THE UNIVERSITY OF ARIZONA

Arizona **AHEC**

Area Health Education Centers

Annual Report 2020

Arizona AHEC Program Mission Statement:

To enhance access to quality health care, particularly primary and preventive care, by improving the supply and distribution of health care professionals through academic community educational partnerships in rural and urban medically underserved areas.

In FY 2019-20, 11,368 participated in the following activities:

Rural & Urban Underserved Health Professions Trainee Field Experiences

From July 1, 2019 to June 30, 2020, the AzAHEC Program supported the following unduplicated field experiences in AzAHEC Regional Centers, Rural Health Professions Programs and Residency Programs for nearly 210,000 contact hours:

Academic Discipline/Program	# of Trainees	# of Field Experiences
Medical Residency	38	50
Pharmacy School	89	160
Other Undergraduate Health-related Disciplines	46	55
Nursing or Medical Assistant	203	203
Dentistry and Dental Hygiene	32	33
Nurse Practitioner	115	206
Graduate - Psychology	1	1
Public Health	202	229
Graduate - Social Work	2	2
Medical School	233	591
Registered Nurse, Nurse Anesthetist or Other Nurse	78	158
Phlebotomy Technician	27	31
Physical Therapy	2	2
Physician Assistant	56	60
Total	**1,124**	**1,781**

Congress authorized the Federal Area Health Education Center (AHEC) Program in 1971 (PL III-148 § 751 PHSA). There are now 56 AHEC Programs and 235 Regional Centers in 48 U.S. states and territories. In 1984, Andy Nichols, MD, founded the Arizona Area Health Education Center (AzAHEC) Program in Tucson with the first AzAHEC Regional Center opening in Nogales. Today, five AzAHEC Regional Centers support health professions education, address health disparities, and provide continuing education for health professions and the local healthcare workforce. A sixth Regional Center focused on American Indian healthcare workforce needs is projected to be developed in 2021.

AzAHEC Program Personnel

Daniel Derksen, MD, Senior Advisor
Leila Barraza, JD, MPH, Director
Jennifer Zúñiga, BA, Associate Director
Amanda Perkins, MEd, CPA, Assistant Finance Director
Colleen Reed, BA, Program Coordinator, Sr.
Edgardo Figueroa, BA, Program Manager
Nicole Paredes, MEd, Program Manager
Sonia Cota-Robles, JD, PhD, Evaluation Specialist

Pre-College (K-16) Health Career Preparation Programs in Rural and Urban Underserved Areas: 6,198 participants.

Participants in K-16 Health Career Preparation Programs included 1,932 K-16 students in 60 health careers clubs, inclusive of academic year programs, summer programs at the University of Arizona (Frontera, Med-Start and BLAIS-ER), and summer programs at AzAHEC Regional Centers. A total of 4,266 students and adults (parents, teachers and others) participated in 80 other health career events, including health career fairs.

Health Professions Continuing Education: 4,046 participants.

Participants at 198 continuing education events included 4,046 physicians, dentists, public and allied health professionals, pharmacists, nurse practitioners, registered nurses and physician assistants.

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AzAHEC Program Executive Summary FY 2019-20

Thirty-five years ago, Arizona Area Health Educations Centers (AzAHEC) began serving Arizona through health professions workforce development for rural and urban underserved communities. This 2019-20 AzAHEC Annual report highlights progress and achievements.

A total of 1,124 health profession students representing 37 universities participated in 1,781 community-based clinical and experiential training experiences through collaboration with the five AzAHEC Regional Centers, eight Rural Health Professions Programs (RHPPs) at Arizona's three state universities (ASU, NAU, UArizona), and Family Medicine Residency Programs at Banner University Medical Center's South Campus and North Country HealthCare. The first two-year AzAHEC Scholars Program cohort had 35 students graduate in the Spring of 2020. The 53 AzAHEC Scholars in the second-year cohort completed their first year of their interprofessional program including community immersions at one of the five AzAHEC Regional Centers. Each cohort gained greater knowledge through interprofessional curricula with didactic and community-based training activities focused on rural and/or urban underserved communities. In the Fall of 2020, a third cohort of 53 was welcomed.

Continuing education (CE) for practicing health professionals remains a core AzAHEC activity. Each Regional Center identifies and addresses CE needs, resulting in 198 CE events across all five regions to 4,046 health professionals over the last year.

The five AzAHEC Regional Centers hosted 60 health career clubs reaching 1,932 primary through high school students participating in health career learning programs in a structured curriculum. Frontera, Med-Start and Blaiser provided summer intensive programs at the University of Arizona-Tucson for future health professionals. The AzAHEC Regional Centers also offered health education events to 17,594 community member participants on health-related topics.

On behalf of the Arizona AHEC Program and five Regional Centers, we thank our federal partners and our collaborators across Arizona for their commitment to education, quality primary care and health services in rural and urban underserved Arizona communities.

Leila Barraza, JD, MPH
Director, Arizona Area Health Education Centers (AzAHEC) Program
Associate Professor, Mel and Enid Zuckerman College of Public Health, Community, Environment & Policy Department

In 2019-20, the AzAHEC Regional Centers and Rural Health Professions Programs have continued to provide community-based interprofessional education in new and innovative ways during these unprecedented times. I congratulate them on their unwavering commitment to rural and urban underserved communities.

Michael D. Dake, MD
Senior Vice President for Health Sciences

About AzAHEC

- Started in 1984 with the first AzAHEC Regional Center in Nogales, Arizona to recruit, train and retain a primary care workforce committed to helping underserved populations.
- Expanded by 1989 to include five AzAHEC Regional Centers serving all 15 Arizona Counties.
- Housed in the UArizona Health Sciences Office of the Senior Vice President as a Sponsored Project.
- Enacted in Arizona Revised Statutes (ARS) §§ 15-1643, 15-1644, 15-1645 and 5-572 (C)
- Operated with federal and required state matching funds.
- Supported by State of Arizona lottery funds resulting from a citizen ballot initiative directing support to the AzAHEC Program.

Structure

The University of Arizona (UArizona) in Tucson administers the AzAHEC Program and has formal contracts with the five AzAHEC Regional Centers located strategically statewide. The AzAHEC Program and Regional Centers carry out the mission, goals, objectives and work plan by creating, coordinating and implementing a scope of work designed to address the health professions education and training needs within each Regional Center service area.

The AzAHEC Program Director (Leila Barraza JD, MPH) and Senior Advisor (Daniel Derksen MD, Associate VP for Health Sciences) consult regularly with the AzAHEC Advisory Commission, who represent health educators, health professionals and community members serving and/or living in rural and urban medically underserved communities throughout Arizona. Other committees involve faculty, staff, and students at participating health professions colleges at the three public university colleges under the Arizona Board of Regents – Arizona State University (ASU), Northern Arizona University, and UArizona. Formal reports are submitted regularly to the Health Resources & Services Administration (HRSA), and annually to the Arizona Board of Regents and the Arizona State Legislature.

Each AzAHEC Regional Center has its own governing board, comprised of health care providers and consumers who reflect the demographic, racial and ethnic diversity of the Center's geographic service area.

Focus Areas 2019-20

The AzAHEC Program and Regional Centers expanded statewide efforts to strengthen Arizona's health professions workforce from pipeline to practice including K-12, post-secondary health professions students, and health professionals from many disciplines. Regional Centers supported activities to promote health awareness in their communities.

■ **Youth (K-12) Health Career Programs:** the AzAHEC Program and Regional Centers supported activities to introduce Arizona's youth to health careers, working with local high schools to support health career clubs (e.g., Health Occupations Students of America (HOSA) chapters), Border Latino and American Indian Summer Exposure to Research (BLAISER), Focusing Research on the Border Area (FRONTERA) and the Med-Start Health Careers Program.

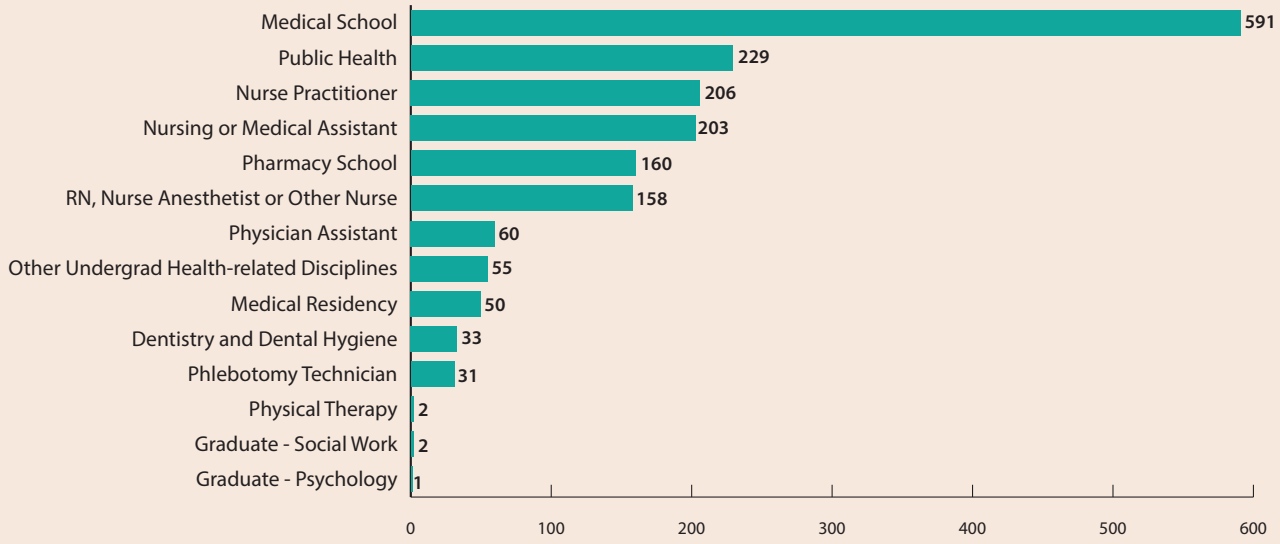
■ **Health Professions Trainee Education:** the AzAHEC Program, Rural Health Profession Programs (RHPP) and Regional Centers supported clinical rotations, internships, and Graduate Medical Education (GME, aka residency training). Regional Centers provided students with in-depth orientation to the local communities. Some trainees received housing, travel and related expense support for experiences in remote areas. Dedicated, experienced preceptors and strong academic partnerships with colleges and universities provided high quality community-based education.

■ **AzAHEC Scholars:** the first cohort completed their two-year program; a second Scholar cohort was accepted and had an immersion experience at their assigned AzAHEC Regional Center. Scholars get advanced, interprofessional community-based experiences in Regional Center communities. RHPP faculty mentors provided Scholars with continuity over the two-year program.

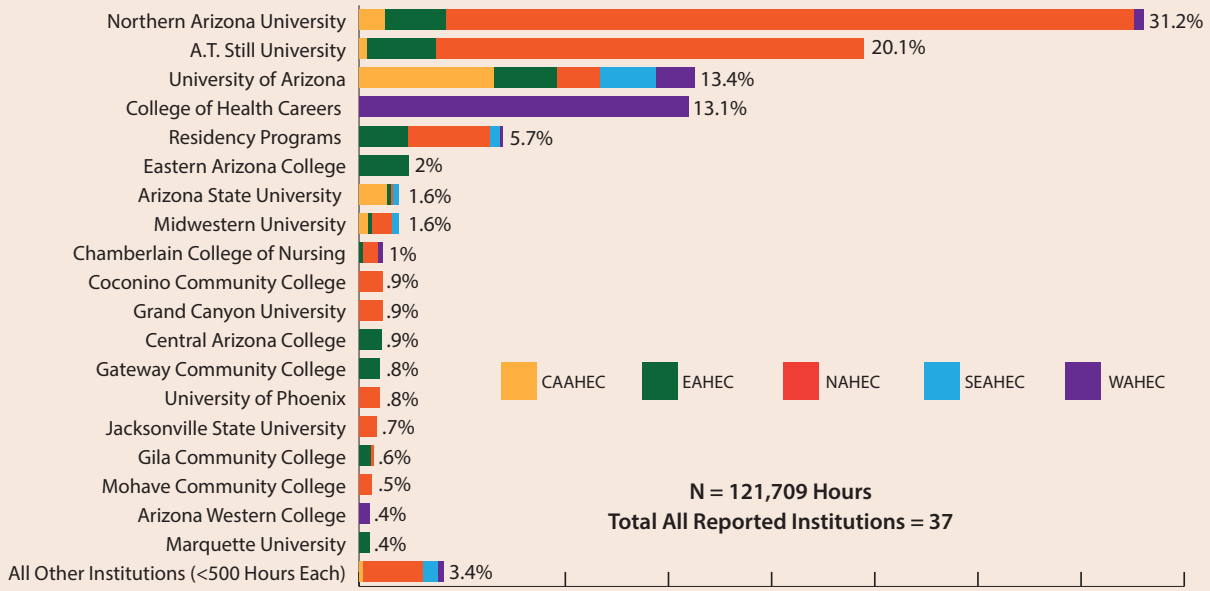
■ **Continuing Education (CE/CME) for Health Professionals:** Regional Centers sponsored numerous CE/CME events throughout the year for practicing health professionals statewide.

■ **Community Health Promotion:** Regional Centers coordinated and supported health education activities and events for local community members throughout Arizona's rural and urban underserved areas.

