### 2021-2022 Annual Report





MISSION: The Central Michigan University 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.

CHIGA

#### **VALUES:**

Integrity Respect Empathy Excellence Inclusiveness Social Responsibility Innovation

#### A letter from the dean

Each year at Commencement, I look out at the year's graduates with pride knowing that those students are now physicians—a distinction they will hold for the rest of their lives. This year is particularly memorable because, in 2022, the 500th graduate of the <u>CMU College of Medicine</u> crossed the Commencement stage.

With this achievement comes the recognition that we are no longer a new medical school—we are an established institution attracting high-achieving students and preparing them well for residency training and future services to their communities. Just as no physician completes medical school without the support of friends and loved ones, the College of Medicine is grateful to its alumni, students, faculty, staff, community partners, and friends whose invaluable support helped us reach this milestone.

The 2021/22 academic year brought much growth to the CMU College of Medicine's educational programming and research enterprise. Within this annual report, you will read about our expanding residency programs, our commitment to the healthy futures of children, and the incredible research of our students and faculty.

We continue to expand our efforts in the diversity, equity and inclusion space—a necessity as we fulfill our mission of educating diverse students to become culturally competent physicians and provide health care to patients from a wide range of racial, cultural and socio-economic backgrounds.

While we continued to teach in the classroom using a hybrid model combining in person and virtual instruction, the waning of the COVID-19 pandemic meant a return to in-person events, such as the White Coat Ceremony, Match Day and Commencement. We have missed these communal celebrations, and the excitement and comradery of classmates at these events was palpable. We look forward to spending more time together in the coming year.

The College of Medicine is built on a solid foundation and the future is bright. In the coming year, we look forward to welcoming new medical students, expanding community partnerships, contributing to health care discoveries, and serving the patients who place their trust in us.

Be well, earge

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



## CMU College of Medicine graduates sixth class of new physicians, celebrates 500 alumni

At the <u>May 2022 Commencement</u>, the CMU College of Medicine graduated its 500th physician—a major milestone that solidifies the college's transition from a newly formed institution to an established school of medicine.

CMU formed the College of Medicine to address a national and statewide shortage of physicians, particularly those in primary care. When the first students arrived on the Mount Pleasant campus in 2013, they embraced the opportunity to be part of something new and the responsibility of building a reputation for themselves, the college and future classes.

In a <u>Fired Up for 500</u> video celebrating the achievement, **Nicholas Cozzi, M.D.**, '18, currently an EMS fellow with a fire department in New York City, said he attributes his success to the College of Medicine. "I chose the right destination in CMU College of Medicine—from the faculty to the staff to the community. Thank you to all of our donors who have made this day and all these memories possible."

In August of 2022, the College of Medicine's tenth class arrives on the Mount Pleasant campus. They will be welcomed by faculty and staff well-prepared to deliver an outstanding education and support student success and wellbeing. They will be taught by a growing network of physicians and staff at our partner hospitals throughout the state plus community educators who are committed to the college's mission. They will benefit from the experience and comradery of those who preceded them, and they will be part of the solution to providing quality, comprehensive care to underserved communities in both rural and urban areas.

#### Diversity, equity and inclusion director joins College of Medicine staff



The College of Medicine welcomed **Donnesha Blake**, **Ph.D.**, as the director of diversity, equity and inclusion (DEI) for the College of Medicine. DEI efforts are central to the College of Medicine's excellent education. Blake's position collaborates with leaders and colleagues at CMU, the College of Medicine, CMU Medical

Education Partners, and affiliate hospitals, as well as with students to create an inclusive learning climate. Blake holds a bachelor's in communication from CMU, and a master's and a Ph.D. in women's studies from the University of Maryland, College Park.



#### >> MATCH DAY

Each March, on the same day and at the exact same time, thousands of medical students around the United States and the world learn the name of the residency program where they will continue their physician training. The annual event is known as <u>Match Day</u>.

The historic match rate of CMU College of Medicine students is higher than the national average. The college attributes this success rate to holistic recruitment and education of bright and dedicated students who are eager to serve their patients and communities.

> 52% Matched in Michigan

64% Matched in primary care

98% Historical match rate

#### >> ADMISSIONS OVERVIEW



First-year class, **2022** 

Total applicants **7,989** 

Michigan applicants **1,436** 



First-year class, **2021** 

Students from Michigan 73%

Under-represented in medicine **15%** 



# Humanistic medicine national honor society inducts CMU students

The Arnold P. Gold Foundation Gold Humanism Honor Society inducted 15 thirdyear College of Medicine students in April 2022. Students nominated their peers for consideration into the society that focuses on humanistic care. Chosen based on their compassion, clinical excellence and patient-centered care, the nominees are known for their strong communicative and collaborative skills.

