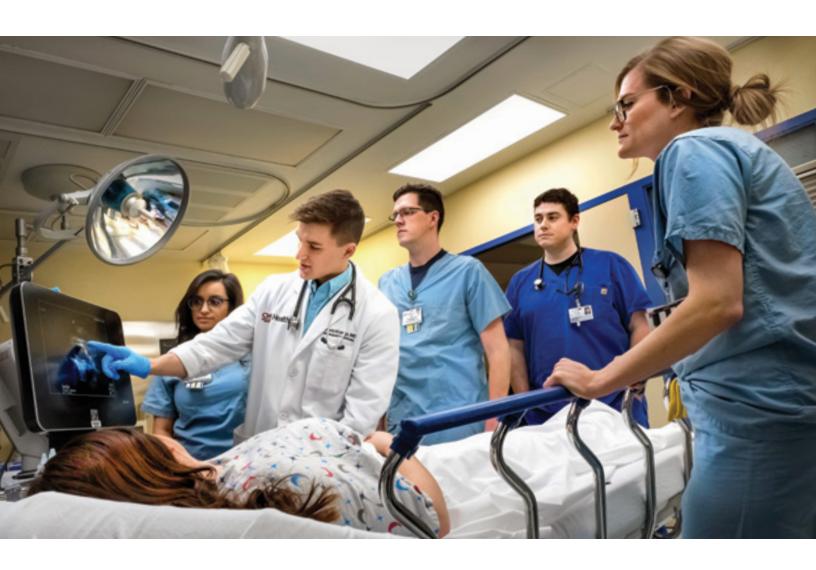
### CMU COLLEGE OF MEDICINE ANNUAL REPORT 2018-19



# FOCUSED ON OUR HEALTHY FUTURE





### OUR MISSION

The Central Michigan University (CMU) College of Medicine educates diverse students and trains culturally competent physicians to provide comprehensive health care and services to underserved populations in Michigan and beyond. Our faculty, staff and graduates advance health and wellness through exceptional education, innovative research, quality patient care and strategic collaborations to improve the health and wellbeing of individuals and communities.

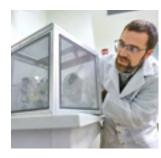
### OUR VISION

We will realize our bold vision by producing future generations of well-trained physicians, developing new solutions from innovative research, improving access to high-quality health care and forging strategic partnerships to build thriving communities and better lives for all people in Michigan.



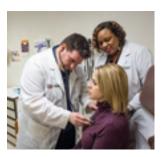
### **Education**

By preparing physicians for the future through the delivery of excellent medical education and clinical training, more people have access to quality health care. Students and residents receive the academic foundation necessary to advance their knowledge, critical thinking skills, clinical competence and professional development.



### Research

The College's foundational and clinical faculty foster research initiatives to advance science and improve individual and community health outcomes. Students and residents develop a strong sense of discovery, which leads to scholastic contributions.



### **Clinical Care**

Through accredited medical and residency programs, renowned faculty and state-of-the-art medical facilities, learners will develop the skills needed to deliver evidence-based, patient-centered care with respect and empathy. The health care services we provide contribute to improving individual lives for populations served.



### Social Impact

In collaboration with clinical and community partners, our state and the cities and towns in which we live, teach and care for patients are healthy and vibrant because of shared commitments to social responsibility. Together, we work to improve health care, wellness and economic outcomes by taking action to develop new, inclusive and progressive solutions.

### OUR VALUES

Integrity

Respect

**Empathy** 

Excellence

Inclusiveness

**Social Responsibility** 

Innovation

### A MESSAGE FROM **DEAN KIKANO**



I am pleased to report that the College made great progress this year because of dedicated efforts by our talented people and unified team. We are working across our organization, throughout the

University and in collaboration with our education, clinical training, health care and community partners to make a difference in the Great Lakes Bay Region and across the state.

The College of Medicine's blueprint for the future is fully aligned with CMU leadership and the University's Strategic Imperatives focused on fostering scholarly activity, strengthening partnerships in Michigan and beyond and nurturing student success.

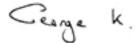
Recently, we redeveloped our mission statement and vision to more accurately reflect our present and path to a better future. This includes a commitment to further invest in our research programs with a particular emphasis on addressing issues unique to our region.

We strengthened our local presence with a new 25-year affiliation agreement with Covenant HealthCare. And we expanded our geographic footprint with a new affiliation agreement with Spectrum Health Lakeland. We have also added a new MD-MBA dual degree, expanded our residency program and improved the CMU Medical Education Partners organizational structure for long-term success.