AzAHEC Health Professions Clinical Rotations by Trainee Discipline (N = 1,781)



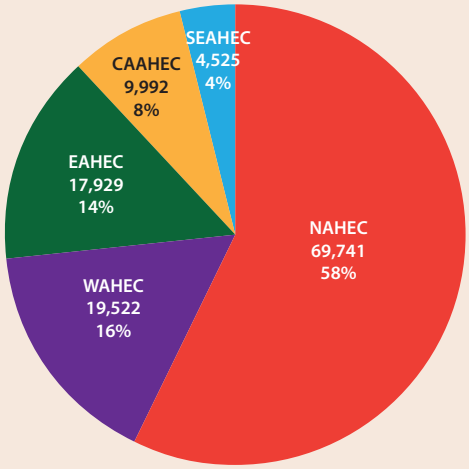
AzAHEC Rotation Hours by Regional Center and Academic Institution: July 1, 2019 - June 30, 2020



AzAHEC Rotation Hours, Number of Rotations and Number of Trainees by Center 2019-20

Location	Total Rotation Hours	Number of Rotations	Total Trainees
CAAHEC	**9,992**	**40**	**36**
Clinical Field Experience	9,502	33	29
Non-Clinical Field Experience	490	7	7
EAHEC	**17,929**	**183**	**92**
Clinical Field Experience	17,929	183	92
NAHEC	**69,741**	**671**	**342**
Clinical Field Experience	69,324	658	336
Non-Clinical Field Experience	417	13	6
SEAHEC	**4,525**	**46**	**43**
Clinical Field Experience	3,808	35	32
Non-Clinical Field Experience	717	11	11
WAHEC	**19,522**	**249**	**238**
Clinical Field Experience	19,477	248	237
Non-Clinical Field Experience	45	1	1
GRAND TOTAL	**121,709**	**1,189**	**751**

AzAHEC Rotation Hours by Regional Center July 1, 2019 - June 30, 2020



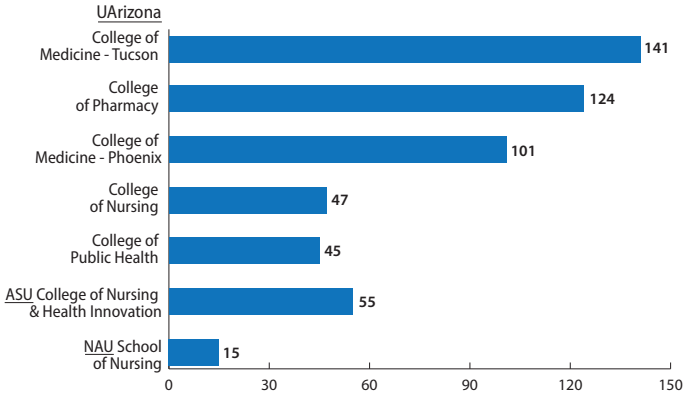
N = 121,709 Hours

The AzAHEC Rural Health Professions Program (RHPP) Overview

The Arizona State Legislature authorized the Rural Health Professions Program (RHPP) in 2007 by state statute (ARS § 15-1754). It is now a core component of the AzAHEC Program to address shortages of health professionals in rural and urban underserved Arizona communities. In 2019-20, UArizona, ASU and NAU RHPPs provided 528 rural and underserved training experiences totaling 95,836 hours.

RHPPs provide rural training experiences for health professions students in the public universities under the Arizona Board of Regents: the UArizona Health Sciences Colleges of Nursing, Pharmacy, Medicine (COM-Tucson and COM-Phoenix), and Public Health; the ASU Edson College of Nursing and Health Innovation, and the NAU School of Nursing and the Department of Physician Assistant Studies.

AzAHEC RHPP Students 2019-20 by Participating Institution N = 528



RHPPs prepare health professions students for practice in Arizona's rural communities. The AzAHEC Program and AzAHEC Regional Centers support urban, medically underserved training experiences to address primary care provider shortages. While RHPP student participation is voluntary, statutorily, UArizona selects 15 medical, four pharmacy and ten nurse practitioner students; ASU selects four, and NAU two nurse practitioner students for RHPP. The number of participating RHPP students and programs has grown significantly above state statutory requirements.

RHPPs are primary care rural and urban underserved training tracks in the UArizona COM-P and COM-T Medicine students, the College of Nursing Nurse Practitioner (NP) students, the College of Pharmacy PharmD students, and the College of Public Health Master of Public Health (MPH) students; NAU Physician Assistant (PA) and NP students; and ASU NP students. NAU Physician Assistant students were added to the RHPP in FY 2019-20.

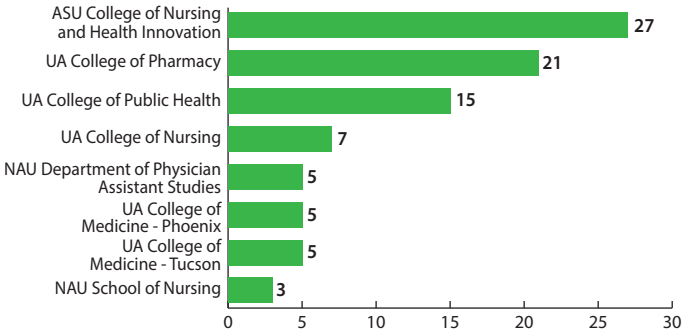
AzAHEC Scholars Two-Year Program

The AzAHEC Scholars Program is a two-year interprofessional program providing graduate-level health profession students with advanced community-based experiences in rural and underserved settings in the five AzAHEC Regional Center services areas. Participants are selected from AzAHEC's RHPPs.

To qualify, Scholars must be enrolled in an RHPP and meet all academic and didactic training requirements of their graduate-level health professional program. Scholars are matched into interprofessional groups at one of the five AzAHEC Regional Centers for advanced community-based experiences in rural and underserved settings. Each RHPP has two Faculty Mentors to support and direct an interprofessional student cohort at each Regional Center. Faculty mentors, RHPP Directors and Regional Center staff meet regularly.

The 35 Cohort 1 (2018-2020) Scholars completed their two-year experience in April 2020. By discipline, the Scholars completing the program included: Medicine (2); NP (16); PharmD (12); and MPH (5). The 53 Cohort 2 (2019-21) Scholars completed their first year in April 2020, and started their second year, including students from Medicine (8); NP (21); PharmD (9); PA (5); and MPH (10). In total, 88 Scholars from Cohorts 1 and 2 either completed the program (35) as of 6/30/20, or remain enrolled (53) for year two (2020-21).

AzAHEC Scholars 2019-2020 Cohort by University and Discipline N = 88



AzAHEC SCHOLARS PROGRAM COVID-19

The Health Resources and Services Administration (HRSA) awarded supplemental funding to the AzAHEC Program in the late Spring of 2020, to develop a one-year interprofessional COVID-19 Scholars Program. Initiated in the Fall of 2020, it provides 35 undergraduate and graduate students the opportunity for interprofessional community collaboration in response to the pandemic. Working in small interprofessional teams, a faculty mentor and community partners help implement COVID-19 interventions such as preventing transmission, testing and contact tracing. They learn how the social determinants of health affect infection rates, morbidity and mortality in vulnerable populations.

WAHEC Region AHEC Scholar Immersion

Tuba City Housing

AzAHEC leases a four-bedroom, two bath modular home from the Tuba City Regional Health Care Corporation Housing Office so students have housing during their clinical rotations there. During 2019-20, six RHPP and other UArizona Health Profession students utlized the housing. This was less than last year due to the COVID-19 Pandemic. Living in the community enhances AzAHEC student experience working interprofessionally in a tribal community. Housing activity is expected to increase when clinical rotations resume.

Post-Pipeline Program Survey respondents in Grades 9-12 wrote about what other students could expect from the health career education during their pipeline program:

"This camp was able to expand my knowledge about health careers and the requirements for these careers and it can help one make a plan on their career."

"It's a great opportunity to learn more about health careers that you're interested in, health careers that you've gained a newfound interest in, and health careers that you've never even heard about."

"The program opened my eyes to the wide range of professions one can have in the health field; you do not have to just be a doctor or nurse. It helped me narrow my potential careers down and now thanks to the program, believe I know definitively what I would like to pursue. It was definitely worth the time put in!"

Evaluations

AzAHEC evaluates programs based on participant surveys in four areas:

- Health profession trainees (e.g., students and residents) who participated in rotations.
- Health profession students who participated in the AHEC Scholars Program.
- Licensed and other health professionals who received Continuing Education (CE) credits.
- High School and Undergraduate students who participated in structured pipeline programs.

Survey responses indicate that AzAHEC's programming is successful and reaches diverse populations. Survey response highlights include:

- Almost all (91%) health profession trainee respondents indicated that the rotation increased their likelihood to select practice in a rural or medically underserved area, and 61.8% intend to practice in underserved communities.
- Of the AHEC Scholars who completed the two-year program in 2020 and responded to the survey, 100% reported that they intend to become employed or pursue further training in a medically underserved setting. Most (78.2%) respondents indicated an intention to become employed or pursue further training in a rural setting.
- Almost all (91.3%) of continuing education respondents indicated they were "likely" or "very likely" to implement the CE material into their practice.
- Over 75% of 9-16th grade respondents to the Pipeline Program Survey reported that they were very interested in pursuing a health career, and that the program had increased their knowledge of health careers "very much" (64.0%) or "pretty much" (23.4%).

Eighth Annual Interprofessional Rural Health Professions Conference

The 8th Annual Interprofessional Rural Health Professions Conference, "Better Together through Interprofessional Education," was held April 3-4, 2020. Due to the COVID-19 Pandemic, it was transformed to a virtual event in collaboration with the Arizona Telemedicine Program.

Attendance dramatically increased over prior years to 320 participants including AHEC Scholars, faculty, preceptors, RHPP and Regional Center directors and staff, and High School Pipeline Students. Students submitted 47 posters for online viewing on topics that included community health needs assessments, interprofessional health professions research, healthcare research among the URM population, behavioral health and addiction research, healthcare evaluation, and current issues in primary care. Regional Center and RHPP directors and mentors judged student poster and bestowed outstanding and excellent poster awards.

Victoria Maizes, MD, Executive Director of the Andrew Weil MD Center for Integrative Medicine gave the keynote of the first day, and Richard Carmona MD, MPH, former U.S. Surgeon General gave it on day two. Topics included: Social Determinants of Health, Current Topics, Interprofessional Education and Practice Transformation, and an "Integrating Cultural Humility into Clinical, Research & Practice with Indigenous People" panel.

The First Cohort (2018-20) AHEC Scholar groups presented on their community immersion experiences. Carlos Gonzales MD closed the conference with a traditional tribal blessing ceremony. Post-session evaluations scored high levels of satisfaction. One respondent wrote, "Every part of the conference was very helpful and important. The topics and the presentations were very useful…in the current context of COVID -19 Pandemic. I was not aware of the Navajo communities' struggles and challenges and the presentation changed my perception of disease control among them."

The conference agenda, videos and posters are available to view at: https://azahec.uahs.arizona.edu/events/8th-annual-interprofessional-rural-health-professions-conference.

Dan Derksen, MD

Dr. Diane Nuñez facilitated the AzAHEC Scholar presentations.

Dr. Richard Carmona

Dr. Kim Shea presenting on "Best Practices for Home Telehealth."

Clockwise: Dr. Timian Godfrey, Dr. Shannon Saltclah, Ms. Rene Begay, and Dr. Joshua Allison-Burbank presented, "Integrating Cultural Humility into Clinical, Research, & Prevention Practice with Indigenous People.")

University of Arizona (UArizona) College of Medicine-Tucson (COM-T) Rural Health Professions Program (RHPP)

Carlos R. Gonzales, MD, FAAFP
RHPP Director, Assistant Dean, Curricular Affairs & Associate Professor, Family & Community Medicine Department

The UArizona COM-T RHPP offers rural and urban underserved clinical rotations in family medicine, pediatrics, general surgery, internal medicine, medicine/pediatrics, obstetrics/gynecology and a new fourth-year elective in emergency medicine with dedicated volunteer physician preceptors throughout Arizona. Students participate in community-based rotations the summer after their first year and during their third and fourth years of medical school. The COM-T RHPP has students spend ten or more weeks of rural clinical training where they have an opportunity for a longitudinal experiences in the same location with the same preceptor, patients and community. While developing their clinical skills, students get to know the community, its benefits and attractions, and the socioeconomic, rural and/or urban underserved medical issues and social determinants that affect health outcomes.

In 2019, COM-T RHPP admitted 23 first-year medical students. Combined, 107 first through fourth-year COM-T RHPP students participated in this longitudinal program. AzAHEC also funds non-RHPP COM-T students interested in rural and underserved site clinical rotations. In 2019-20, the UArizona COM-T RHPP supported 141 clinical rotations, totaling approximately 600 weeks and 30,000 hours of community-based training in rural and urban underserved sites. Clinical rotations and hours decreased from the prior year due to COVID-19 and the hesitancy of rural sites to accept students. The graduating Class of 2020 included 24 RHPP graduates. Eight are remaining in Arizona for residency and 16 are entering primary care residency programs.

In 2015, the UA COM-Tucson Educational Policy Council approved a **Rural Health Distinction Track (RHDT)**. Students receive a Certificate of Distinction at graduation on their official transcript. RHDT requires an additional six weeks in their third or fourth year, above the 10-week RHPP requirement, for a total of 16 weeks, and a researched Capstone paper. There were 22 of 24 RHPP students who earned the Certificate of Distinction in the Class of 2020. Capstones included: *"Rural Arizona: Social Determinants of Health and What We Can Do to help," "Helicobacter Pylori & Gastric Cancer in Native American Populations," "Understanding the Issues Surrounding Reproductive Healthcare for Native American Women," "Pediatric Health Disparities in the Arizona Borderlands Region," "To Transfer or Not to Transfer: The Challenging Nature of Triaging Patients in Rural Settings."*

In 2020, three COM-T students enrolled in the **AHEC Scholars Program**. They work with colleagues from the other health professional schools in these interprofessional settings.

Many COM-T RHPP graduates now work in Arizona's rural and urban underserved areas. This aligns with the AzAHEC mission to train and retain the primary care health-care workforce in these communities. Several RHPP graduates serve as preceptors, helping prepare medical students for future practice in underserved communities.

In 2019, three RHPP preceptors were honored: UArizona COM-T graduate Dr. Andrew Aldridge a general surgeon in Flagstaff; UArizona COM-T graduate Dr. Cathy Romero a family physician from Safford; and Dr. Gregory Jarrin a general surgeon from the Winslow IHS clinic.

Preliminary data analysis shows that the UArizona COM-T RHPP trained and retained more than 50 physicians in rural Arizona and a similar number Arizona's urban underserved communities.

