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*The Federal Area Health Education Center (AHEC) program was authorized by Congress in 1971 (PL III-148 § 751 PHSA). There are now 56 AHEC Programs and 235 Regional Centers in 48 U.S. states and territories. Andy Nichols MD founded the Arizona Area Health Education Center (AzaAHEC) Program in Tucson in 1984 with the first AzaAHEC Regional Center opening in Nogales in 1984. Today, five AzaAHEC Regional Centers support health professions education, provide continuing education for health professionals, address health disparities, and local health workforce.*

- Daniel Derksen, MD, Acting Director
- Jennifer Zuñiga, 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

## PROGRAM HIGHLIGHTS

**In FY 2019, 15,762 participated in the following activities:**

### Rural & Urban Underserved Health Professions Trainee Field Experiences

*From July 1, 2018 to June 30, 2019, the Arizona AHEC Program supported the following field experiences in AzaAHEC Regional Centers, Rural Health Professions Programs and Residency Programs:*

Academic Discipline/Program	# of Trainees	# of Field Experiences
Behavioral Health	2	2
Dentistry and Dental Hygiene	58	61
Medical Residency	47	75
Medical School	327	732
Nurse Practitioner	105	231
Nursing or Medical Assistant	181	188
Other Undergraduate Health Disciplines	52	57
Pharmacy School	215	433
Physical Therapy and Podiatry School	6	6
Physician Assistant	47	61
Public Health	192	211
Registered Nurse, Nurse Anesthetist or Other Nurse	56	87
<b>Total</b>	<b>1,288</b>	<b>2,144</b>

### Pre-Collegiate (K-16) Health Career Preparation Programs in Rural and Urban Underserved Areas: 7,086 participants

1,430 K-16 students participated in pipeline programs including 59 health career clubs, AzaAHEC Regional Centers and the two (Med-Start, BLAISER) summer programs at the University of Arizona for future health professionals. Over 5,656 students and adults participated in other health career events (parents, teachers, and others).

### Health Professions Continuing Education: 7,388 participants

Participants at 222 continuing education events included physicians, dentists, public health and allied health professionals, pharmacists, nurse practitioners, registered nurses, and physician assistants.

## **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.*



## AZAHEC Program Executive Summary FY 2018-19

Since 1984, the Arizona Area Health Educations Center (AZAHEC) Program has served Arizona in pipeline to practice health professions workforce development for rural and urban underserved communities. The Fiscal Year 2019 AZAHEC Program Annual Report updates progress in carrying out its mission, federal and state required activities that reached 15,762 participants:



- 1,430 students participated in K-12 Pre-College Health Career Preparation.
- 5,656 attended health career events - students and adults (parents, teachers, others).
- 1,288 health profession students from 35 universities completed 2,144 community-based field experiences through collaborations with the five AZAHEC Regional Centers (WAHEC, SEAHEC, NAHEC, GVAHEC, EAHEC), seven Rural Health Professions Programs (RHPPs) at the three State universities – Arizona State University (ASU), Northern Arizona University (NAU), and the University of Arizona Health Sciences, and residency training at Banner University Medical Center South and North Country HealthCare. This includes 53 AZAHEC Program Scholars.
- 7,388 CME/CE attendees - practicing health care professionals in rural and urban underserved areas in 222 continuing education AZAHEC sponsored events.

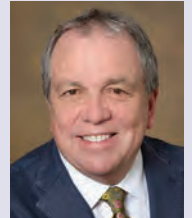
On behalf of the AZAHEC Program, I thank our many partners for their commitment to quality health professions education and health care delivery in Arizona's rural and urban underserved communities.

Respectfully submitted,

**Daniel Derksen, MD, Acting AZAHEC Program Director**  
Associate Vice President for Health Equity, Outreach & Interprofessional Activities  
University of Arizona Health Sciences  
Professor of Public Health, Medicine and Nursing

*“The RHPP and AZAHEC Programs have provided community-based inter-professional education for a combined 57 years. They are shining examples of our commitment to rural and urban underserved Arizona communities and to our land grant social missions.”*

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



## About AzaHEC

- Started in 1984 with the first AHEC Regional Center in the US-Mexico border town of Nogales, 13 years after the US Congress developed the nationwide AHEC system to recruit, train and retain a health professions workforce committed to helping underserved populations.
- Expanded in 1989 to five AHEC Regional Centers serving all 15 Arizona counties.
- Became a sponsored project of the University of Arizona, funded by federal and state support.
- Cited in Arizona Revised Statutes (ARS) § 15-1643, § 15-1644, § 15-1645, § 5-572, and §15-1754 (C).

## Structure

The AzaHEC Program is based at the University of Arizona Health Sciences in Tucson. Five AzaHEC Regional Centers carry out the program's mission by creating, coordinating and implementing a scope of work to address the health professions education and training needs in their service areas.

The AzaHEC Program Director consults quarterly with the Arizona AHEC Advisory Commission comprised of health educators, health professionals and community members serving in rural and urban underserved Arizona communities. Each AzaHEC Regional Center has its own governing board, comprised of health care providers and consumers who reflect the ethnic diversity of the Regional Center's geographic area.

## Focus Areas 2018-19

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, Health Occupations Students of America (HOSA) chapters, for the Border Latino and American Indian Summer Exposure to Research (BLAISER) and the Med-Start Health Careers Program.

■ **Health Professions Trainee Education:** the AzaHEC Program and Regional Centers supported clinical rotations, internships, and Graduate Medical Education (GME, aka residency training). AzaHEC 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.

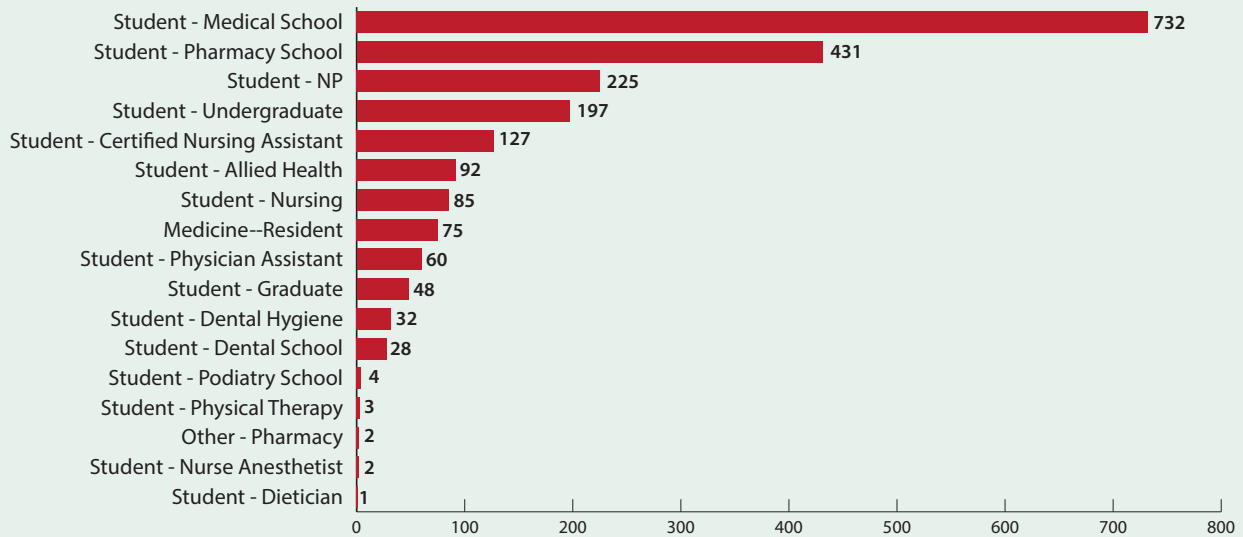
■ **AzaHEC Scholars:** completed their first of a two-year program; a second Scholar cohort was accepted and had an immersion experience at their assigned AzaHEC Regional Center. Scholars get advanced, interprofessional community-based experiences in AHEC Regional Center communities and Rural Health Professions Programs.

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

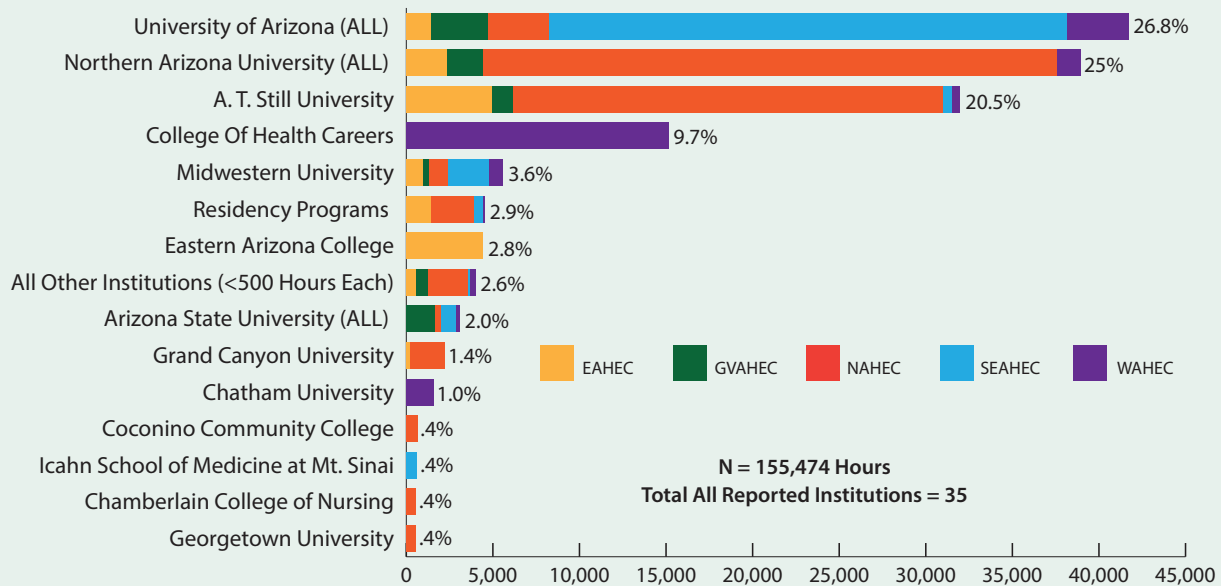
■ **Community Health Promotion:** the AzaHEC Program and Regional Centers collaborated to build and support a culturally competent health professions workforce, coordinating and supporting health education activities and events for local community members throughout Arizona's rural and urban underserved areas.



### AZAHEC Health Professions Clinical Rotations by Trainee Discipline (N = 2,144)



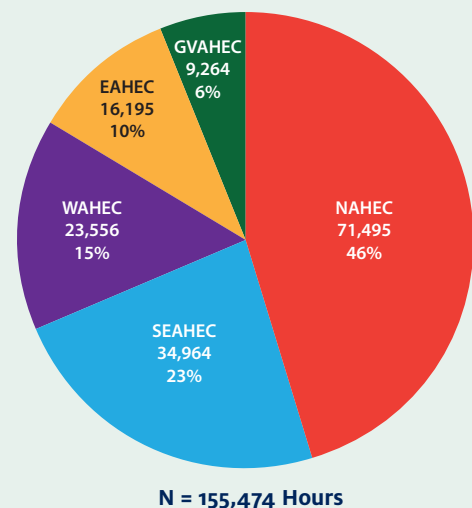
### AZAHEC Rotation Hours by Regional Center and Academic Institution: July 1, 2018 - June 30, 2019



### AZAHEC Rotation Hours, Number of Rotations and Number of Trainees by Center 2018-19

Location	Total Rotation Hours	Number of Rotations	Total Trainees
<b>EAHEC</b>	<b>16,195</b>	<b>125</b>	<b>88</b>
Clinical Field Experience	16,195	125	88
Non-Clinical Field Experience	0	0	0
<b>GVAHEC</b>	<b>9,264</b>	<b>62</b>	<b>57</b>
Clinical Field Experience	8,345	53	49
Non-Clinical Field Experience	919	9	8
<b>NAHEC</b>	<b>71,495</b>	<b>638</b>	<b>291</b>
Clinical Field Experience	71,225	632	286
Non-Clinical Field Experience	270	6	5
<b>SEAHEC</b>	<b>34,964</b>	<b>174</b>	<b>100</b>
Clinical Field Experience	33,457	155	84
Non-Clinical Field Experience	1,507	19	16
<b>WAHEC</b>	<b>23,556</b>	<b>256</b>	<b>231</b>
Clinical Field Experience	23,556	256	231
Non-Clinical Field Experience	0	0	0
<b>TOTAL CENTERS</b>	<b>155,474</b>	<b>1255</b>	<b>767</b>

### AZAHEC Rotation Hours by Regional Center July 1, 2018 - June 30, 2019



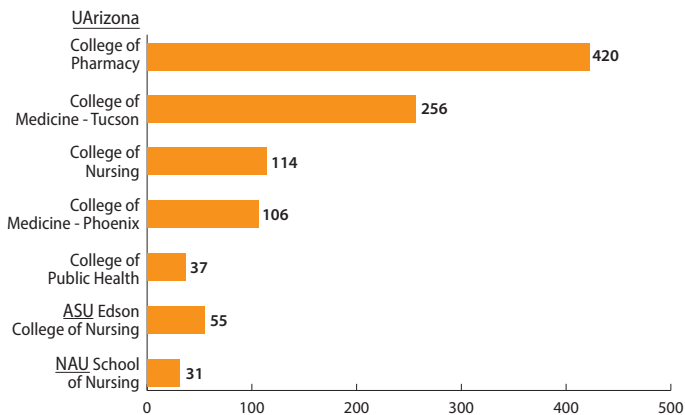
### The AzaHEC Rural Health Professions Program (RHPP) Overview

The Rural Health Professions Program was authorized by the legislature in 2007 by state statute (ARS § 15-1754) and is a core component of the AzaHEC Program to address shortages of health professionals in rural Arizona communities. In 2018-19, the UArizona, ASU and NAU RHPPs reported a total of 1,019 rural training experiences.

