs with student organizations such as Street Medicine Detroit, which delivers health care directly to the city’s homeless.

In 2017, students engaged in 1,128 ENCOUNTERS with 776 PATIENTS through the organization.

The Robert R. Frank Student Run Free Clinic, founded by WSU medical students in 2009, was Michigan's first student-led free clinic.

In 2016, more than 200 STUDENTS and nearly 20 WSU FAMILY MEDICINE PHYSICIANS volunteered more than 200 HOURS, serving 42 PATIENTS for a total of 130 VISITS.

Elsewhere, the Interprofessional Team Home Visit Program conducted home care visits with more than 450 ADULTS 65 and older annually.
On campus, medical students of the WSU Class of 2020 developed a training program titled Urban Clinical First Encounter and produced a series called “First Aid First” – original videos to introduce the incoming Class of 2021 to the service-learning component of their coursework and, in turn, educate the community at large.

The Urban Clinical First Encounter training was hosted by the Class of 2020 during the Class of 2021’s freshman orientation. Training was supervised by WSU Department of Emergency Medicine medical residents and physicians.

“The aim of our training is to provide a Detroit-centric exposure to first aid to both the incoming Wayne State University School of Medicine Class of 2021, as well as to the community as a whole,” said the Class of 2020’s John Condello. “We want to ensure that all medical students have both the confidence and the training necessary to respond to basic emergencies from the very beginning of medical school, and that training will provide a foundation for understanding emergency response in an urban environment. These students will then build on this foundation during their time at the School of Medicine.”

The project aligns with the School of Medicine’s Service Learning requirements for clinical service, with students earning three of their required 10 clinical hours, said Co-Curricular Programs Director Jennifer Mendez, Ph.D.

The videos demonstrate what to do and when regarding topics such as seizures, cuts and burns, hypothermia, broken bones, heart attack, diabetic issues and more.

“Basic first aid is one of the foundations of medicine, along with hygiene and public health. Our goal with this program is to prepare students with the basics of caring for others, right from the beginning of medical school,” said Assistant Professor of Emergency Medicine Kristiana Kaufmann, M.D., the lead faculty physician assisting with the student project.

The class developed a community arm of the project during the 2017-2018 academic year. The community training component supports the sustained effort of the School of Medicine and the Department of Emergency Medicine faculty to increase the emergency preparedness of the community. In 2017, physician and student volunteers, including Condello, taught free first aid training at community organizations and public schools, including Auntie Na’s House in Detroit. The community center also hosts a free clinic run by School of Medicine students.

“Detroit has historically had an extremely low level of bystander-initiated CPR and first aid. We will work on refining and improving this training across time in order to bring high-quality first aid education to every Detroiter that is interested,” Condello said.

The training teaches improvised techniques to applying personal protective equipment, splints, tourniquets and more in the case that standard medical equipment is not readily available. For example, a folded magazine and a scarf or belt can be used as a makeshift splint and arm sling.

Volunteers also taught community members about how to treat nosebleeds, head injuries, seizures, shock and more.

“We also address several aspects related to Detroit’s unique urban setting, as well as diversity and inclusion,” said David Gelovani, Class of 2020 vice president and medical clinic coordinator for the Community Homeless Interprofessional Program Clinic at the Cathedral Church of St. Paul in Detroit.
AN ENHANCED, EXPERIENTIAL, AND EXCEPTIONAL CURRICULUM

Each new class at the medical school participates in service-learning activities that include everything from tutoring children at community centers to working at urban farms.
The Wayne State University School of Medicine launched a Year 1 curriculum revision that provides students with an even more enhanced, experiential and exceptional curriculum. The goal is to provide Warrior M.D.s the best student experience possible—a learning environment informed by extensive research, analysis and review that will provide them with a unique set of tools, skills, knowledge and experiences that will position them as leaders among their peers, here in Michigan and beyond.

The transformed curriculum will be enhanced, experiential and exceptional. It provides students with an organ systems-based curriculum that blends and reinforces basic sciences and clinical experiences from day one, integrating classroom, self-directed learning and small-group learning with clinical skills, cases, experience and training; a deep and authentic understanding of health needs and social determinants among various populations; multiple ways to take advantage of experiential service learning, community engagement and research opportunities via individualized elective tracks and strong academic, health care and community partnerships; a longitudinal focus on professionalism that stresses quality and compassionate care, cultural competency and leadership; and continuous quality improvement and assessment efforts that help ensure the best student experience possible.