In 2019-20 a new program – **the Primary Care Physician Scholarship Program (PCP SP)** - was launched to support medical students interested in returning to practice in an Arizona medical Health Professions Shortage Area (HPSA) after residency training. With a recurring appropriation from the Arizona Legislature, up to 100 scholarships are awarded to cover the costs of tuition for COM-T and COM-Phoenix medical students. Recipients provide one year of service in an Arizona HPSA for each year of scholarship support. Three COM-T scholarship recipients were RHPP students who graduated in 2020 and entered family medicine residencies. Of the 34 other COM-T PCP scholarship recipients awarded to date, 14 are part of the RHPP program.

Rural Health Professions Program (RHPP) UArizona College of Medicine-Phoenix (COM-P)

Jonathan Cartsonis, MD
RHPP Director COM-P

After years of planning, the Longitudinal Integrative Clerkship (LIC) began in 2019-20 in Payson. The Liaison Committee for Medical Education approved the LIC as a parallel curriculum. Its first three students demonstrated great flexibility and resilience in the midst of the pandemic. They began the program with telehealth clinics and public health works aimed at helping the Payson community cope with the challenges of COVID-19.

To prepare for the Payson LIC, we co-developed with EAHEC and the AzAHEC Program the first annual LASSO conference. Rural track experts Jay Smith, MD, from the University of Washington Trust Program and Jill Konkin, MD, Director of the University of Alberta Rural LIC were featured speakers. Participants gained a better understanding of the LIC structure, the benefits to students, faculty and community, and the challenges involved in standing a new program.

In mid-March we ceased all face-to-face medical student clinical rotations due to the pandemic, rushed to develop alternatives and discovered new opportunities for learning and innovation. We leaned heavily on rural clinical faculty in Yuma, San Luis, Morenci, Payson, Flagstaff, Show Low, and Williams to virtually place more than a dozen students in clinical settings via telehealth.

Five of our rural track students continued as AHEC Scholars, completing virtual interprofessional activities in Prescott, Yuma, Payson, Tucson and Phoenix. Five rural-track students graduated from COM-P and entered residencies in emergency medicine, family medicine, internal medicine-pediatrics, and neurosurgery. Our medical student graduates reported that the Rural Certificate of Distinction prepared them well for the demands of residency.

These activities would not be possible without ongoing AzAHEC Program funding and support. The students, rural faculty and communities, and the UArizona College of Medicine-Phoenix are grateful.

Community Engagement Research Grant – SHOW Clinic

University of Arizona (UArizona) College of Medicine-Phoenix (COM-P) Student Health Outreach for Wellness (SHOW) Clinic

Jennifer Hartmark-Hill, MD, AFFP

Management of Hypertension & Diabetes in the Homeless Population: A Pilot Study

In 2014, AzAHEC awarded a grant for a Community Engagement Research Program to the College of Medicine-Phoenix for the "Management of Hypertension & Diabetes in the Homeless Population" pilot study. The study's goal was to determine the effectiveness and quality improvement opportunities of a comprehensive, point-of-care approach to chronic disease management for patients with diabetes and/or hypertension who are experiencing homelessness in Maricopa County. Funding supported purchase of point-of-care diagnostics, medications and statistical software to care for this vulnerable population over a six-year period.

The Student Health Outreach for Wellness (SHOW) Community Initiative conducted the study, which is Arizona's first tri-university collaborative, service learning, student-run project. Students and faculty (from UArizona, NAU and ASU), clinical preceptors and community partners are united in a mission to prepare our future healthcare workforce for tomorrow's healthcare delivery system and provide integrated, client-centered health care services using an interprofessional team-based care delivery model to underserved individuals in our community. The SHOW Clinic strives to incorporate interprofessional practices and foster community partnerships in ways that leverage the resources of individuals and organizations for the public good. Since inception, more than 200 students from 16 professional programs across the three Arizona Board of Regent (ABOR) universities have collaborated with faculty and community partners on the design and development of the SHOW Clinic. Study results, inclusive of the "Management of Hypertension & Diabetes in the Homeless Population," will be made available at a future date.

University of Arizona (UArizona) College of Pharmacy Rural Health Professions Program (RHPP)

Elizabeth A. Hall-Lipsy, JD, MPH
RHPP Director and Assistant Professor
Director, Health Disparities Certificate-RHPP

The UArizona COP considers developing the pharmacy workforce to address the access to healthcare service challenges in Arizona's rural and medically-underserved communities a key priority to its mission. How Arizona's health workforce is distributed affects access to pharmacy care, particularly in rural and remote areas. Surveys show that only 7% of Arizona's pharmacists practice in rural areas, yet approximately 15% of Arizona's population lives in rural communities. The College works to address pharmacy workforce distribution through its RHPP and Professional Certificate in Pharmacy-related Health Disparities, both of which have dramatically impacted students' exposure and decisions to practice in rural and underserved communities.

Students selected for the College's RHPP/Professional Certificate are placed in rural communities at three points in their pharmacy education: (1) the summer between first and second year for a four-week introductory community or institutional rotation, (2) the summer between second and third year for a four-week introductory community or institutional rotation, and (3) during fourth year for a six-week advanced pharmacy practice rotation.

Over the last eight years, as a result of AzAHEC funding, the College's RHPP expanded ten-fold from recruiting four first-year student participants per year to average more than 40 new participants per year. Total RHPP participation is now 27% of the college's Doctor of Pharmacy (PharmD) student body. In 2019-20, RHPP funding supported 67 students, who completed 124 rotations, totaling over 25,196 hours of pharmacy training in rural and urban underserved Arizona communities. In addition, because of scheduling difficulties due to COVID, 18 rotations totaling 3600 hours were completed in urban underserved communities, but will be submitted on next year's report.

Among RHPP students enrolled during 2019-20, all are also pursuing the Professional Certificate track (n=95), 36% are from a rural community (population < 50,000 people); 64% are from an underserved background (defined as identifying with one or more of the following: (1) first in their family to attend college, (2) received a scholarship or loan for disadvantaged students, (3) relied on federal or state assistance programs, i.e., free or reduced lunch, subsidized housing, food stamps, Medicaid; or (4) lived in an area where there were few medical providers at a convenient distance).

In May of 2020, 22 students from the Class of 2020 received their Certificate in Pharmacy Related Health Disparities. Among these graduates, 12 students were selected for competitive post-graduate pharmacy residency. Eight of the residency programs that selected RHPP graduates this year serve rural or underserved populations. Of the remaining 10 graduates, one accepted employment at a rural Arizona pharmacy, three accepted employment at urban pharmacies in medically underserved areas, and six were undecided at the time of data collection.

In a survey of these graduates, 91% reported intending to pursue further training and/or seek employment in an underserved community and 68% plan to train/work in rural settings. Employment tracking for all RHPP alumni revealed that since AzAHEC funding was awarded, 73 students (50%) obtained post-graduate residency training, 47 (28%) are employed in a rural setting and 95 (61%) are employed treating underserved patients. The College is especially proud to report that 40 (26%) RHPP alumni are practicing in rural Arizona, and 29 (24%) of our RHPP alumni now act as rural preceptors for current pharmacy students.

To improve student retention and provide additional structure and support to student participants, the College's RHPP was enhanced to include a Professional Certificate in Pharmacy-Related Health Disparities in 2010. In 2020, 22 graduating students earned the certificate, joining a total of 134 students who have successfully completed the certificate. In addition to clinical rotations, the certificate requires two classroom-based courses taught by college faculty: Community Assessment for Pharmacy Students and Health Disparities in the United States. As a result of the community assessment course, 175 students have conducted community assessments of their RHPP rotation site communities and presented their findings orally and in written reports to their peers and colleagues. Reports were presented at the Annual Interprofessional Rural Health Professions Conference poster sessions and shared with the AzAHEC Regional Centers. During rotations, students participate in community programs and events coordinated by the AzAHEC Regional Centers, such as PharmCamp, health fairs and other outreach activities.

UArizona College of Nursing (CON) Rural Health Professions Program (RHPP)

Christy Pacheco, DNP, FNP-BC
RHPP Director and Clinical Assistant Professor

In 2019-20, 46 CON Doctoral Nurse Practitioner (DNP) students participated in the UArizona CON RHPP. CON RHPP Scholars completed clinical and didactic requirements, including rural rotation hours, coursework, and a rural focused doctoral project.

Clinical Education
Collaboration with UArizona CON colleagues, the AzAHEC Program, AzAHEC Regional Centers, and community partners led to the successful development of longitudinal clinical rotations and enhanced student and site support to promote placements. Longitudinal clinical experiences permit continuity for students and preceptors. Telehealth sites across Arizona, including Federally Qualified Health Centers (FQHCs), private practices, larger healthcare institutions, and border health, migrant, refugee rotation opportunities were identified. Rotation support, such as stipends to support travel to sites were provided. A persistent barrier is affordable student housing for clinical placement.

Didactic Opportunities
Students completed rural focused didactic courses and seminars, which were open to all graduate students. Thirty-two students completed NURS 638, focusing on conceptual considerations for providing rural healthcare; 14 completed NURS 774, examining rural health status, health disparities and special populations such as Border and Native American health. Doctoral projects were conducted at clinic sites aimed to improve the health status, outcomes, and/or access to care for rural and medically underserved populations. Though targeted to RHPP Scholars, all health professions students interested in rural or medically underserved healthcare were welcome to attend.

Tanya Dempsey with Christy Pachecho (left), UArizona College of Nursing RHPP Director.

Interprofessional RHPP Conference
Thirty-five UArizona CON DNP students attended the Eighth Annual Interprofessional RHPP Conference. Eight student posters focusing on health topics of interest to rural and/or medically underserved populations, ranging from health issues to community assessments were presented. CON faculty presented at sessions on cultural competency, community assessment, and self-care during COVID.

UArizona College of Nursing RHPP student Tanya Dempsey received the Mary Opal Wolanin award for outstanding work on her DNP project.

AHEC Scholars Program
Eighteen UArizona CON RHPP Scholars participated in the AzAHEC Scholars Program, including twelve for the first (2018-2020) cohort, and six for the second (2019-2021) cohort. Students learned about social determinants of health, conducted community assessments, and developed interventions to improve health status or outcomes. Community immersions were conducted at AzAHEC Regional Centers for each interprofessional group. For example, Scholars at the Northern Arizona AHEC (NAHEC) conducted community assessments of both Flagstaff and Tuba City on the Navajo Reservation. They learned about local community health and social service resources. CON RHPP Faculty Mentors worked with AzAHEC Regional Center Directors in conducting community assessments, developing a community intervention, and disseminating findings at the Interprofessional RHPP conference.

The UA CON RHPP provides critical clinical and didactic support to DNP students interested in caring for rural and medically underserved populations. Scholars develop expertise in interprofessional primary care for these populations to improve access to care and health outcomes. Extensive collaboration continues among RHPP Directors, AzAHEC Regional Center Directors, the AzAHEC Program, UArizona CON and our community partners across the state.

ASU Edson College of Nursing & Health Innovation Rural Health Professions Program (RHPP)

Diane E. Nuñez, DNP, RN, ANP-BC, FNAP
Clinical Professor, Interim DNP Program Director, RHPP Director; Specialty Coordinator, Adult-Gerontology DNP Program

The ASU RHPP provides clinical opportunities for primary care Doctor of Nursing Practice (DNP) students to work in Arizona's rural and urban underserved areas throughout Arizona, fosters interprofessional educational opportunities, and stimulates DNP student interest in careers in underserved settings. This contributes to the AzAHEC mission to develop a culturally-competent, diverse healthcare workforce to help reduce health disparities and improve health outcomes for vulnerable Arizona populations. DNP students are selected as RHPP fellows based on an essay statement, interview, leadership and community involvement, scholarship activities and potential to seek employment in AzAHEC focus areas upon graduation. Students can opt to apply to the AzAHEC Scholars Program.

The ASU RHPP offers networking, outreach, community service and education in social determinants of health locally and regionally. This approach helps students develop knowledge and expertise in the unique challenges of working in rural and medically underserved communities, and challenges these populations face. Experiences for most students included long-term rotations across two to four semesters in medically underserved communities. Students completed direct patient care and quality improvement projects at the sites. Several students participated in COVID-19 testing and contact tracing in high-risk communities in Arizona.

In 2019-20, the ASU RHPP supported students assigned to rural community health clinics, rural private practice, Federally Qualified Community Health Centers (FQHCs), in Health Professional Shortage Areas (HPSA) across all five AzAHEC Regional Center service areas, totaling 7995 hours of community-based training. The COVID pandemic prevented some students from completing all rotations, however 32 unique students were placed in rural or medically underserved communities for practice. These students completed 55 rotations, and another 19 students had longitudinal clinical rotations across several semesters.

ASU AHEC Scholars attending Day at the Legislature. Senator Heather Carter (center).

The Nurse Practitioner students represented all primary care specialties and included 11 Adult/Gerontology Health, 13 Family Health, three Family Psychiatric Mental Health, three Pediatric and two Women's Health NP students.

A great success this year was celebrating the completion of our first AzAHEC Scholars Program cohort of 15 ASU students representing all primary care specialty areas. They engaged interprofessionally in all five AzAHEC Regional Center service areas, with students studying pharmacy, public health and medicine. Students completed the curriculum in addition to their rigorous graduate programs, which included several community immersions in their assigned AzAHEC Regional Center, monthly meetings for virtual seminars, and year-round teamwork to complete a community assessment and intervention project in their area. They created a poster of their community experience and presented it at the 8th Annual Interprofessional Rural Health Professions Conference in April 2020.

Stemming from their clinical rotations and community immersions, 14 students completed DNP projects in their AzAHEC Regional Center service areas. The projects are a natural evolution of their RHPP practice experience, and coupled with the AzAHEC Scholars Program community assessment, fulfill both their educational obligations and the community needs. The ASU RHPP program will continue to provide clinical practice and legacy projects to best use student talent and academic requirements to benefit rural and underserved communities.

ASU AHEC Scholars attending Day at the Legislature.

Northern Arizona University (NAU) School of Nursing (SON) Family Nurse Practitioner (FNP) Rural Health Professions Program (RHPP)

Shelley Vaughn, DNP, FNP-BC
RHPP Director

In 2019-20 NAU SON had 38 FNP graduates, with eight who participated in the RHPP and completed 3,902 rotation hours in rural and urban medically underserved areas. AzAHEC Scholars received stipend support for summer, fall and spring rotations.