The RHPP provides rural training experiences for health professions students in the public universities under the Arizona Board of Regents: the University of Arizona Health Sciences Colleges of Nursing, Pharmacy, Medicine (COM-Tucson and COM-Phoenix), and Public Health; the Arizona State University (ASU) Edson College of Nursing and Health Innovation, and the Northern Arizona University (NAU) School of Nursing, and beginning in 2019, the Department of Physician Assistant Studies.

UArizona selects 15 medical, four pharmacy and ten nursing practitioner students; ASU selects four, and NAU two nurse practitioner students for RHPP.

**AzaHEC RHPP Students 2018-19 by Participating Institution**  
N = 1,019



\* College of Pharmacy had 179 RHPP students officially enrolled in the program and 241 were placed in rural and underserved areas.

RHPP student participation is voluntary; however state statute mandates RHPP at ASU, NAU and UArizona.

RHPP prepares health professions students for practice in Arizona's rural communities. The AzaHEC Program and AzaHEC Regional Centers also support urban, medically underserved training experiences to address primary care provider shortages. The number of participating RHPP students has grown significantly above statutory requirements.

### AzaHEC Scholars Program

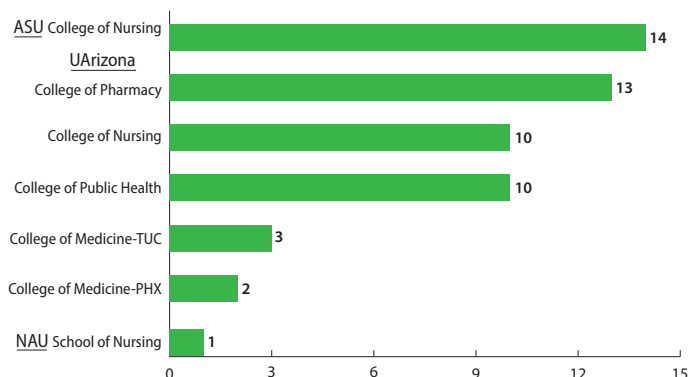
The Arizona Area Health Education Center (AzaHEC) Scholars Program: is a two-year interprofessional program providing advanced community-based experiences in rural and underserved settings in the five AzaHEC Regional Center service areas. The Scholar Program builds on the seven Rural Health Professions Programs (RHPPs) at the three state universities: five at the University of Arizona Health Sciences, and one each at Arizona State University (ASU) and Northern Arizona University (NAU). Participating colleges include medicine, nursing, pharmacy, and public health. Each RHPP assigns a Faculty Mentor to work with the AzaHEC Scholars.

To become an AHEC Scholar, students apply to their participating college's RHPP program. Each RHPP is responsible to recruit and select AHEC Scholars and evaluate outcomes. Scholars learn about rural and medically underserved urban communities and how to contribute meaningfully as members of the interprofessional team at their assigned AzaHEC Regional Center.

In August 2018, 53 AzaHEC Scholars started the two-year program. This 2018-20 cohort included nurse practitioner, medicine, pharmacy, and public health students. Under the guidance of an AHEC faculty mentor, Scholars were assigned to an interprofessional group in an AzaHEC Regional Center.

Scholars and their faculty mentors spent over 32 hours rural and underserved communities. Program activities included participating in monthly electronic seminars and discussions, conducting community needs assessments and interviewing community leaders. In August 2019 a second AzaHEC Scholar cohort was accepted.

**AzaHEC Scholars 2018-2019 Cohort by University and Discipline** N = 53

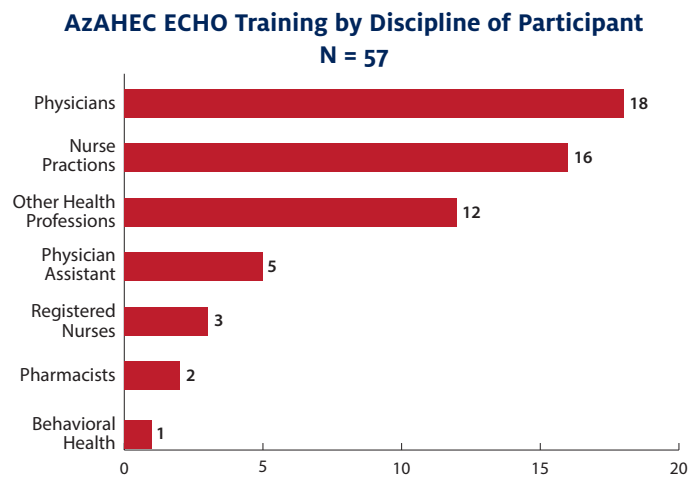


## ECHO Training

AZAHEC Program Project ECHO® Medication Assisted Treatment (MAT) Training - supplemental HRSA AZAHEC funding supported substance and opioid use disorder treatment education for primary care physicians and other prescribing health providers practicing in Arizona's rural and urban underserved communities. The AZAHEC Program and Regional Centers collaborated with the Arizona Telemedicine Program and the UArizona COM Departments of Psychiatry and Pharmacology to educate rural providers on substance use disorder treatment.

Project ECHO® (Extension for Community Healthcare Outcomes) provided MAT waiver training, augmented by pain management and substance and opioid use disorder education. A total of 57 participants completed the required eight-hour MAT waiver training in four two-hour modules and 12 hours of continuing medical education (CME) credit from 2018-20.

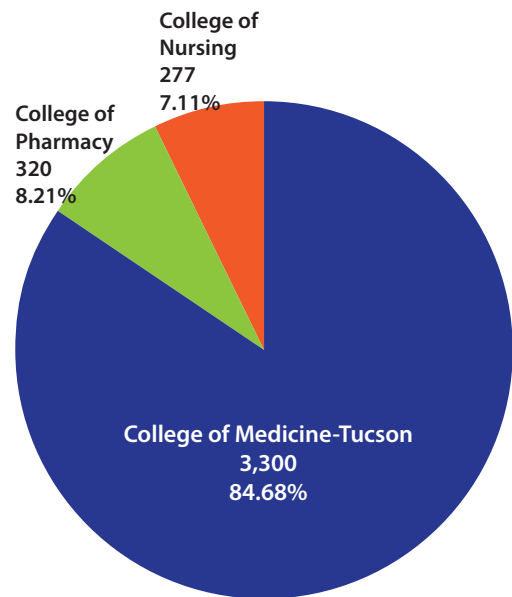
Faculty included; Francisco Moreno, MD; Elisa Gumm, DO; Mohab Ibrahim, MD, PhD; Todd Vanderah, PhD; Alison Sutton- Ryan, LCSW, LISAC; Kaye Godbey, MS; and Joy Subrin, LMSW.



## 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 at Tuba City Regional Health Care Corporation. During 2018-19, 22 UArizona students were housed. A total of 5,257 clinical hours were reported for all AHEC-placed students/trainees at Tuba City; 74% of these hours were for UArizona students for an average rotation of 216 hours. This housing collaboration with Tuba City Regional Health Care Corporation enhances AZAHEC's ability to prepare practice-ready graduates to work interprofessionally in a tribal community.

**AZAHEC RHPP Clinical Hours at Tuba City with Housing Accommodations, 2018-2019 N = 3,897**



## Seventh Annual Interprofessional Rural Health Professions Conference

The Seventh Annual Interprofessional Rural Health Professions conference was held over two days in April 2019, at the UArizona College of Nursing (CON) in Tucson for more than 120 participants including health professionals from the community, health professions students, trainees, residents, faculty, and alumni from the UArizona Colleges of Medicine (COM Tucson and Phoenix), Nursing, Pharmacy, and Public Health; the ASU CON & Health Innovation; and NAU School of Nursing. The conference offered in-person and technology-enabled remote participation from Phoenix and Flagstaff, Arizona.

The conference theme was *culture wisdom, health, and compassion*. It provided opportunities for students to present posters, connect with others, network and discuss their rural health experiences.

The conference began with a panel discussion on the “Social Determinants of Health” moderated by Dr. Carlos Gonzales, COM-Tucson, with panelists Drs. Francisco Moreno and Victoria Murrain, COM-Tucson. Roberto Danie was the keynote speaker.

Discussions were on the “Impact of Health Professional Students in AZAHEC Regions,” interprofessional education and practice, cultural wisdom, rural health, and compassion. Poster presentations (36) were delivered in-person and remotely by students and faculty from UArizona, ASU, and NAU.

AZAHEC Regional Center directors judged the posters; poster awards included, “Exploring the role of the pharmacist in administering the HPV vaccine: Caregiver’s views” authored by Lauren Dominick, MS4, UArizona COM–Phoenix; Alexis Koskan, PhD, ASU, College of Nursing and Health Solutions; Community Assessment of Española, New Mexico, authored by Tiffin Zellers, BSN, RN, UArizona College of Nursing.

Posters can be viewed at: <https://azahec.uaahs.arizona.edu/health-professions/rural-health-professions-programs-rhpp/annual-rhpp-conference-information>



ASU RHPP Director Diane Nunez and RHPP Students at the Seventh Annual Interprofessional RHPP Conference.

**Outstanding Poster** at the Seventh Annual Interprofessional RHPP Conference was awarded for “Exploring the role of the pharmacist in administering the HPV vaccine: Caregiver’s views,” presented by Lauren Dominick, MS4, University of Arizona College of Medicine – Phoenix; co-authored by Alexis Koskan, PhD, Arizona State University, College of Health Solutions



**Excellent Poster** at the Seventh Annual Interprofessional RHPP Conference was awarded for “Community Assessment of Española, New Mexico,” presented by Tiffin Zellers, BSN, RN, The University of Arizona, College of Nursing.



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

Carlos R. Gonzales, MD, FAAFP

RHPP Director & Associate Professor, Family & Community  
Medicine Department

In 2018–19, University of Arizona COM-T RHPP supported 256 clinical rotations for 62,364 hours of community-based rural and urban underserved training. The 2019 COM-T graduating class included 21 RHPP students; 11 remained in Arizona for residency training, seven matched in an Arizona primary care residency. To date the COM-T RHPP program graduates include 106 physicians practicing in rural and urban underserved Arizona sites: 54 in rural Arizona and 52 in urban underserved Arizona locales.

The RHPP admitted 23 first-year COM-T students from 28 applicants in 2018, a total of 96 RHPP medical students across all four years. RHPP enrolled five students in the AHEC Scholars Program.

The COM-T RHPP offers medical students rural and urban underserved clinical rotations in family medicine, pediatrics, general surgery, internal medicine, med/peds, ob-gyn, and emergency medicine through a network of volunteer physician preceptors.