Our community service roots run deep within our massively revitalized city, and our focus on a healthier world grows ever stronger. Through social responsiveness and a continuous focus on innovation in education, research and clinical care, the Wayne State School of Medicine will continue to graduate a diverse group of physicians and biomedical scientists who will transform the promise of equal health and wellness for all into a reality.
BETTER TOGETHER

Nursing

Medical

Pharmacy

Physical Therapy

Occupational Therapy

Social Work
Treating the whole patient: Students collaborate in community care

By Andrea Westfall

Wayne State University’s urban location provides students unparalleled access to diverse populations and exposure to health challenges absent in other cities. In addition, School of Medicine students receive unmatched opportunities to partner with other health science majors across the university, including pharmacy and nursing in real-life settings. WSU’s long history and collaborative strength in these and all of its 13 schools and colleges allows for an even larger impact on the community when its students work together to understand the unique needs of the whole patient, taking socio-economic issues such as culture and population disparities and more.

Together, these students collectively and collaboratively understand how to best treat individual patients and have a larger impact in the community.

Interprofessional Team Home Visit Program (IPTV)

IPTV, an award-winning collaborative approach to patient care groups, allows WSU health professional students to conduct home care visits with more than 450 adults age 65 and older annually, introducing them to the demands of assessing older adult health and social needs in a home environment.

The program, founded in 2008, brings together medical, pharmacy, nursing, occupational therapy, physical therapy and social work students, teaching as many as 750 students a semester or more a team-based approach to health care that puts the patient at the center of an integrated web of care.

Specifically, students conduct one-hour visits with patients, asking questions about daily activities,
nutrition, medications, family health and social support. Third-year pharmacy students conduct a follow-up visit with recommendations. Medical students use assessment tools to evaluate seniors’ nutrition and functional and cognitive abilities. Pharmacy students address medication use and management, and social work students discuss and evaluate social networks. Overall, students learn about aging issues through the real-life interaction.

From a patient perspective, it allows for patients to see a wide variety of health care professionals in one setting, more connected care... etc.

Interprofessional Team Home Visit Program participant Clyde Mitchell, center, speaks with, from left, Master of Social Work student Vernice Danna, Physician’s Assistant student Kendell Gjetaj and medical student Allie Patterson, during an in-home visit about his health.

Interprofessional health care teams improve patient outcomes and safety, health care delivery, decrease the number of medical errors and lower the cost of patient care,” said Jennifer Mendez, Ph.D., director of the School of Medicine’s Co-Curricular Programs and a driving force behind IPTV.

For students, this approach allows for a much deeper understanding and appreciation of other health care professionals who similarly play an important role in the patient’s life.

“This program is preparing students for their future role as part of the health care team,” said Jennifer Mendez, Ph.D., director of the School of Medicine’s Co-Curricular Programs and a driving force behind IPTV. “It also provides an opportunity for them to learn from patients about what they would like to see in their practitioners.”

Based on a survey, 99 percent of students agreed the project helped them improve teamwork skills for learning; 93.8 percent agreed participation made them more effective in conducting patient assessments in a home environment and their impact on patient outcomes.

While IPTV goes directly into homes throughout metropolitan Detroit, the School of Medicine’s Community Homeless Interprofessional Program Clinic takes assistance to church.

COMMUNITY HOMELESS INTERPROFESSIONAL PROGRAM CLINIC (CHIP)

Founded in 2014, the CHIP clinic provides free monthly care and health education for the homeless through a partnership with the Cathedral Church of St. Paul in Detroit, and WSU medical, pharmacy and social work students.

“The clinic creates a portal for individuals who are on the edge of survival and the margins of sustainable living to receive even rudimentary medical care. It is a portal to address what, to others, may seem simple, but which to them, impact survivability and quality of life that most of us cannot imagine,” said church leader the Rev. S. Scott Hunter. “It opens the eyes of future health care practitioners to the realities of the human condition that, at best, we wish did not exist, and at worst, our systems heighten.

“It also provides a modeling to all connected by faculty and other mentors that ‘making it’ means caring for those who systems marginalize or bypass, thereby defining success and leadership in ways not often embraced in our culture,” he added.