The Gold Humanism Honor Society is a life-long honor providing networking and learning opportunities throughout the inductees' careers. Only fifteen percent of any College of Medicine third-year class is eligible for membership.

With chapters at more than 150 schools, there are more than 27,000 members of the Gold Humanism Honor Society in training and practice.



# CMU College of Medicine inducts 21 students into prestigious medical honor society

This academic year, the CMU College of Medicine became the Zeta Michigan Chapter of Alpha Omega Alpha (A $\Omega$ A), a 120-year-old honor society for medical students, residents and faculty. Membership in A $\Omega$ A is a lifelong honor recognizing a physician's dedication to the profession and the art of healing. Twenty-one CMU fourth-year medical students were accepted into the organization in the fall of 2021.

Criteria for selecting A $\Omega$ A members include a mission-driven commitment to serve the suffering, high academic standards, professionalism, leadership and research. A $\Omega$ A has 135 chapters in medical schools across the United States with more than 200,000 members whose ranks include 55 Nobel Prize winners.

# Medical student organizes health fair, fills care gap for Albanian-American community

More than 70 members of the Albanian American community in Southeast Michigan received preventative health care in November, thanks to an initiative led by a CMU College of Medicine student.

Michigan has one of the largest populations of Albanian immigrants in the United States. Third-year student **Michela Manga** saw a need in an underserved population—a gap she could help fill.

Manga organized 43 Albanian-American health care professionals and students, all of whom spoke Albanian, in an effort to educate people in their native language about the benefits of preventative health. Informational handouts regarding lifestyle modification and disease, written in Albanian and English, were available for the attendees to take home. In addition, the Albanian-American community members had the opportunity to meet current and future health care professionals in the region.



### FULFILLING AN EDUCATIONAL AND CLINICAL MISSION

**CMU** Medical Education Partners provides two vital functions for the Great Lakes Bay Region: delivering outstanding patient care and supporting graduate and undergraduate medical education. With the addition of a pediatrics residency, the expansion of primary care and psychiatry programs, and a full complement of surgery residents, in July 2022, Partners welcomed its largest group of incoming residents in the organization's history.



Residency/fellowship graduates

41

New residents

52

Total residents **153** 



S. Sethu K. Reddy, M.D.

#### **Dr. Reddy takes the helm of clinical and foundational research enterprise**

**S. Sethu K. Reddy, M.D.**, CMU professor of internal medicine-endocrinology, assumed the role of senior associate dean for research this fall. Reddy is an internationally renowned endocrinologist, skillful clinician, experienced researcher, and excellent mentor. He currently serves as the president of the American Association of Clinical Endocrinology. Reddy joined the College of Medicine in January 2017 and previously served the College of Medicine as the chair of medical disciplines.

#### **BY THE NUMBERS**



Research grants received

Amount awarded

Peer-reviewed publications

20

#### Faculty research tackles devastating diseases



**Jocelyn Ang, M.D.**, CMU professor of pediatrics-infectious disease and physician at University Pediatricians/Children's Hospital of Michigan, and her team continue their research into novel therapies for children with COVID-19.

Ang was honored as a Top Doc in Detroit for her commitment to improving outcomes for children of color. The research found Black and Hispanic children are more vulnerable to severe COVID-19-related illnesses.



The New England Journal of Medicine published a landmark, nationwide COVID vaccine study that included the work of **Sabrina Heidemann, M.D.**, CMU professor of pediatric critical care and physician at University Pediatricians/Children's Hospital of Michigan.

Heidemann and colleagues across the country concluded two doses of the BNT162b2 messenger RNA vaccines were highly effective for children between the ages of 12 and 18 years in preventing hospitalization, the receipt of life support and the loss of life.



**Ute Hochgeschwender, M.D.**, CMU professor of neuroscience, is a senior co-author of a study published in Communications Biology. The article, Selective Control of Synaptically-Connected Circuit Elements by All-Optical Synapses, details a new method of using biological light, or bioluminescence, to control communication between neurons in two cells.

Funded by the National Science Foundation's NeuroNex program, the research has application in alleviating neurological and psychiatric conditions.



Mariana Rosca, M.D.

The National Institutes of Health awarded **Mariana Rosca, M.D.**, CMU associate professor of physiology and chair of foundational sciences, a three-year R15 grant to advance her work in mitochondrial pathophysiology.

At least one in 5,000 people are born with inherited mitochondrial diseases that lead to heart disease, blindness, diabetes and abnormalities in muscles and the brain. In addition, a large proportion of chronic conditions (diabetes, coronary artery disease, heart failure, aging) develop mitochondrial defects that are key factors in disease progression. Mitochondrial defects have no cure.