Each RHPP medical student participates in their second through fourth years for a total of ten weeks of longitudinal experience in a rural or urban underserved commu-

nity with the same preceptor, patients and community. While developing their own clinical skills, they learn about living in these communities and how social determinants affect health outcomes.

In 2015, COM-T established the Rural Health Distinction Track (RHDT) to enhance the RHPP. RHDT adds six weeks during the third to fourth year to total 16 weeks in a rural or urban underserved RHPP longitudinal experience. The 2019 COM-T had 19 RHDT students (of 21 total RHPP students). RHDT students are recognized at graduation with a Certificate of Distinction, a medallion and documentation on their official transcript.

RHDT requires a research Capstone which included: “The State of Diabetes-Related Vascular Disease among American Indians in the Southwest”; “Rural Arizona and Behavioral Health: A Case for Greater Use of Telepsychiatry”; “The Challenge of Non-obstetric Surgical Emergencies in Native American Reservations”; “Culturally-Competent Psychiatry Learning From Native American Communities.”

COM-T RHPP graduates now practice in Arizona’s rural and urban underserved areas and serve as RHPP preceptors in Winslow, Whiteriver, Kingman, Nogales and Fort Defiance, Arizona. Three RHPP preceptors were honored in 2019: COM-T graduate Dr. Charlotte Richards, Ob/ Gyn in Yuma, AZ; COM-T and RHPP graduate Dr. Matthew Hinton, Pediatrician in Prescott, AZ; and COM-T graduate Dr. Judy Hunt, Medicine/Pediatrics physician in Payson, AZ.

**University of Arizona College of Medicine – Tucson: Rural Health Professions Program Outcomes**

Year	Total Graduates <sup>1</sup>	All Grads entering potential Primary Care Residency		Total RHPP Graduates	RHPP Grads entering potential Primary Care Residency <sup>2</sup>		RHPP Grads Entering Residency in AZ		Activity of RHPP Grads <sup>3</sup>			
		Number	Percent		Number	Percent	Number	Percent	Still Training	Rural AZ Practice	Urban Underserved AZ Practice	Other state
2000	100	56	56%	13	8	62%	8	62%	0	4	3	6
2001	102	55	54%	14	12	86%	8	57%	0	6	3	3
2002	101	62	61%	15	12	80%	9	60%	0	4	3	3
2003	91	46	51%	13	9	69%	8	62%	0	4	2	4
2004	104	60	58%	14	11	79%	7	50%	0	3	5	5
2005	90	50	56%	14	11	79%	11	79%	0	2	4	4
2006	86	51	59%	11	9	82%	3	27%	0	2	3	6
2007	114	56	49%	12	8	67%	5	42%	0	4	5	3
2008	100	51	51%	19	11	58%	10	53%	0	3	4	7
2009	119	61	51%	19	17	89%	8	42%	0	2	1	10
2010	106	63	59%	13	10	77%	8	62%	0	5	3	3
2011	100	50	50%	12	10	83%	5	42%	0	3	1	8
2012	141	80	57%	15	9	60%	5	33%	0	3	4	8
2013	157	79	50%	19	15	79%	8	42%	0	5	4	10
2014	146	90	62%	17	11	65%	8	47%	0	3	4	15
2015	119	52	44%	11	6	55%	6	55%	5	1	2	11
2016	103	40	39%	18	13	72%	4	22%	1	0	1	9
2017	98	44	45%	22	14	64%	8	36%	22			
2018	117	60	51%	23	16	70%	8	35%	23			
2019	105	36	34%	21	6	29%	11	52%	18			
<b>TOTAL</b>	<b>2,199</b>	<b>1,142</b>	<b>52%</b>	<b>315</b>	<b>218</b>	<b>69%</b>	<b>148</b>	<b>47%</b>	<b>69</b>	<b>54</b>	<b>52</b>	<b>115</b>

<sup>1</sup> Graduates include UArizona College of Medicine – Phoenix 2011 through 2014, due to one RHPP for both colleges during that period.

<sup>2</sup> RHPP specialties for primary care include family medicine, internal medicine, OB/GYN, general surgery and pediatrics.

<sup>3</sup> Residency lengths vary from three to seven years.

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

**Jonathan Cartsonis, MD**

RHPP Director COM-P

In 2018-19 the University of Arizona COM-P RHPP supported 106 student clinical rotations for 21,656 hours in rural and underserved Arizona communities. Rotations grew due to new emergency medicine, pediatrics, and family medicine clerkship sites and ambulatory elective opportunities.

Eight rural seminars were held on: A Day in Life as a Rural Doctor, Considerations in the Care of Native American Patients, and State and Federal loan Repayment Opportunities. RHPP students participated in four rural health huddles, social events held in the homes of faculty members to share rural experiences. Five first year RHPP students completed an immersive one-month block in the rural communities where they will return in year three.

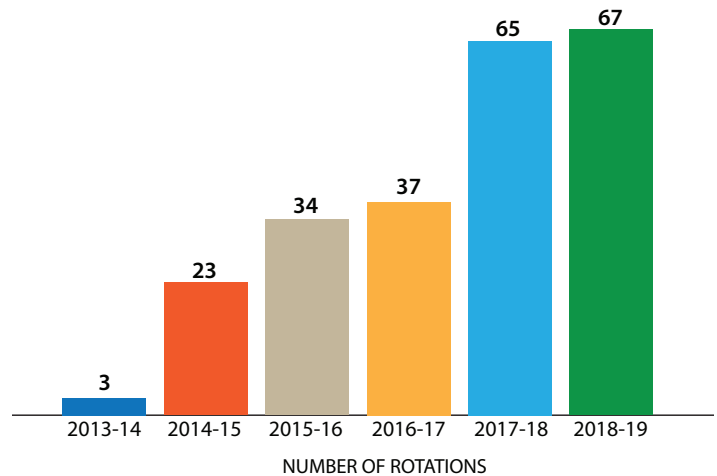


Phoenix RHPP Director Jonathan Cartsonis with 2019 RHPP graduates.

**COM-P RHPP Rural Certificate of Distinction** – five RHPP students earned a Rural Certificate of Distinction at graduation in 2019; each matched with their first-choice residency program, as has every graduate participating in the COM-P rural program since its inception.

Scholarly Project topics included rural vs urban mortality, community paramedicine, and intractable pediatric epilepsy management via a telehealth. Lauren Dominick, won Outstanding Poster at the Annual Interprofessional Rural Health Professions Conference for her Scholarly Project on rural caregiver acceptance of HPV vaccine administered by community pharmacists.

COM Phoenix Rural Rotations 2013-2019



### Longitudinal Integrated Clerkship (LIC) in Payson:

Community-based faculty, the Mogollon Health Alliance Foundation, Banner Payson Medical Center, and Ponderosa Family Care are collaborating to create a third-year COM-P longitudinal experience for students interested in rural medicine. It is proposed as an eight-month experience starting in 2020 for a cohort of up to 40 students in the Payson LIC to learn clinical skills, knowledge and patient management in a context of continuity with patients, medical staff, and the community.

Two 2019 RHPP graduates wrote about the value and impact of their rural clinical rotations for medical students considering RHPP participation:

*“Are you interested in primary care? Look no further! The Rural COD offers vast exposure to all of the primary care specialties, and actually allows you to have full ownership over your patients. With rural docs constantly being overworked, having your help is extremely appreciated. You will get hands on experience that you will never get at other large urban settings. You will bond with a healthcare staff that has similar mindset and goals as you, and you will make friendships and professional relationships that will last a lifetime.”*

*“My time at the Fort Defiance Indian Hospital has greatly changed how I see the practice of medicine. I feel like I am not the same person I was when I started medical school, and my rural rotations helped shape me for the better.”*

Note: Federal statute requires that AHEC programs must ensure that at least 10% of clinical education for medical students occur in community settings that are removed from the primary teaching facility. In 2018-19, UArizona COM-T had 15% and COM-P had 10% medical student clinical education in community settings.

## Rural Health Professions Program (RHPP) UArizona College of Pharmacy (COP)

**Elizabeth A. Hall-Lipsy, JD, MPH**

*RHPP Director and Assistant Professor*

Developing the pharmacy workforce to improve access in Arizona's rural and urban underserved areas is aligned with the AZAHEC Program and College of Pharmacy missions.

In 2018-2019, University of Arizona COP RHPP students did 179 rotations for 37,960 hours of pharmacy training in rural and urban underserved Arizona communities. Over eight years, the RHPP grew from four first-year students to more than 40 new participants per year, representing 27% of the Doctor of Pharmacy (PharmD) student body.

COP RHPP alumni tracking shows that 35 (25%) of all RHPP alumni over eight years are now practicing in rural Arizona, and 26 (22%) now act as rural preceptors for current pharmacy students.

All RHPP students participate in the Professional Certificate (n=128), 50% are from a rural community population less than 50,000; and 50% are from an underserved background defined as: (1) being first in their family to attend college; (2) receiving a scholarship or loan for disadvantaged students, (3) receiving federal or state assistance (i.e., free or reduced lunch, subsidized housing, food stamps, Medicaid); or (4) having lived in an area where there were few medical providers at a convenient distance.

Students selected for the RHPP/Professional Certificate are placed in rural communities three times over four years: (1) between first and second year in a four-week introductory rotation; (2) between second and third year for four weeks; and (3) during fourth year for a six-week advanced pharmacy practice rotation.

In 2019, 30 graduates received their Certificate in Pharmacy Related Health Disparities, 11 were selected for competitive post-graduate pharmacy residency, nine residencies serve rural or underserved populations. Of the other 21

RHPP graduates, two are employed in rural Arizona and 10 in urban underserved pharmacies.

In a survey of RHPP graduates, 63% reported intending to pursue further training and/or seek employment in an underserved community, 59% intend to train/work in a rural setting, and 89% plan to train/work in Arizona. Alumni tracking shows 73 students (51%) obtained post-graduate residency training, 44 (32%) work in a rural setting, and 82 (59%) work with underserved patients.

Since 2010, COP RHPP has offered a Professional Certificate in Pharmacy-Related Health Disparities. In 2019, 30 graduates earned the certificate, joining 112 previous students who earned the certificate. The certificate requires two COP courses: Community Assessment for Pharmacy Students and Health Disparities in the United States. A total of 135 students conducted community assessments of their RHPP rotation sites and presented findings in oral and in written reports to peers and colleagues. Posters are presented at the Annual Interprofessional Rural Health Professions Conference and shared with the AZAHEC Regional Centers. Students participate in community programs and events such as PharmCamp and health fairs.

The COP RHPP collaborated with the Medication Management Center (MMC), the Arizona Department of Health Services, NAHEC, WAHEC and two rural Arizona pharmacies in San Luis and Flagstaff to enroll more than 500 diabetic patients to receive free comprehensive medication reviews by the MMC team. Students and their supervising pharmacists follow up with at risk patients. Enrolled patients received quarterly one-on-one counseling sessions and regular follow-up consultations, conducted in cooperation with their local clinic and pharmacy staff. Project results, and impacts on rural participants were published in professional pharmacy journals and presented at national and international professional meetings.



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

Christy Pacheco, DNP, FNP-BC

*RHPP Director and Clinical Assistant Professor*

In 2018-19 University of Arizona CON had 43 Doctoral Nurse Practitioner (DNP) RHPP students, who completed 13,577 rotation hours in rural and urban medically underserved areas. Of those, 18 participated in the AHEC Scholars Program, 12 in the 2018-20 and six in the 2019-21 cohorts. Scholars at Northern Arizona AHEC conducted community assessments in Flagstaff and Tuba City and heard community health and social service resource presentations. Non-RHPP students completed another 9,261 rotation hours in rural and underserved areas.

Sites included Tuba City on the Navajo Reservation. New sites were developed at Benson Hospital and Poore Medical Clinic. DNPs received on-site supervision in rural and urban medically underserved rotations, and remotely using HIPAA compliant videoconferencing. RHPP Scholars are equipped with clinical decision support tools including iPads, apps. Scholars received stipend support for summer (29 students), fall (16), and spring (17) rotations.