CMU medical students, residents, physicians, faculty and staff continued to extend our reach through collaborative efforts with medical education, clinical and community partners to touch people's lives in positive ways. Sixty-nine CMU Health clinical providers and 121 residents and fellows are serving more primary care, specialty care and surgical patients than ever before. Many of our patients are medically underserved.

Together with our partners, we continue to lead on public health issues including opioid abuse, childhood trauma, mental health, suicide prevention, infant health and more.

This year, we will continue to build momentum to make a more significant and growing health care, community and economic impact as we improve health through academic medicine.



**George E. Kikano, M.D.** *CMU Vice President for Health Affairs Dean, CMU College of Medicine* 





### EXCELLENCE IN MEDICAL EDUCATION

### MD PROGRAM



The CMU College of Medicine focuses on recruiting students from Michigan who want to become doctors for Michigan. We provide medical education on two campuses located in Mount Pleasant and Saginaw, Michigan, and at other affiliate and regional campus locations.

The College offers a comprehensive approach to learning, where traditional coursework is enriched by hands-on

training through medical simulation, clinical rotations and community-based clerkships. This active teaching environment provides a real-world setting for expanding knowledge, honing patient care techniques and emphasizing the critical skill of medical decision-making. We now offer an MD-MBA dual degree and plan to provide additional options in the future.

### **CLASS PROFILES**

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
CLASS SIZE	64	104	104	104	104	104	104
TOTAL APPLICANTS	2,765	3,007	4,603	4,854	5,443	7,225	7,442
MICHIGAN APPLICANTS	1,131	1,195	1,307	1,248	1,227	1,391	1,369
MICHIGAN STUDENTS ENROLLED	57	95	80	78	81	78	85
UNDERREPRESENTED IN MEDICINE	0	1	15	14	13	12	11

Visit med.cmich.edu/mdprogram to learn more.

### COVENANT HEALTHCARE LONG-TERM AGREEMENT



A new 25-year affiliation agreement between the CMU College of Medicine and Covenant HealthCare (Covenant) in Saginaw strengthens collaboration in support of medical student education and research. The agreement provides a long-term commitment of resources and support for the College and is an affirmation that Covenant will serve as the primary site for medical education in the region. CMU medical students will continue to complete clinical rotations at Covenant facilities under the supervision of physicians who serve as CMU faculty members. The agreement also increases opportunities for clinical research on public and community health issues prominent in the Great Lakes Bay Region. Covenant is a regional leader for health care and an important partner to CMU for medical education and training. The organization has long recognized the critical role that medical education plays in community health. By cementing the relationship, communities and residents across our region and beyond will benefit from improved access to health care as we fill the critical need for medical professionals.

>80% In-state Students **98%** 2019 Match Rate **45%** 2019 In-state Match Rate

**71%** 2019 Primary Care Match Rate 48%
Incoming Class
Female Students

**52%**Incoming Class
Male Students

### **RECENT HIGHLIGHTS**



### Street Medicine

Medical student Samuel Jackson and Dr. Bethany Brown led students from the College of Medicine and The Herbert H. and Grace A. Dow College of Health Professions to begin a Street Medicine initiative to serve homeless and medically underserved people. Through a series of events in Isabella and Saginaw counties, students work with clinical faculty to provide free health screenings and basic care, and help patients connect with care providers to establish long-term relationships. The team's other goals include increasing the number of area physician volunteers and expanding the student pool to include physician assistants and those focusing on mental health.



### Spectrum Health Lakeland Affiliation

The College of Medicine expanded its footprint into southwest Michigan through a new affiliation. CMU students can now complete their clinical rotations at Lakeland Medical Center in St. Joseph and Lakeland Hospital Niles, along with other surrounding facilities. Last year, CMU medical students began taking part in Family Medicine rotations at Lakeland. Twenty-four students eventually will be based at Lakeland for the third and fourth years of their training. They will be exposed to highquality care and have the opportunity to learn alongside residents in Internal Medicine, Family Medicine and Emergency Medicine.



### **Technology in Medicine**

As health-related digital applications continue to evolve and more patients use them, physicians must keep pace. CMU students Brian Shear, Christopher Twilling and Caleb Pawl worked with several faculty members to create a curricular program to teach fellow students how to find, validate and assess the benefits of the most popular mobile health care applications. Students will learn about the science, ethics and legal considerations when using apps in health care, in addition to seeing how current data supports or refutes the use of medical apps in some situations.

