College of Medicine - Tucson: Past, Present, Future

UAHS Office of Public Affairs November 2017

The UA College of Medicine – Tucson is marking its 50th year with a <u>celebration this week [1]</u> featuring free public lectures by founding faculty members and a Junior Investigator Poster Forum.

In recognition of the milestone, the UA Health Sciences Office of Public Affairs spoke with the college's dean, **Dr. Charles B. Cairns** [2], about the impact the college has had over the past five decades, and the opportunities that lie ahead.

What has been the impact of the UA College of Medicine - Tucson in its first 50 years?

Our impact can be measured in how we fulfill our mission of advancing health and wellness through education, research and patient care in Arizona and beyond. We have educated more than 4,000 physicians, half of whom have remained in the state. In addition, we provide the largest graduate medical education program for specialty training in the United States.

When you realize that each physician sees an average of 4,000 patients over their career, the impact of their care on patients, their families, employers and communities is truly remarkable.

We have had tremendous impact on care across the world through our innovative research. For example, the <u>Asthma and Airway Disease Research Center</u> [3], formerly known as the Arizona Respiratory Center, has defined the natural history of asthma and set the worldwide standard on asthma and airway research and clinical investigations.

We developed the first artificial wrist, developed digital imaging, performed groundbreaking mechanical heart support systems and established the first integrative medicine program. We developed hands-only CPR and are thought leaders and innovators in research in Valley fever, heart disease, children's health, pulmonary disease, pain, arthritis and cancer. We are one of the national leaders in precision medicine and how to take new genomic and related discoveries and apply them to patients and populations.

The college is proud of its ability to provide culturally competent care to those in underserved areas by recruiting, training and mentoring students and trainees to work in rural communities, including the Native American lands and border regions of our state.

What differentiates the college from other medical schools?

Our partnership with Banner Health has created one of the nation's largest nonprofit health care systems. This enables us to take new discoveries, technologies and care models, and apply them to large populations of patients.

Our commitment to research innovation and our clinical partnership with Banner Health position the college at the forefront of precision medicine innovation. As one of four universities initially selected by the NIH (National Institutes of Health) to initiate the Precision Medicine Initiative, the "All of Us Research Program," is the largest NIH grant in Arizona history. With this significant funding, we are conducting groundbreaking research that will shape the future of medicine and give our students significant advantages in the paradigm shift to individualized treatments for diseases.

We also have a tremendous advantage in Arizona, with close proximity to the Mexican border and adjacency to our Native American communities. We are able to give our medical students culturally immersive opportunities through our **Rural Health Professions Program** [4] and through a variety of distinction tracks: bilingual medical Spanish, community service, global health, integrative medicine, research, leadership and innovation. The response of students to these opportunities has been amazing. We currently have more than 9,400 applicants for our 120 positions, an increase of more than 95 percent over the past three years.

So much has changed in health care since the opening of the College of Medicine. How has the college navigated the changes?

Consistent with our missions of advancing health and wellness through education, research and patient care, we have evolved as new discoveries, knowledge, technology and care models became available.

Health care is now a remarkable 19 percent of our nation's economy, and the scope and scale of our activities have grown with it. Beyond the obvious need to increase our class sizes and training opportunities, we have steadily increased the size of our faculty to meet this need. We also have emphasized the need to engage with our communities as partners in education, training and research. Thus, we recently transformed our curriculum to get our students into communities and exposed to clinical medicine at an earlier stage.

We also look forward to working with our health sciences colleagues in the College of Nursing (5), the College of

1

<u>Pharmacy</u> [6] and the <u>Mel and Enid Zuckerman College of Public Health</u> [7] as we emphasize interprofessional education. Of course, we have needed to increase our physical capacity as well. Our campus has more than \$1 billion of capital construction coming online by the end of next year with new research, education, hospital and outpatient facilities.

As we celebrate the college's 50th anniversary, what vision do you have for its future?

We want to be a national leader in academic medicine and be highly ranked nationally for our educational, training, research and clinical programs. We recently developed strategic plans for education, training and research to take advantage of these new facilities, discoveries and partnerships. We need to educate and train our students for the future and are incorporating key concepts of professional intelligence and expertise in health care systems. Our strategic research areas build upon our expertise and incorporate the health needs of Arizonans, now and in the future. Areas of emphasis include medicine, microbiome, host responses and medical informatics. We truly have the opportunity to be a world leader in precision medicine, and in incorporating the benefits of clinical trials into our communities to impact the care of populations.

Source URL: https://uaatwork.arizona.edu/lqp/college-medicine-tucson-past-present-future

Links

[1] http://medicine.arizona.edu/founders-week [2] http://medicine.arizona.edu/person/charles-b-cairns-md-facep-faha [3] http://lungresearch.arizona.edu/ [4] http://medicine.arizona.edu/education/other/rural-health-professions-program [5] http://www.nursing.arizona.edu/ [6] http://www.pharmacy.arizona.edu/ [7] https://publichealth.arizona.edu/