*RHPP Director Christy Pacheco with College of Nursing RHPP Students.*

Students participated in both clinical and simulation activities. Ten students participated in a mock code interprofessional simulation at Northern Arizona AHEC in December on a state-of-the-art mannequin. Students agreed or strongly agreed that the activity was valuable, promoted a better understanding of patient barriers, and that working in interprofessional teams can improve patient care on their evaluations. Students participated in the hands-on training and simulation workshops at the UArizona CON.

Students took rural focused didactic courses and seminars including NURS 638 Conceptual Foundations for Rural



*College of Nursing RHPP Students.*

Health Nursing (28 students); NURS 774 Rural Community Health (14), and independent studies (7). Rural courses were open to all UArizona Colleges (Medicine, Pharmacy, and Public Health), and focused on providing rural health-care, rural health status, health disparities and special populations such as Border and Native American health. DNP students participated in on-campus Brown Bag Lunches to discuss rural rotation and practice issues, and locally relevant quality improvement projects. Though targeted to RHPP Scholars, all health professions students interested in rural or medically underserved health were welcome to attend. Students and faculty advisors accessed program and rural health course and resource information on an updated CON RHPP website.

**Interprofessional RHPP Conference:** 31 CON DNP students attended and 19 presented posters at the 7th Annual Interprofessional Rural Health Professions Conference. Tiffi Zellers, CON RHPP student and AHEC Scholar received a poster award for her rural community assessment.



*RHPP IPE Event at NAHEC.*

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

**Diane E. Nuñez, DNP, RN, ANP-BC, FNAP**  
Clinical Professor, RHPP Director

In 2018-19, the ASU RHPP placed 40 primary care Doctor of Nursing Practice (DNP) students in 64 rotations totaling 11,501 hours in rural or urban medically underserved communities. Ten students rotated in sites that hosted them previously. Students gave five poster presentations and 31 attended the 7th Annual Interprofessional Rural Health Professions Conference.

2018-19 ASU RHPP DNP students included 13 Adult/Geriatric Nurse Practitioner (NP), 13 Family NP, six Family Psychiatric Mental Health NP, four Pediatric NP, and five Women's Health NP students. Of the students doing rotations, 51% were from a rural area, 61% a disadvantaged background, 22% underrepresented ethnic/racial groups, 28% self-identify Hispanic, and 54% Arizona natives.

The ASU CON Center for the Advancement of Interprofessional Practice, Education and Research (CAIPER) provided e-learning modules, simulation, and events to prepare students for primary care practice. Students have two mentors one clinical and one faculty – to foster positive clinical experiences and encourage graduates to practice in areas of need.

CAIPER e-learning Modules and IPE Discussions: CAIPER topics included: What is Interprofessional Education? Interprofessional Communication; Involving Team Members in Primary Care Practice; Developing an Integrated Plan of Care.

RHPP students participated in discussions on Preparing for Interprofessional Practice: Trauma Informed Integrated Care; How Health Professionals Can Influence Health Policy; Meeting the Primary Care Needs of Arizona's Multi-Ethnic Refugee Communities; Addressing Substance Use Disorders in Primary Care. Other events included TeamAZ and HopeFest, where 22 and 18 RHPP students attended.

The ASU CON RHPP had 15 AzaAHEC Scholars complete the first year from primary care DNP areas of practice: family, adult-geriatric, pediatrics, women's health and mental health.

Six students graduating in 2019 completed projects on culturally-tailored diabetes education; impact of sponsorship and substance abuse treatment and relapse prevention; improving Hepatitis C diagnosis & treatment; use of a medical portal for an underserved community free-clinic; advanced practice providers for primary care in rural home healthcare.



GVAHEC region ASP students with their mentor Charlotte Thrall.

Ten AHEC Scholars began their community assessment for DNP projects in their AHEC areas on: breastfeeding intervention; parenting support for women in recovery; Improving oral health; food insecurity; reducing substance use disorder and readmissions; provider engagement in gathering women's sexual history; mindfulness to reduce chronic pain; pediatric health promotion, Improving heart failure outcomes; diabetes self-management.

Post rotation student testimonials and graduation plans:

*I plan to work in Arizona within my community. I want to work in primary care and hope to further my education after graduation by getting additional nutrition education so that I can promote health and wellness for my patients in the underserved area where I live in Douglas, AZ. I plan to continue volunteering with organizations such as HopeFest and Circle the City throughout my future career as these clinics and events helped shape me during my educational years. – G. Durazo RHPP student, Adult-Gerontology*

*I really enjoyed my rural health rotation especially in regard to the continuity of care provided. As a student, I was able to see the patient, talk to them, brainstorm with my preceptor, and order the tests. I felt like I had a tremendous growth and my Spanish is definitely getting better, as it is the main language spoken in the clinic. The ability to learn the cultural differences and aspects in care are also amazing. – M. Davis RHPP student, Family Health*

*My post-graduation plan is to work in Northern Arizona region where Native Americans reside. I have been employed as a nurse for almost 2 years in Ganado, Arizona, which is located within the Navajo reservation. With this, I have seen how these population lack primary mental health programs. Also, it will be my privilege to work with underserved populations in rural areas. – E. Vidal RHPP Student, Family Psychiatric Mental Health.*

## Northern Arizona University School of Nursing Rural Health Professions Program (RHPP)

**Shelley Vaughn, DNP, FNP-BC**  
NAU RHPP Director

Eight NAU RHPP students graduated in 2019. AzaHEC funding supported family nurse practitioner (FNP) clinical training in rural and urban underserved communities. Each FNP student received a \$1,500 stipend to help cover costs. RHPP FNP students participated in an eight-hour clinical skills lab in Tucson or Phoenix to learn suturing skills and performing punch biopsies of skin lesions.

Shelby Abramson: *“I was grateful receive an RHPP award during my clinical. I was mentored almost exclusively at different locations of a single Federally Qualified Health Center in Southern Arizona serving low-income and at-risk com-*

*munity members. I was successful in identifying a need for breastfeeding support. I’ve been able to use the connections I made, skills acquired, and knowledge gained to propose creating a Lactation Program as a dual-trained International Board-Certified Lactation Consultant and Family Nurse Practitioner.”*

Johannah Blake: *“The RHPP allowed me to focus more on my clinicals and capstone project instead of worrying about finances or trying to work shifts as a nurse to make ends meet during my final year of the program... to really put all my time and effort into my studies, learn, and prepare to take on the role of Family Nurse Practitioner.”*

Megan Mayne: *“The RHPP allowed me to work part time to spend more time dedicated to school... it helped pay for some of the expenses to drive to rural and underserved clinical sites.”*

## Rural Health Professions Program (RHPP) UArizona Mel & Enid Zuckerman College of Public Health

**Leila Barraza JD, MPH, RHPP Director, Assistant  
Professor and Jennifer Peters**

In the 2018-19 MEZCOPH RHPP, 37 students participated in service learning courses, of whom 36% grew up in Arizona, 19% grew up in a rural area, and 44% are either the first in family to attend college, received a scholarship or loan for disadvantaged students, received federal or state programs, or lived where there were few medical providers.

The MEZCOPH RHPP consists of five one-week intensive credit bearing (one unit) service-learning courses. Students worked in rural, tribal, border and urban un-



MEZCOPH RHPP Tucson Service Learning Day.



MEZCOPH RHPP Northern Service Learning.

derserved communities via AzaHEC Regional Centers. Students experience active learning and reflection on addressing the social determinants of health, promoting health and eliminating health disparities.

**Family and Child Health in Urban Settings HPS 597A:** Eight students worked with organizations serving marginalized populations in Tucson’s borderlands area, including poverty and home insecurity, migrants and refugees, Native American and Hispanic populations. Topics included the social determinants of health for Medicaid recipients; neighborhood revitalization; cultural approaches to addressing trauma, substance use and violence; oral health; adolescent and transgender health; immigration; and civic engagement. A student wrote: “This class rein-



MEZCOPH RHPP Rural Service Learning.

forced how important it is to get out of the classroom and into the community...”

**Maternal and Child Health in Rural Settings HPS**

**597B:** Six students experienced the health systems and services in tribal communities in the Navajo Nation, Hopi Health Care Center, Hopi-Tewa Women’s Coalition to End Abuse, Tewa Garden Project, Tuba City Regional Health Care Pow-wow, and others. A student wrote: “This course has taught me about my passions towards pursuing a career in public health and... and find solutions to help rural communities thrive.”

**Border Health Service-Learning Institute PPHM 597C:**

immersed 28 students, faculty, and community partners in the border communities of Douglas, AZ and Agua Prieta, Mexico and their health disparities. A student noted, “A key asset in effectively addressing public health issues is social and community connection and integration... developing authentic and trusting relationships can be the key determinant in whether a health initiative is successful.”



MEZCOPH RHPP Phoenix Service Learning.

**Rural Health Service-Learning Institute PPHM 597D:**

five students collaborated in rural areas where copper mining and cotton farming are major industries in Graham and Greenlee Counties. 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. A student wrote: “This course was probably my favorite experience in graduate school thus far. I learned so much...”

**MEZCOPH RHPP AHEC Scholars Program:** Five Scholars completed their first year and entered the second year; a new 10 student cohort began their first AHEC Scholar year.

**YES-Youth Engagement for Success Camp:** Three students assisted in a summer program for Casa Grande high school students to increase interest in the health professions. Students worked in the MEZCOPH Mobile Health Unit to promote exercise and healthy behaviors, gave seminars on current public health issues and on engaging and succeeding in school.



MEZCOPH RHPP Family and Child Health in Urban Settings  
Students visiting Mariposa Community Health Center in Nogales, Arizona.





### Arizona COM-T Rural Health Residency Training at Banner University Medical Center South Campus

**Jerome Koleski, MD**

*Assistant Professor and Rural Health Coordinator*

In 2018-19, Banner University Medical Center South Campus (BUMC-S) Family Medicine (FM) residents completed 29 rural rotations and Internal Medicine residents completed 33 rural rotations. First, second, and third year FM residents do rotations in FM, geriatrics, musculoskeletal, obstetrics and emergency medicine in the rural Arizona communities of Fort Defiance, Polacca, Safford, St Johns, Tuba City, Whiteriver, Payson, Casa Grande, Sells and San Xavier, Ajo, and Willcox. Additional sites are planned in Nogales and San Carlos. Internal Medicine residents rotated at Payson, Green Valley and Casa Grande. Over the last three years, 40% of BUMC-S FM resident graduates practice in rural Arizona.

The BUMC-S mission is to train physicians to work in Arizona's rural and urban underserved areas. Residents spend a minimum of 16 weeks in rural Arizona sites to experience the professional and personal benefits of living and working in these communities. These rotations are some of the most valued experiences our residents have, why some of our best student applicants decide to come here for residency training, and why many of our resident graduates stay to practice in rural and underserved areas in Arizona - many times where they rotated as a resident.

Over the last three years, 58% BUMC-S FM graduates practice in rural areas in North America with 40% in rural Arizona; an impressive 100% work in federally designated Health Professional Shortage Areas (HPSAs) in the U.S., with half (50%) in Arizona HPSAs.

### NAHEC/North Country HealthCare (NCHC) Family Medicine Residency Program

**Marica Martinic, MPH, NAHEC Director**

#### The NCHC Family Medicine Residency Program

**(FMRP):** planning began in 2010 with AzaHEC Program funding to implement a sustainable primary care workforce pipeline in northern Arizona through a community-based Family Medicine Residency Program in this culturally diverse and medically underserved area.

The NCHC FMRP received accreditation for a 4-4-4 family medicine (FM) program in 2017 and will match its first cohort of residents in 2020. In addition to ongoing AzaHEC Program funding, the state legislature appropriated \$750,000 in new funding, and the NARBHA Institute com-

The 2019 BUMC-S FM resident graduating class has all five now practicing in Arizona HPSAs. The program's track record earned National Rural Training Track Collaboration Rural Recognition - an honor bestowed on just 12 FM residencies in the nation.

AzaHEC supports courses that prepare residents for rural practice: 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 medical Spanish. AzaHEC supported the purchase of three obstetrical ultrasound models to teach residents to do ultrasounds in low resource environments.