All NAU RHPP students attended the 8th Annual Interprofessional Rural Health Professions Conference in April via Zoom and several students presented posters. One NAU SON RHPP student participated in the AHEC Scholars Program.

Preceptors sites for the RHPP students included Kaplan Family Care, Honor Health, El Rio Community Health Center, Banner Page Hospital, Gila Valley Clinic, North Country HealthCare, Old Pueblo HealthCare Canyonlands Healthcare and Adelante Healthcare.

Northern Arizona University (NAU) – Phoenix Biomedical Campus Department of Physician Assistant Studies

Elias Villarreal, Jr., MPAS, PA-C, DFAAPA
RHPP Director

In 2019-20, the NAU Physician Assistant (PA) Program was invited, developed and participated as a new RHPP and AzAHEC Scholars Program. It has been a privilege to be part of an initiative that so closely mirrors the mission of NAU PA Program to serve Arizona in primary care and rural health settings in medically underserved areas and populations.

In this first year, the program focused on setting itself up for RHPP clinical placements. The NAU RHPP Director learned the scope and practice of the AzAHEC Scholars Program Faculty Mentor role, the delivery of AzAHEC Scholars curriculum, RHPP policy, procedure, and administration, and setting up partnerships and relationships with fellow Scholar faculty mentors and RHPP directors. Developing important bonds and communication streams between AzAHEC Regional Centers and the AzAHEC Program at UArizona in Tucson were important elements of first year implementation and onboarding.

In 2019-20, the NAU RHPP director worked diligently to boost the visibility of the AzAHEC Scholars and RHPP programs to currently enrolled PA students, future students at all recruitment and admissions events, and the NAU campus environment on both the Phoenix Biomedical and Flagstaff campuses. This was accomplished by holding regular recruitment in-person sessions, informational webinars, and promotional marketing to all potential NAU media outlets.

Five RHPP students were selected to participate in the AzAHEC Scholars program from 12 applicants. The five selected represent diverse ethnicities, backgrounds, prior experience and geographic locations. The Native American population is also represented in our current scholar participants. Since the PA program is 24 months in length, only first year PA students were recruited to participate in the two-year AzAHEC Scholars Program. Clinical placements will start in their second year. NAU PA AHEC Scholars speak highly of the program and look forward to the clinical rotations.

NAU PA AHEC Scholars said:

"I've loved the opportunity to learn about a smaller community inside and out. Now, in rotations I am working in this community and it's wonderful - everyone is friendly and welcoming, and it is evident that they really love their town. I've learned that people here will do anything they can to help you benefit their town especially in terms of medicine."

"I enjoyed engaging with other students from different health care programs and working towards a goal of helping provide community and healthcare service. I also liked going out to the community and interacting with the people that lived within the town. It gave me a different perspective of how it is to be a citizen of the community for a day."

"The most important thing I've learned as an AHEC scholar is to embrace the experience. People live in conditions that may be different from your own life. As an AHEC scholar, I have been able to learn and gain exposure to rural places and how it impacts one's life. It has been a good experience to embrace the culture in these communities and has helped with becoming aware of health care issues occurring in Arizona."

"I am looking forward to going to different locations and seeing how healthcare is handled in my AHEC division. I will be able to see what areas of health care are needed for help as well. I am also looking forward to applying the knowledge that I learned in my first year to patients that I will be seeing in the future."

Arizona Center for Rural Health (AzCRH), Rural Health Professions Program (RHPP) University of Arizona (UArizona) Mel & Enid Zuckerman College of Public Health (MEZCOPH)

Marc Verhougstraete, PhD, *RHPP Director, Assistant Professor;* **Jennifer Peters**, *Academic Professional, Arizona State Office of Rural Health Program Manager*

The AzCRH RHPP offers five graduate and undergraduate-level service-learning academic (one credit) courses, delivered as one-week intensive immersion experiences. In the 2019-20 MEZCOPH RHPP, 45 MEZCOPH students participated in these service learning courses, of whom 42% grew up in a rural area and 56% grew up in Arizona. As a result of COVID-19, one of the service learning courses (Northern Arizona) was transformed to support summer internships for 12 MEZCOPH students working on community issues including air, water and food safety on Native American reservations; farm worker health; climate change; and immigrant health.

Students worked in rural, tribal, border and urban underserved communities collaborating closely with the AzAHEC Regional Centers. They experienced active learning and reflection while they addressed rural health challenges around social determinants of health, environmental health, health promotion and eliminating health disparities. By combining service with reflection, the courses broaden student understanding of health equity and social justice, while encouraging community engagement.

Family and Child Health in Urban Settings HPS 597A August 2019 | Regional AHEC partner: Southeast Arizona AHEC (SEAHEC)
Ten students worked with public health faculty (Dr. Christina Cutshaw) and an instructional team (Jennifer Peters, Bryna Koch, and Nidal Kram) to collaborate with organizations in a blended model of didactic and field-based work to provide students foundational information and applied opportunities related to current health and social policy affecting families and children. Students were introduced to the diverse ethnic and racial populations of Tucson through public health programs that serve families and children, particularly those that serve families affected by migration.

> *"Because of the knowledge I gained from this course, I believe that my relationships to Nogales, the border, and the people there are now changed. I am now in a different role in Nogales because of this course; I have a place there as an MPH student from the U of A."*

MEZCOPH RHPP Scholars in Safford.

Border Health Service-Learning Institute (BHSLI) PHPM 597C | August 2019 | Regional AHEC partner: Western Arizona AHEC (WAHEC), at the Regional Center for Border Health (RCFBH)
Ten students, public health faculty (Dr. Kate Ellingson and Jill de Zapien), an instructional team (Abby Lohr and Mario Trejo), and community partners completed this immersion experience in the border communities of Yuma, Somerton, and San Luis, and the Sonoran community of San Luis Rio Colorado. Participants focused on community health disparities and explored the role public health advocacy in globalization, migration and health. During its decade-long tenure, BHSLI introduced students to the nuanced and challenging reality of health disparities along the US–Mexico border. More importantly, BHSLI highlights work being done to improve health outcomes in the Border Region.

> *"Our visit to RCFBH provided us with invaluable context and background information, and it gave us a sense of what 'border health' really means in Yuma County. It was a great start to what would turn out to be a truly transformative week."*

Phoenix Urban Service Learning PHP 597F January 2020 | Regional AHEC partner: Central Arizona AHEC (CAAHEC) at the Arizona Alliance for Community Health Centers (AACHC).
Fifteen students explored public health policy and action with state and community-based programs meeting the needs of the diverse metropolitan city. The course focused on structural conditions and policies related to the unhoused population of Phoenix, and the health and social services that engage and supports this community.

Continues on next page ▶

"I enjoyed learning more about the services offered in Phoenix and how they have recognized the needs of the community and adapted their services to address these needs in a culturally competent and inclusive manner."

Rural Health Service-Learning Institute PHPM 597D March 2020 | Regional AHEC partner: Eastern Arizona AHEC (EAHEC)

Ten students, along with faculty (Dr. Marc Verhougstraete) and staff (Teresa Sosa), collaborated with community partners in Eastern Arizona. Students explored water concerns, worked in a community food bank and garden, toured clinics and hospitals, interacted with elderly clients at communal meals, and explored the social and environmental impacts of local economic drivers related to social justice in rural areas.

"This class was one of my favorite classes so far. I enjoyed getting to work interprofessionally while learning about the needs and resources available in a rural community."

Maternal and Child Health in Rural Settings | HPS 597B Regional AHEC partner: Northern Arizona AHEC (NAHEC)

Due to the COVID-related community conditions and UArizona moratorium on travel during the Spring and Summer of 2020, we were unable to offer this course. It is led by Agnes Attakai, and focuses on health systems and services in tribal communities in the Navajo and Hopi Nations.

RHPP Public Health Internships Summer 2020

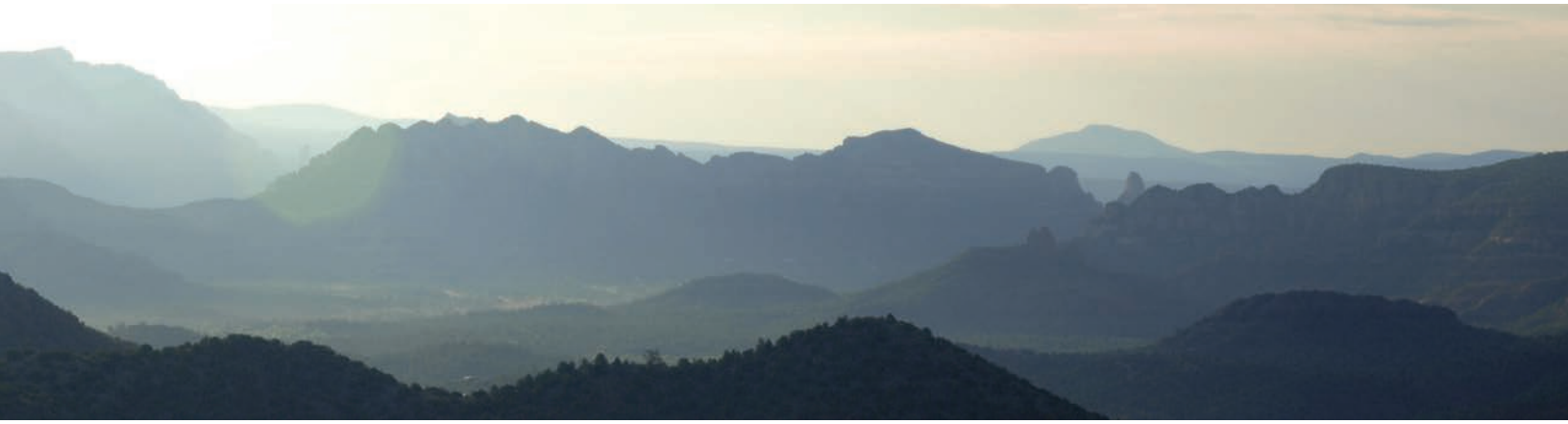
Twelve students completed internships with faculty (Drs. Marc Verhougstraete, Mary Kay O'Rourke, Robin Harris) and academic professionals (Jill de Zapien, Bryna Koch, Abby Lohr, Jennifer Peters, Sheila Soto). Internship outcomes included: developed three papers for publication; created service-learning tool kit website; performed qualitative analysis of service-learning student reflections; and made policy recommendations for farmworker health. RHPP internship participants wrote:

"The culmination of my academic pursuits is to work in Public Health at the community level through community mobilization and participation and to foster the development effective and sustainable normative cultures of health and wellbeing within the respective social/cultural contexts."

"Through my internship, I hope to gain practical experience that will help me analyze and utilize data to direct interventions in rural and underserved communities in future projects."

MEZCOPH RHPP AHEC Scholars Program

This two-year interprofessional program provides students with community-based experiential training in rural or underserved Arizona communities. In 2019-20, the program saw 1) the first cohort graduate at the annual RHPP meeting, including five MEZCOPH students, 2) ten students continued to engage with Arizona's communities in the second year of their program, and 3) five new students entered the program and were placed in the five AzAHEC Regional Centers.



The "CRHWorks" Health Workforce Data System

Bryna Koch, MPH; Susan Coates, MBA; Charles Drake, MS, MA; Daniel Derksen, MD

The Arizona Center for Rural Health (AzCRH) mission is to "improve the health and wellness of Arizona's rural and underserved populations." Addressing rural health needs requires up to date, accurate, and standardized health workforce data. This data can inform policy and programmatic interventions.

CRHWorks aims to provide timely, reliable, graphically pleasing and publicly accessible Arizona health workforce data for stakeholders.

The CRHWorks reports and interactive data visualizations can be found on the Center for Rural Health Website at https://crh.arizona.edu.

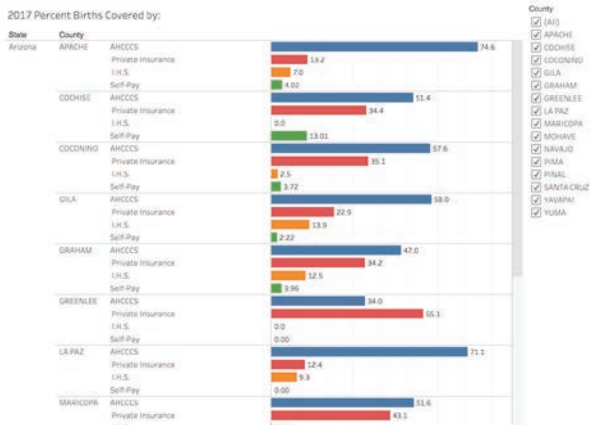
Research

In the prior year the Health Workforce team has collaborated on two research papers in the development or peer review process.

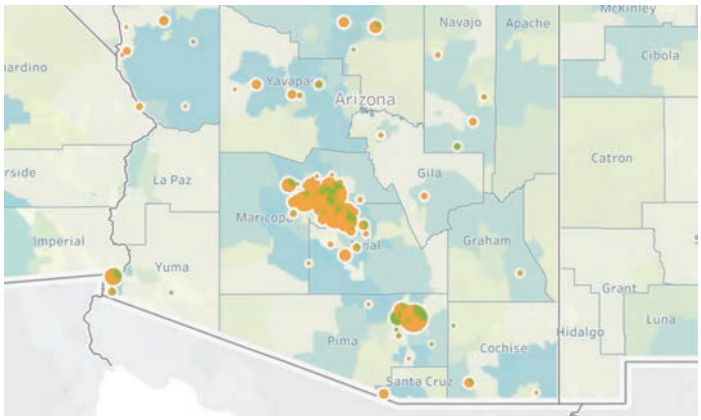
Federally Qualified Health Centers Can Expand Rural Access to Medication-Assisted Treatment in Arizona. Brady, B; Gilderlseeve, R; Koch, B; Campos-Outcalt, D; and Derksen, D. (In Review).

Physician Relocation Patterns Differ by Rurality and Primary Care Status. Brady, B; Koch, B; Gulick, D; Carter, H, and Derksen, D. (Pre-Submission).

