

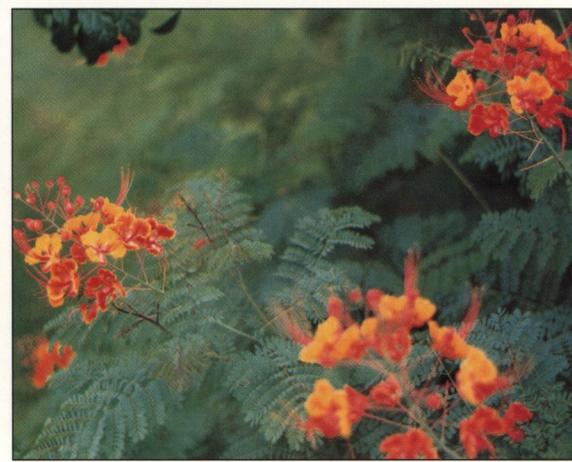
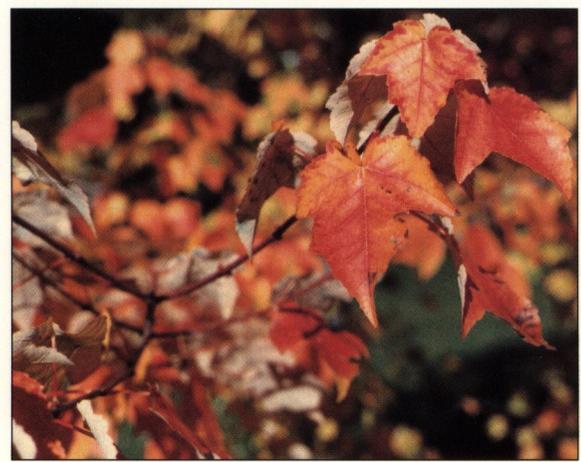
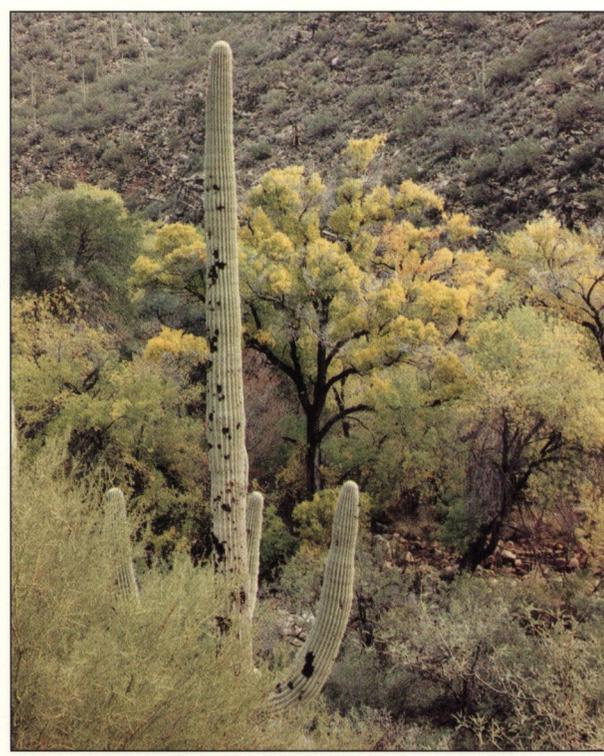
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# ARIZONA

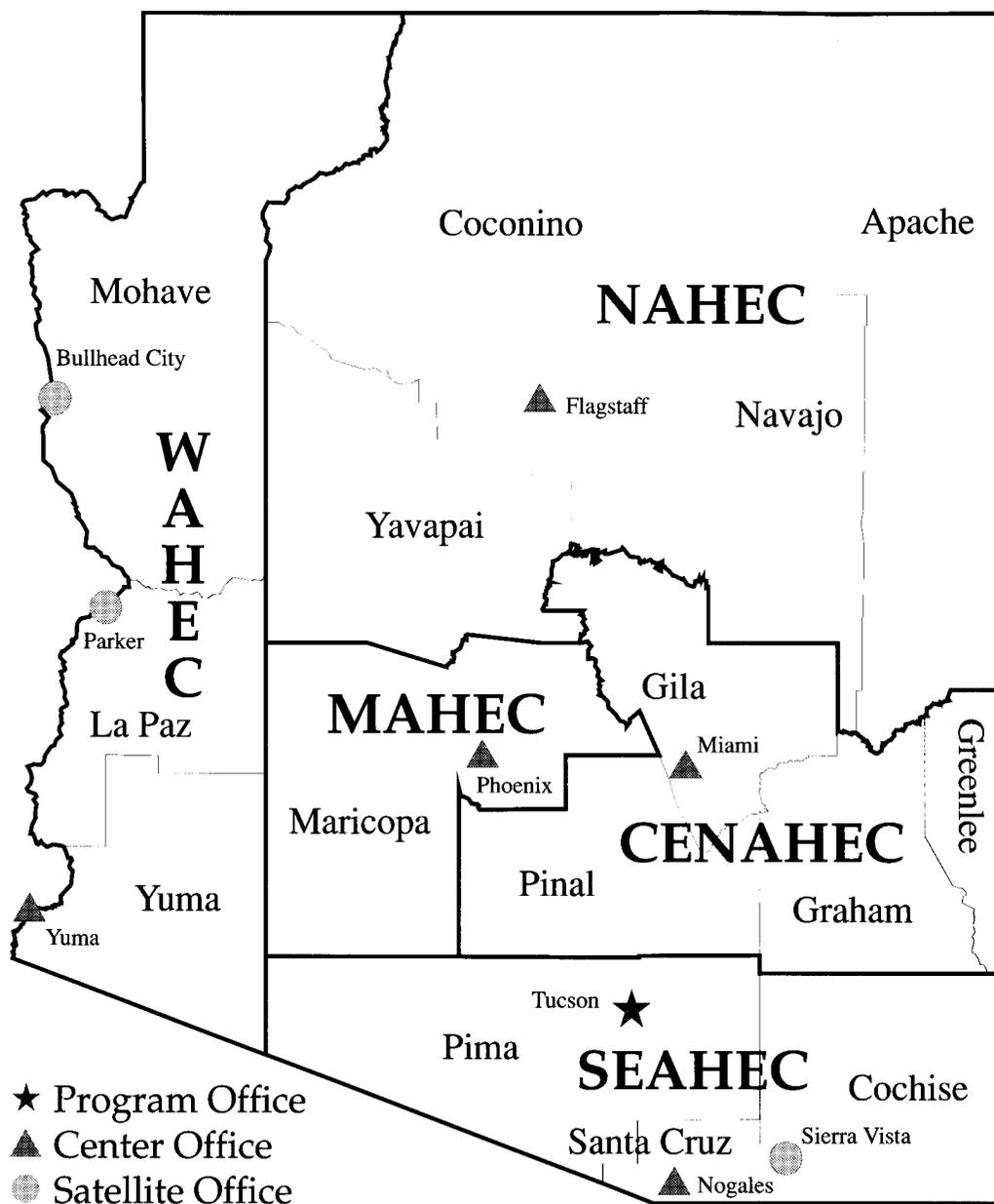


# AREA HEALTH EDUCATION CENTERS

**Progress Report**  
**1993-94**  
*Seasons of Service*



# Arizona Counties and Area Health Education Centers



# Overview of the Arizona AHEC System

The Arizona Area Health Education Center (AzAHEC) System is a complex, multi-disciplinary effort which responds to the problems of health professional supply and distribution in rural and underserved areas of Arizona, with special emphasis on minority populations. Since 1984, the AzAHEC System has represented a partnership of health providers, health professions students, educators, and communities, joined together with a commitment to resolve these problems through educational support to health professionals in the field, both as students and as practitioners.

The Arizona Area Health Education Center (AzAHEC) System began its work in October of 1984, with the first Center established in Nogales to serve the southeastern portion of the state. By 1989, the system included five Centers serving all 15 counties in Arizona. A part of the National AHEC Program, the Arizona AHEC System is a sponsored project of the University of Arizona College of Medicine. The AzAHEC Project Office is located in the Department of Family and Community Medicine's Rural Health Office.

Each AHEC has been developed in Arizona as a non-profit corporation, governed by a Board of Directors which represents the needs and interests of the communities located within the geographical service area of each Center. The Southeast Arizona AHEC (SEAHEC), established in 1984 with its operational center located in Nogales, serves the Counties of Pima, Santa Cruz, and Cochise. The Western Arizona AHEC (WAHEC) was established in Yuma in 1985 to serve the western region of Arizona including Yuma, La Paz, and Mohave Counties. In 1986, the Northern Arizona AHEC (NAHEC) established its operational center in Flagstaff to serve northern Arizona's Yavapai, Coconino, Navajo, and Apache Counties. The Central Arizona AHEC (CENAHEC) began serving the Counties of Pinal, Gila, Graham, and Greenlee in 1988, and the Maricopa AHEC (MAHEC) began its service to Maricopa County in 1989.

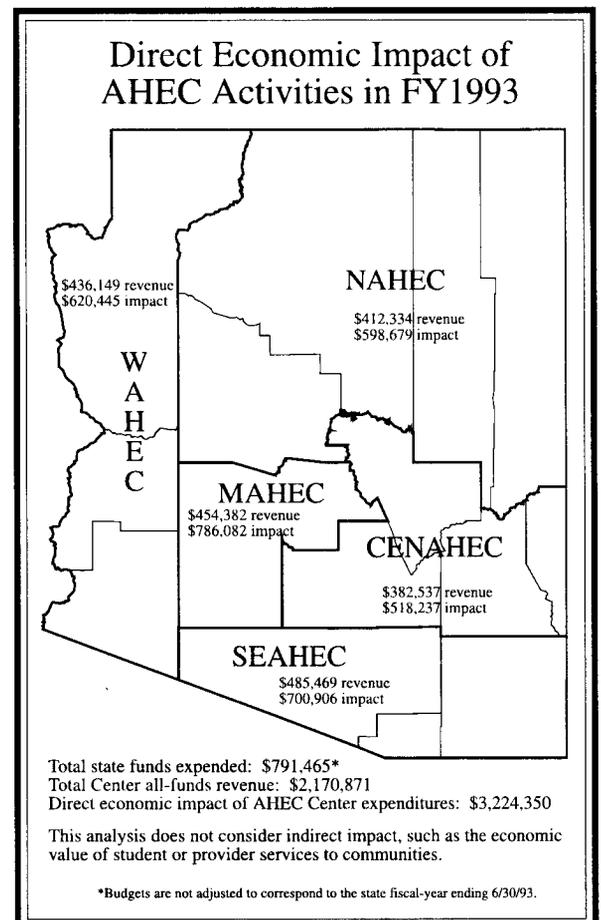
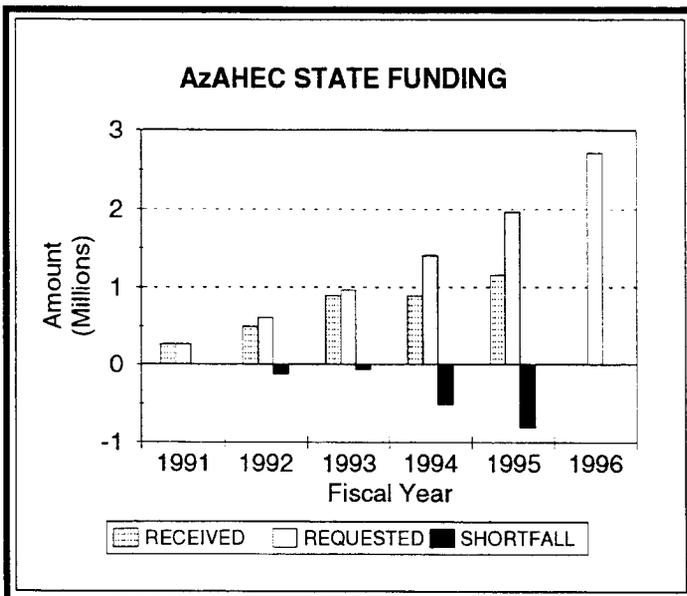
- Specifically, the program's functions are:
- 1) to increase the recruitment of students into health professions careers, with a particular focus on minority and disadvantaged students;
  - 2) to recruit health professionals into practice in Arizona's rural and medically underserved areas; and
  - 3) to aid in the retention of health providers currently practicing in Arizona's rural and medically underserved communities.