### GRADUATE MATCH LOCATIONS 2018-2019

This year, the College graduated its third class of 102 medical doctors; 98 percent of the graduating class matched to residency programs. Seventy-one percent chose primary care and 45 percent elected to stay in Michigan for residency training.



### COMMUNITY-BASED MEDICAL EDUCATION AFFILIATES

Our presence in the Great Lakes Bay Region includes a new and growing campus in Midland, Michigan, at MidMichigan Health where 24 students complete clinical rotations in Emergency Medicine, Family Medicine (CCC), Internal Medicine, Obstetrics and Gynecology, Psychiatry and Surgery this year. The College's expanding network of regional campuses and more than 50 Comprehensive Community Clerkship (CCC) locations across the state and northern Ohio, provide unique perspectives for students and create opportunities to connect professionally and collaborate state-wide.

### **Local Affiliates**

- Covenant HealthCare
- Ascension St. Mary's Hospital
- · Aleda E. Lutz VA Medical Center
- Great Lakes Bay Health Centers
- HealthSource Saginaw

### **Regional Campuses**

- Ascension St. John Hospital
- MidMichigan Health
- Spectrum Health Lakeland

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### EVIDENCE-BASED CLINICAL TRAINING

#### RESIDENCY PROGRAMS



CMU's residency programs, led by CMU Medical Education Partners – which is a consortium that includes Covenant HealthCare and Ascension St. Mary's Hospital – builds upon the excellence of a 50-year legacy with highly respected program directors, faculty and staff supported by two area teaching hospitals.

Since inception, the program has graduated more than 800 physicians with an estimated 20 percent electing to remain and practice in the region. This year, the program graduated 33 trained physicians – seven of whom have elected to stay in the Great Lakes Bay Region.

In 2019, the program expanded by 8 percent, with 118 resident physicians and three fellows in training. Forty-one new residents and three fellows joined the program and were selected from 7,318 applicants. CMU's residency program is important to the region since many graduating residents choose to practice near the location where they completed their residency.

### **Residency Programs**

- Emergency Medicine
- Family Medicine
- General Surgery
- Internal Medicine
- Obstetrics & GynecologyPodiatric Medicine & Surgery
- Psychiatry

### **Fellowships**

- Child & Adolescent Psychiatry
- Emergency Medical Services

### **PROGRAM PROFILE**

	EMERGENCY MEDICINE	FAMILY MEDICINE			OBSTETRICS & GYNECOLOGY	PODATRIC MEDICINE & SURGERY	PSYCHIATRY	FELLOWS
2019 RESIDENCY GRADUATES	10	6	-	8	3	-	3	3
2019/2020 RESIDENTS IN TRAINING		18	8	25	15	6	18	3

Visit med.cmich.edu/residencies to learn more.

**30%**Residents from
Michigan Schools

**121**Resident Physicians & Fellows in Training

**48%**Female Residents

**8%**Annual Program
Growth Rate

**2020**First Year CMU
MD Graduates
Complete Residency

**52%**Male Residents

### RECENT HIGHLIGHTS



### New Child & Adolescent Psychiatry Fellowship

CMU's Child and Adolescent Psychiatry Fellowship program is new for 2019. Fellows benefit from working with leading faculty in general and specialized psychiatry with extensive experience in the effective treatment of child, adolescent and family issues. This includes a distinct focus on emerging practices in trauma-informed care and addressing adverse childhood experiences.



#### MIDOCS

CMU is among four Michigan-based medical schools that collaborated on the MIDOCS plan. It was developed to increase the number of medical residencies in the state - especially in Family Medicine, Psychiatry, Pediatrics and Obstetrics and Gynecology in underserved areas. Residents can apply for scholarship support of up to \$75,000 in loan forgiveness with a requirement that they work in underserved areas of the state for at least two years. The College has dedicated these positions in our Psychiatry Residency. Dr. Jisselly McGregor, a resident of Saginaw, Michigan, and a CMU MD program graduate, and Dr. Christopher Le, from Des Moines University College of Osteopathic Medicine, are the recipients this year.



### Internal Medicine Residency Program Accreditation

Our Internal Medicine Residency Program received continued accreditation from a 10-year site visit by the Accreditation Council for Graduate Medical Education. Dr. Nicholas Haddad, an internal medicine doctor and infectious disease specialist, was recently named program director.