Evaluation feedback from both Internal Medicine and Family Medicine residents is very positive:

*"I just completed a rural rotation. It reinforced my passion and desire to pursue rural medicine."*

– Delphine Colar, MD (PGY 2)

*"My experience at Mount Graham in Safford, Arizona was amazing. They truly encompass the full scope of family medicine, including both inpatient and outpatient care, and full-spectrum obstetrics! Those docs are amazing!"*

– Ana Casanova, MD (PGY 3)

Mobile Health Program Obstetrics (MHP OB) - provides prenatal, postpartum and family planning services to uninsured Tucson patients. In 2018-19, 66 ob patients received care in 718 visits. Care is delivered by an inter-professional team of FM residents, nurse practitioner, nursing, pharmacy and undergraduate students supervised by faculty physicians Ravi Grivos-Shaw, MD and Kyle Meehan, MD.

mitted \$3 million in funding over five years.

The NCHC FMRP Program Director, Ed Paul MD, has over thirty years of experience in Family Medicine practice and residency program administration and leadership - including starting the Yuma Regional Medical Center Family Medicine Residency Program. He served on the AzaHEC Advisory Commission for many years.

Activities for FY'20 include recruiting the first resident class, renovating the Family Medicine Center in Flagstaff, hiring the Associate Program Director and Program Coordinator, maintaining the collaborative partner network and Graduate Medical Education Committee, complying with ACGME requirements, finalizing the curriculum, and creating faculty development.

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

**Jorge Gomez, MD, PhD**  
Assistant Professor of Public Health

The **B**order **L**atino and **A**merican **I**ndian **S**ummer **E**xposure to **R**esearch (BLAISER) goals are to expand the pipeline of future physician scientists and health care researchers; increase awareness and promote research in underserved communities; better understand health disparities and their impact on health outcomes; attract and retain diverse students interested in biomedical research and a desire to learn more about health disparities in Southern Arizona.

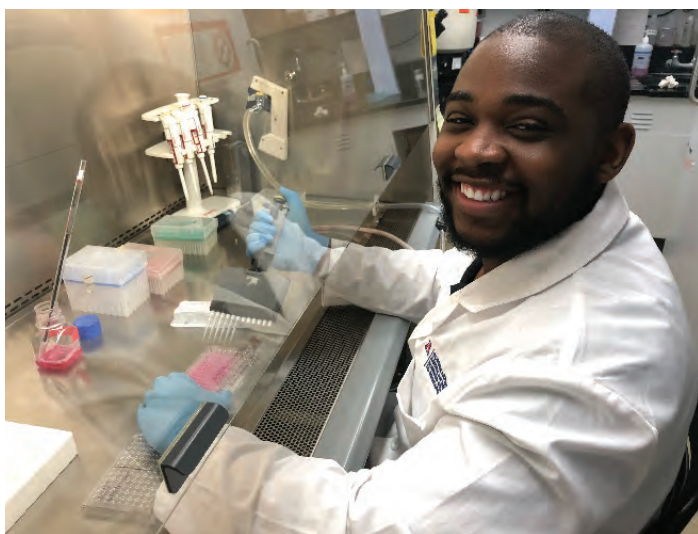
In 2018-19, BLAISER accepted 20 students of 117 applicants, of whom 45% were first-generation college students. Consideration was given to diverse students from underrepresented minorities.

Students receive a \$3,000 stipend, get on-campus housing, receive recognition at the BLAISER Closing Ceremony, and earn up to six upper-division credits for undergraduate research for participation in the BLAISER activities.

**Research scientist laboratory:** matches students with translational research scientists to learn critical-thinking, scientific techniques and hands-on research solving real-world problems.

*"I got my first research experience under my belt, one that provided so many unique insights. I was able to improve on some lab skills while learning some completely new techniques."* – Diana Meijers, University of New Mexico student.

**Minorities and Border Health Disparities Lectures:** increase awareness of Arizona's health disparities, and



encourages students to pursue careers that identify and address health disparities.

*"I was exposed to the burdensome health disparities that affect these areas and the importance of being proactive about these concerns."* – Mariana Felix, UArizona student.

### Graduate Medical School Application Process Preparation

**Pre-Health Advising:** Students meet individually with pre-health advisors.

**Preparation GRE and MCAT exams:** Princeton GRE Review, MCAT preparation,.

**Writing and Public Speaking Workshop:** helps students develop their written personal statement and practice public speaking skills.

*"The public speaking sessions gave me the confidence that I had not had before...it will be a great asset throughout my future in healthcare and in life."* – Olga Munoz, Western New Mexico University student

**Site Visits to Nogales and Sells (Tohono O'odham Nation):** SEAHEC arranges student visits to health systems along the US-Mexico border and in tribal communities.

*"Now, I have a deeper understanding of minority health disparities around the border regions."*  
– Krystelle Boyd, UArizona student

**Research Project Presentation:** workshops help students create research project posters and present them at the Undergraduate Research Opportunities Consortium.

*"My greatest accomplishment this summer was completing my research and putting together a poster."*  
– Christian Henry, UArizona, student

*"It was an honor and pleasure to be a part of the program. It helped to reinforce and guide me to my career path."*  
– Aracely Lopez-Esquer

*"Above all, the BLAISER program taught us how to be responsible leaders, pioneers in health sciences, teamwork skills, and problem solvers."*  
– Ricardo Montejano



Left to Right: Olga Munoz, Monique Torres (secondary mentor) and Laura Zelis at Dr. Gerardo Lopez Lab.

## Med-Start Health Careers Program

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

Med-Start is a health careers exploration program started in 1969 for high school juniors from rural, border, tribal, and other educationally and economically disadvantaged communities. Students experience six-weeks of living on the UArizona Tucson campus. They take college classes, hear health career lectures, tour academic institutions and health facilities, and present a research project.

In 2019, 50 Med-Start students were selected from 303 applicants; 98% completed the Med-Start program. Students came from 34 Arizona and Navajo Nation high schools.

Students learn about public health and how health disparities affect health outcomes. In 2019, Med-Start student community projects included:

**SEAHEC – Food Deserts:** Students presented on food deserts, cultural factors, their impacts from the viewpoint of community member video interviews.

**NAHEC – Prevention to Fight Against Type II Diabetes with Exercise and Healthy Eating:** Students showed how exercise and healthy eating can prevent Type II Diabetes.

**WAHEC – Obesity in Yuma County:** students created a music video about how culture, social media, opioid use, food costs and advertising contribute to the obesity epidemic, and proposed solutions.

**CAAHEC – Behind the Screens:** students showed how social media can improve teenage mental health through awareness and prevention. The title has no “i” because anxiety and depression causes one to lose a sense of individuality.

### **2019 Med-Start lectures and experiences included:**

Cross Cultural, SafeZone Training, Trauma Skills, Motivational Interviewing, Adverse Childhood Experiences, Suturing, CPR, Intubation, Stop the Bleed, Simulation Lab, CON-Vital Stats, and Native American Health.

In weekly chats with faculty they learn about health professions careers.

**Hopi Health Care Center in Polacca, Arizona on the Hopi Reservation:** Students learn about tribal Critical Access Hospital services, 24/7 ER, sexual assault examinations and diabetes prevention.

**Northern Arizona University (NAU):** Students tour North Country Healthcare, learn public health roles in promoting healthy communities, practice suturing skills, and collective problem-solving.



**UArizona College of Medicine-Phoenix campus:** Medical students teach Med-Start students simulation skills in suturing, intubating, and first aid. Students learn tips about the medical school application process.

**Grand Canyon University (GCU):** Students learn health courses offered and tour the cadaver lab.

**A.T. Still University |AZ School of Health Sciences:** Physician Assistant faculty teach students AED use and heart sounds in the Standardized Patient Experience Center.

**Tubac Fire Department, Rio Rico, Arizona:** provides students trauma skills rescue sessions.

**UArizona Center on Aging:** Students experience what elders see and feel with goggles simulating cataracts, and tubes on their fingers to simulate arthritis, prior to a community based volunteer experience at St. Luke's.

*“Med-Start gave me the opportunity to not only explore different health professions but also grow as an individual. I am well equipped with a larger lens into the vast and intricate medical field.”* – 2019 Med-Start student.

*“I am honored to have been able to work with these students this year. As a teacher, there is nothing I love more than a class eager to learn.”* – English Instructor Med-Start 2019

*“I was very nervous because I felt as though I was not a bright enough student, especially when it came to the idea of college. Med-Start has shown me the work I am capable of...”* – 2019 Med-Start student

Med-Start students celebrated their achievements with their families at a closing ceremony. Dr. Moreno, University of Arizona Associate VP for Diversity and Inclusion, spoke to students about their value in becoming health professionals and serving their communities. Speakers Carlos Gonzales, MD (Med-Start 1972) and Evelinda Gonzales, MD (Med-Start 2002) inspired attendees with their personal health career pathway stories.

## AZAHEC Sponsorship of 46th Annual Arizona Rural Health Conference

The AZ Rural Health Conference was held in Flagstaff, Arizona in August, 2019 - over 200 health care professionals, administrators, policymakers, county health directors, state and local leaders, federal agencies and others attended. Presentations included treatment of substance use disorder, mental health and housing services in rural communities; opioid abuse prevention; recruiting and retaining health professionals in rural Arizona; and emergency preparedness. The five AzaHEC Center Directors provided updates of activities in their region.



AzaHEC Center Directors presenting AHEC program overview at the Arizona Rural Health Conference. Left to right: Marica Martinic (NAHEC); Sean Clendaniel (CAAHEC, beginning in 2019); Gail Emrick (SEAHEC); Brissa Garcia (WAHEC); and Jeri Byrne (EAHEC).



Gail Emrick, SEAHEC Executive Director and team receiving the award for "Inspiring Rural Health Program" for the Health Farms Program from the Arizona Rural Health Association.



Brissa Garcia giving an overview of WAHEC programs.

## Grants

Consistent with its federal requirement, to “coordinate community-based participatory research with academic health centers,” in 2018-19, the AzAHEC Program supported the following innovative, interprofessional education programs and research through competitive grants:

**Community Engagement Research Program:** fosters community-based participatory research that contributes to the health and well-being of Arizona’s diverse populations.

**Faculty Development Research Program:** supports translational research with measurable outcomes, such as preliminary data for submitting an extramural grant. Preference is given to junior investigators undertaking research related to health disparities and population health.

**Research and Scholarly Project Grant Program:** provides students and residents experience in rural and urban underserved Arizona communities in research or scholarly projects in interprofessional education and practice that address unmet health needs in an AHEC Regional Center service area.

### Community Engagement Grants, Faculty Development Research Grants and Small Grants New (2018-19) and Continuing

Department/College	Principal Investigator	Project Title	Award Type	Amount Awarded
College of Medicine - Phoenix	Jennifer Hartmark-Hill, MD, AAFP	Management of Hypertension & Diabetes in the Homeless Population: A Pilot Study	Community Engagement Research Grant (Continuing)	\$50,000
College of Medicine - Tucson	Alexander Alvarez	Salud de Frontera – Improving Healthcare Delivery in the Border Zone	Small Grant (New)	\$4,980
College of Public Health	Emily Cooksey	A mathematical modeling approach to address drinking water quality disparities between rural and urban communities in Arizona	Small Grant (New)	\$4,762
College of Public Health	Katherine Ellingson	Antibiotic Resistance Patterns in Arizona Healthcare Facilities along the US-Mexico Border: Harnessing Data for Action and Advocacy	Small Grant (New)	\$4,911
College of Medicine-Tucson	Amy Rogers	The Butterfly Effect: Using handheld ultrasound to close gaps in healthcare disparities	Small Grant (New)	\$4,957
College of Medicine-Tucson	Khiem Tran	A Novel Mechanism in the Immunosuppression Repertoire of Metastatic Melanoma	Small Grant (New)	\$5,000

### Community Engagement Grants, Faculty Development Research Grants and Small Grants Completed in 2018-19

Department/College/Institution	Principal Investigator	Project Title	Award Type	Amount Awarded
College of Medicine-Tucson	Monica Vandivort	A Community Paramedicine-Primary Care Partnership in Rural Cochise County to Improve Health Outcomes for Severely Ill Elders	Community Engagement Research Grant	\$50,000
College of Public Health - Phoenix	Celina Valencia	Saludable: Holistic Health Behavior Intervention for Latino Youth	Community Engagement Research Grant	\$46,854
College of Public Health - Tucson	Ashley Lowe	The Epidemiology and Environmental Determinants of Childhood Asthma on the Navajo Nation: A Needs Assessment	Small Grant	\$5,000
Regional Center for Border Health	Amanda Aguirre	Early Child Intervention	Small Grant	\$5,000
College of Public Health - Tucson	Stephanie Brennhofer	HIV primary care providers’ HPV vaccine promotion and anal dysplasia screening practices	Small Grant	\$4,495
UArizona College of Nursing	Christina Wyles	Understandability and Acceptability of the NEC-Zero Español Toolkit for Families of Fragile Infants	Small Grant	\$5,000
College of Medicine	Leopoldo Cobos	Nattokinase to improve insulin sensitivity and weight loss in women with obesity	Small Grant	\$5,000

### Regional Center for Border Health, Inc./San Luis Walk-In Clinic, Inc.

**Amanda Aguirre, President & CEO, RCBH**

Amanda Aguirre, President & CEO, Regional Center for Border Health (RCBH), Inc./San Luis Walk-In Clinic, Inc. – received a small AzAHEC Program grant to improve early identification of children with developmental problems who may benefit from special education, speech therapy, occupational therapy, and behavioral health services.