Thanks to faculty member supervision and community volunteers, students are able to consult monthly with patients on common health conditions such as hypertension, diabetes, respiratory disease, seizure
99% of students agreed the project helped them improve teamwork skills for learning.

93.8% agreed participation made them more effective in conducting patient assessments in a home environment and their impact on patient outcomes.
disorders, mental health issues and substance abuse. Students also offer education and assistance to patients on housing, safety and more. From 2015 to 2017 alone, WSU students evaluated 223 homeless individuals.

“The biggest motivator is how much of an impact you are able to have in peoples’ lives. Just seeing the progression and watching patients be able to get back on their feet or just being able to make that human-to-human interaction with a patient that otherwise might not have been able to seek medical care,” said pharmacy student Megan Kucemba.

Their work is being recognized by patients in the community and by peers on Wayne State University’s campus. The program received Dr. Arthur L. Johnson Community Leadership Award from the WSU Office of Government and Community Affairs in 2016. The award, named for the late civil rights leader, honors individuals and organizations whose contributions positively affect the community.

“Even if we can get nothing done dramatically to change their lives, we care and we listen, and they know it,” said Associate Professor of Medicine and Director of Subinternship and Ambulatory Programs Joel Appel, D.O.

### DIABETES EDUCATION AND WELLNESS CLINIC (DEW)

Although health conditions seen at CHIP are varied, some of the School of Medicine’s interdisciplinary community outreach is rather focused. Take the Diabetes Education and Wellness Clinic for example, another free student-run clinic that provides diabetes management strategies and treatment plans to optimize health for Detroiters through the Super All Year, or SAY, Detroit Family Health Clinic, founded by author and Detroit News columnist Mitch Albom, at Detroit Rescue Mission Ministries.

Founded in 2011 to answer Detroit’s diabetes epidemic, the clinic seeks to expand access to health care services for uninsured or underinsured individuals with type 2 diabetes while enriching the educational experiences of students.

The clinic is a collaboration involving several disciplines. With the support of faculty and staff from different departments and through interdisciplinary coordination, the clinic provides well-rounded free education about the many aspects of type 2 diabetes to individuals in the community. There has been a steady increase in the number of patients receiving education at the clinic. More than 50 faculty and preceptors supervised nearly 200 medical students in 2016. That same year, Class of 2018 graduate Nathan Nartker won honors at the American College of Physicians, Michigan Chapter scientific meeting for a poster about the use of an Interprofessional Treatment Summary Assessment to Improve Diabetes Education and Compliance.

As the then-medical school coordinator at the clinic, he could see areas where changes could benefit the clinic and, more importantly, the patients, he said, and decided to explore the subject more.

Nathan Nartker, M.D. won honors at the American College of Physicians, Michigan Chapter scientific meeting for a poster about the use of an Interprofessional Treatment Summary Assessment at the Diabetes Education and Wellness Clinic.
PUTTING THE COMMUNITY INTO RESEARCH

Partnering with targeted populations at the start key to addressing health disparities

By Philip Van Hulle

Cardiovascular disease is the leading cause of death in the United States and cancer is the second, with higher rates of diagnosis and death in metropolitan Detroit compared to the state of Michigan and the nation. Diagnoses and deaths from these diseases are higher among African-Americans compared to other racial and ethnic groups.
Yet the approach to addressing these problems, and many other health issues and disparities, has typically been “top-down,” with decisions about research, methods and assessments often made without input from the communities that could be affected by that research.

Wayne State University is reversing that pyramidal structure by enlisting the community and relying upon its input at the very starting gate of research projects. Phillip Levy, M.D., M.P.H., the Edward S. Thomas Endowed Professor of Emergency Medicine, is one key WSU innovator responsible for changing the formula. Appointed assistant vice president of Translational Science and Clinical Research Innovation for Wayne State University, Dr. Levy is directing the transformational shift that will develop centralized, horizontally-integrated resources to support clinical research university-wide influenced by community engagement.

“We’re looking at a completely different vision: fully integrating a community and university to solve health care disparities and inequities,” said Dr. Levy, who also serves as associate chair for Research in WSU’s Department of Emergency Medicine. “We will have all oars rowing in the same direction. This includes our partner health care systems and the city of Detroit, with whom we are now collaborating on a number of initiatives. In short order, WSU will be the go-to source for appraisal of, and solutions to, regional population health issues.”