### CONTINUING MEDICAL EDUCATION FOR PHYSICIANS & HEALTH CARE PROFESSIONALS

The College is accredited with commendation by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians, nurses and a variety of allied health care professionals. Learners benefit from education and training on evidence-based medical knowledge, patient care and procedural skills, practice-based learning and improvement, interpersonal and communication skills, professionalism, systems-based practice and values and ethics. In 2018, the program expanded to offer courses for osteopathic physicians, physical therapy and social work. Last year, accredited activities provided grew by more than 26 percent, with an increase of 34 percent in hours of instruction.





### **Medical Simulation Accreditation**

Recently, the College's two centers received accreditation from the Society for Simulation in Healthcare. CMU offers the most advanced technology including virtual reality simulation, high-fidelity manikins, clinical skills training, robotic surgery training, standardized patient and highly specialized scenarios. Accreditation puts Central among just four programs in Michigan and more than 110 accredited programs in approximately 20 countries. Last year, the College provided 3,772 simulations with more than 39,800 hours of instruction; served 14 institutions; taught 66 American Heart Association Courses; utilized 45 standardized patients for encounters; and facilitated 1,007 student certifications.

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### PATIENT-FOCUSED HEALTH CARE

### **CMU HEALTH**

CMU Health, with 69 faculty physicians and 121 resident physicians, provides care for patients from northern and central Michigan. With eight locations spanning the Great Lakes Bay Region, CMU Health is improving access to quality health care in Michigan with an emphasis on serving medically underserved populations. CMU doctors also provide care at 13 other clinical affiliate locations in the region and health care on campus for CMU students, faculty and staff.

CMU Health patients rely on our experienced providers for evidencebased, patient-centered primary and specialty care.

### **Primary Care**

- Family Medicine
- Internal Medicine
- Pediatrics

### Specialty Care

- Emergency Medicine
- Endocrinology
- General and Specialized Surgery
- Infectious Disease
- Obstetrics and Gynecology
- Podiatry
- Psychiatry

Our physicians and faculty also lead community health initiatives, address critical health care issues and advance research.



Visit cmuhealth.org to learn more.

**69** Faculty Physicians

**96%**Patient Satisfaction

70,500

Ambulatory Patient Visits

32,000

Primary Care Visits

32,062

Medically Underserved Visits

8,859

Surgeries Performed

**679**Babies Delivered

9,548
CMU Student
Acute Care Visits

**2,123**CMU Student
Behavioral Health Visits

8 CMU Health Clinical Locations

### RECENT HIGHLIGHTS



### Rehman Named Medical Director of Saginaw County Health Department

CMU Health's Dr. Najibah Rehman has been appointed medical director of the Saginaw County Health Department. As the top physician for Saginaw County, Rehman serves as a liaison among the county, community organizations, health care providers and allied health organizations. She continues to see patients at CMU Health while working with county health care providers to improve patient care and provide screening for preventable diseases.



### **CMU Health Expands Footprint**

The CMU Health footprint expanded into Saginaw Township by bringing the family practice of Dr. Lawrence LaLonde into its network of clinics caring for patients in the region. Dr. Wynee Lou, an internal medicine physician, Dr. Jennifer Romeu, a family medicine physician and 2019 graduate of CMU's Family Medicine residency program, and Joseph Sedlar, a nurse practitioner, lead the practice, which is open five days a week and is accepting new patients.



### New CenteringParenting® Program

In partnership with the Michigan Health Improvement Alliance, our new CenteringParenting® program brings 6 – 8 moms, partners, support people and their infants (age 0 – 2 years) together with their health care providers and other parents of sameage infants, who are experiencing similar milestones. Each visit begins with individual well-child health assessments, immunizations and developmental screenings. In group, moms monitor their own health goals and address fundamental topics including stress management, nutrition and weight and family planning. The program complements CMU Health's CenteringPregnancy® program which has demonstrated excellent results for patients in managing pregnancy, childbirth and the care of women through labor and delivery.

## ACADEMIC MEDICINE FOR THE GREAT LAKES BAY REGION



CMU College of Medicine and its clinical health care system, CMU Health, are leading academic medicine for the region in collaboration with our partner teaching hospitals, Covenant HealthCare and Ascension St. Mary's Hospital.

Medical schools and teaching hospitals educate the next generation of physicians, conduct cutting-edge research that saves lives and care for the sickest and most medically complex patients. In fact, patients treated at teaching hospitals have up to 20 percent better odds of survival than those treated elsewhere. These institutions are responsible for many of the most important breakthroughs in medicine and patient care of the past century.

Whether we are educating the next generation of health care professionals, pioneering medical discoveries or providing high-quality patient care, the College and our partners play a vital role in improving health care. Together, we are transforming health care in the Great Lakes Bay Region.