Dr. Cathleen von Hippel, Clinical Psychologist, trained ten RCBH staff to conduct the Parents' Evaluation of Development Status (PEDS) Test. The tool is used to interview parents and assess children at 18 months, 24 months, and at annual well child visits up to age 8 to assess a child's language, motor, self-help, early academic skills, behavior, social, emotional, and mental health. Clinicians enter information into a secure website and receive immediate, actionable feedback about a child's functioning compared to a large standardized sample of same-age peers.

Over 1,334 tests were administered from August 2018 through March 2019. Children identified at risk are referred to the behavioral health team for a more complete assessment. As a result, 303 referrals were made for behavioral health services.

### Nattokinase to improve insulin sensitivity and weight loss in women with obesity

**Leopoldo Cobos, MD**

The study examined Nattokinase's effect on obese patients living in the border region. Nattokinase is an enzyme supplement that degrades fibrin, which is involved in clotting. Obese patients have elevated clotting markers which could impair adipose tissue oxygenation and thus insulin resistance. Of 17 patients recruited from the San Luis Walk-In Clinic in Somerton, Arizona, nine received Nattokinase for three months and eight received a placebo.

After three months, the percentage of patients that lost weight was similar in the Nattokinase and Placebo groups (33% and 37%). More in the Nattokinase group had a HbA1c decrease (43%) compared to Placebo (22%), with an average Nattokinase group HbA1c decrease of 0.9%. More in the Nattokinase group compared to the Placebo group had lower fasting insulin levels (75% vs 22%), a lower fasting glucose level (50% vs 22%), and a lower HOMA index (63% vs 22%). A slightly higher percentage of patients in the Nattokinase group noted a reduction in waist compared to Placebo (38% vs 22%) but more subjects lost inches in hip measurement in the Placebo group compared to Nattokinase (38% vs 56%).

These results suggest that, although there was not a significant difference in weight loss, metabolic health improved in obese patients with diabetes on Nattokinase. Further study is needed to evaluate the long term benefits of Nattokinase on metabolic health and as an adjunct to diabetes care.

### HIV primary care providers' HPV vaccine promotion and anal dysplasia screening practices

**Stephanie Brennhofner, MPH, MS, RDN and Alexis Koskan**

Human immunodeficiency virus (HIV)-infected populations suffer a disproportionate burden of anal cancer due to types 16 and 18 human papillomavirus (HPV). HPV-related anal cancer can be prevented with timely completion of the HPV vaccine series and controlled via anal dysplasia screening and treatment.

This study explored HPV vaccine and anal dysplasia screening practices by providers caring for HIV-positive individuals. Greater Valley AHEC identified clinics and providers to participate in the study. Interviews were conducted with 25 primary care physicians (PCPs), nurse practitioners, physician assistants, and colorectal surgeons. The interviews were transcribed and analyzed using deductive qualitative analysis and the ATLAS.ti qualitative software program. Preliminary analysis indicated that involving pharmacists to provide the HPV vaccine could reduce the burden on PCPs and help patients overcome barriers to completing the HPV vaccine series.

Three abstracts related to the research were accepted to conferences (one national and two international), have submitted one manuscript for publication and plan to submit a second manuscript in the near future.

### Understandability and Acceptability of the NEC-Zero Español Toolkit for Families of Fragile Infants

**Christina Wyles and Sheila Gephart, Ph.D., RN.**

Necrotizing enterocolitis (NEC) affects 5-10% of babies born weighing less than 1500 grams. Hispanic infants are at higher risk for NEC. The purpose of this study was to evaluate the quality of the NEC-Zero toolkit Spanish materials. The aims were to: 1) validate the accuracy and acceptability of printed material for readability, acceptability, and cultural appropriateness for English and Spanish speakers, and 2) evaluate the acceptability, perceived ease of use, and usability of website materials for parents.

Twenty self-identified bilingual English/Spanish speaking parents (15 female, 5 male) with a child in the newborn intensive care unit were recruited. Education ranged from high school diploma or lower (40%) to master's degree (5%, n=1). Gestational age of the infants ranged from less than 27 weeks (40%) to older than 33 weeks (20%).

Participants reviewed three Spanish-language brochures and the NEC-Zero website: 1) *What is Necrotizing Enterocolitis*; 2) *Prevent Complications*; 3) *Expecting a Premie*? Data collection included questionnaires and semi-structured interviews. Results strongly indicated that parents found the translated material useful and offered a meaningful way to start a conversation.

## **Saludable: A Holistic Health Intervention for Latino Youth**

**Celina Valencia, DrPH, Cecilia B. Rosales, MD, MS and Eduardo Gonzalez-Fagoaga, PhD**

This project purposes were to test an obesity intervention designed for Latino youth, to provide an interprofessional education experience for health profession students, and to provide Latino youth with exposure to college students. *Saludable* is a bicultural, bilingual obesity prevention intervention designed to build healthy Latino communities in Arizona. The six-week obesity intervention curriculum addresses nutrition, physical activity, and mindfulness-based stress reduction (MBSR) techniques.

Sixty Latino youth ages 8-13 were enrolled across three community sites in Maricopa and Pima Counties and included a parent orientation on chronic disease prevention, healthy lifestyles, and emotional well-being and an English/Spanish *Saludable* curriculum manual to encourage household discussion of health and well-being.

The *Saludable* curriculum delivery by interprofessional students: (1) provided the opportunity for health sciences students to work collaboratively to tackle obesity and (2) provided Latino youth with peer-to-peer interactions with college students - Doctorate of Public Health (DrPH), Master of Public Health (MPH), and undergraduates in Public Health, Nursing, Pre-Medicine, Pre-Pharmacy, Pre-Physician Assistant, Health Education, and Health Psychology. Didactic lectures on health and resilience, childhood toxic stress, cultural competency, sensitivity training on hunger and poverty, and collecting physiological study data. Students worked with community

health workers (CHW) who provided feedback on strategies to reach Latino youth.

*Saludable* graduated 54 youth in August 2018. The rural Maricopa County intervention had 20 participants (65% males; 35% female) who were primarily first generation American and reported primarily speaking Spanish at home. All 20 completed the program. The Pima County intervention had 40 participants (50% male; 50% female), of whom 34 completed the program delivered at a YMCA and a neighborhood center in urban areas. Urban youth participants were later generation American and reported primarily speaking English at home.

Data was collected at baseline, program graduation, and three months post-graduation in November 2018. Data included blood glucose, HbA1c, body mass index (BMI), cholesterol, and blood pressure to assess risk for Type 2 diabetes and cardiovascular disease. Self-report data was collected on physical activity, healthy eating, depression, traumatic stress, and social support. Small weight loss was documented for some youth participants who were obese at baseline. Qualitative data was collected from parents, who indicated that youth engagement with newly learned healthy habits such as reading food nutrition labels at the grocery store was influencing decisions and behaviors of the family. Youth participants, their parents, and members of the interprofessional team also provided feedback as part of a developmental evaluation to refine the *Saludable* intervention and identified areas for improvement for the yoga sequence, the lesson on emotional well-being, and the food and nutrition lessons.

## **A Community Paramedicine-Primary Care Partnership in Rural Cochise County to Improve Health Outcomes for Severely Ill Elders**

**Monica Vandivort, MD**

The project purpose is to improve health outcomes for diverse, seriously ill elders in rural Sierra Vista, Arizona using community paramedics. Sierra Vista Fire Department Community Paramedicine collaborated with four of the 19 (21%) local primary care practices. The study evaluated program knowledge by participants, the number of referrals, sustainability and expansion.

**Training.** Two community paramedicine training sessions (December 2017, March 2018) increased program knowledge pre- and post-test, but did not reach medical assistants or hospital discharge planners. Rio Rico Fire reported higher attendance if training was mandatory and paid.

**Referral rates.** The Community Paramedic program was from December 2017 to December 2018. It received 106 referrals: 61% from patients discharged from the hospital or emergency department; 25% from primary care practices, and 14% from the field. The 30-day hospital readmission rate was 8.7% for participants compared to a baseline 19.7% hospital rate.

**Sustainability.** SEAHEC facilitated a community stakeholder focus group who reported improved access to care through home visits and referrals to local resources such as SEAGO, the housing authority, Meals on Wheels and others. One participant said: "There has been a huge difference in continuity of care. Quality of care improved by reduction of readmissions." The group had concerns about program sustainability and expansion due to limited financial resources.

**Conclusion.** Interest in and desire for ongoing community paramedicine programs in Sierra Vista and Cochise County remain high. Partners plan to pursue ongoing sources of funding.

## Eastern Arizona Area Health Education (EAHEC)

Jeri Byrne, BA, MS, Executive Director



**Eastern Arizona Area Health Education (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
Pre-Collegiate (K-12) Health Careers Preparation Participants	4,278
Health Professions Trainee Experiences	125
Continuing Education Health Professional Participants	732
Community Health Education Participants	3,005

**Future Health Leaders (FHL) Summer Camp** – has allowed rural students to explore health professions careers since 2006. Forty rural sophomore, junior, and senior high school students participate in hands-on medical experiences in a university setting over seven days each summer. The five AHEC Regional Centers rotate hosting the FHL summer camp presenting core programs and personalizing them to meet local community needs.

All five AHEC Regional Centers participate in FHL Summer Camp planning and advertise it to local high school students who apply and get teacher recommendations. The Centers review applications from their area and choose eight students. EAHEC hosted the 2019 FHL Summer Camp June 9 – 16, 2019 at the Arizona State University (ASU) Downtown Phoenix Campus. Center staff attend to get to know local students and provide a 1:4 staff to camper ratio.

FHL campers experience college campus life for a week, staying in dorms with roommates and learning the importance of self-awareness, boundaries, and upkeep of their shared space. Campers eat in the cafeteria, walk to classes, and learn about college amenities.

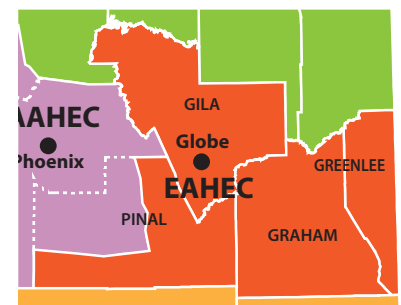


Presentations include the college admissions process, financial aid, graduate school, resume-writing, and leadership. Campers meet with administrators and current students about opportunities in specific health fields. In 2019 they toured the ASU Nursing and Simulation Lab and had hands-on experiences in intubation, speech and hearing. They had a “cook off” in ASU’s Cooking Lab to learn about healthy eating. Evening include bonding exercises and fun events - Phoenix Mercury basketball game, movie night, ropes course, laser tag, and a pool party.

The AHEC Regional Center FHL Summer Camp provides rural students a seven day college immersion to prepare them for health professions careers. Living on campus enables rural high school students a chance to learn independence and maintain a schedule, keep up with work, and socialize with students from diverse backgrounds. FHL Camp exposes rural students to health professional education and career opportunities.



**Fairbanks Scrub Club** – was established in 2018 at Fairbanks Middle School in Morenci, Arizona to develop 6th to 8th grade student knowledge about medical careers and learn leadership skills. Scrub Club members educate other students – such as teaching kindergarten and first grade students about proper handwashing technique. Members learn compression-only CPR on mannequins, the Heimlich maneuver, phlebotomy, and vital signs monitoring in a Scrub Club summer camp at Eastern Arizona University.