Each of the five Area Health Education Centers offers programs that address the recruitment and retention issues specific to its service area. Although underlying goals remain the same, these programs differ from Center to Center, evolving as the needs of communities change.

# Impact and Program Accomplishments – 1993-94

In spite of a significant shortfall (\$806,300) in state funding in 1993-94, the activities and achievements of the Arizona Area Health Education Centers continued to influence in a positive way the education, supply, distribution, and retention of health care providers in Arizona. In FY 94, AzaAHEC programs served nearly 40,000 youth, health care students, health care providers, and community members by providing a mix of over 900 long- and short-term program, at an average cost of less than \$50 per participant. Some highlights of accomplishments include:

- Provided almost 600 programs of continuing education for over 14,000 participating health care providers;
- Sponsored 559 community-based clinical practice opportunities for health professions students and medical residents;
- Provided close to 90 health career education and minority recruitment programs for over 10,950 Arizona youngsters (grades 5 through 12);
- Provided over 250 community-oriented health promotion programs for over 14,260 children and adults in rural and medically underserved areas of Arizona;
- Published and distributed two issues of *Arizona Health*, the AzaAHEC newsletter designed to keep health professionals and interested citizens around the state up-to-date on health care concerns;
- Provided rural health care providers with state-of-the-art information through a comprehensive learning resource system that includes such services as on-line databases, interlibrary loan capabilities, and information referral systems;
- Resulted in a direct economic impact of \$2,170,871 to Arizona communities in 1993-94, based on a state investment of \$791,465 -- an effective leverage of 174% for state funds.



# AzAHEC Recruitment Programs

**Recruitment—Health Career Education Programs:** The following AHEC programs reach young people throughout the year in grades 5 through 12 and are generally closely aligned with the curricular and extracurricular activities of Arizona’s elementary schools, junior high schools and high schools located in rural and/or socioeconomically disadvantaged neighborhoods:

		SEAHEC	WAHEC	NAHEC	CENAHEC	MAHEC	TOTAL
HANDS ON HEALTH PROGRAMS		5	7	1	4	1	18
CAREER DAYS PARTICIPANTS		205	962	126	1347	131	2771
SCHOOL CAREER FAIRS PROGRAMS		2	4	13	6	13	38
PARTICIPANTS		202	510	4114	2382	602	7810
HEALTH OCCUPATIONS PROGRAMS		0	2	3	0	0	5
EDUCATION STUDIES, including PARTICIPANTS		0	36	76	0	0	112
High School Bio-Prep programs							
SCHOOL HEALTH CLUBS PROGRAMS		3	1	7	1	0	12
PARTICIPANTS		48	8	91	28	0	175
MENTORING PROGRAMS PROGRAMS		0	0	0	14	0	14
(Young students shadow PARTICIPANTS)		0	0	0	17	0	17
community health professionals)							

In addition, the AHECs sponsor Health Career Summer Camp programs each year for high school students. The AzAHEC Health Career Camp, for students completing the 9th and 10th grades, is one week in length. The Med-Start Summer Camp, for students completing the 11th grade, is six to seven weeks in length.

		SEAHEC	WAHEC	NAHEC	CENAHEC	MAHEC	TOTAL
AzAHEC CAMP PARTICIPANTS		2	9	6	9	6	32
MED-START PARTICIPANTS		20	5	10	6	4	45
TOTAL CAREER RECRUITMENT PARTICIPANTS		477	1530	4423	3789	743	10962

**Recruitment—Health Professions Education Rotations:** The AHECs sponsor community-based rural and medically underserved clinical education rotations for health professions education students in the following disciplines:

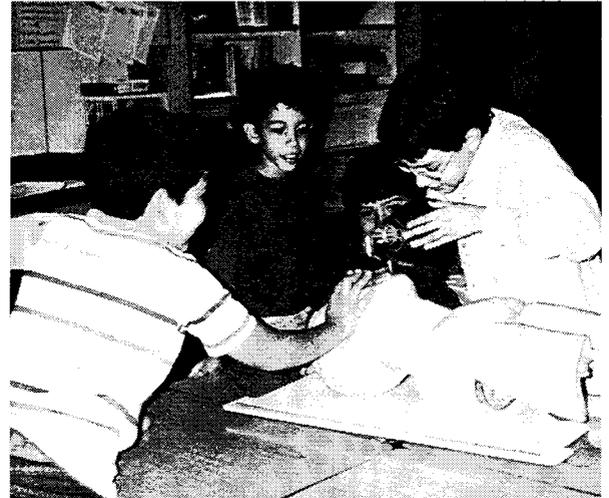
- |  |  |
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| <ul style="list-style-type: none"> <li>medicine</li> <li>nursing</li> <li>nurse practitioner (NP) programs</li> <li>physician assistant (PA) programs</li> <li>pharmacy</li> <li>dental hygiene</li> <li>dental assisting</li> <li>emergency medical technology</li> </ul> | <ul style="list-style-type: none"> <li>physical therapy</li> <li>radiologic technology</li> <li>speech and hearing sciences</li> <li>health administration and policy studies</li> <li>Master’s in public health</li> <li>social work</li> <li>respiratory therapy</li> <li>other allied health disciplines</li> </ul> |
|--|--|

Students receive travel, lodging, and *per diem* meal support through the AHECs during clinical rotations which range (depending upon the program of study) from one week to a full semester in length — the typical rotations in medicine and allied health disciplines are four to six weeks in length.

		SEAHEC	WAHEC	NAHEC	CENAHEC	MAHEC	TOTAL
EDUCATION ROTATION PARTICIPANTS		90	14	312	96	47	559

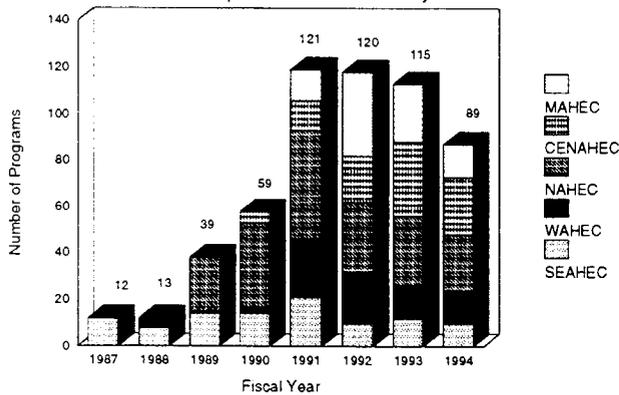
# AzAHEC Recruitment Programs

The AzAHEC Health Careers Summer Camp is a one-week program offered at Northern Arizona University in Flagstaff. The camp is designed to provide students, who have completed their freshman or sophomore years in high school, the opportunity to explore career choices in health care and the related academic sciences through detailed presentations by professionals from a variety of fields, and to develop the confidence necessary to pursue one of these careers through self-help/self-esteem workshops. During the summer of 1994, the AHECs sponsored 32 high school students to participate in this fourth annual Health Careers Camp.



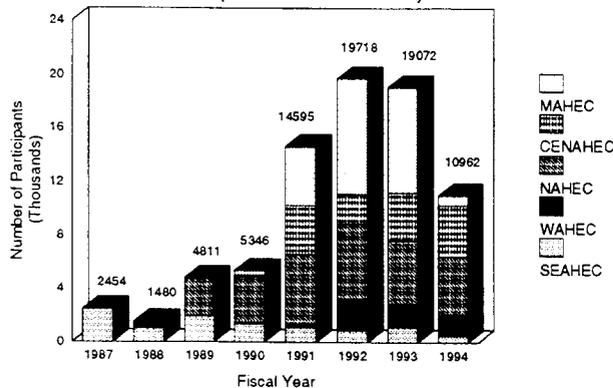
*Elementary School students participate in SEAHEC-sponsored "Hands-on-Health" Career Day.*

## AzaHEC RECRUITMENT PROGRAMS (FY1987-1994)



Area Health Education Centers sponsor health career education programs in elementary schools, middle schools, and high schools. Through "Hands-on-Health" Career Days and other career education programs, youngsters are introduced to a variety of health occupations in an informal atmosphere in order to stimulate interest in health careers and health issues. Many of the programs offer "hands-on" opportunities in which students participate in small groups directly with health professionals, educators, and health professions students.