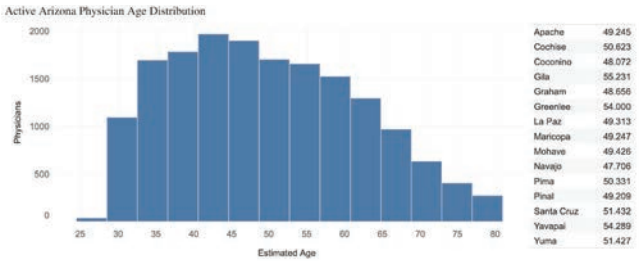
Data Visualization



Access to Maternal and Pre-Natal Health care in Arizona

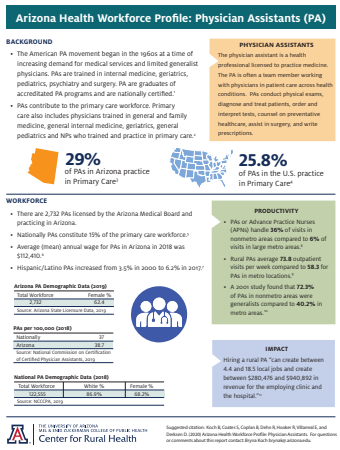


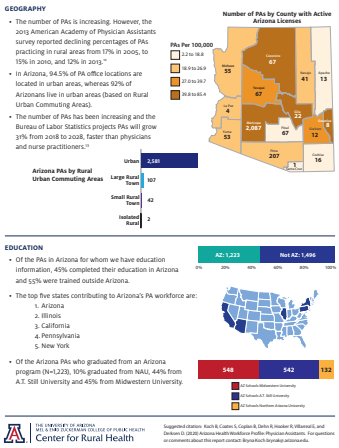
Arizona's Maternal Health Workforce

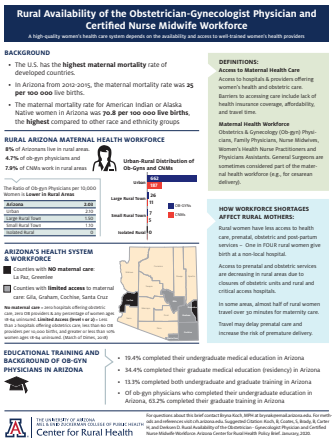


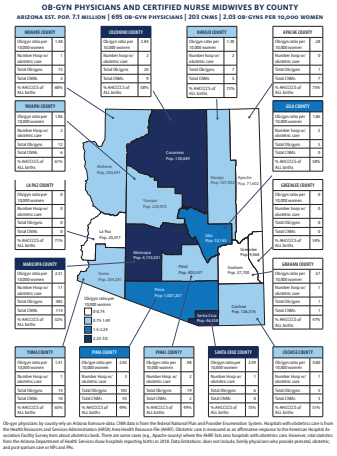
Arizona Primary Care Physician Report

Briefs and Reports









Arizona Primary Care Physician Report

UArizona COM-T Rural Health Residency Training Banner University Medical Center South (BUMC-S) South Campus

Jerome Koleski, MD
Assistant Professor and Rural Health Coordinator

Our mission at BUMC-S Campus is to train physicians to work in Arizona's rural and underserved areas. Spending significant amounts of time in rural areas, 16 weeks minimum for Family Medicine (FM) residents, allows them to experience the professional and personal benefits of living and working in underserved and rural communities. Our rural rotations are some of the most valued and highly rated experiences our residents have. These rural rotations are often why some of our best residents decide to train here, and why many of them stay to practice in Arizona's in rural and underserved areas in Arizona – many times where they rotated as a resident. The FM and Internal Medicine (IM) residencies at BUMC-S are most grateful to AzAHEC for their ongoing support of resident training in rural Arizona.

During the 2019-20 academic year, AzAHEC and BUMC-S sent first, second and third-year FM Residents to rotations in family medicine, obstetrics, pediatrics, and emergency medicine in rural Arizona. FM Residents served in Fort Defiance, Polacca, Safford, Tuba City, Whiteriver, Payson, Douglas, Casa Grande, and Willcox. FM Residents also rotated in Sells and San Xavier, and the town of Ajo for parts of their musculoskeletal and geriatrics experiences respectively. We added a new rural OB site in Nogales and exploring re-establishing a FM rotation in Sells. IM Residents completed 19 rotations in Payson, Casa Grande and Green Valley. FM Residents completed 26 rural rotations and went to rural sites during 10 blocks (slightly lower than previous years because of the COVID-19 pandemic).

The BUMC South Campus FM Residency continues to see a high percentage of their graduates stay in Arizona to work in underserved and rural areas. Of the residents that graduated in the last three years, 48% are practicing in rural areas in North America, with 50% of those practicing in rural areas of Arizona; a very high 96% work in federally designated Health Professional Shortage Areas (HPSA), 64% of them in Arizona. In the last graduating class, all of our graduates except one stayed in Arizona, and all will be working in HPSAs. Two of our previous graduates, Sommer Aldulaimi, MD, and Daphne Rosales, MD, are both practicing in underserved South Tucson. Because of the high percentage of our residents who practice rurally, we had the honor of receiving the National Rural Training Track Collaboration Rural Recognition for three consecutive years!

AzAHEC supported courses to help prepare FM residents for rural practice environments, including Advanced Trauma Life Support (ATLS), Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), Neonatal Resuscitation Program (NRP), Advanced Obstetrical Life Support (ALSO) and an introduction to medical Spanish. AzAHEC supported the introduction of a new "Point of Care Ultrasound (POCUS)" curriculum for the residents to help equip them for practicing in low resource areas, prepare them for their rural rotations and feel competent to practice in under-resourced areas after they graduate.

The quality of the teaching by rural preceptors is one of the most valued parts of the rural rotations and is very highly regarded by residents; feedback from both IM and FM residents is very positive. Each of our rural site preceptors received the Society of Teachers of Family Medicine's "Practice Recognition Award for Teaching," for their exemplary teaching of our residents. We are honored to have such amazing rural preceptors who invest so much time in teaching our residents.

Mobile Health Program Obstetrics

The Mobile Health Program Obstetrics (MHP OB) continues to provide prenatal, postpartum and family planning services to uninsured patients in Tucson.

Ravi Grivos-Shaw, MD, and Elizabeth Kyle Meehan, MD, supervise second- and third-year residents to provide high quality continuity prenatal care to underinsured and uninsured women throughout their pregnancies and deliveries into the post-partum period. This year the mobile heath prenatal program had 758 patient encounters, which is almost double last year! This year, we were also able to provide an ultrasound clinic that averaged about seven patients per session.

Dr. Meehan said of the MHP OB, *"Our program serves uninsured and underinsured pregnant women, providing prenatal care, labor and delivery, and post-partum care, while also training the next generation of family physicians. Barriers to health care…have only gotten worse during the COVID-19 pandemic. Many health centers stopped providing in-person care, and some also stopped accepting new patients. Throughout this pandemic, the Program continues to provide in-person care to our prenatal patients, and accepts new patients needing prenatal care. For many of our patients, our mobile health program was one of the only places that would accept them for care during this pandemic."*

This program is not just important for these women in Tucson but also resident education. It demonstrates that clinical care is not the only important part of being a family physician – providing services that our patients need during, even the most difficult times, embodies the mission of our program. Residents attest to the sense of giving back to the community, providing care where it really matters, and they report a sense of fulfillment. They develop confidence as they strengthen their OB related decision-making skills in accordance with evidence-based medicine and community standards of care in a resource poor environment.

One of our graduates last year, Ana Gonzales, MD, is going to be one of our core MHP OB faculty says, *"The mission of our program focuses on training full spectrum Family Medicine physicians through providing care for rural and underserved populations. Working with the mobile OB program exemplifies this mission. As a resident, working with the program was not only enriching educationally, but helped ground me in my commitment to continue to pursue full spectrum Family Medicine. I am excited to continue to be a part of this program which truly embodies the impact Family Medicine physicians can have when they engage with their communities."*

We are very proud of what we have accomplished at South Campus in conjunction with the AzAHEC Program. Our programing continues to expand, and we are excited for the future! This partnership has allowed us to train strong residents to serve in underserved and rural areas of Arizona and beyond. We look forward to our continued collaboration!

Student Experiences: UArizona COM-T Rural Health Residency Training at Banner University Medical Center South Campus

Myles Stone, MD, MPH, graduated from our South Campus Family Medicine Residency Program in 2017. He has been working for the Indian Health Service – Whiteriver Hospital on the Fort Apache Reservation in Whiteriver, Arizona since graduating and is now the COVID-19 High Risk Program Director for them. He recently co-authored an article published in the *New England Journal of Medicine,* **"Contact Tracing for Native Americans in Rural Arizona."**

He recently discussed his experience with us and wrote:

"We detected our community's first person to test positive for COVID-19 in early April. I happened to be working in the emergency room that day, and will likely remember the patient's chest x-ray for the rest of my life. Our rural location delayed the virus's arrival, but we knew that it would spread quickly. We had already set up a contact tracing team, so they were ready to go with the first case.

However, we quickly discovered, along with the rest of the world, that the virus spreads faster than it can be traced. Since the asymptomatic and pre-symptomatic periods are so long, many patients will spread the virus to people around them before they know they're infected. So, we evolved our contact tracing program into more of a high-risk home visit program. This evolution occurred just as I returned from a PHS deployment to the Detroit COVID-19 Alternate Care Site.

I had spent the prior month exclusively treating patients with COVID-19, and our lead infection control physician asked me to join his team and do the same for our community. Since then, I've driven nearly 1,500 miles across our reservation, visiting the homes of people who have been newly diagnosed with COVID-19, checking up on them and others in their homes.

Every morning, I review the new cases, and plan out the day's visits based on each patient's risk factors and where they are in the disease course. Our team has now expanded to include a full-time nurse, and another rotating member of the medical staff.

We typically see 40-50 people a day. The days are long for all of us, but this is probably the most enjoyable and gratifying work that I've done in my career.

The broad training and exposure to rural medicine that I received during residency is why I am able to take on this role, and why I am working in this environment in the first place. I feel very grateful to be a UA FCM South Campus graduate."

Our Family Medicine and Internal Medicine residents continue to see their rural rotations as a key element of their training. The following are some of the thoughts our current residents and recent graduates have shared about their experiences:

"Having the opportunity to complete rural rotations is one of the best parts about our Family Medicine Residency. My first rural rotation was out in Safford, AZ and has shaped my vision of how I hope to practice medicine and inspired me to pursue a career in rural medicine. I am currently on a rural rotation for OB in Casa Grande which is allowing me to have robust training in obstetrics that I otherwise would not be able to have. Besides the clinical skills learned, it is amazing to be able to learn about so many different groups and cultures in Arizona allowing us to become more well-rounded, culturally competent physicians for this state and beyond." – Caroline Flowers (PGY 2)

"The rural rotation experience is a unique aspect of my residency program. I was able to receive one-on-one teaching with several faculty without having to share their attention with several residents (as at large academic institutions). I had more opportunities for hands on experiences for the same reason. I also learned about the community I became a part of and the limited resources that rural areas are challenged with." – Marisela Mariscal (PGY 2)

Colorado Plateau Family & Community Medicine Residency

Marica Martinic, MPH, *NAHEC Director*

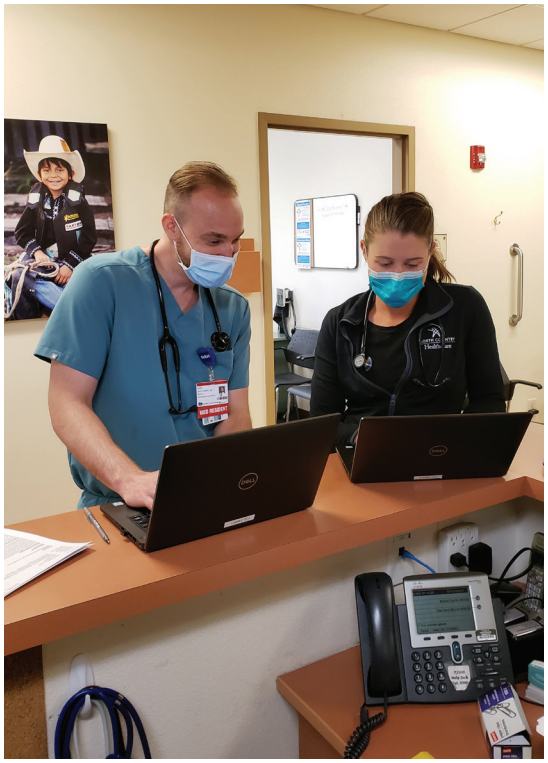
North Country HealthCare and the Northern Arizona AHEC (NAHEC) Program began planning for our family medicine residency program in 2010, with statewide support from the AzAHEC Program, UArizona, and many other key partners. The past year was a whirlwind of activity, led by Program Director, Ed Paul, MD. In Fall 2019, we began recruiting the first class of Family Medicine (FM) residents. Of the 700 applicants for our four FM residency slots, about 50 were from Arizona medical schools. We were thrilled to have such a competitive, high quality pool, and interviewed about 50 applicants. In November 2019, HRSA awarded us funding for Teaching Health Center Graduate Medical Education (THCGME) program, one of only five new awardees in the country. It pays for the direct and indirect costs of operating a residency program in a Community Health Center (CHC) setting. The funding provides $150,000 per resident per year, or $1.8 million per year once we have our full complement of twelve residents.

In March 2020, we learned who matched with our first class of four FM residents - three are graduates of Arizona schools, including Lauren Weinand, MD, from UArizona COM-Tucson, Dan Shtutman, DO, from Midwestern University, and Tasha Harder, DO, from our own Flagstaff campus of ATSU-SOMA. Our fourth match, Elizabeth Curtiss, MD, comes to us from Wayne State University and has Arizona connections. These residents could not be better suited to pioneer the first class of a CHC-based program in a residency-naïve area and will be fabulous physicians for northern Arizona communities.