## Greater Valley Arizona Area Health Education Center (GVAHEC)

Martha McNair, MBA, RDN, Director

**Greater Valley Arizona Area Health Education Center (GVAHEC)** was housed in Empowerment Systems, serving communities in Maricopa County, west-central Pinal, and south-central Yavapai Counties through June, 2019. GVAHEC supported all aspects of the health professions pipeline, from K-12, health profession students and practicing providers.

### WORKFORCE DEVELOPMENT SUMMARY- GVAHEC

TYPE OF PROGRAM	PARTICIPATION
Pre-Collegiate (K-12) Health Careers Preparation Participants	701
Health Professions Trainee Experiences	62
Continuing Education Health Professional Participants	3,043
Community Health Education Participants	4,523

**Meeting the Training Needs of Health Professions Students** - GVAHEC coordinated student field experiences at Wesley Clinic Family Medicine (for UArizona COM students); at Gila River Health Care (for UArizona CON and COM students); at DORA/Horizon clinic (A.T. Still University Dental and MPH students); Dietetic Technician Registered and Nutrition students (Iowa State University, University of Northern Colorado, Utah State University, and Chandler Gilbert Community College); Public Health students (NAU and ASU); field projects with St. Mary's Food Bank, St. Vincent De Paul, Healthy Harvest, and Pan de Vida Foundation; Midwestern HOME veterinary clinic and pharmacy student experiences at the Helen Drake Senior Center; the Horizon Substance Treatment Opioid Program (STOP); and Maricopa Integrated Health Services.

GVAHEC Scholars Program: coordinated a community immersion experience for eight Scholars.

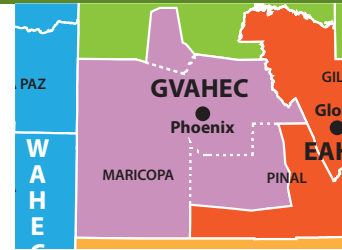
**Community-Based Experiential Training (CBET):** included a poverty simulation for 77 UArizona COM students; mental health first aid training for GVAHEC staff, nutrition and public health students; and “Lunch and Learn” sessions for clinical rotation students.

**Pipeline:** GVAHEC coordinated activities including a Simulation Lab tour for 80 Combs High School medical pre-professional students. It helped recruit and select 11th grade high school students to for Med-Start 2019. GVAHEC sponsored nine Future Health Leaders Camp attendees. GVAHEC supported week-long attendees for the Youth Engagement for Success and the Scrubs Camp on the Phoenix biomedical campus.

**Continuing Education (CE):** GVAHEC provided CE/CME credits for registered nurses, social workers, certified health ed specialists, and physicians. It supported Medication Assisted Treatment waiver training for 13 providers.

**Additional Activities:** GVAHEC and the UArizona Office of Diversity and Inclusion held the Annual Native Health Professions Day June, 2019 in Phoenix. It supported attendance for five high school and nine UArizona COM and NAU PA students. It promoted healthy community activities with the Council of Human Service Providers, AZ Rural Health Association, Cover AZ coalition, Cover Kids, AzPHA, and ARIZONA@WORK Pinal County Local Workforce Development Board.

**Note:** Central Arizona Area Health Education Center (CAAHEC) - Starting July 1, 2019 CAAHEC began serving these communities after submitting a formal, competitive AHEC Regional Center proposal. CAAHEC is based in Phoenix at the Arizona Alliance for Community Health Centers.



Sean Clendaniel, MPH, Director of CAAHEC received recognition for his contributions as Arizona Rural Health Association president.



## The Northern Arizona Area Health Education Center (NAHEC)

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

**The Northern Arizona Area Health Education Center (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
Pre-Collegiate (K-12) Health Careers Preparation Participants	562
Health Professions Trainee Experiences	638
Continuing Education Health Professional Participants	2,846
Community Health Education Participants	5,991

**Community-based Experiences:** NAHEC facilitated field experiences for students and resident trainees in medicine (allopathic, osteopathic); registered nurse; family nurse practitioner; undergraduate & doctorate nursing; pharmacy; medical assistant; dental hygiene; MPH; physician assistant; behavioral health; psychology; social work and others. NAHEC hosted RHPP students from UArizona Colleges of Medicine Tucson & Phoenix, Nursing & Pharmacy; and ASU College of Nursing in Flagstaff, Williams, Kingman and Show Low sites. NAHEC awards preceptor honors – in 2019 to Bridget Wicks, Brian Goodman and Dr. Abbott.

**Health Partners** - has served 1,914 patients, completed 2,815 referrals, mentored 74 NAU students since 2015, and compiled a database with over 400 community resources. NAHEC trained 65 people from 21 organizations to use the database to address unmet client needs.



Brandon Abbott, DO, Demonstrates How to View an Ultrasound at Med Skills.

**Interprofessional Education** - includes 'med skills' sessions including examinations – neurologic, ophthalmoscopic, lower and upper extremity; EKG; diabetes; splinting; memory screening, palliative care, hospice; mock code, AEDs; motivational interviewing, asthma & COPD.

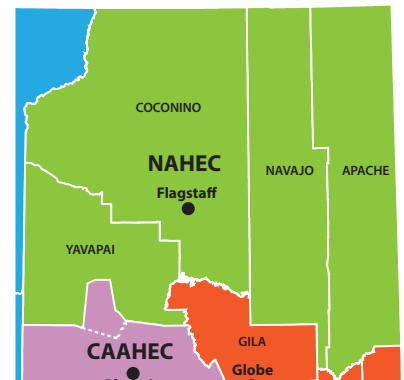
**AHEC Scholars Program** - NAHEC hosted an immersion weekend in January, 2019, Scholars visited the Poore Medical Clinic, met staff at the rescue mission, and heard an opioids lecture.

**Pipeline Activities** - support high school and college students including Indigenous Pride Health Workers, iCREATE, Future Health Leaders (FHL) Camp at ASU, Med-Start, Girls on the Run of Northern Arizona. In its tenth year, Girls on the Run continues to grow adding Granville, Joseph City, Lukachukai, and Pinon community participants in 2019, giving nine Dare to Lead trainings to 100 coaches serving 441 girls on 37 teams led by 121 volunteers. New grants support needs such as giving running shoes to the girls who need them.



AHEC Scholars Program 2019 – Tour of Tuba City

**Continuing Education CE/CME:** NAHEC coordinated activities including opioid and legislative updates; common ear problems in children; anticoagulation management; and meeting the needs of transgender patients. Presentations addressed social determinants of health, cultural competency and practice transformation core topics. NAHEC partnered with the NAU Center for Health Equity Research and the Arizona Biomedical Research Commission to provide an all-day workshop on practice transformation for 51 attendees.



## Southeast Arizona Area Health Education Center (SEAHEC)

Gail Emrick MPH, Executive Director, SEAHEC



The Southeast Arizona Area Health Education Center (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
Pre-Collegiate (K-12) Health Careers Preparation Participants	375
Health Professions Trainee Experiences	174
Continuing Education Health Professional Participants	676
Community Health Education Participants	904

**SEAHEC & Tohono O’odham Future Health Leaders Summer Institute (FHLI)** - was piloted at Tohono O’odham Community College (TOCC) in June, 2019 as a two week summer course with credit toward college or high school graduation. The goal is to help Native high school students prepare for college life through growth in leadership, skill building, and self-sufficiency, while exploring healthcare professions. Eight students participated in the FHLI pilot, representing five tribal groups and six high schools.

**FHLI Activities.** Daniel Sestiaga, B.S. taught the Careers in Public Health 101 course that provided direct contact with health professionals. Students were required to attend class, complete daily discussions, take a mid-term exam, and present a final project showcasing lessons learned. The American Indian College Fund offered scholarship, advising, and program information. For cultural grounding, students played *Toca* – a native game similar to field hockey. Students learned about careers in Pharmacy,



Coordinators for the Future Leaders Institute: Kathleen Ventura, Tashina Machain, and Amaury Gama pose during a Diamond Backs game.

Nursing, Public Health and Medicine at University of Arizona Health Sciences, they explored the Arizona Simulation Technology & Education Center, and heard about the COM Arizona Indians into Medicine Program (INMED), which seeks to “enhance recruitment, retention and graduation rates of Native health professional students.”

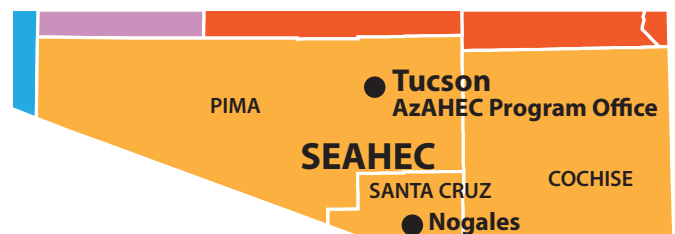
Students toured Pima Community College in Tucson and learned about allied health careers: Dental Hygienist, Emergency Medical Technician, Medical Assistant, and others.

**FHLI Feedback:** Tashina Machain, BA, co-coordinated FLHI. As a SEAHEC intern in 2013, she helped with Tohono O’odham Nation’s Baboquivari and Tohono O’odham high school FHL clubs, then served four years as SEAHEC’s Program Coordinator for Future Health Leaders, and is now the INMED Program Coordinator. She is a role model for FHLI students on how to successfully navigate college and pursue a health profession.

She said, “*Being able to collaborate with partners in making this year’s Institute a success was such a rewarding experience. Seeing the students’ growth over the two-week duration was inspiring. Each of these students has the capability. The Future Health Leaders Institute provided them a foundation.*”



Alohilani Felix posing with the basket she made during the cultural activities at the Future Health Leaders Institute.





## Western Arizona Area Health Education Center (WAHEC)

Brissa Garcia, Director, WAHEC

The Western Arizona Area Health Education Center (WAHEC) is based in Yuma, Arizona, and housed in the Regional Center for Behavioral 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 & practicing providers. RCBH-WAHEC strives to improve the quality of life for those living along the US-Mexico border.

### WORKFORCE DEVELOPMENT SUMMARY – RCBH-WAHEC

TYPE OF PROGRAM	PARTICIPATION
Pre-Collegiate (K-12) Health Careers Preparation Participants	1,150
Health Professions Trainee Experiences	256
Continuing Education Health Professional Participants	34
Community Health Education Participants	17,670

**Training for Health Professions Students:** RCBH-WAHEC facilitated field experiences for undergraduate and graduate health professions students including medicine (allopathic, osteopathic), physician assistant, nurse practitioner, certified nursing assistant, counseling, pharmacy, social work, medical office specialist, phlebotomy technician, pharmacy technician, medical coder / biller, food safety, nutrition and food management, caregiving, and informatics. RCBH-WAHEC had three medical resident clinical rotations at the San Luis Walk-In Clinic.



AHEC Scholars 1st cohort at Historic downtown Yuma AZ August 2018.

**AHEC Scholars:** In January 2019 RCBH-WAHEC hosted the AHEC Scholars Immersion Experience. Eleven Scholars from UArizona, NAU, and ASU met at RCBH-AHEC, completed community assessment projects and heard Dr. Rivadeneira present on “Bacteria Infection in Agriculture.”

**Pipeline Programs:** RCBH-WAHEC has expansive high school programming, sponsoring Health Occupation Students of America (HOSA) high school student clubs in Antelope Union, Kofa, Lake Havasu City, Cibola, Parker, San Luis, and Kingman. Students get support to attend State Leadership Conferences in Phoenix, Tucson and the HOSA International Leadership Conference.

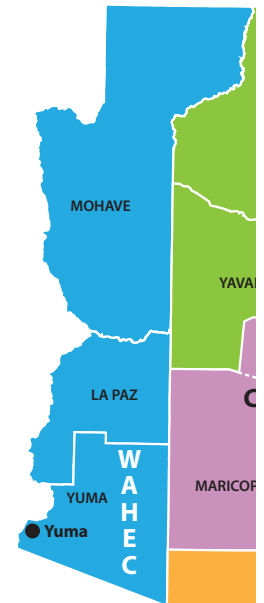
RCBH-WAHEC coordinated Youth Mental Health First Aid certification for students and arranged certified nursing assistant, registered nurse, registered dietitian, behavioral health technician, emergency medical technician, MD, DO, physician assistant, family nurse practitioner, social worker, phlebotomist, radiologist, and X-ray technician panels. Antelope Union and Kofa High School students toured the College of Health Careers and San Luis Walk-In Clinic; 15 Yuma County students participated in the Nuestros Niños immunization campaign.