## AzaHEC RECRUITMENT PARTICIPANTS (FY1987-1994)



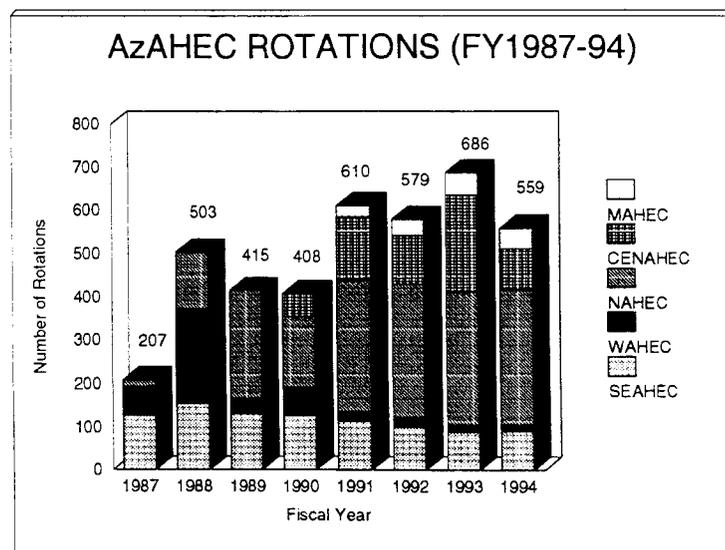
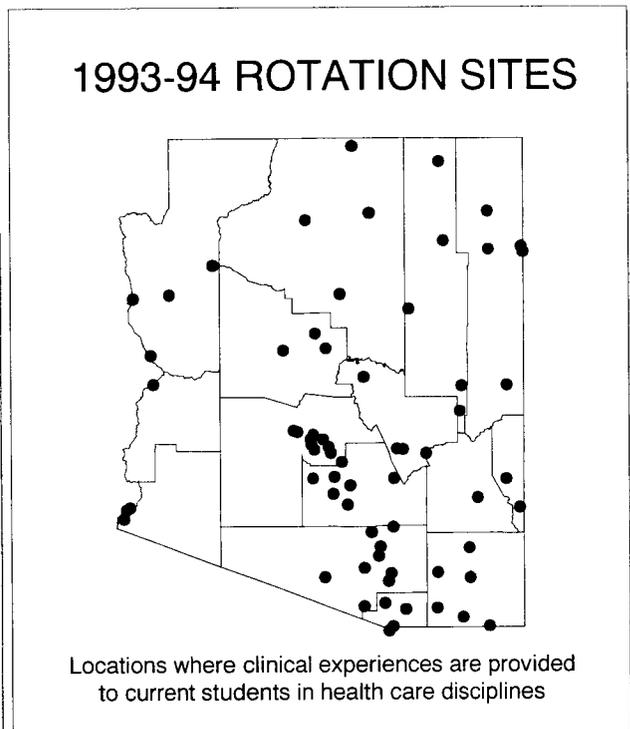
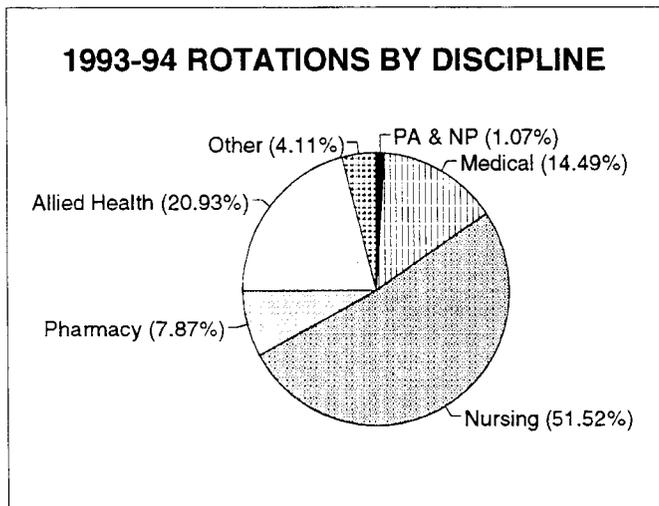
The Area Health Education Centers also sponsor mentorship and health club programs. Mentor programs link local health care providers with young people who have expressed an interest in pursuing a career in health care. These volunteer health professionals serve as inspiring role models. The cooperative efforts of the Arizona Area Health Education Centers and the community schools have resulted in health club and health occupations education activities, including field trips to health care facilities and educational institutions, exposure to the work of a variety of health care practitioners, special speakers, and other programs during the school year.

# Student Clinical Practice Rotations

Each year, the AzaAHEC System sponsors quality, community-oriented clinical practice opportunities for medical, nursing, pharmacy, physical therapy, social work and other health professions students. Primary care preceptorships and clinical practice rotations for medical residents are also offered by the Arizona AHECs. Many of these rotations are located in multicultural environments. A rotation in a community-based clinical training site may range from one week to a full semester in length.

Such experiences in ambulatory and hospital-based health care settings in rural and medically underserved communities provide an essential educational element to prepare students for the real world of health care practice. In addition, students who have received training in rural and medically underserved areas are more likely to choose to practice there than those who have not.

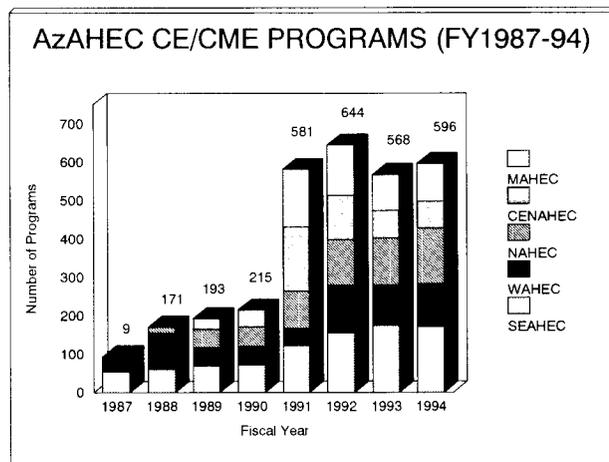
*Breakdown by health care disciplines of students who participated in AzaAHEC clinical practice rotations in Arizona's rural and medically underserved areas during 1993-94*



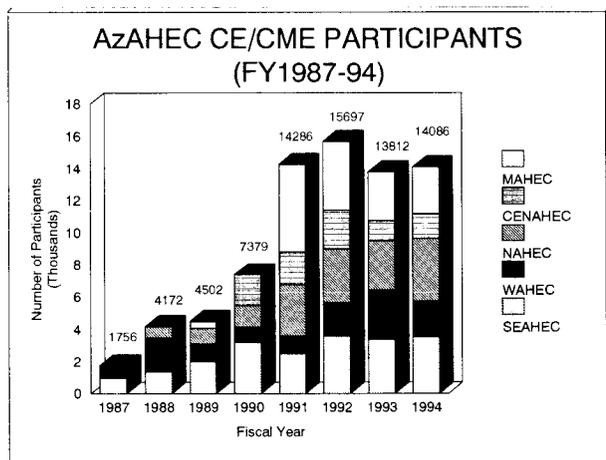
# Retaining Arizona's Health Providers Through Continuing Education

**Provider Retention—Continuing Education Programs:** The AHECs provide continuing education/ continuing medical education (CE/CME) programs on a variety of topics and in multiple remote, rural and medically underserved practice sites throughout the year which serve the professional education needs (including recertification and continuing licensure needs) of a broad range of health care providers in Arizona—medicine, nursing, nurse practitioners, physician assistants, dental providers, pharmacists, and allied health personnel. These programs range from one hour to one week in length. Several statewide programs are offered each year as two- or three-day conferences. The AHECs also provide minisabbatical support (one week to one month in length) to allow remote-site/rural providers to attend professional update courses away from their practice communities.

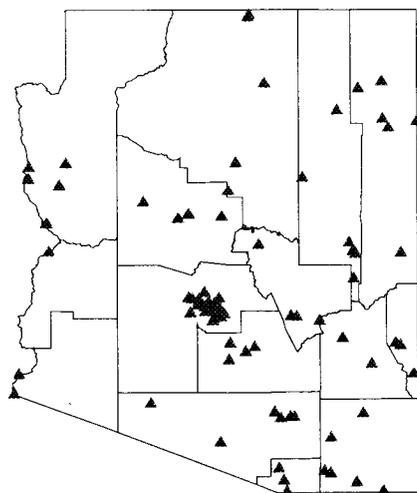
		SEAHEC	WAHEC	NAHEC	CENAHEC	MAHEC	TOTAL
CE/CME ACTIVITIES	PROGRAMS	152	110	138	68	82	550
	PARTICIPANTS	3518	2208	3887	1525	2843	13981
MINI SABBATICALS	PROGRAMS	20	1	7	3	15	46
	PARTICIPANTS	22	1	14	13	55	105
TOTAL	RETENTION PARTICIPANTS	3540	2209	3901	1538	2898	14086



*In 1993-94, 596 continuing education programs were attended by 14,086 participating health professionals.*



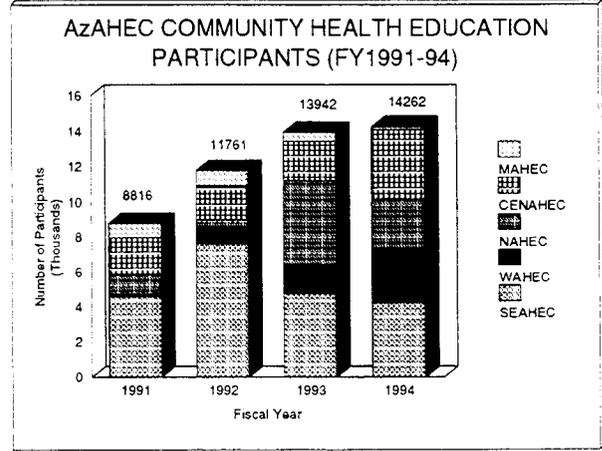
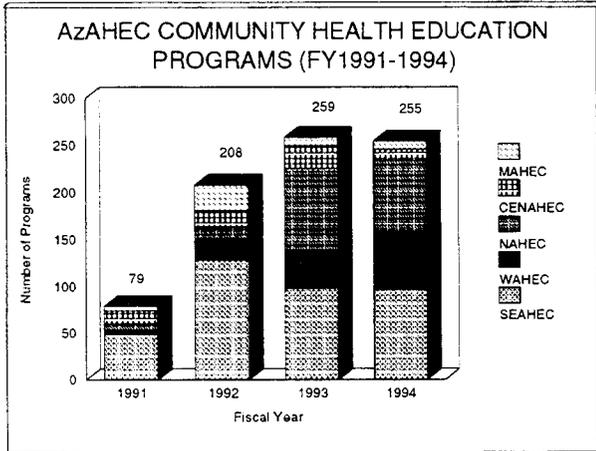
## 1993-94 CE/CME SITES



Locations where Continuing Education and Continuing Medical Education programs have been presented for health care providers

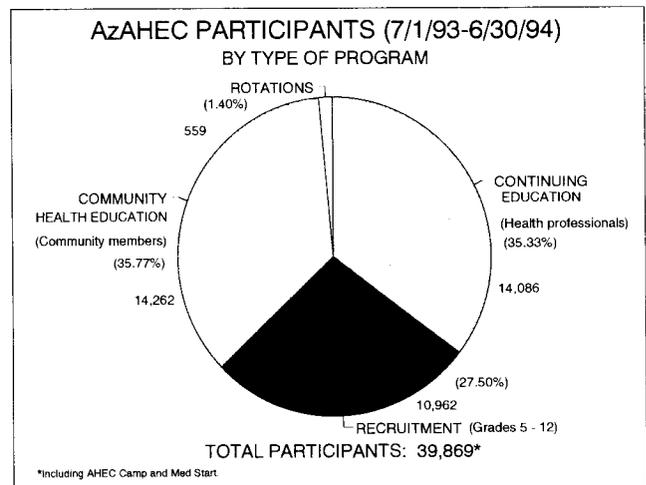
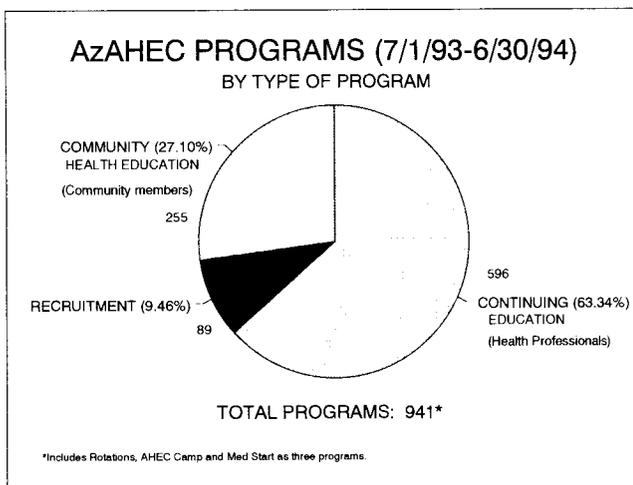
# AzaHEC Community Health Education Programs

**Health Promotion/Disease Prevention Community Health Education Programs:** The AHECs sponsor a variety of community-based health education programs each year—serving a wide age range of people who live in rural, medically underserved, tribal or other special population settings—to promote access to primary and preventive health care services and to promote the general health of these communities in Arizona. Topics vary according to the interests and needs of these communities, including: Hanta Virus education, diabetes, AIDS and sexually transmitted diseases, pre-natal and perinatal education, substance abuse education, etc.