Much of this work is being conducted in WSU’s Integrative Biosciences Center, or IBio, the hub of campus-wide research aimed at improving health and health care for Detroit and southeast Michigan. Envisioned as a partnership with the community, IBio is a focal point for WSU faculty to work with funding agencies and industry partners on the design and conduct of clinical research involving innovative methods, drugs and devices.

The overarching goal is to work with community advisory boards comprised of individuals who are living with chronic medical conditions such as hypertension to determine the direction of the university’s clinical research, helping to ensure that studies and discoveries are applicable and available to community members. Success will be marked by the development of new research and ideas at WSU that will have a meaningful impact on the population of Detroit.

“One of our greatest strengths as an academic institution is our patient population,” said Dr. Levy. “Detroitters suffer from substantial health disparities that we should be concentrating on. In conjunction with input from the community, our focus will be to
improve health and promote wellness. We need to be a university for Detroit, not just in Detroit.”

Critical to the transformation is public participation in the form of “deliberative democracy,” a process championed by Parada Jordan, director of the Office for Community Engaged Research at iBio. Working with the Center for Citizenship founded by Marc Kruman, Ph.D., professor of History, an entity whose mission is to serve Detroit residents by fostering engagement and evaluation, “especially those of democratic action and deliberation,” this approach allows community-based citizenship to flourish for the sake of improving public health. As Dr. Kruman explained, with iBio acting as a hub to facilitate activities and interactions between the community and the university, “we have the opportunity to develop avenues by which residents, WSU and other organizations can learn from each other to improve community health, assisting in the attainment of knowledge to inform new health-related practices.”

As an example, Dr. Levy pointed to an effort to map blood pressure data across the city of Detroit to identify areas with concentrations of uncontrolled hypertension. Using this approach, population pockets at high-risk can be targeted and community relationships, such as those with community
churches, can be leveraged to effect change. Working with its hypertension community advisory board, Dr. Levy’s team, in partnership with the Greater Detroit Area Health Council and the Midwest Affiliate of the American Heart Association, designed an intervention to disseminate education and materials related to high blood pressure control to community members using family matriarchs and patriarchs as trusted sources of information.

“Our advisory board told us they’d like to get community leaders and family members, not health care providers, to deliver that type of education,” he said. “When we hear that type of information from people we trust, it becomes more effective. We want our community to become part of a culture of health.”

As assistant vice president for Translational Science and Clinical Research Innovation, Dr. Levy is charged
The reality is we want people to be healthy.

with providing support for clinical research across the university. His goal is to drive grant submissions and proposals developed by investigators in critical thematic areas that impact population health under the guidance of community advisory boards. In this way, WSU will be aligned with, engaged in and informed by the community in its research efforts. Resources available to WSU faculty to support this vision at iBio include expertise for development of clinical trials, including early- to late-phase drug and device studies, as well as designing and conducting epidemiological studies. Such expertise, and the personnel and computing capabilities needed to compile, curate and analyze massive data sets, and perform complex biostatistics including population-level genomic and epigenomic analyses, have been made possible through the newly formed Biostatistics and Epidemiology Design Core. In addition, there is the capacity to collect and store thousands of samples in WSU’s biospecimen repository, providing ready access to patient populations for projects such as novel biomarker discovery.

To help ensure ongoing funding, Dr. Levy has also created an industry-facing entity aptly called Research One at Wayne, or R1@Wayne. “The goal of R1@Wayne,” he said, “is to provide a one-stop shop for industry partners seeking to conduct research, which can in turn lead to growth in our technology commercialization potential. Industries seeking to test new drugs and devices can contract with WSU to conduct clinical trials across a coordinated network of regional health care systems, with all operations conducted out of a centralized location. As evidenced by secured contracts in excess of $2.5 million already for such work, industry is hungry for such opportunity and the prospects for R1@Wayne are promising.”