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### INNOVATIVE **Investigation**

### MEDICAL, CLINICAL & PUBLIC HEALTH RESEARCH

CMU College of Medicine research efforts encompass basic, translational, clinical and public health areas of research. This work fuels progress to advance science and improve individual and community health outcomes. Our faculty conducts research with the potential to contribute to new discoveries in medicine, while training medical students and resident physicians in proper research methodology. This includes understanding and finding better treatments for a variety of common chronic illnesses that affect many people across Michigan.



Visit med.cmich.edu/research to learn more.

#### **Basic & Translational Research**

Often referred to as "bench to bedside" research, translational research investigates results discovered in a basic science laboratory to determine how they might be applied to human treatments. Significant active research projects are focused on neurodegenerative diseases (Alzheimer's, Parkinson's and Huntington's), diabetes, heart disease, cancer, insect-borne diseases, mitochondrial disease and more.

#### Clinical & Public Health Research

Clinical and public health projects provide a service to the community. Current projects include opioid abuse, women and infant health, disparities in diabetic-induced chronic conditions, health care barriers for people with disabilities, increasing vaccination rates, community mental health awareness, homeless persons' experiences in health care and minority population end-of-life decisions.

### **RECENT HIGHLIGHTS**



### **Novel Approach for Parkinson's** and Alzheimer's Diseases

A team of scientists at CMU has received a National Institutes of Health R21 grant that funds innovative research with the potential to treat brain disorders, including neurodegenerative diseases such as Parkinson's and Alzheimer's. The goal is to devise a way to deliver large DNA fragments into brain cells across the blood-brain barrier.



### **State and National Effort to Improve Child Health**

CMU Health and the College of Medicine are taking part in a \$160 million national data-gathering project with the goal to improve the future health of children and their mothers throughout Michigan and nationwide. The purpose is to analyze data from diverse areas around the state to determine how health care, environmental, socioeconomic and other factors affect child development.



### **Student & Resident Physician Research**

The College offers extensive opportunities for medical students, resident physicians and graduate students to gain real-world, hands-on medical research experience. Last vear, the College's Research Symposium and Student Research Forum had a record number of submissions. Fourteen students were selected to join the Summer Research Scholars program and received a stipend to complete proposed research under the guidance of their faculty mentor.

### PARTNERS FOR **PROGRESS**

The CMU College of Medicine works to realize a bold vision by producing future generations of well-trained physicians, improved access to high-quality health care, thriving communities and better lives for all people in Michigan. These efforts, combined with collaborations with our clinical and community partners, are making an impact in health care, community wellbeing and economic growth – and a difference in our state and the Great Lakes Bay Region.

- Barb Smith Suicide Resource & Response Network
- BlueWater Angels
- Great Lakes Bay Regional Alliance
- Great Lakes Bay Region Mental Health Partnership
- Michigan Department of Health and Human Services
- Michigan Health Improvement Alliance
- Saginaw County Medical Society
- Saginaw Chippewa Indian Tribe
- Saginaw County Health Department
- The Dow Chemical Company
- Transforming Health Regionally in a Vibrant Economy



### INVEST IN NEW PHYSICIANS FOR MICHIGAN AND OUR FUTURE

The College of Medicine has enjoyed tremendous success since we welcomed our first class of future physicians in 2013. The past six years have been spent attracting high-quality faculty and staff, leveraging state-of-theart facilities, growing clinical volumes, fostering community partnerships and most importantly graduating exceptional new doctors. Yet future success will not be possible without support necessary to grow and expand in ways that benefit our learners and the community at large.

### Michigan Impact

- Close the gap in Michigan's physician shortage
- Provide access to health care for medically underserved populations
- Support students from Michigan to become doctors for Michigan
- Meet the needs of people and communities across the state
- Build collaborations and community partnerships
- Secure economic growth and job creation

### **Benefits from Your Support**

- Create change and impact the future
- Ensure a healthy and productive workforce
- Build vibrant communities and support economic growth
- Expand health care capacity and access for the medically underserved

**Aledore** 

• Positively impact Michigan and the Great Lakes Bay Region

Visit med.cmich.edu/invest to learn more.





for supporters to make a difference through endowed scholarships, student scholarships, naming opportunities and estate gifts to leave a lasting legacy.



### CMU COLLEGE OF MEDICINE



### **MOUNT PLEASANT CAMPUS**

1280 East Campus Drive Mount Pleasant, MI 48859 989.774.7547



### **SAGINAW CAMPUS**

1632 Stone Street Saginaw, MI 48602 989.746.7504







Join the conversation and follow our success on social media