	SEAHEC	WAHEC	NAHEC	CENAHEC	MAHEC	TOTAL
COMMUNITY HEALTH EDUCATION ACTIVITIES	97	62	75	12	9	255
PROGRAMS PARTICIPANTS	4258	3130	2803	3911	160	14262

The following pie charts summarize all programs provided and participants served by the Arizona AHECs in FY 94.



# Highlighting AzAHEC Clinical Rotations in Rural Arizona

*Julie Razon-Milner is a part-time School Nurse at Pierson Middle School in Rio Rico and a part-time Nursing Education Specialist for SEAHEC. Nancy Krushaar is a full-time School Nurse with Santa Cruz Valley Unified School District #35 in Rio Rico, Arizona.*

**Community Health Nursing in a Rural Area -- by Julie Razon-Milner:** "Following a community health rotation in the rural area of Nogales, Arizona, where I experienced the many roles nurses play in a rural community, I graduated from the University of Arizona College of Nursing in 1988. During this type of rotation, nursing students visit many agencies to observe the nurse's role, and are assigned several elderly patients to follow in their homes, as well as various nursing assessment and nutritional counseling assignments. Time is spent with school nurses, where students have the opportunity to do dental, hand washing, and AIDS teaching, together with blood pressure screenings, physical assessments, and home visits. During the rotation, students also assist with physical assessments and surveillance of diseases in the community.



"Because of this positive experience, especially the rotations with the school nurses, I decided I would like to work as a school nurse. In 1991, my husband and I moved to Rio Rico, where I worked two years at Lincoln Elementary School in Nogales and part-time for SEAHEC. I now divide my time between Pierson Middle School in Rio Rico and the Southeast Arizona AHEC. I am thankful to the AHEC for the opportunity I had to complete and educational rotation in a rural community like Nogales. That is the reason I continue to work in this community -- helping to meet the needs of children and responding to change in the community, as problems arise."

**Rural Education and Rural Practice -- by Nancy Krushaar:** "What started as a rural health rotation in Nogales, Arizona, through the College of Nursing at the University of Arizona and supported by the SEAHEC, ended with my employment by Santa Cruz County in Rio Rico, ten miles north of Nogales. During my training in 1992, nursing instructors Maryln McEwen and Elizabeth Tracy also supervised six other nursing students, supported by the Southeast Arizona AHEC, in cooperating programs in the Nogales public school and across the border.



"Exposure to the problems and the available resources in Santa Cruz County galvanized my intention to be a part of the community following graduation. Getting to know the people, feeling comfortable among the agencies, and being a part of the service component during my rural clinical training converted my appreciation for the area into participation. After graduation, I knew who to contact about what. Thanks to the SEAHEC and their support for students to train in rural communities, I was successfully matched, as a new health care graduate, with a community in need of my services. I hope Arizona's students can continue to benefit through rural practice rotations, as I have."

## AzAHEC Clinical Rotations in Rural Arizona

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*Marni Marvin, a registered nurse practitioner, serves as Program Coordinator of Reproductive Health Services for the Pinal County Department of Public Health. She also serves as Vice President of the Board of Directors of the Central Arizona AHEC (CENAHEC). Marni was supported by the Arizona AHEC System in her nurse practitioner training, and is particularly well-qualified to tell the AHEC story.*

**The AHEC Rural Nurse Practitioner Training Program -- by Marni Marvin:** "Several years ago, the long-time nurse practitioner (NP) from this area moved out-of-state, leaving the Pinal County Department of Health Women's Clinic without a clinician on staff. We had a hard time keeping practitioner staff because they were all commuting to work in Pinal County communities from Phoenix and Tucson. I became the program manager during this time, and was concerned about the services being offered in such a patchwork manner and the feasibility of continuing to pay contract staff.

"I had a long-time goal of becoming a nurse practitioner, but I had a family and was unable to decrease my hours because of financial obligations. I began to research the options and eventually proposed a plan to the health department administration to support current staff who desired to become NPs, providing them with the opportunity to take advanced training. Three RNs in the county health department applied, and over a three-year period received certification as nurse practitioners.

"The program to send current staff for NP certification training at the University of Phoenix was a cooperative effort between the county health department, the state health department, and the AHECs. Because of the commitment of all the agencies, including the financial support of the Area Health Education Centers (AHECs), we were able to leave our homes for the time period required for training without financial devastation. Many of us would not have been able to attend the training without the support of AHEC. Barbara Silvia, Mary Westfall, and I have all completed N.P. certification and have been working full-time since completing the training program. This has allowed our county health department to serve more women with a higher quality of care. Continuing service for Pinal County women is now possible due to continuity of staff; the Pinal County Department of Health now has three full-time nurse practitioners who are committed to long-term employment in this area.

"The AHECs' support did not stop with just the training of nurse practitioners. These NPs have continued to be supported in continuing education (CE) via the AHECs. All three practitioners are advancing their knowledge and scope of practice through AHEC-sponsored CE. I am currently working on my Masters Degree to expand my ability and scope of service in health care delivery. Another practitioner has completed training in an advanced technique used for the diagnosis and treatment of precancerous genital lesions. The third practitioner has completed national certification in the specialty field of OB/GYN.

"The continuing support of Arizona's AHECs is essential if health care for all, including those living in rural Arizona, is to be realized in this state as well as across our nation."

## AzAHEC Clinical Rotations in Rural Arizona

*Sierra Vista Community Hospital (SVCH) is an 86-bed not-for-profit community hospital, approximately 75 miles from Tucson, providing general medical, surgical, obstetric, and intensive care services for the Cochise County area. The Pharmacy Department has accepted PharmD externs for six-week clinical rotations since 1984 and has trained over 40 students. Dennis K. McAllister, R.Ph., F.A.S.H.P., Manager, Pharmacy Services, a popular preceptor for pharmacy students, explains the impact of AHEC-supported clinical education rotations.*



**A Preceptor's Perspective -- by Dennis McAllister:** "During their rotation at Sierra Vista Community Hospital, pharmacy students are expected to practice as fully-licensed practitioners (with constant, direct supervision by SVCH staff). The students routinely work with physicians in developing therapeutic care plans. All students participate in nursing drug education and patient drug education, and provide inservice training in drug therapy issues.

"Students have returned after graduation to practice as licensed pharmacists and some have assisted the hospital during staffing shortages. The following five students returned to practice primarily due to their exposure to small hospital practice received during their SEAHEC-supported clinical education rotations: Heather Nielsen, Kim Volk, Cheri Lewis, Tina Neil, and Jeff Bingham.

"The staff of Sierra Vista Community Hospital gratefully acknowledge and appreciate the assistance of the Arizona AHEC System in assisting students with housing and travel. Support for these rural externships enriches both the students and the health care facility."

### **A Student's Perspective -- by Heather Nielsen:**

"Working in a rural setting gives a pharmacist many opportunities that might not be found in an urban setting. First, the smaller hospital provides much closer relationships between the pharmacist-physician, pharmacist-nurse, pharmacist-lab, etc. I found that I was known around the hospital after only a few days, and I was able to make recommendations and see changes take place. Secondly, in a small community hospital, the pharmacist performs both staff and clinical functions. The pharmacist is able to see and fill orders, as well as make therapeutic changes, suggestions, order necessary labs, etc. In larger institutions there may be little communication between the pharmacists and other health care providers. Thirdly, since a rural community hospital may be the only hospital in the area, there is a diversity of patients to be seen and the staff must be prepared to handle patients in any kind of situation. This provides a challenging and varied work experience."

### **AzAHEC Partnership with the National Health Service Corps (NHSC) Fellowship Training Project and Arizona's Community Health Centers**

On June 1, 1994, the Arizona AHEC System entered into a subcontract with the Arizona Association of Community Health Centers to collaborate with Arizona's Community Health Centers, located in rural and medically underserved communities, cosponsoring clinical education rotations for an eligible cadre of primary care students.

Primary care residents, medical students, and nurse practitioner students are specifically targeted. Dental, physician assistant, nurse midwifery, and mental health students are also eligible to receive subsistence support (travel, lodging, and per diem meals) through the resources of this new NHSC Fellowship Training Grant and the matching resources of Arizona's AHECs.

The mission of the National Health Service Corps (NHSC) is to provide health care services to underserved communities in designated health professional shortage areas through the recruitment and placement of health care providers. In order to further this mission, the NHSC launched this Fellowship of Primary Care Health Professionals Training Program.

## AzAHEC Clinical Rotations in Rural Arizona

*Dr. Daniel Crawford, a pediatrician in private practice in Yuma, Arizona, talks about precepting medical students and residents in rural rotations. Dr. Crawford also serves as one of the Medical Directors for the Western Arizona AHEC.*

### Precepting Medical Students and Residents --

by **Dr. Daniel Crawford:** "There are many aspects to life in medicine that cannot be taught



or experienced in the academic setting. The AHEC Program gives medical students and residents an opportunity to invest a small portion of their training 'out in the community,' experiencing what private

physicians do and see, how they run their practices, and how they relate to their patients.

"Currently, through WAHEC, students have a chance to arrange an elective in a number of different areas, including OB/GYN, pediatrics, surgery, family practice and internal medicine. In addition, a very popular summer program focusing on primary care is available for medical students who have completed their first year. Rotations can be arranged in a variety of ways, with exposure to rural and indigent care, as well as more traditional private practice settings. The medical community is sophisticated, dedicated, and caring; the local hospital is modern and supportive. We look forward in the future to a continuing relationship with the University of Arizona's College of Medicine and Primary Care Residency Programs."

*Amy Stevenson is a fourth-year medical student at the University of Arizona College of Medicine. She recently completed a one-month rural ambulatory elective rotation with Yuma Pediatrics.*

### A Rural Rotation Offers Variety -- by Amy

**Stevenson:** "My third-year clerkship in pediatrics left a few knowledge gaps that I was anxious to fill with additional pediatric

experience. I really wanted to escape the busy, university world of academic medicine and experience something just a little different.