Leading up to the residency launch in June 2020, we completed renovation of the residency training space and named the program: The NARBHA Institute Family & Community Medicine Program under the umbrella of the Colorado Plateau Center for Health Professions. The NARBHA Institute contributed $3 million to the program over five years to support development and initial program costs. Brandon Abbott, DO, was hired as Associate Program Director. He is a long-time advocate and supporter of all things education. Dr. Abbott graduated from the first NAHEC's ATSU-SOMA campus, came to work for North Country HealthCare upon residency completion, and coming full circle to serve as faculty in the new residency program. It is wonderful to see our graduates return to teach the next generation of providers.

On June 29, 2020, our first class of residents were welcomed on-site at North Country HealthCare! After a month of non-stop training and orientation, they began seeing patients in North Country clinics and partner training sites on July 27. They are already immersed in the local community, learning how to care for rural, indigenous and underserved populations, and we hope they will stay for years to come. We cannot thank our partners and funders enough for their ongoing support of this monumental achievement – especially the AzAHEC Program, the NARBHA Institute, and the State of Arizona.

Brandon Abbott, DO, prepares to don the white coat on Tasha Harder, DO, during the Colorado Plateau Family & Community Medicine Residency White Coat Ceremony.



New residents Dan Shtutman, DO, and Tasha Harder, DO, prepare to see patients in the Family Medicine Center at North Country HealthCare.

Med-Start Health Careers Program

Francisco Moreno, MD, *Professor of Psychiatry*
Lydia Kennedy, M.Ed, *Office of Equity, Diversity and Inclusion*

The Med-Start Health Careers Program is an academic enrichment and health careers exploration program offered in partnership with the AzAHEC Program and Regional Centers. Since 1969, Med-Start has prepared high school juniors from rural, border, tribal and other educationally and economically disadvantaged communities for their future health professional careers. Med-Start's goal is to expand the "health professions" pipeline of diverse and culturally competent students. In 2019-20, Med-Start selected 42 students from 366 online applicants. Students represented 30 high schools from the Navajo Nation and from across Arizona.

Due to the COVID-19 Pandemic, the 2019-20 Med-Start Program converted to virtual experiences including:

Online college courses:
Students received up to five college credits for English, Math, Chemistry and College 101.

Virtual Health Career Lectures:
Students learned about health profession careers via weekly career chats from health professionals via zoom. The Colby-Olsen Foundation provided a virtual Co-Lead Internship. Topics included: Time Management, Smart Goals, Personal Branding and Interviewing, Workplace Readiness and Leadership & Ownership. Students were paired with one St. Luke's Home senior resident and exchanged correspondence.

Interactive virtual tours in academic institutions and healthcare facilities:
Students participated in virtual tours of the UArizona Health Sciences Innovation Building-Tucson, Grand Canyon University, Northern Arizona University, Midwestern University, Mayo Clinic College of Medicine, and AT Still University. Other activities included a virtual suturing session using kits delivered to their homes; the Red Cross provided remote CPR-FA training.

Financial Literacy Course:
Students learned about Spending Plans, Savings, and Ways to Invest in Themselves. In Spending Plans, students learned how to create and use a budget, the value of money and saving, and how money can be used to reach financial goals.

Community Health Project:
Over the six-week program, students collaborated with each other and their AzAHEC Regional Center to develop community health projects. At the conclusion of Med-Start, students presented their English, Math and AzAHEC community projects.

EAHEC – *Bullying, Cyberbullying, and Racism in Smaller Communities*

SEAHEC – *The Threats of Vaping*

NAHEC – *COVID-19 and Ebola Virus*

WAHEC – *The Effects of COVID-19 in Yuma County*

CAAHEC – *Obesity Intervention and Health Disparities*

Med-Start students collaborate with the AzAHEC Program and Regional Centers on their initiatives in reducing health disparities within their assigned communities. Students talk about their experiences in their high schools and assist in recruiting new Med-Start applicants.

We are grateful for the AzAHEC Program's ongoing support and guidance, and for providing laptops and software so each student could participate remotely in the 2019-20 Med-Start Program. We thank the Arizona Telemedicine Program for supporting our Med-Start opening and closing ceremonies.

Med-Start students participating remotely.

UArizona Health Sciences Office of Equity, Diversity and Inclusion

Focusing Research on the Border Area (FRONTERA)

Francisco Moreno, MD, *Professor of Psychiatry*
Lydia Kennedy, M.Ed.

The FRONTERA Summer Internship prepares students to apply to graduate programs, gain research experience, and understand public health disparities in the U.S.-Mexico Border Region. FRONTERA has an incredible wealth of committed and world-renowned faculty; a network of organizations committed to improving the health of border communities; and community leaders interested in developing the next generation of culturally competent and research savvy health professionals working cohesively to analyze and report on crucial public health issues.

In its 15th year, FRONTERA accepted ten interns from 79 applications in 2020. FRONTERA Interns:

Matched with a faculty mentor – aligned with the student's areas of interest stated on their application. Due to the COVID-19 Pandemic, interns worked virtually with faculty mentors for eight weeks on their research projects.

Received up to nine University credits – six for an internship course and three for a health disparities class offered by the UArizona Mel and Enid Zuckerman College of Public Health.

Attended virtual graduate school prep courses – offered in partnership with UArizona Think Tank. Five interns participated in the self-paced GRE prep course and eight interns in the MCAT prep-course. Training included conducting literature reviews, using PubMed for evidence based research, and establishing clear expectations when meeting with their mentors.

Attended a three-day virtual workshop about health disparities in border communities – offered with the Southeast Arizona AHEC (SEAHEC). Presentations included a program in Winchester Heights, a Willcox, AZ neighborhood comprised largely of farmworkers and their families. FRONTERA interns created seven 3-minute educational videos in Spanish to support mental health in this community. Dr. Brenda Martin, Chief Recruitment Officer from the Navajo Area Indian Health Service (IHS) presented on the IHS, the Navajo Nation Department of Health, and IHS Emergency Preparedness related to the COVID-19 pandemic. Dr. Mercedes Gameros, MD, Hospital General, Nogales, Sonora presented on Mexico's health system. Dr. Eladio Pereira MD, Chief Medical Officer for the Mariposa Community Health Center talked on health care in Nogales, Arizona and Santa Cruz County. Dr. Kacey Ernst presented on the COVID-19 pandemic in Pima County.

Learned how to apply to medical school – from Tejal Parikh, MD, of UArizona COM-Tucson and about financial aid opportunities for medical students from Jessica Le Duc.

Interns presented their posters and explained their research projects to UArizona Faculty, staff, students, and family members at the FRONTERA closing ceremony. Speakers included Dr. Michael Dake, Senior VP for Health Sciences, who invited interns to continue their paths to UArizona Health Sciences colleges. Professor Leila Barraza and Dr. Francisco Moreno offered words of encouragement to the interns.

Intern feedback and testimonials on their FRONTERA experiences

"My passion to serve the underserved one day as a future provider was further reinforced, so thank you!"

– Christina Cañez.

"We got a better context of the border region and why public health work is important in this region"

– Radhey Ruparel

"The projects that you run in border communities were especially interesting to me, as I hope to someday serve a Spanish- speaking community. The way we convened in groups was very refreshing… I was able to do a lot of personal reflection and thinking about the issues that matter the most to me in healthcare… I will carry these experiences with me far into the future"

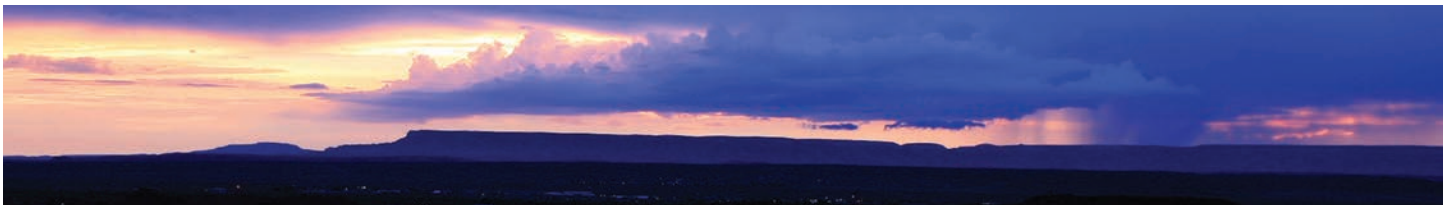
– Ruya Arce

"As a first generation college student, it can be intimidating… in regard to my career pursuits. I learned it is important to step out of my comfort zone and create moments in my life both personally and professionally instead of waiting for them"

– Yecenia Villarreal

"So glad that I was accepted into this program. It has prepared me for so much! I am ready to continue my career with a huge motivation and support system. I will be forever grateful to FRONTERA"

– Alexis Ortega



The Border Latino and American Indian Summer Exposure to Research (BLAISER) Program

Allison Huff MacPherson, DHEd, *Assistant Professor, Family and Community Medicine, COM-T*
Viridiana Johnson, *Program Coordinator*

BLAISER was created in 2015 to address health disparities in Arizona's ethnically diverse, fast-growing communities. It is primarily a research-based program with goals to: expand the pipeline to support future physician-scientists and health care researchers; increase awareness and promote research efforts in our underserved communities to better understand health disparities and their impact on health outcomes; attract and retain diverse students who have a strong interest in biomedical research and a desire to learn more about health disparities in Southern Arizona; and encourage students to pursue graduate studies by equipping each student with the necessary skills to become a competitive graduate school applicant.

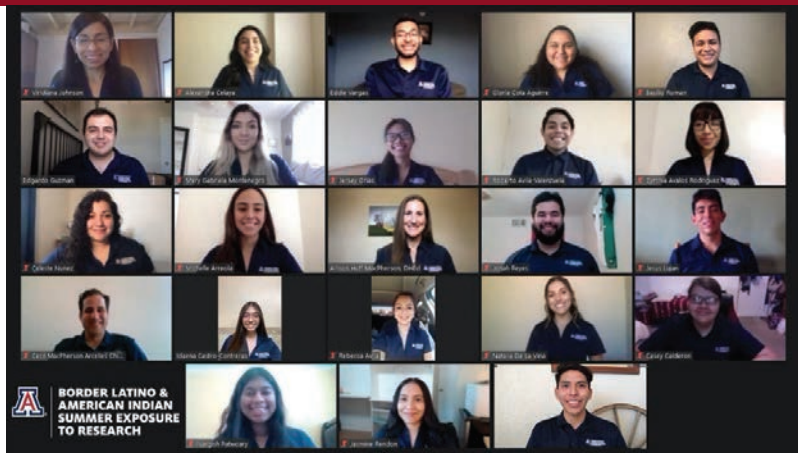
In 2019-20, BLAISER accepted 20 students from 83 applications received, of whom 85% were first-generation college students. In response to the COVID-19 pandemic, this year's program was adapted to be online.

Students Benefits – Each BLAISER student received a $4,000 stipend to assist with financial and technological burdens related to online learning. On-campus housing was offered for non-UArizona students. Each student earned six units of upper-division graded undergraduate research.

The Minorities and Border Health Disparities Lecture Series (MBHDLS) – given by prominent researchers and faculty taught students about the health disparities in Arizona and the U.S.-Mexico border region. Students learned about efforts by UA researchers, faculty, and other statewide organizations to address health disparities.

Research experience – BLAISER students were matched with leading UArizona Health Sciences scientists based on their research interests. Prior to starting their research, students were provided with critical tools needed to ensure success in their research laboratories, such as IRB training, Responsible Conduct of Research, and HIPAA certification. Students developed mentoring relationships, learned about research methodology, explored career options, and contributed to resolving unique real-world problems. They developed important skills that can be applied in their personal and professional lives, such as critical thinking, writing, communication, teamwork and collaboration. These skills contribute to developing well-rounded students with stronger graduate school applications.

Graduate and Medical School Application Preparation – Students learned about the Arizona Medical School admission and application process and alternative application pathways such as the Pre-Medical Admissions Pathway (P-MAP) and



2020 BLAISER students and staff

Pathway Scholars Program (PSP). Students attended a Financial Aid Guidance presentation on financial aid options for medical students.

GRE and MCAT exams preparation - Students participated in Princeton Review GRE prep courses and MCAT preparation through the UArizona Office of Equity, Diversity and Inclusion. They learned about test taking strategies, section content and managing anxiety.

Writing and Public Speaking Workshop – Students participated in facilitated writing workshops and public speaking courses to enhance their personal statements, learn communication strategies and improve presentation and public speaking skills. They applied the skills learned to create and present their research posters and final oral presentations.

Learning Resources – The UArizona Health Sciences Libraries provided BLAISER students resources and guidance to searching databases for scholarly articles to assist in their annotated bibliography assignment and their research.

Pre-Health Advising – Students met with a pre-health advisor to discuss their goals, academic history, future pathways, and strategies to be a more competitive applicant when applying to health sciences careers.

AzAHEC Regional Centers presentations – were given by EAHEC, NAHEC, WAHEC about support and resources for health professions students. SEAHEC provided virtual presentations about the health disparities and services provided in the U.S.-Mexico border region and on the Tohono O'odham Nation.

The virtual research poster presentation – had students showcase their research in the first ever BLAISER virtual poster session open to friends, family, faculty and peers.

We are proud of the wonderful accomplishments students were able to achieve in the 2020 virtual BLAISER experiences.

Central Arizona Area Health Education Center (CAAHEC)

Sean Clendaniel, *Director*

CAAHEC serves the communities of Maricopa County, west-central Pinal and south-central Yavapai Counties. CAAHEC supports all aspects of the health professions pipeline, from K-12, health profession trainees (students and residents) and practicing providers.

WORKFORCE DEVELOPMENT SUMMARY- CAAHEC

TYPE OF PROGRAM	PARTICIPATION
Health Careers Preparation Participants	452
Health Professions Trainee Experiences*	40
Continuing Education Health Professional Participants	596
Community Health Education Participants	907

*Trainees completed 9,992 contacts hours

Pathways Programs

In 2019-20, CAAHEC supported health professions clubs which provide opportunities for students to explore and prepare for health careers. CAAHEC and the other AHEC Regional Centers shifted the annual summer Future Health Leaders to an online platform in response to the COVID-19 Pandemic. It was a massive success, reaching nearly 300 students. Other collaborations included the UArizona Med-Start program, ASU Summer Health Institute, and Connect2Mentor programs.