“The reality is we want people to be healthy. Part of living in a culture of health is knowing why you want to be healthy. Staying healthy allows people to be vibrant contributors to family, providing emotional and physical support, and to the tax base, which helps schools and community services, bettering the overall quality of life, and prospects for the future,” Dr. Levy said. “A healthier population also decreases dependence on health care systems, reducing the amount of money and time spent on medical care, enabling direction of such resources to other community needs.”
Medical students learn early how to be a leader and advocate for their future patients

The Wayne State University School of Medicine’s Medical Political Action and Public Health Leadership program is one of the only medical education initiatives in the country with a year-long curriculum focused on public health care advocacy and leadership development.

MPAC provides up to 75 medical students a year the knowledge and opportunity to influence health care policy at local, state and federal levels. The program focuses on a multi-faceted approach to becoming a health care advocate, including discussions on issues affecting patient care, the business of medicine, how to communicate issues to lawmakers and effective leadership.
The program schedule includes two lectures per month and an annual Advocacy Day in Michigan’s capital of Lansing.

“Whether they know it or not, whether they want to or not, medical students will be leaders throughout their career. They will be leaders in medicine, their community, with their colleagues and with their medical teams. The only question is whether they will be an effective or ineffective leader,” said School of Medicine Associate Vice President of Government and Community Relations Douglas Skrzyniarz, who oversees the MPAC program. “MPAC is an opportunity for students to begin their journey of leadership development and expose themselves to topics that are not
normally covered in medical school. With the potential of influencing thousands of people throughout their careers, it is important to provide medical students with a primary understanding of how public policy affects health care, how they can most effectively impact health policy if they so choose and how health policy affects their patients.”

Lawrence Chen is part of MPAC’s 2017-2018 group, and joined to learn more about advocating for his future patients. He attended the most recent advocacy day held last November in Lansing.

“A lot of our stakeholders don’t get a voice. Our job is to be here and help speak for them, especially when they need it most,” Chen said.

Multiple resolutions written by MPAC students have been adopted by Michigan’s medical association; others have been presented and debated at the national level. Most recently, the students talked to legislators about the need for more residency slots in Michigan. The number of slots has not increased since 1993, despite a regular increase in medical school graduates since then.

“Our ultimate goal is to increase residency programs – Graduate Medical Education – for the graduating medical students, so physicians who get trained here, stay here,” Grace Mahasi, a first-year student.

Their experiences can go beyond advocacy day, with additional opportunities offered as they arise. For example, WSU’s MPAC students have hosted a congressional hearing on post-traumatic stress disorder; lectures and meetings with U.S. senators, the White House director of National Drug Control Policy, state legislative committee chairs and Michigan's Medicaid director; and a human sex trafficking victim’s presentation.

“My decision to attend the Wayne State University School of Medicine revolved around the fact that no other medical school comes close to providing the
opportunities that WSUSOM provides to become community leaders and engage with our future patients,” said Class of 2019 medical student Kaitlyn Dobesh, J.D. “A large factor in my decision was the MPAC program. It illustrated to me that the school is serious about molding future physician leaders who not only exemplify the human aspects of medicine through community-based clinical opportunities but who also know how to navigate the complexities of being an effective advocate outside of the clinic.”

Dobesh is one of nearly 100 students in the program in 2016-17 who educated Michigan lawmakers during Advocacy Day last year in Lansing about a proposed mental health care cut to a fund that would have devastated a vulnerable community and reduced funding for psychiatric residencies in Detroit. The fund was established by the Wayne State University School of Medicine Department of Psychiatry and Behavioral Neurosciences to care for patients left without care – most on Medicare or Medicaid – when state institutions closed many years ago.

“When we went to our meetings with the legislators, not a single legislator I talked to was aware of the cut. It was apparent that restoring this funding was a bipartisan issue, as long as we could educate as many lawmakers as possible on what the money was going toward,” she said. “We truly were able to make a difference because of the training and education we were provided.”

MPAC is one option within the school’s Co-Curricular Program. Students are required to attend at least 10 hours of lectures out of about 15 lectures offered during the academic year. The class meets twice a month, with one lecture by Skrzyniarz and another by a guest.

“The discussions open our eyes to disparities in health care we were previously ignorant of and give us a platform to do something about them. If you stay after a seminar is over, the true effect on students becomes apparent,” Dobesh said. “Wayne MPAC is not a passive program. There will always be groups of students still actively involved in discussion on the topic, forming plans to write resolutions to the American Medical Association or contact student organizations that may have a role in making a difference. The conversations continue throughout the halls and lead to advocacy in practice.”
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