"Drs. Robert Cannell and Daniel Crawford were eager to help me better understand topics like growth and development, intensive care, and even some of the subspecialties. I was sent to Chronic Rehabilitation Services clinics in cardiology, neurology, orthopedics, and cleft palate. Dr. Cannell also helped me arrange some Neonatal Intensive Care Unit time and county public health home visits. I was offered an incredible amount of independence, and unlike some of my previous experiences, I was given a great deal of respect by these rural physicians.

"Some of my best experiences were learning about Yuma's health care system. Dr. Cannell shared the border town politics with me and invited me to participate in a few local meetings.

Yuma Pediatrics gives new meaning to longitudinal care! The physicians have extended care to generations of patients, and each family has tremendous familiarity with the staff. I very much felt a part of their family for one month, and I now feel very comfortable with the pediatric population."

*Dr. Tom Van Hassel, Pharmacy Manager at the Yuma Regional Medical Center, talks about the health professional's role as a preceptor.*

**The Health Professional as a Preceptor -- by Dr. Tom Van Hassel:** "I think that rural practice sites are good practice sites for the students. It gets them away from the college atmosphere and into the real working world. I think it's important that the students see how a real pharmacist in a real hospital has to deal with dispensing IVs, filling dose carts, ordering medications, and all those aspects of professional practice. I've always been very active in supporting pharmacy, and I think



## AzAHEC Clinical Rotations in Rural Arizona

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that if pharmacy is to grow as a profession, we have to help the students learn how to become professional pharmacists; and I find personal reward in helping to shape a student's professional career. Serving as a community-based preceptor also forces me to learn, because I get questions about drug information, patient types, and even relationships with physicians. Those things force me to be active professionally. Personally, it's rewarding and it's helping me to grow professionally."



*Aldona Manka recently completed a clinical education rotation in pharmacy at the Yuma Regional Medical Center.*

*Mike Kalsman, a pharmacist employed by Kachina Pharmacy in Yuma, also serves as a preceptor for new pharmacy students.*

"It's been said, 'you're never too old to learn.' How true, how true. I took my first Pharmacy intern some years ago. I was supposed to impart my skills in pharmacy management to these students. However, in questioning these

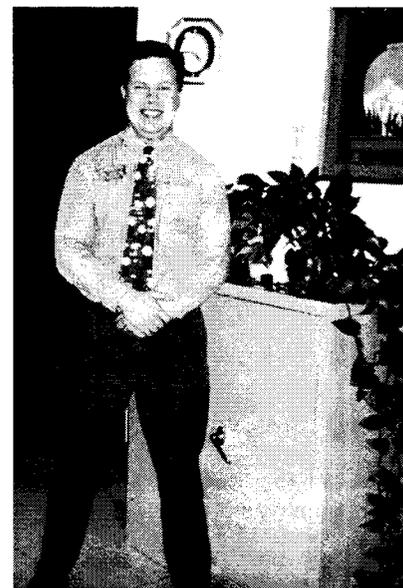
students in our afternoon exchange sessions, I ended up learning more than the student. A number of times, when the teaching day ended, I felt that I had received more than I had given.

"Often students come to the store with ambitions in pharmacy that are distant from the retail setting. After doing a rotation at the Kachina Pharmacy, they find this facet of pharmacy not only challenging, but rewarding."

*Jonathan Ford is a doctoral student in the College of Pharmacy at the University of Arizona. He recently completed clinical rotations in Yuma, Arizona.*

"I felt that removing myself from the immediate college area for a portion of my pharmacy clerkships was quite important. One tends to maintain a narrow perspective on the practice of pharmacy when staying within the boundaries of a teaching institution, and I wanted to receive at least part of my training from a non-academic or 'journeyman's' viewpoint.

"Because WAHEC paid for my housing, I was able to stay in Yuma for three of my clerkship rotations. This gave me the non-university practitioner's perspective on pharmacy that I wanted. All of my preceptors and the other pharmacy staff, with whom I worked, were good to me, and the practice sites themselves gave me an idea of what is involved in serving in a relatively isolated area of the state."



## AzaHEC Clinical Rotations in Rural Arizona

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*Dr. Mike Huyebroek is the Chief Professional Officer for Physical Therapy, Occupational Therapy, Speech and Audiology for the Whiteriver Indian Health Services Hospital. Ernestine Higdon is a Native American who did her clinical education rotation in physical therapy at the Whiteriver IHS Hospital. She is currently a staff therapist at the Zuni Public Health Service Hospital in Zuni, New Mexico.*



**Serving As a Preceptor -- by Mike Huyebroek:** Personally, having students here requires me to keep myself up-to-speed about what's going on in the physical therapy profession, requires me to do some studying, requires me to do some research, and it keeps me on my toes professionally, because the students always have questions, and I don't always have the answers -- and when I don't, I have to find the answer. Serving in a clinical education rotation differs from the classroom because the student is applying what they have learned. We're teaching as we're doing, and it brings home everything they learned in the classroom and what they're learning here in the clinic.

I enjoyed working with Ernestine Higdon in wound care, electromyograms, and diagnostic testing because she was always committed and enthusiastic. The NAHEC/AzaHEC System is a valuable tool to break down cultural barriers that affect both patients and health care professionals in rural areas. Rural rotations provide the IHS a chance to recruit committed, enthusiastic, and talented medical students.

**A Student Becoming a Professional -- by Ernestine Higdon:** Being a Native American, I felt there was a real need for a Native American physical therapist, and one of my goals was to come back here and work for the Indian Health Services. That's how I ended up in physical therapy.

My rotation at the Whiteriver IHS with Dr. Huyebroek gave me an expanded vision of working in rural communities, including the challenge of working with many different types of patients with various medical problems. I loved being in the mountains and there were many things, such as making orthotics, splints, nerve conduction tests, wound care, that I couldn't get anywhere else. Mike was very helpful as Chief Physical Therapist, especially in demonstrating new procedures in my generalist training.



## AzAHEC Clinical Rotations in Rural Arizona

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*Brian Solan, MD, is a family physician in practice with Clinica Adelante, which operates the Tidwell Family Care Center, a community/migrant health center in El Mirage/Surprise, with satellite clinics in Wickenburg, Gila Bend, and Queen Creek. Dr. Solan talks about the value of rural clinical education programs.*

**Health Care Practice with Underserved Populations by Dr. Brian Solan:** "Some of the benefits of rural clinical education that we see as important include: 1) the students see a wider range of diseases, and even if they are not going into family practice it's a good idea to have some general knowledge about those particular diseases; and 2) a lot of times we're treating people who have limited resources. Health professional students in these rotations learn how to make decisions based not only on patients' medical problems, but sometimes based on their social problems, including their ability or inability to pay for medications or their ability to afford to have certain tests done. Those considerations all weigh into the decisions that we make day to day, and may include referrals to *Clinica Adelante's* supportive social services including nutrition, community health nursing, health education, and eligibility determination."

*Shelly Renee Garone, a medical student from Tulane University Medical School, comments about her MAHEC-sponsored externship experience at Clinica Adelante.*



"The best part of my experience with *Clinica Adelante* was the self-confidence I learned in my eight weeks at the clinic. At the beginning of the eight weeks I was afraid to knock on examining room doors, let alone to believe that I could actually help somebody. However, by the end of the eight weeks, I was eager to knock on those doors -- to practice the skills I had begun to learn, to meet new people, to listen to their stories, to see what my instinct told me to think. The confidence to believe in myself and my instincts -- and to believe in their beneficial value -- gaining this was indeed the best part of my experience with *Clinica Adelante*."

*Medical Students comment on the opportunities provided by rural rotations to witness community medicine in practice, to develop an awareness of people with different backgrounds, and to gain a better understanding of health care needs in underserved areas.*

**Laurie Hebert:** "It's really important, as you go through the educational process, to be exposed to a lot of different settings. I believe that will help me make a better decision for my own career. This population of people is really fun to work with. You have limited money and limited tests that can be run. But the people are really appreciative, they do listen, and you feel like you are helping people."



**David Jagoda:** "It seemed like the staff really made an effort to provide me with as many quality patient contact experiences as possible, which is precisely what I had hoped to gain out of the rotation. I had many opportunities to practice, with good instruction, constructive feedback, as well as exposure to both acute and chronic medical conditions and their treatment. Dr. Solan did an excellent job making my experience challenging, yet applicable to my level of training."

**Reid Hales:** "Dr. Solan is a good physician role model. He has both the competence and compassion necessary to be a good physician. Every medical student needs this type of exposure."

## AzAHEC Clinical Rotations in Rural Arizona

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### Flinn Foundation Seeds Rural Training Initiative with AzAHEC and the Arizona Consortium of Family Practice Residency Programs

A Flinn Foundation grant has been awarded for the next two years to support the Consortium of Family Practice Residency Programs in collaboration with Arizona's Area Health Education Centers and the College of Medicine's Department of Family and Community Medicine Faculty Development Office to develop some selected rural practice sites for residents. The Arizona AHEC System is excited to have this enhanced opportunity to work with primary care residency program directors and community-based providers to promote rural medicine as a part of the training experience for family practice residents in Arizona.

The intent of the Flinn Foundation initiative, as a demonstration effort, is initially to plan with a few (two to four) rural practice sites to sponsor these experiences for residents with monthly rotations in mind. The resources of the Foundation will be used to develop a rural medicine residency curriculum and program evaluation tools, to provide faculty development support for rural providers to serve effectively as preceptors, and to expand the capacity of rural practice sites to serve as quality teaching communities for the development of Arizona's primary care physicians.

The Arizona AHEC Program Office has completed a preliminary assessment of about a dozen potential rural community teaching sites, and the Consortium of Family Practice Residency Program Directors has selected the first two sites for a targeted effort this year: (1) Lake Powell Medical Center in Page, as a community health center teaching site, and (2) The Gila Valley Clinic practice group, plus other providers located in Safford, as a private practice teaching community. In addition, the Consortium plans to assist with the expansion and capacity-building of at least two other teaching communities which have had some prior experience in supporting primary care resident rotations. These particular sites are the Mariposa Community Health Center (Nogales) and its affiliated clinic in Patagonia,

and the *Clinica Adelante*/Tidwell Family Care Center and its affiliates serving the rural/migrant communities of far west Maricopa County.

There was a tremendous expression of interest by all rural communities initially contacted to participate in this initiative, and while the Consortium has agreed to focus its attention on these four initial demonstration sites over the next year, the project hopes to extend its support for the development of additional teaching communities in the second year of the Flinn Foundation's support. Dr. Evan Kligman, Head of the Department of Family & Community Medicine at the Arizona Health Sciences Center is serving as the Principal Investigator for this initiative. Donald E. Proulx, Associate Director of the Arizona AHEC System, is serving as the operational Program Coordinator to carry out the necessary planning activities of this initiative in collaboration with the Consortium of Family Practice Residency Programs. Dr. Howard Silverman of the Good Samaritan Family Practice Residency Program chairs the Consortium.