Health Professions Education: CAAHEC Scholars

The CAAHEC Scholars Program - hosted twelve 2019-21 Scholars in two community immersion events. Scholars learned about what Federally Qualified Health Centers (FQHCs) do to provide access to care to rural and underserved communities. Scholars participated in panel discussions with key community stakeholders providing services to vulnerable populations in underserved communities in Central Phoenix.

CAAHEC hosted eight 2018-20 Scholars who focused on Food Insecurity and an Interdisciplinary Community Health Intervention. Scholars presented at the 8th Annual Interprofessional RHPP Conference in April 2020.

CAAHEC Scholars and Mentor at the Fall 2019 AHEC Scholars Program Community Immersion at Circle the City.

Primary Care Clinical Rotations

CAAHEC introduced the *myClinicalExchange* platform to several Community Health Centers. This workforce development tool helps them streamline rotation requests, manage workflow, assist with compliance requirements and evaluations, and provide comprehensive reporting functions that help assess their contributions to the training of future healthcare professionals.

CAAHEC collaborated with the Workforce Section of the Bureau of Women's and Children's Health at the Arizona Department of Health Services on workforce programs including Annual National Health Service Corps (NHSC) Scholars Conference, Arizona SEARCH Partners Network, On Site Clinical Rotation Staff Training and Recognition Events, and updates to Health Centers on topics such Health Professional Shortage Areas (HPSAs), Shortage Designations, and NHSC and Arizona State Loan Repayment Programs.

CAAHEC provides technical assistance and training to help clinical sites with rotation placements including an online application platform for students requesting rotations at AACHC member sites. This includes 23 Health Center Programs and over 175 delivery sites.

Health Professional Education (CE/CME)

In launching CAAHEC, we focused on infrastructure, accreditation, process standardization, and event management. We received accreditation by the American Academy of Family Physicians (AAFP), the California Board of Registered Nurses (CABRN) and the National Association of Social Workers—AZ Chapter (NASWAZ), the National Commission for Health Education Credentialing (NCHEC) and the Association of Child Life Professionals (NCLP).

Eastern Arizona Area Health Education (EAHEC)

Jeri Byrne, BA, MS, *Executive Director*

EAHEC is based in Globe, Arizona and serves Graham, Greenlee, Gila and Pinal Counties. EAHEC supports all aspects of the health professions pipeline to practice including K-12, health professions students, resident trainees and practicing health professionals.

WORKFORCE DEVELOPMENT SUMMARY- EAHEC

TYPE OF PROGRAM	PARTICIPATION
Health Careers Preparation Participants	4385
Health Professions Trainee Experiences*	183
Continuing Education Health Professional Participants	457
Community Health Education Participants	2882

*Trainees completed 17,929 contact hours

The AzAHEC Scholars Program, workforce expansion, and a new Liaison Committee on Medical Education (LCME) accreditation have made this one of the busiest years ever for EAHEC!

AzAHEC Scholars Program – The second (2019-21) cohort of AHEC Scholars spent two weekends in Payson during the 2019-20 academic year. Scholars analyzed the mechanism for creation of a rural Paramedicine program. Their capstone project will be a proposal for a community paramedicine program. Three Scholars selected Banner Payson Medical Center and other Payson-area health care provider clinics for clinical rotations. Both the first (2018-20) and the second (2019-21) Scholar cohorts attended the 8th Annual Interprofessional RHPP Conference in April 2020. The first cohort presentation was "Community Health Needs Assessment of Globe, Miami, San Carlos."

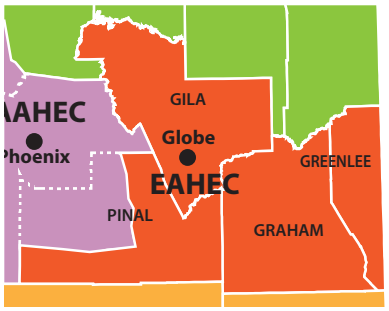
Longitudinal Integrated Curriculum – The pioneer UArizona College of Medicine-Phoenix (COM-P) Longitudinal Integrated Curriculum (LIC) was launched on March 7, 2020. The COM-P received approval from the Liaison Committee for Medical Education to develop the LIC as a parallel curriculum in Payson. Over 60 physicians, physician assistants, nurse practitioners, students and others attended a one-day presentation on the new paradigm of community and competency Interprofessional training. These same students would later be in Payson helping the medical community address the COVID-19 pandemic.

Interprofessional training is the foundation of the LIC program and includes Physician Assistant, Doctor of Nursing Practice, Podiatry, Physical Therapy and Medical students during their clinical rotations. Weekly interprofessional didactic case presentations are done with community UArizona faculty. Rotating residents and community health providers also attend. Attendees can receive one hour of Continuing Medical Education (CME) credit for each session.

As part of LIC, three UArizona COM-P students (Luke, Celina and Maryssa) moved to Payson in April 2020 and began their third year of medical school. In collaboration with their preceptors and in immediate response to the COVID-19 pandemic, the students helped create a telehealth program to augment and substitute for in-office visits at Payson Ponderosa Family Practice Clinic and Payson Christian Clinic. Patients quickly became comfortable with the students, with some requesting follow-up appointments with their "own personalized medical student." During these unprecedented times of the COVID-19 Pandemic, the Association of American Medical Colleges (AAMC) guidelines prohibited any patient contact, so extraordinary health care to the Mogollon Rim Country communities (in Northern Gila County) was provided via virtual medicine.

COVID-19 required novel mass testing. Interdisciplinary students in the EAHEC region collaborated with Payson Ponderosa Family Practice Clinic and the Mogollon Health Alliance Foundation (MHAF) on creating a drive-through testing site for over 1500 Mogollon Rim Country residents. Health profession students, including from UArizona COM-P, provided telehealth visits and contacted patients with results and additional information. The town of Payson and MHAF awarded each of the students "Hero of Rim Country" framed certificates.

Butterfly Ultrasound Device – EAHEC collaborates with UArizona COM-P on a rural ultrasound course using the hand-held, portable Butterfly Ultrasound Device that is easily moved between rural locations. Beginning Fall 2020, remote teaching sessions are offered to selected sites to teach this modality for use in rural medicine and education.



The Northern Arizona Area Health Education Center (NAHEC)

Marica Martinic, MPH, *Director, NAHEC, North Country HealthCare*

NAHEC is based in Flagstaff, Arizona, and serves Apache, Coconino, Navajo and Yavapai Counties. NAHEC supports all aspects of the health professions pipeline to practice including K-12, health professions students, resident trainees and practicing health professionals.

WORKFORCE DEVELOPMENT SUMMARY – NAHEC

TYPE OF PROGRAM	PARTICIPATION
Health Careers Preparation Participants	587
Health Professions Trainee Experiences*	671
Continuing Education Health Professional Participants	2,392
Community Health Education Participants	4,216

*Trainees completed 69,741 contact hours

This year, North Country HealthCare/NAHEC achieved some major milestones, the biggest being that we launched the Colorado Plateau Family & Community Medicine Residency Program. We are thrilled to have four fantastic residents on-site, serving North Country HealthCare patients and learning about the diverse communities of northern Arizona. (See Page 18 for details.)

NAHEC continued to provide crucial health professions programming despite disruptions due to the COVID-19 pandemic. The first (2018-20) AzAHEC Scholars Program cohort completed the two-year program with a virtual conference. NAHEC supported 671 clinical rotations for health professions students, over 130 unique continuing education activities, and graduated our tenth year of ATSU School of Osteopathic Medicine in Arizona (SOMA) students from the Flagstaff community campus. Five of six graduates matched with primary-care-related disciplines for residency, and four will stay in Arizona including one in Flagstaff with our new Family & Community Medicine Residency Program. We maintained most of our youth programs, including the Future Health Leaders (FHL) camp, Med Start, HOSA and Girls on the Run, which completed its first spring season in Yavapai County with a virtual 5K.

Girls on the Run practice at Dr. Daniel Bright Elementary School in early spring 2020.

Adaptation & Virtual Programming

The COVID-19 pandemic created the need to swiftly re-think and adapt the way we work to a virtual or hybrid model. Hospitals and training sites across the country were unable to continue taking students safely, particularly due to shortages of Personal Protective Equipment (PPE). Thus many students had their clinical training canceled. Students rely on clinical training to learn essential components of their curriculum. NAHEC stepped in to support them by continuing to accept and place students in North Country HealthCare clinics and we developed telehealth clinical experiences for medical students, who were not allowed by their programs to be on site.

We also adapted our youth and continuing education programs. The Future Health Leaders camp, a collaboration between all five AzAHEC Regional Centers, was converted to a 100% virtual format and accommodated nearly five times the usual number of students!

Supplemental Funding for Continuing Medical Education

NAHEC received federal supplemental funding for continuing education programs, which we used for three innovative activities: 1) a Motivational Interviewing training for dental teams. Thirty dentists, dental hygienists, dental assistants, and support staff participated in a two-day intensive workshop; 2) a four-part series, presented by experts from North Country HealthCare about emerging and significant issues in northern Arizona; 3) a Medication Assisted Treatment training was held virtually with 18 participants from Flagstaff, Globe, Gilbert, Scottsdale, Kingman, Show Low and other locations.

Southeast Arizona Area Health Education Center (SEAHEC)

Gail Emrick MPH, *Executive Director*

SEAHEC is based in Nogales, Arizona and serves communities in Cochise, Pima and Santa Cruz Counties. SEAHEC supports all aspects of the health professions pipeline to practice including K-12, health professions students, resident trainees and practicing health professionals.

WORKFORCE DEVELOPMENT SUMMARY – SEAHEC

TYPE OF PROGRAM	PARTICIPATION
Health Careers Preparation Participants	226
Health Professions Trainee Experiences*	46
Continuing Education Health Professional Participants	560
Community Health Education Participants	3,849

*Trainees completed 4,525 contact hours

SEAHEC awarded the 2020 NAO AHEC Center of Excellence: Community-based programs – SEAHEC had an "award-winning" year, starting with the Inspiring Rural Health Program award given by the Arizona Rural Health Association at its 2019 Rural Health Conference, and ending with the National AHEC Center of Excellence for Community-based programs award, 2020.

Gail Emrick receiving the Inspiring Rural Health Program award at the 2019 Arizona Rural Health Conference.

Healthy Farms/Healthy Communities – An AHEC Approach to Community Capacity Building, Student Training & Health Equity

Healthy Farms Healthy Communities is a unique initiative building local capacity while addressing social determinants of health within a Latino farmworker community in rural Arizona. SEAHEC, and partners including a Community Action Board (CAB) of local residents, Chiricahua Community Health Center, the UArizona Health Sciences Colleges and Cochise County Health and Social Services, built a community center which now serves as a catalyst for change, improving health and health service delivery. Healthy Farms is based on community-driven efforts, AzAHEC partnerships and health professions student training, education and service learning.

Community Partners

SEAHEC's model of success is based on its partnerships. Our primary partner is and has been since inception, the community. Respect for and involvement of the community's residents has been critical to garnering community input, support and sweat equity the entire way. Community members participated in the initial needs assessment, design and construction of the community center and playground.

Another important partner is Chiricahua Community Health Centers, the local primary health care provider with sites in Cochise County, that has worked closely with SEAHEC for over two decades. Its mobile unit provides weekly services at the Winchester Heights Community Center.

Program Outcomes and Impact

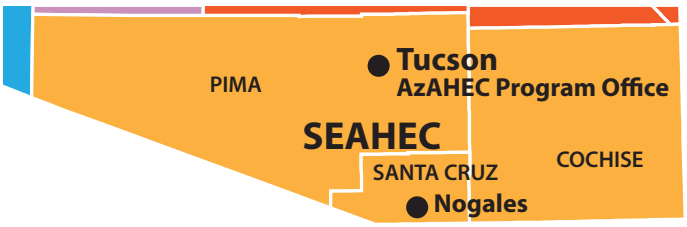
Winchester Heights has approximately 600 residents, including 200 children. In our recent Community Center use survey, we found:

- 156 adults & children (nearly ONE-THIRD of the community) regularly exercise at the facility, through participation in soccer league
- 583 community residents participate in health education training, fairs and events
- 10-20 Health professions students are placed per academic year: Average placement (2011-2020)

New and Innovative Model

The Healthy Farms Healthy Communities program is unique in several aspects: its focus on a rural, isolated Latino farmworker "colonia" of the southwest border region of the U.S.; its belief in and involvement of the community residents from planning interventions, training CHWs and evaluating its own programs; its "assets based" approach to building on the community's belief in itself.

Healthy Farms is creative in its design in that it uses a physical structure – the community center – as a hub of UNITY, advocacy and action for health and wellbeing.



Western Arizona Area Health Education Center (WAHEC)

Joena Ezroj, *Director*

WAHEC is based in Somerton, Arizona, and housed in the Regional Center for Border Health (RCBH) serving communities in Yuma, La Paz and Mohave Counties. RCBH-WAHEC supports all aspects of the health professions pipeline to practice including K-12, health professions students, resident trainees and practicing providers. RCBH-WAHEC strives to improve the quality of life for those living along the US-Mexico border and to provides communities of Yuma, La Paz and Mojave Counties with accessible quality training and affordable healthcare.

WORKFORCE DEVELOPMENT SUMMARY – RCBH-WAHEC

TYPE OF PROGRAM	PARTICIPATION
Pre-Collegiate (K-12) Health Careers Preparation Participants	738
Health Professions Trainee Experiences*	249
Continuing Education Health Professional Participants	41
Community Health Education Participants	5,740

*Trainees completed 19,522 contact hours

Health Professions Programs: RCBH-WAHEC facilitated 249 field experiences for graduate, undergraduate and technical health professions students including medicine (allopathic MD, osteopathic DO), physician assistant, nurse practitioner, certified nursing assistant, medical office specialist, phlebotomy technician, medical coder & biller, food safety nutrition and food management, caregiving, and informatics. RCBH-WAHEC provided preceptor training for students in medically underserved agencies such as San Luis Walk-In Clinic, Evangelist Medical Group, Pinnacle, Foothills Walk-In Urgent Care Clinics, UP-2Par Medical Clinic, Yuma Nursing Center, Kissito Health Care Palm View, Lake Havasu Nursing, Midwest Internal Medicine, Parker Walk-In Clinic and Maggie's Mobile Lab.