**Camps:** RCBH-WAHEC supported eight Future Health Leaders (FHL) students and six for Med-Start. Students learn about health careers, write a resume, and on campus college life.

**Growing Our Own:** RCBH-WAHEC trains in medically underserved areas in the San Luis Walk-In and Urgent Care Clinics, Evangelist Medical Group, Pinnacle, Foothills Walk-In Clinic, UP-2Par Medical Clinic, Yuma Nursing Center, Kissito Health Care Palm View, and Lake Havasu Nursing.

**Community Education:** RCBH-WAHEC provided CPR/First Aid and veteran mental health first aid certification; the College of Health Careers was recognized as a Veteran Supportive Campus.

**Expansion:** In 2020 the 65,000 sq. ft. San Luis Medical Mall will open and expand RCBH-WAHEC clinical rotation capacity.



## AZAHEC Financial Review for Fiscal Year 2018-19

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

The AZAHEC Program earns Federal funding from 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. In 2019 Dr. Sally Reel stepped down from her role as AZAHEC director after 13 years of service. Effective July 1, 2019, Daniel Derksen, M.D., Associate Vice President for Health Equity, Outreach and Interprofessional Activities was appointed the AZAHEC Program acting director.

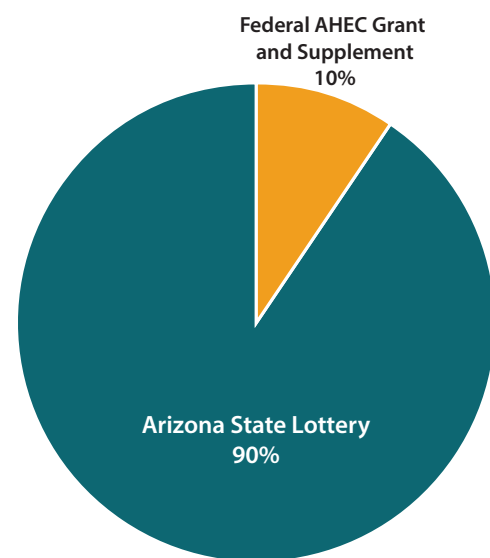
**AZAHEC Employment Data 2018-19:** The AZAHEC Program and the five Regional Centers employ 127 Arizonans, important economically for rural and urban underserved communities.

Item / Initiative	FTEs	"Person Count"
AZAHEC Program Office	9.20	12
Supplemental ECHO Funding	0.17	6
EAHEC	3.40	5
GVAHEC	5.35	7
NAHEC	5.85	9
SEAHEC	5.90	6
WAHEC	6.30	8
RHPP COM-PHX	0.47	3
RHPP COM-TUS	0.55	3
RHPP CON	0.40	3
RHPP CPH	0.51	10
RHPP COP	0.37	2
RHPP ASU	0.56	4
RHPP NAU	0.15	1
North Country Residency Program	1.50	2
South Campus Primary Care Residencies	0.20	3
BLAISER Program	1.00	2
Med-Start Program	0.96	13
AZAHEC Grants Programs	1.15	26
Establishing an Arizona Health Workforce Data System	1.25	2
<b>TOTAL</b>	<b>45.24</b>	<b>127</b>

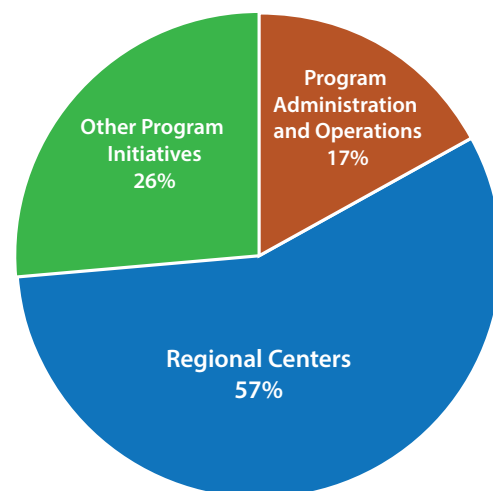
Federal and state funding supports AZAHEC Regional Centers (EAHEC, GVAHEC, NAHEC, SEAHEC, WAHEC) via annual subcontracts administered through the AZAHEC Program Office following University of Arizona, state, and federal requirements. AZAHEC supports the Arizona statute required Rural Health Professions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

After a formal competitive process, the Arizona Alliance for Community Health Centers (AACHC) was awarded the Central Arizona Area Health Education Center (CAAHEC) effective July 1, 2019. The Greater Valley Area Health Education Center (GVAHEC) contract ended June 30, 2019.

**AZAHEC Funding Sources 2018-19**



**Expenditures 2018-19**



## 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

July 1, 2019 to 2020:

## Central Arizona AHEC (CAACHEC)

Arizona Alliance for Community Health Centers  
700 East Jefferson Street  
Suite 100  
Phoenix, Arizona 85034  
602-253-0090  
[www.aachc.org](http://www.aachc.org)

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

July 2018 to June 2019:

## Greater Valley AHEC (GVAHEC)

c/o Empowerment Systems, Inc.

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

## Northern Arizona AHEC (NAHEC)

c/o North Country HealthCare  
2920 North Fourth Street  
Flagstaff, AZ 86004-1816  
(Mailing) PO Box 3630, ZIP: 86003  
928-522-9860  
<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](http://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 2018-19

### Advisory Commission Members

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**Agnes Attakai**

Director, Health Disparities Outreach  
Prevention Education  
University of Arizona Health Sciences

**Rachel Behrendt**

Senior Vice President, Operations  
Hospice of the Valley

**Kristina Diaz**

Residency Program Director  
Yuma Regional Medical Center

**Amanda Klein**

Clinical Pharmacist  
El Rio Community Health Center

**Pamela Lusk**

Psychiatric & Mental Health Nurse  
Practitioner

**Daniel A. McDonald**

Interim Director, Pima County Cooperative  
Extension  
Associate Agent/Associate Regional Specialist  
Pima County Cooperative Extension/Family  
and Consumer Sciences  
UArizona Cooperative Extension

**Fran Roberts**

Professor  
University of Arizona, COM-Phoenix

**Ronald Weinstein**

Director, Arizona Telemedicine Program  
University of Arizona Health Sciences

### University of Arizona Health Sciences Faculty Advisory Committee Members

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

**Tamsen Bassford**

Associate Professor, Family and Community  
Medicine  
College of Medicine – Tucson

**Dan Derksen**

Director, Center for Rural Health  
Professor, Public Health Policy and  
Management Program  
Zuckerman College of Public Health

**Carlos R. Gonzales**

Assistant Dean for Medical Student Education  
Associate Professor, Family and Community  
Medicine  
College of Medicine – Tucson

**Elizabeth Hall-Lipsy**

Program Manager, Health Disparities  
Initiatives and Community Outreach  
Assistant Professor  
College of Pharmacy

**Marylyn Morris McEwen**

Professor  
College of Nursing

**Marion Slack**

Professor, Pharmacy Practice and Science  
College of Pharmacy

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Board Chair, Greater Valley AHEC

**Laura Dorrell**

Board President, Eastern Arizona AHEC

**Marylyn McEwen**

Board President, Southeast Arizona AHEC

**Cheryl Blume**

Board President, Northern Arizona AHEC

**Christopher Nunez**

Board Chair, Western Arizona AHEC

**Sally J. Reel**

University Distinguished Outreach Professor  
Clinical Professor of Nursing



Dr. Sally Reel stepped down as AzaAHEC director in the fall of 2019. In her 13 years of leadership, Dr. Reel advanced the AzaAHEC mission to improve community health and the health workforce serving Arizona's rural and urban underserved communities.

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## Arizona AHEC Program

The University of Arizona

1834 East Mabel Street

Tucson, Arizona 85721-0425

Phone: 520-626-0265

Fax: 520-626-4037

<http://azahec.ahsc.arizona.edu>

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 includes the College of Medicine–Tucson, COM–Phoenix, College of Nursing, College of Pharmacy, and the Mel and Enid Zuckerman College of Public Health.

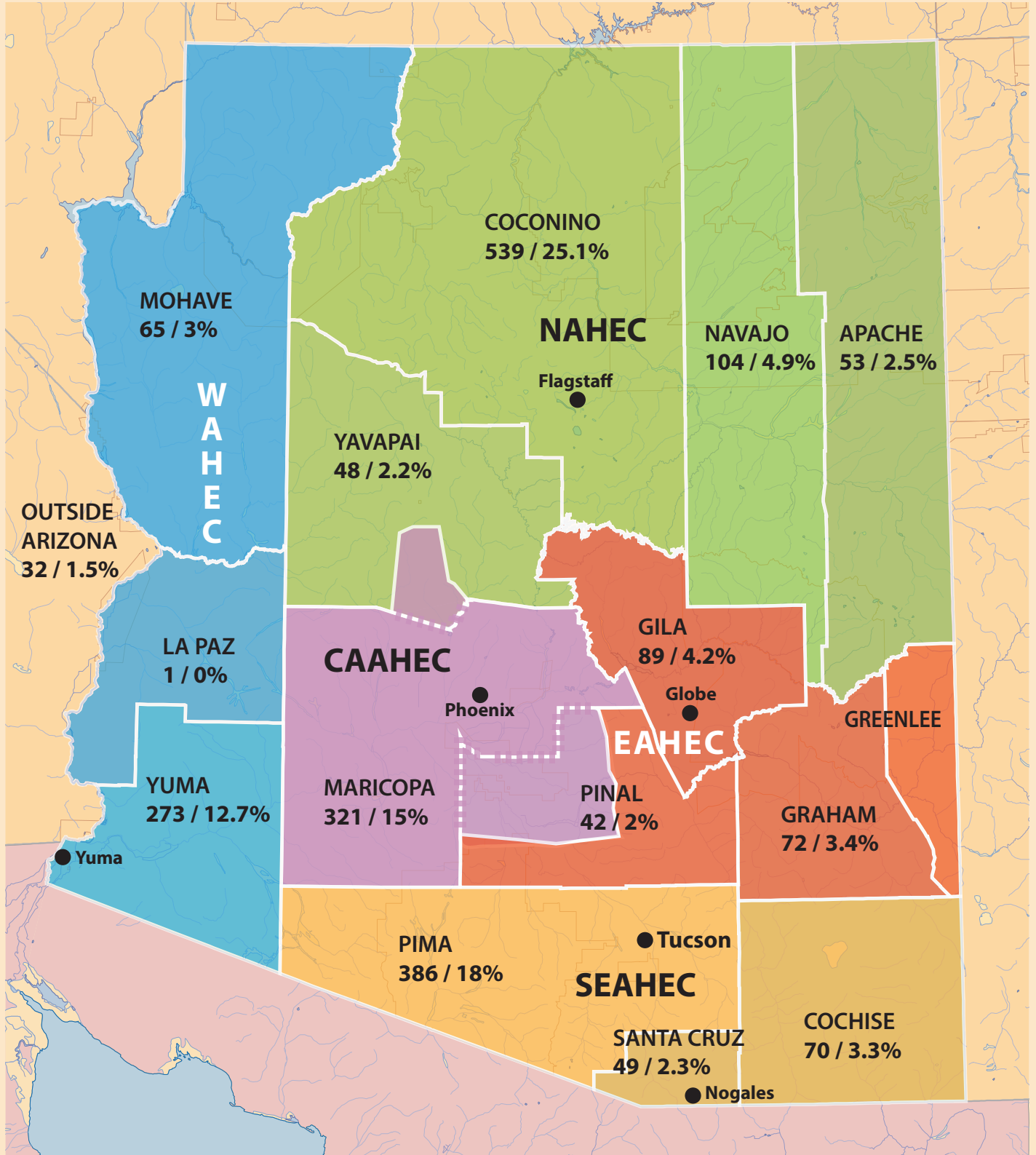
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*Design: Paul Akmajian, Arizona Center for Rural Health*

*Landscape photos by: Ken Miller & Dan Derksen (inside front cover)*

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## AzaHEC Health Professions Field Experiences by County (total 2,144)



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