Site visits will be made over the next few months with the practice communities of Safford, Page, Nogales/Patagonia, and Surprise.

This initiative will help address House Bill 2392 rural training mandates regarding primary care residencies. Enacted by the Legislature in the 1993-94 session, HB 2392 calls for rural practice rotations by at least 50 percent of all primary care residents in the Arizona Health Sciences Center's teaching programs. Although the Flinn Foundation initiative's initial emphasis is on family practice residency training in rural practice sites, the firm establishment of these rural teaching communities can also help support the participation of residents in the primary care areas of pediatrics, obstetrics/gynecology and general internal medicine.

# Minority Recruitment and Retention

*Carmen Garcia-Downing, MS, was recruited to the Rural Health Office at the College of Medicine to work with the Arizona AHEC Program and expand its efforts in minority recruitment, particularly among Native Americans. Last year, Ms. Garcia-Downing reported the very low enrollment of Native Americans in the College of Medicine -- less than 1% -- and analyzed some of the barriers impeding progress for minority students in general. The purpose of the Healing Pathways Program designed by Ms. Garcia-Downing is the identification and recruitment of minority students into the health professions, with an emphasis on students coming from rural areas of Arizona. The "Talking Medicine Circle" is the retention component of this program.*

## Healing Pathways Program

Good news!

Minority participation at the University of Arizona College of Medicine is on an upward trajectory. The Fall 1994 entering class is now approaching a close reflection of Arizona's minority population (28%), with 24 minority students and 78 non-minority students (23.5% minority; 76.5% non-minority).

Most encouraging is the number of Native American students admitted to the 1994 entering class: while only three Native Americans were enrolled in all classes in the College of Medicine during the 1992-93 academic year (1% of all classes), the 1994 entering

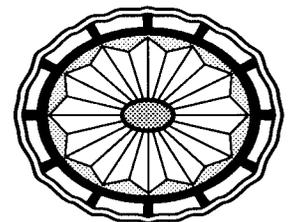
class included five Native American students (4.9% of the entering class). About 5.2% of the total population in Arizona are Native Americans.

Also included in this new class are 16 Hispanic students (15.7% of the class), and 3 African American students (2.9% of the class). Native Americans comprise 18.2% of the rural population in Arizona; Hispanics comprise 17.7% of the rural population; African Americans comprise 1.5% of the rural population.

*Source of Statistics: Minority Program Office, UA College of Medicine*

## Talking Medicine Circle

The Talking Medicine Circle is a monthly gathering of Native American undergraduate students, graduate students, faculty, and health practitioners who meet together to share their experiences, exchange information, and provide encouragement and support for each other. This is an informal dinner meeting hosted by the University of Arizona's undergraduate Pre-Health Advisor, Christine Marshall, and Carmen Garcia-Downing, Minority Recruitment Specialist for the Arizona AHEC System.



This group was started because there is still a problem with minority student retention, although University recruitment efforts appear to be succeeding. Some of the areas in which minority students have expressed the most difficulty include isolation from their peers, faculty, and families; and lack of access to information or lack of familiarity with resources and programs within the University of Arizona, the Arizona Health Sciences Center, and in the health professions community. The Talking Medicine Circle provides a network of support for these students, and an occasional newsletter is now being published.

# Arizona AHEC Learning Resource System

During the past year, the major focus of the Arizona AHEC Learning Resource System has been communication; electronic, as well as print, modalities have been used to link rural health providers to medical information resources.

**GRATEFUL MED/LOANSOME DOC**, a software program developed by the National Library of Medicine (NLM), continues to be a primary means for accessing databases at the NLM for rural practitioners. Training sessions were held by AzAHEC for the Greenlee County Health Department, for a Scottsdale group, and at the annual Rural Health Conference.

**GRATEFUL MED** was an integral part of the AHEC System's learning resource services in phase 1 - obtaining information electronically. That capability has expanded over this past year with the connection of the AHECs to the Internet - phase 2. Initial and advanced training sessions were held for each of the five centers and the central office staffs allowing the AHECs to communicate electronically with each other.

As **AZHIN** (the Arizona Health Information Network) came online, phase 3 began. Email and Listserv capabilities now exist. MEDLINE, Combined Information on Nursing and Allied Health, Health Planning and Administration, and PsychInfo databases are also now available, and plans are underway to offer additional services, such as a statewide continuing education (CE) calendar through the Arizona AHEC network.

A prototype of the statewide CE calendar was developed and tested on special librarians, who provide information to a particular clientele, like the medical community. This has been a resounding success. With over 250 subscribers, the statewide CE publication comes out on a monthly basis. It is only available electronically and was originally intended for Arizona special librarians; however, the content is of interest to all special librarians, and many of the subscribers are from California, as well as Arizona.

To facilitate the communication between practicing medical librarians and students in the Graduate

Library School and encourage library students to go into the field of medical librarianship, AzAHEC has been involved in the development of a mentor program through SABL (Southern Arizona Biomedical Librarians) and is currently planning a Career Day to further this goal.

**Western Arizona Medical Library Consortium (WAMLC):** WAHEC supports the activities of the Western Arizona Medical Library Consortium, an alliance of public, academic, and medical libraries in La Paz, Mohave and Yuma Counties whose mission is to provide health care professionals with efficient, timely access to current biomedical information.

As stated in the President's health care reform proposal, "... Networks of care require networks of information." That requirement is being fulfilled daily, in a variety of ways, by the WAHEC's Learning Resource System Coordinator, who also serves as the Consortium's Coordinator. The Coordinator conducts training sessions in the use of various computerized biomedical databases, either with individual health care professionals or in groups. A grant was recently awarded to the WAHEC by the National Library of Medicine to support the WAMLC Online Modernization Project. This grant will support installation of needed equipment to support expanded computer capacities in community health care centers, as well as supporting additional training.

The Coordinator has served the community hospital population by developing an on-site health science library for its use. In addition to traditional services (such as checking out books, video and reference works), the Coordinator performs electronic searches of computerized databases at remote sites for health care professionals. With this service, vast amounts of current health information can be reached easily, sometimes within hours of the request. Through links with the Medical Library Association, the Arizona State Library Association, the Mohave County Library Alliance, and the Central Arizona Biomedical Libraries, the WAHEC Learning Resource System Coordinator is able to maintain a network of support for information retrieval services and interlibrary loan activities.

# Arizona AHEC Rural AmeriCorps

## AzAHEC Sponsors Rural AmeriCorps Program

In August 1994, the Arizona AHEC System was awarded a grant by the Corporation for National and Community Service to establish an AzAHEC Rural AmeriCorps Program. This is one of five new "service-learning" programs funded in Arizona by the National and Community Service Trust Act that President Clinton signed into law in 1993, establishing AmeriCorps.



Through AmeriCorps, individuals of all ages and backgrounds are engaged in addressing the nation's education, public safety, human, and environmental needs through community service. In return, AmeriCorps members receive a living allowance (up to \$7,650 a year) and earn education awards (\$4,725 for a full year of service) to help finance their college education or vocational training or to pay back their student loans.

The Arizona AHEC Rural AmeriCorps Program offers an exciting and unique opportunity to provide national and community service in rural community-based and community-driven service and learning projects throughout the state. AzAHEC Rural AmeriCorps members will strengthen the provision of primary health care in Arizona's rural, resource poor, and medically underserved communities through the following programs:

- providing health career education programs with community schools;
- providing remote-site health professions continuing education programs;
- supporting community-based student clinical education in rural practice sites;
- providing health promotion and disease prevention community health education programs; and
- serving as community health advisors in socioeconomically disadvantaged neighborhoods to improve access to primary care, including home health visits and access to preventive care services.

During its first year (by January 1995), the Arizona AHEC Rural AmeriCorps Project will assign 20 members to community service in three regions of the state: 1) the Northern Arizona AHEC (NAHEC) in Flagstaff, serving the communities in Apache, Coconino, Navajo, and Yavapai Counties; 2) the Central Arizona AHEC (CENAHEC) in Miami, serving the communities in Gila, Graham, Greenlee, and Pinal Counties; and 3) the AzAHEC Program Office, located at the University of Arizona's Rural Health Office in Tucson, serving several rural communities in Pima County.

In the second year, the SEAHEC and the WAHEC will be included in this AmeriCorps Program to include all the rural counties of Arizona. This AmeriCorps Program complements well Arizona's recently established Border Volunteer Corps, with which Arizona's Border AHECs, located in Nogales and Yuma, are already forming supportive community-based relationships. While in its first year, the AzAHEC Rural AmeriCorps Program anticipates the selection of corps members who are indigenous to the rural communities in which AHEC-related community service projects have been developed; in subsequent years, up to 10% of the corps members may be selected from the National AmeriCorps recruitment system. The AzAHEC Rural AmeriCorps Program anticipates growing from 20 members in its first year to 27 members in Year 02 and 35 members by Year 03.

The AzAHEC Rural AmeriCorps Program is clearly responsive to the National AmeriCorps mission of "Getting Things Done®." In that the Arizona AHEC System is a "grassroots" network and part of a larger national system, involving some 35 other states, it offers excellent potential for the dissemination and replication of its AmeriCorps Program nationally.

# 1993-94 Individual AHEC Accomplishments

## Central Arizona Area Health Education Center (CENAHEC)

### CENAHEC Community-Based Training for Pre-Hospital Care Providers

National initiatives for health care reform have focused a spotlight on meeting the needs for primary care, emphasizing health promotion, disease prevention, and increasing the numbers of primary care, rather than specialty care, providers. All of these strategies are consistent with the AHEC mission, and the AHECs play a critical role in meeting the increased demand for primary care education. Many communities with populations of 5,000 or less are continuing to struggle to attain goals set 15 years ago.

One of the ways in which CENAHEC has attempted to address these problems has been through its major role in sponsoring educational programs for pre-hospital care providers. Due to the travel time it takes to transport a person to an emergency room in rural communities, it is emergency medical technicians (EMTs) that may



mean the difference between life or death for rural patients. In many of our rural areas it can take as long as an hour for emergency services to arrive, and the so-called "golden hour" of immediate care has already ended. The

education of these personnel, who are the direct care providers for an extended period of time in emergency situations, must be of the highest quality.

For years, in order to obtain this education, students had to travel to Phoenix or Tucson to participate in continuing emergency medical education programs. Now, CENAHEC works closely with educational institutions and emergency medical services (EMS) to provide as much of the needed continuing education as possible in those areas where the

students reside, minimizing travel time and costs while maximizing accessibility and effectiveness. CENAHEC also supports clinical rotations in rural areas for emergency medical technology students. Thirty-two (32) emergency medical services students (including basic and intermediate EMTs, and paramedics) in CENAHEC's four-county service area were supported in educational programs this past year. These continuing education programs, such as the Annual Rural EMS Conference, are part of the AzaAHEC Program's retention strategies, and have a positive effect on the number of EMTs who have chosen to remain in rural areas. Although costly, retention programs in rural areas provide positive benefits for students, the communities and the state.