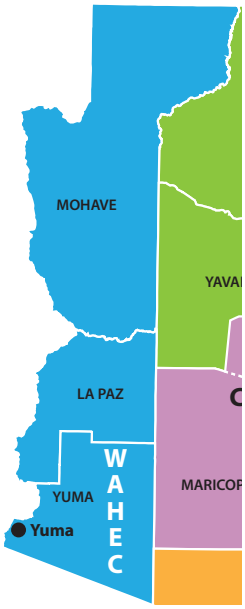
AHEC Scholars: The second (2019-21) AzAHEC Scholars cohort spent two weekends at WAHEC during the 2019-20 academic year as part of their community immersion experiences. Both the first year (2018-20) and the second year Scholar cohorts attended the 8th Annual Interprofessional RHPP Conference in April 2020. The first year cohort's podium presentation was "Skin Cancer Education—Yuma County Assessment."

Growing Our Own: The RCBH College of Health Careers is accredited by Accrediting Bureau of Health Education Schools (ABHES) and is dedicated in "Growing Our Own" healthcare workforce in Western Arizona. The objective is to connect with local healthcare industries and deliver their healthcare workforce needs. RCBH/WAHEC and the College of Health Careers are affiliated with over 50 local organizations in Yuma, La Paz, and Mojave Counties where students conduct practicum experiences and clinical rotations to meet their program requirements.

Pipeline Programs: RCBH-WAHEC has expansive high school programming, sponsoring 650 Health Occupation Students of America (HOSA) high school students in HOSA clubs in Antelope Union, Kofa, Lake Havasu City, Cibola, Parker, San Luis, and Kingman High Schools. Students receive support to attend the State Leadership Conferences in Phoenix, Tucson and the HOSA International Leadership Conference. RCBH-WAHEC supported 15 students in Nuestros Niños Summer Program. Eight WAHEC students participated in the Med-Start Summer Program, along with students from other AzAHEC Regional Centers. This year's research project was "The COVID-19 impact in Yuma County."

RCBH-WAHEC coordinated Youth Mental Health First Aid certification training sessions for fifty 9-12 students from Antelope Union High School (Yuma County) and Lake Havasu High School (Mohave County). The students received the national certification as Youth Mental Health First Aiders.

Community Education and Service: RCBH is a huge advocate and leader in the testing of COVID-19 throughout Yuma and La Paz Counties, testing 86% of the population. Beginning in April 2020, RCBH provided no-cost Blitz COVID-19 testing in Yuma and La Paz Counties. As of this report, RCBH tested over 45,000 community members in Yuma County. During the first week of June 2020, more than 450 community members from Parker and 50 for the town of Quartzsite were tested. RCBH tested 3,400 La Paz residents for COVID-19. RCBH tested a total of 48,402 residents from Yuma and La Paz Counties, and 87% of all Yuma County residents for COVID-19.



AzAHEC Financial Review for Fiscal Year 2019-20

Amanda Perkins, M.Ed, CPA, *Assistant Finance Director, AzAHEC Program*

The AzAHEC Program earns Federal funding from the Health Resources Services Administration (HRSA), Bureau of Health Professions through a competitive Model AHEC grant. It requires 1:1 matching non-federal funds. Statutory state funding is from the Arizona State Lottery for the AzAHEC Program (ARS § 5-572C) to the Arizona Board of Regents (ABOR).

The AzAHEC Program is administered through the University of Arizona Health Sciences Office of the Senior Vice President.

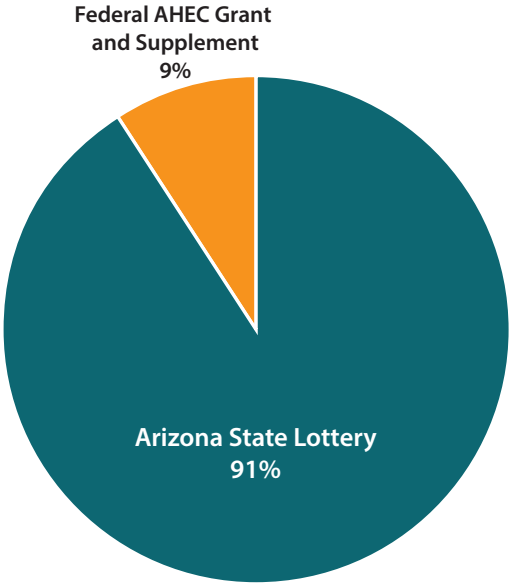
Starting July 1, 2019 through August 10, 2020 Daniel Derksen, M.D., Associate Vice President for Health Equity, Outreach and Interprofessional Activities served as the AzAHEC Program acting director. On August 10, 2020, Leila Barraza, JD, MPH, was appointed AzAHEC Program director, and Daniel Derksen serves as the Program's Senior Advisor.

Federal and state funding supports the AzAHEC Regional Centers (CAAHEC, EAHEC, NAHEC, SEAHEC, WAHEC) via annual subcontracts administered through the AzAHEC Program Office following University of Arizona, state, and federal requirements. The AzAHEC Program administers the Arizona statute required Rural Health Professions Program (RHPP).

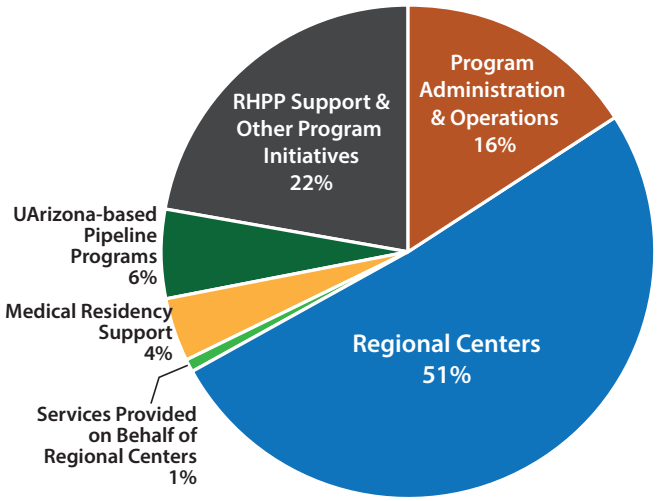
AzAHEC Employment Data 2019-20: Arizona AHEC Programs employ 110 people statewide, operating as important economic forces in their communities.

Item / Initiative	FTEs	"Person Count"
AzAHEC Program Office	8.62	15
CAAHEC	4.07	12
EAHEC	3.60	5
NAHEC	6.05	9
SEAHEC	5.38	7
WAHEC	5.94	8
RHPP COM-PHX	0.46	3
RHPP COM-TUS	0.50	2
RHPP CON	0.35	2
RHPP COPH	0.50	9
RHPP COP	0.30	1
RHPP ASU	0.58	4
RHPP NAU Nursing	0.20	2
RHPP NAU Physician Assistant	0.20	1
North Country Residency Program	0.43	1
South Campus Primary Care Residencies	0.25	4
BLAISER Program	1.90	3
Med-Start Program	1.05	12
AzAHEC Grants Programs	0.28	2
Establishing an Arizona Health Workforce Data System	2.24	8
TOTAL	**42.90**	**110**

AzAHEC Funding Sources 2019-20



Expenditures 2019-20



Central Arizona AHEC (CAAHEC)
700 E. Jefferson
Suite 100
Phoenix, Arizona 85034
602-253-0090
www.aachc.org

Service Region: *Maricopa County and portions of west-central Pinal and south-central Yavapai Counties*

Eastern Arizona AHEC (EAHEC)
1600 E. Ash Street, Suite 3
Globe, AZ 85501
(Mailing) PO Box 572 ZIP: 85502
928-402-8054
http://azeahec.org

Service Region: *Gila, Graham, Greenlee Counties and portions of eastern and southern Pinal County*

Northern Arizona AHEC (NAHEC)
c/o North Country HealthCare
2920 North Fourth Street
Flagstaff, AZ 86004-1816
(Mailing) PO Box 3630, ZIP: 86003
928-522-9855
https://northcountryhealthcare.org/education-research/northern-arizona-area-health-education-center-nahec/

Service Region: *Apache, Coconino, Navajo Counties and eastern portions of Yavapai County*

Southeast Arizona AHEC (SEAHEC)
1171 West Target Range Road
Nogales, AZ 85621-2415
520-287-4722
www.seahec.org

Service Region: *Cochise, Pima, Santa Cruz Counties*

Western Arizona AHEC (WAHEC)
Regional Center for Border Health, Inc.
214 West Main Street
Somerton, AZ 85350-0617
PO Box 617
Somerton, 85350
928-276-3414
https://www.rcfbh.org/western-arizona-ahec.html

Service Region: *La Paz, Mohave, Yuma Counties*

ARIZONA AHEC PROGRAM FY 2019-20

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University of Arizona Health Sciences

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Hospice of the Valley

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Critical Path Institute

Pamela Lusk
Psychiatric & Mental Health Nurse Practitioner

Ed Paul
Director, Family Medicine Residency Program, North Country Healthcare

Ronald Weinstein
Director, Arizona Telemedicine Program
University of Arizona Health Sciences

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Laura Dorrell
Board President, Eastern Arizona AHEC

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Board President, Southeast Arizona AHEC

Christopher Nunez
Board Chair, Western Arizona AHEC

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Note: All members are faculty within the University of Arizona Health Sciences.

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College of Medicine – Tucson

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Senior Advisor and PI, Arizona Area Health Education Center Program
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Professor of Public Health, Medicine & Nursing

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The Arizona AHEC Program is administered through the University of Arizona Health Sciences Office of the Senior Vice President for Health Sciences. University of Arizona Health Sciences Colleges include the College of Medicine–Tucson, COM–Phoenix, College of Nursing, College of Pharmacy, and the Mel and Enid Zuckerman College of Public Health.

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Design: Paul Akmajian, Arizona Center for Rural Health
Landscape photos by: Ken Miller & Paul Akmajian (page 1)

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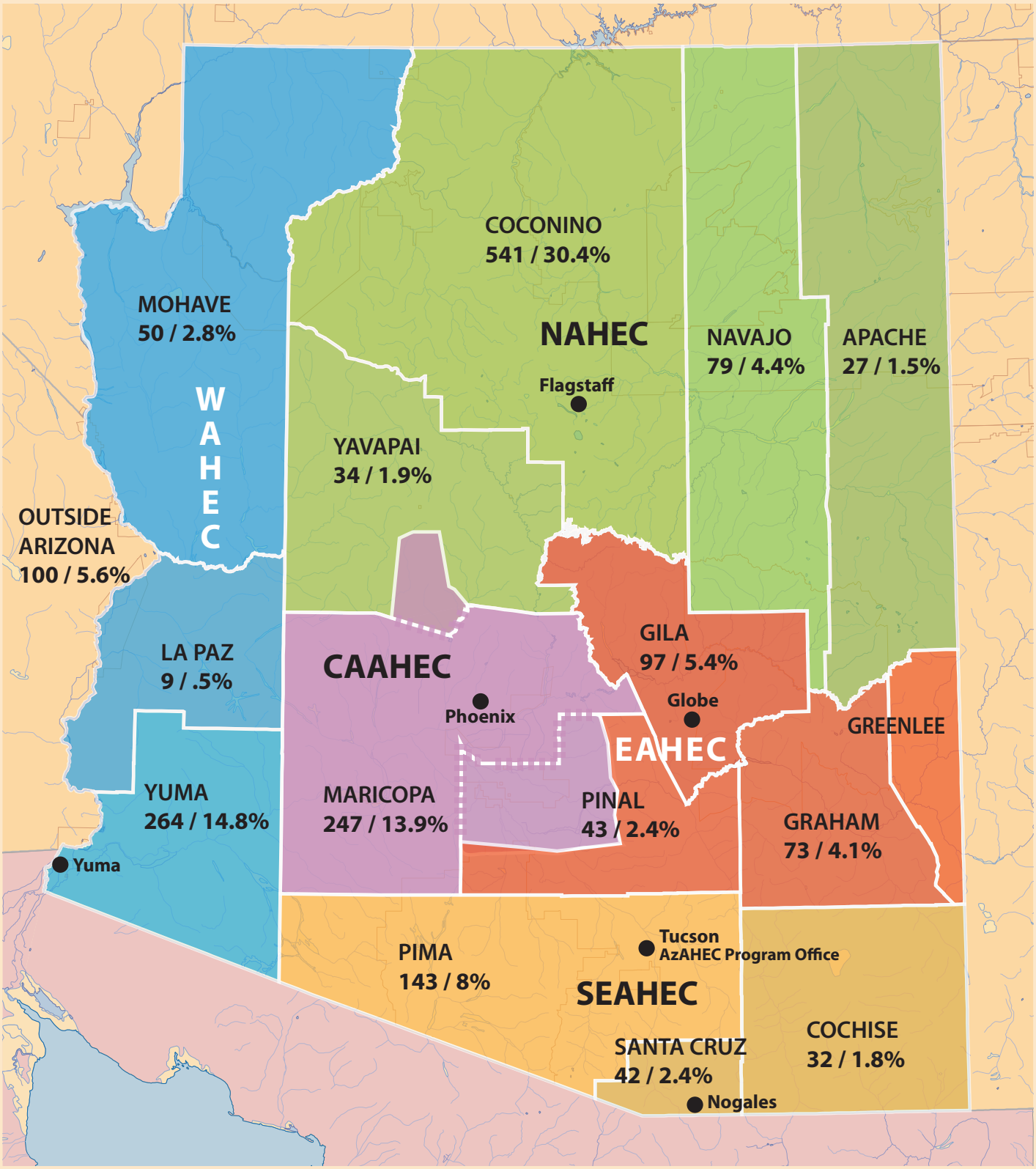
AzAHEC Health Professions Fields Experiences by County (total 1,781)



THE UNIVERSITY OF ARIZONA
Arizona **AHEC**
Area Health Education Centers

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