The American Heart Association awarded a grant to **Julien Rossignol, Ph.D.**, CMU associate professor of neuroscience, and co-investigator **Jesse Bakke**, **Ph.D.**, CMU assistant professor of biochemistry, for research into reprogramming glial cells following a stroke. Glial cells provide support for neurons and are important to the central nervous system for processing information.

Rossignol is the principal investigator on the project seeking to determine if glial cells in the brains of rats can be changed into functional neurons following a stroke.



**Usha Sethuraman, M.D.**, CMU professor of pediatrics-emergency and physician with University Pediatricians/Children's Hospital of Michigan, presented to the American Academy of Pediatrics her groundbreaking research into developing a non-invasive approach for identifying children at high risk for severe complications from COVID-19.

Funded by the National Institues of Health's Rapid Acceleration of Diagnostics program, Sethuraman and fellow researchers are using salivary biomarkers combined with artificial intelligence to develop a predictive model.



Julien Rossignol, Ph.D.



Jesse Bakke, Ph.D.

### LACASSE NAMED FIFTH ENDOWED CHAIR HOLDER IN COLLEGE OF MEDICINE

Matt LaCasse, M.D., CMU clinical assistant professor of child and adolescent psychiatry and <u>University Pediatricians</u>/ Children's Hospital of Michigan psychiatrist, is the inaugural chair holder of the Patricia H. Rodzik Endowed Chair for Youth Behavioral Health.

The endowed chair, administered through The Children's Foundation, was established at The Children's Foundation in 2019 by Patricia H. Rodzik to provide resources for a leadership position at Children's Hospital of Michigan focused on research in the area of mental health in children and young adults.





## **Research events highlight student, resident and faculty projects**

The CMU College of Medicine held the seventh annual <u>Medical Student Research</u> <u>Forum</u> in January 2022. Due to the COVID-19 pandemic, the majority of this year's 55 submissions were basic research and either public health or database driven.

More than 100 students, residents and faculty submitted proposals for the eighth annual CMU College of Medicine and CMU Medical Education Partners Research Symposium in April 2022. Judges chose 10 projects for presentation at the event, which prepares students to present regionally and nationally. The top presentations included assessment of neuronal communication, workplace violence in the emergency department and several COVID-19-related aspects.

### Medical student receives two prestigious fellowships for T-cell research



The Alpha Omega Alpha national medical honor society and the American Society of Hematology have awarded first-year College of Medicine student <u>Alexander Dils research fellowships</u> to continue investigating how T-cells partake in inflammatory and pathophysiological processes.

Diagnosed with acute lymphoblastic leukemia/lymphoma at the end of his senior year of high school, Dils began his research as an undergraduate student at the University of Michigan while receiving treatment for cancer. This summer, he will continue that work in the Carty Lab at U of M. The Carty Lab's research focuses on the role of protein regulators in normal and malignant T-cells.

Dils chose to attend the CMU College of Medicine because its mission aligns with his goal of becoming a compassionate physician-scientist.

### Coming soon, CMU Health Women and Children Center

The CMU College of Medicine, in collaboration with multiple community organizations and clinical partners, is creating the CMU Health Women and Children Center in Saginaw.

Supported by generous donations from the C.K. Eddy Family Memorial Fund administered through Huntington Bank and the Harvey Randall Wickes Foundation, the Center will serve children from birth through adolescence and provide personalized care for women throughout their entire lives. Designed to provide cutting-edge treatment and diagnostics, the Center will provide prenatal care and support the needs of families from diagnosis and counseling through treatment and follow-up. The Center will also provide a clinical learning site for medical students and residents.

In addition to outstanding health care, women and children will receive assistance with socio-economic issues such as food insecurity, domestic violence, and substance abuse; obtain support from other women with similar backgrounds and concerns; and have nearby access to hospital and subspecialty services with care coordination to enhance quality and reduce disparities in care.

The CMU Health Women and Children Center is slated to open in early 2023.

#### New residency program augments regional health care services for children

CMU Medical Education Partners <u>Pediatric Residency Program</u> received accreditation this academic year to accept an entering class in the summer of 2022. The new program provides specialized training to medical school graduates who aspire to become pediatricians.

Covenant HealthCare is the primary inpatient clinical site. The Saginaw, Michiganbased health system offers a regional pediatric intensive care and pediatric unit, an American College of Surgeons verified level II pediatric trauma center and a wide breadth of extensive clinical programs for children.

In addition, children in the Great Lakes Bay Region will have greater access to ambulatory specialty care, thanks to the CMU College of Medicine's affiliation with University Pediatricians, a practice group based at the Children's Hospital of Michigan in Detroit.



#### **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

#### **University Pediatricians**

Children's Hospital of Michigan 3901 Beaubien Boulevard Detroit, MI 48201 313-745-5437