### CENAHEC Meets the Challenge -- Midlevel Providers for Rural Arizona

The Central Arizona Area Health Education Center, like the other AHECs in Arizona, is facing the challenge of meeting an increased demand for midlevel providers, particularly physician assistants and nurse practitioners to serve in rural remote-site practice settings. While the state's Colleges of Nursing are preparing nurse practitioners, there is no education/training program in Arizona to meet the state's demand for physician assistants, and out-of-state PA students have not been in abundant supply.

### Physician Assistant Students

In late 1992, two PA students from Trevecca Nazarene College in Nashville, Tennessee made inquiries regarding possible sites for their clinical experiences in rural Arizona. In collaboration with the Gila Valley Medical Clinic in Safford and Trevecca Nazarene College, CENAHEC has developed (from what started out as a simple telephone inquiry) a mutually beneficial experience for all parties, with PA students receiving CENAHEC's support for primary care clinical education experiences in rural Graham County. CENAHEC now has a well-established group of preceptors to provide the training that

## 1993-94 Individual AHEC Accomplishments (CENAHEC)

Trevecca Nazarene College is seeking for its students. Currently, all the preceptors practice in a medical clinic setting in a community of approximately 7,500 people. Other preceptors are currently being evaluated to provide this training in additional sites. These clinical training experiences, coupled with the fact that CENAHEC houses students in an apartment/local family setting, provides the students with an excellent look at the rural practice environment.

Rural clinical education rotations for PA students have been popular with preceptors, students, and faculty. Student evaluations have attested to the quality of training and interaction of student, preceptor, and community, as have the graduate midlevel providers who have elected to remain and practice in Arizona. According to David Lutz,



“the precepting physicians were interested in teaching and willing to allow hands-on experiences.” Gary Burks, who grew up in rural Tennessee, stated, “the level of community appreciation and the support I had from everyone is one of the most important aspects of this rotation.”

*David Lutz, PA student completed CENAHEC rural rotation.*

The success of CENAHEC's support of clinical rotations for PA students can be measured not merely by the number of physician assistant students who have been supported, or by the number of physician assistants now practicing in rural Arizona as a result of this support. The more significant measure of CENAHEC's success is the number of communities in the CENAHEC service region that now have a physician assistant practicing in their area. Of the five (5) students who have completed a preceptorship in Arizona, three (3) are currently practicing in rural sites, including Safford and Globe. Another student plans to return to rural Arizona after completing missionary work in South America, and one PA student who elected to remain in Arizona has encouraged a fellow PA to relocate to another Arizona community without any midlevel practitioners.

### Nurse Practitioner Students

The Central Arizona Area Health Education Center (CENAHEC) sponsored clinical rotations for five (5) nurse practitioner students in Pinal and Gila Counties the summer of 1994. These clinical rotations of nurse practitioner students are part of a cooperative agreement between the Arizona State University College of Nursing and CENAHEC to introduce students to the positive aspects of practicing in a rural setting and to encourage them to set up their own practice in a rural community. Students choose the particular area in which they would like to complete their rotation, and have an opportunity to see firsthand the major concerns of rural health and the practitioner's role in a rural setting.

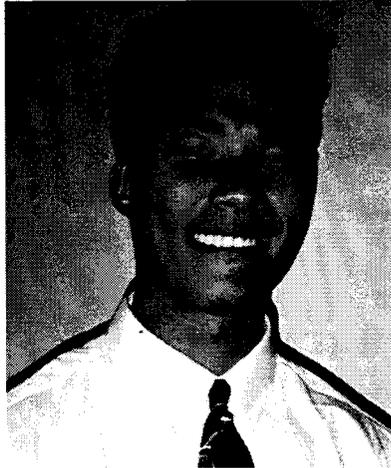
Barbara Golden, pediatric nurse practitioner, did her clinical rotation in Payson over a period of one and a half months. She found the experience, “both fulfilling and interesting.” Pamela Edens did her clinical rotation at the Pine-Strawberry Clinic. After this experience, Pam stated, “I definitely want to practice in a rural setting after one year of experience. I observed positive collaboration between physicians and nurse practitioners -- rural people are delightful and appreciative; the experience was great, the location beautiful. I wish it could have been longer.”

Judith Newell completed her rotation in the Casa Grande Women's Clinic. She found “the diverse background of the patients” a positive experience. Tiffani Smith's experience at the Indian Health Service hospital in Sacaton left her “wanting to make the rotation longer -- it taught me a lot. I had independence, yet an increased learning experience.”

## 1993-94 Individual AHEC Accomplishments (CENAHEC)

Another student, Anna Schwartz, found "the variety of patients and the time with patients outstanding. There was no competition with other students to see patients."

CENAHEC looks forward to continuing to meet the challenge of developing and supporting clinical education rotation experiences in rural communities for physician assistant and nurse practitioner students. As the number of these rotations increases, Arizona's rural communities can expect to see more midlevel providers joining the health care team in their rural practices.



*Ivan Wong, pharmacy student*



*Helen Greer, physical therapy student*

### CENAHEC Community-Based Training for Primary Care Students

In 1993/94, the Central Arizona Area Health Education Center (CENAHEC) recruited and/or provided financial assistance to a total of 109 primary health care students. In 1992/93, there was a total of 80 students; in 1991/92, CENAHEC supported 78 students. This past year the student breakdown by discipline was as follows:

Basic EMT	6	Project Learn (RN to BSN)	10
Intermediate EMT	21	Radiologic Technology	5
Paramedic	5	Social Work	4
Certified Nursing Asst	10	Medical Students	
Laboratory Technician	1	4th year	2
Nurse Practitioner	6	2nd year	3
Nursing (RN Students)	16	Medical Residents	
Physician Assistant	5	4th year	1
Pharmacy	11	3rd year	1
Physical Therapy	2		

Even in times of budgetary constraints, the CENAHEC Board of Directors and staff realize that support for the training of health professions students in rural practice sites is a critical component in an overall strategy for providing the primary care personnel needed in the east central region of Arizona. CENAHEC continues to be committed to the objective of providing these necessary educational opportunities for students in rural Arizona.

## 1993-94 Individual AHEC Accomplishments (CENAHEC)

### UA College of Medicine Dean and Department Heads Tour CENAHEC Communities

The Dean and several Department Heads of the College of Medicine and faculty from the Rural Health Office spent December 6-7, 1993, touring several health care centers and meeting with health professionals in the CENAHEC service area, which includes Pinal, Gila, Graham, and Greenlee Counties. This tour was well received by the university participants and the practicing health care professionals of this region.



*Members of the Dean's Day Tour enjoy a Reception held at the Cobre Valley Country Club.*

While the entire region is rural and shares special problems in serving the medical needs of its residents, problems differ from one community to the next. For example, while the university visitors anticipated that they would hear about the occupationally-related health problems of workers in the copper mines, they learned that the common cold, flu, and other common ailments topped the list of health concerns for this population -- rather than the more esoteric concerns for black lung disease or industry-related cancers.

Among the region's problems, a chronic shortage of nurses and other allied health personnel was revealed in many of CENAHEC's communities during the trip. The CENAHEC "Dean's Day" tour included visits with the West Pinal Family Health Center in Casa Grande and the Casa Grande Regional Medical Center, the Hu Hu Kam Memorial Hospital in Sacaton, the Central Arizona

Regional Hospital in Florence, the Cobre Valley Community Hospital in Miami-Globe, the San Carlos Indian Health Service Hospital, the Mt. Graham Community Hospital, and Gila Valley Clinic in Safford. In all of these sites, local physicians, nursing directors, health care administrators, and other health care personnel conferred with the visiting physicians, deans, and faculty. In the Globe-Miami area, several elected officials and other community leaders met with the touring group, as well.

Those on the tour included Dr. James E. Dalen, Dean of the College of Medicine; Dr. Wayne Heine, Head of the Department of Obstetrics and Gynecology; Dr. Bruce E. Jarrell, Head of the Surgery Department; Dr. Evan W. Kligman, Head of the Department of Family and Community Medicine; Dr. Richard Lemen, Critical Care Section Chief of the Pediatrics Department; Dr. Andrew W. Nichols, Professor and Director of the Rural Health Office and Arizona Area Health Education Center (AzAHEC) System; Marjorie Sisson, Manager of the Physician's Resource Services at the Arizona Health Sciences Center; Donald E. Proulx, Associate Director of AzAHEC; Alison Hughes, Associate Director of the Rural Health Office; and Lilian Chersin, Administrative Assistant to Dr. Nichols.

The Arizona AHECs respond to the problems of health professional supply and distribution in rural and underserved areas of Arizona, with special emphasis on minority populations. The Arizona AHEC System represents a partnership of health providers, health professions students, educators, and communities joined together with a commitment to resolve these problems through educational support to health professionals in the field, both as students and practitioners.

The Dean's Day tours are important opportunities for the Arizona AHEC System, since these are the people who are responsible for educating the next generation of doctors, nurses, and other health professionals. What they learn from the practitioners in the communities they visit is extremely valuable as they prepare students for the real world of work.

## 1993-94 Individual AHEC Accomplishments

### Maricopa Area Health Education Center (MAHEC)

Serving the largest population base in Arizona, including the Phoenix metropolitan area and surrounding rural and Native American communities in Maricopa County, the Maricopa Area Health Education Center (MAHEC) continued to act as a bridge between Arizona's academic institutions and its health care communities during the 1993 - 1994 program year. MAHEC creates, coordinates, and provides education in the health professions with an emphasis on primary care for rural, underserved, and culturally distinct populations of Arizona. The continuum of this educational effort includes the exposure of young people to careers in the health professions; encouragement and support for students entering college to choose a health care profession; the provision of community-based training of students; and the offering of on-site, state-of-the-art, continuing education and medical information services for those working in underserved communities in our state.

#### Recruitment of Students

The spark that ignites a student's interest in pursuing a career in health care is electrifying, and MAHEC's staff enjoys taking part in this process. During the past year, the Maricopa Area Health Education Center worked collaboratively with other organizations throughout Maricopa County and the state to reach more students about health careers. Through dissemination of MAHEC's *Careers In Health Matrix* and consultations with counselors and students, over 9,000 students were informed about health careers.

The Maricopa Area Health Education Center is pleased to report that four (out of five) Maricopa AHEC Med-Start 1993 graduates have continued with their educational process in the health fields. In 1994, four students from Maricopa County attended the AzaAHEC Med-Start Program and six students attended the AzaAHEC Careers in Health Summer Camp Program. The MAHEC also initiated the Career Opportunities Program in 1993-94, a special activity for those students who applied but were not selected to attend the Med-Start or the AzaAHEC Careers in Health Summer Camp Program.

The current period of corporate economic downsizing has affected all parts of the state. In response, MAHEC has acted as a resource to companies throughout Maricopa County, including AT&T and America West Airlines, which have had to lay off permanent employees. By providing career guidance and materials to human resource departments and job displacement/career fairs, the Maricopa Area Health Education Center has extended its student recruitment activities to adult students, with the goal of contributing to the economic health of the State of Arizona and its population.

#### Community-Based Clinical Education Rotations

The Maricopa AHEC has created community-based primary care, minority-oriented clinical educational experiences for health professions students. MAHEC provides trainees with exposure to Arizona's underserved patient populations in specially designed clinical education rotations focusing on geriatric patients, urban/underserved patients, patients with HIV/AIDS, rural/migrant patients, and at-risk children. By participating in community-based health care programs, trainees become aware of people with different cultural and socioeconomic



*Ashish Chabra, family practice resident, makes a home visit to a geriatric patient*

## 1993-94 Individual AHEC Accomplishments (MAHEC)

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backgrounds and gain an understanding of the health care needs and social problems of the elderly, those with HIV/AIDS, Arizona's ethnically diverse populations, migrant workers, and Arizona's urban poor.

During the 1993-1994 program year, 47 students from allopathic and osteopathic medicine, nursing, and residents in family practice and internal medicine residency programs completed one of the MAHEC-developed and/or coordinated clinical education rotations. With an average rotation of over seven days, the MAHEC has utilized numerous clinical sites throughout Maricopa County for its students. With the increasing number of students selecting one of the MAHEC-developed rotations, the Maricopa Area Health Education Center is aggressively pursuing the expansion of its clinical training sites. A detailed survey has been developed and will be mailed to selected settings throughout Maricopa County to evaluate the sites, clinical teachers, clinical teacher training needs, student experiences, and the number of students each facility is able to accommodate. This survey will be used to develop systematically and utilize clinical sites more effectively.

### Continuing Education

Since 1990, the Maricopa Area Health Education Center has collaborated with over 38 statewide health, governmental, educational, and community agencies to develop, organize, and implement over 370 comprehensive continuing educational programs for over 14,650 health professionals throughout Maricopa County and Arizona.

MAHEC programs are community-based and often provide the first didactic or clinical exposure about emerging health care issues for Arizona's health professionals. To facilitate the participant educational process, MAHEC has developed education materials to support the educational programs including posters, educational brochures, and instructional and reference manuals.



*MAHEC-sponsored students participate in EMT training.*

During the 1993-1994 program year, the Maricopa Area Health Education Center provided over 80 continuing education programs for health professionals, hospitals, health maintenance organizations, community health centers, and migrant health centers. Reaching over 2,800 professionals, program development included extensive needs assessment surveys, coordination of focus groups, and multidisciplinary planning groups, as well as extensive journal reviews.

Preceptor training is one of MAHEC's high priorities. By taking the lead in providing training for community-based clinical teachers, MAHEC hopes to strengthen the teaching that takes place at clinical sites. Sponsoring its first preceptor training program in May 1994, MAHEC is scheduling more programs in 1995, which will include training for precepting physicians and nurse practitioners who work in Arizona's rural community health centers, as well as those in Maricopa County.

Institutions throughout Arizona have called upon the teaching experience of MAHEC's staff to lecture, to develop curriculum, and to conduct workshops in geriatrics, public health, and HIV/AIDS. MAHEC staff members have accepted prominent teaching roles in geriatrics and public health with the University of Arizona, Arizona State University, Phoenix Baptist Hospital and Medical Center, Good Samaritan Hospital and Medical Center, and St. Joseph's Hospital and Medical Center.

## 1993-94 Individual AHEC Accomplishments (MAHEC)

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### Maricopa AIDS Education and Training Center

The Maricopa AIDS Education Training Center (ETC) Program, part of the federally-funded Western AIDS ETC Program, has provided HIV/AIDS education and training for a total of 1,826 health care professionals, including physicians, nurses, dentists, and other allied health care workers. Of those educated, 79 were primary care residents. There were 17 psychiatric residents who also received education on HIV/AIDS. In addition, ten (10) medical students completed a week-long HIV Mini-Residency.

The Maricopa Area Health Education Center's AIDS ETC staff presented at both national and local conferences. A presentation on "*Innovative HIV Education in Arizona*" was provided at the AHEC National Conference. John Post, MD, presented "*Opportunistic Infections Through the Eyes of a Clinician*" at the Positive Partnerships HIV Therapeutic Alliance Meeting. "*Biohazard and Chemical Hazard Control in Dentistry*" was presented at the Annual Arizona State Dental Convention by Carla Lidner, DDS. Gail Pigeon, MAHEC Program Coordinator, presented at the *Women and HIV: The Untold Facts* conference. Her presentations were titled "Inquiring Minds Want to Know: How to Identify Women at Risk and Sexual History Taking: A Skill-Building Workshop." This was part of a very successful (101 attendees) two-day conference, which MAHEC coordinated for physicians, nurses, physician assistants, nurse practitioners, and other health care workers.

Other successful conferences which MAHEC assisted in coordinating, developing, and implementing were the *HIV/AIDS Prevention, Education, and Management Conference*. The target population for this conference were health care providers, especially allied health care givers. There were 225 participants. A conference was also held to meet the needs of mental health providers: *HIV/AIDS Overcoming Denial: Yours, Mine, and Ours*. MAHEC also assisted in the planning of a conference sponsored by Samaritan Health System titled: *Primary Care Physicians and HIV: Implications for Care*. This conference was held in August 1994, in Phoenix, and there were 80 attendees. Several Dental Mini-Residencies were also offered by the MAHEC this past year.

The work of the HIV/AIDS Education and Training Center is primarily done by health care professionals who volunteer their time. As such, MAHEC hopes to encourage them by assisting them in receiving the recognition they deserve for their efforts. Through the initiative of MAHEC's nurse educator and AIDS ETC manager, a nomination letter was written for Paul Franquist, Clinical Nurse Specialist and volunteer AIDS Speakers Bureau Member. The result was that Paul received the Association of Nurses in AIDS Care Award for Clinical Nursing Leadership. It is indeed an honor to have been associated with him in receiving this distinguished award.

The AIDS ETC Program offers a variety of resources to the health professional community: Clinical Information Network Newsletter (CIN), Clinical Conference Calls, WARMLINE, videotape and lending libraries, Key Physician Development Programs and Resource Center. The Clinical Information Network Newsletter provides current articles on the latest advances in the HIV/AIDS field. In 1993-94, newsletters were distributed to 719 primary care providers in the Maricopa area. Clinical Conference Calls allow participants from across the United States to hear and interact with leading HIV/AIDS physicians. The WARMLINE is an HIV telephone consultation service from the San Francisco General Hospital. It provides case consultation, drug information, clinical trials information, subspecialty case referral information and literature searches. The services of the Resource Center are to provide information on clinical training programs, educational materials, and HIV/AIDS information services.

MAHEC's plan for 1994-95 is to continue fostering the growth of primary care physicians in the community who are able and willing to care for HIV-infected and AIDS patients. To do this staff will be implementing a Key Physician Development Program for a pediatrician as well as a Key Nurse Program in Pediatric HIV/AIDS. MAHEC will also be expanding its Key Physician Program to develop a primary care provider whose primary practice is in the community.

## 1993-94 Individual AHEC Accomplishments

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

An essential component of NAHEC services is the provision of youth health careers education because research strongly indicates that those born and reared in rural areas tend to return to those areas to live and work. In 1993-94:

- **Health Careers Fairs and Health Careers Days** provided valuable information about health careers to 4,114 students from Tsaile, Flagstaff, Chinle, McNary, Holbrook, Bagdad, Show Low, Prescott, Many Farms, Tuba City, Leupp, Polacca, and Shonto.
- A **Health Career Preprofessions Forum** at Northern Arizona University, cosponsored by the University's Office of Preprofessional Programs, provided an opportunity for the 126 attending students to interact with a variety of local health care providers from more than 20 health careers fields, to expand their understanding of the broad spectrum of health career options, and to learn about requirements for undergraduate, graduate and professional school studies. Participants were exposed, many for the first time, to the daily realities of professional practice.
- NAHEC sponsored seven **Health Careers Clubs** in the NAHEC service area, with 91 participating students in Cottonwood, Fredonia, Hopi, Whiteriver, Window Rock, Chinle, Show Low, and Flagstaff.
- Ten (10) students in the NAHEC service area attended the six-week **Med-Start** summer program at the Arizona Health Sciences Center. Med-Starters have an opportunity to experience university life and observe first-hand what work is like in a health care facility.
- Other health career education events included the **Tuba City High School Next Century Warriors Health Career Workshop**; and the **Job Training Partnership Act Summer Programs** in Page, Fredonia, and Flagstaff, which assisted students with learning skills appropriate to health careers while simultaneously learning on-the-job skills.



*Students participate in NAHEC-sponsored Health Career Club*

#### Health Professions Student Training

It is widely acknowledged within the health care arena that positive training experiences in rural and underserved locations affect rural practice choices. In its eighth year of operation, the NAHEC encouraged and supported directly and indirectly 312 students in rural and clinical practice activities through help with housing, travel, and per diem costs. Students, as well as seasoned health professionals, gain an appreciation for life and health care practice in small rural communities through clinical training opportunities that impact their decision to choose rural practices as a career. Rotations range from one-week to twelve-weeks in length and include summer experiences.

**Joyce Martin, BS**, who now works full-time as a Counselor/Coordinator for the Hopi Manpower Development Program in Kykotsmovi, was a summer health education intern from Northern Arizona University at the NAHEC offices during 1993. During her six-week rotation at NAHEC, she assisted with continuing education program registrations, compiled various databases for the agency, and assisted the Youth Careers Education Program Coordinator with oversight of Health Career Clubs and

## 1993-94 Individual AHEC Accomplishments (NAHEC)

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Fairs. Joyce reports that, "The variety of duties I experienced at the NAHEC gave me an overall view of the "workaday" world in a thriving nonprofit service environment and an opportunity to work with Native American youth who are leaning toward a career in the health professions." In addition, Joyce left the NAHEC with much more confidence in her computer and program assisting skills.

**Alice Amato** of the University of Arizona in Tucson, is a fourth-year medical student hoping to enter pediatrics or family practice. Alice was gratified by the helpful and gracious manner of all her preceptors during her clinical rotation at Whiteriver Indian Health Service Hospital. She emphasized that rural rotations afforded her an opportunity "to learn a lot about a variety of medical situations without a great deal of stress."

As a preceptor for Chinle Hospital, **Dr. Bill Gloyd, MD, MPH**, oversaw the student medical rotation of **Christopher Boyd**, who graduated from Harvard University and is now a first-year medical student at the University of Arizona, hoping to practice family medicine. Christopher worked closely with the Navajo Tribe in implementing programs for Navajo youth. Dr. Gloyd declared that, "Even seasoned health care professionals are enriched through the enthusiasm of young students, particularly on the Navajo Reservation." Dr. Gloyd explained that Christopher participated in the improvement of a Chinle community-based organization known as Central Navajo Youth Opportunities Coalition, and was able to accomplish some tasks within that organization that would have been difficult for other physicians in Chinle to do, including the publication of a newsletter promoting summer activities for Navajo youth that reaches 1,000 persons on the Navajo Reservation.

### NAHEC Offers Diverse Continuing Education Opportunities

An ever-increasing demand for quality continuing education for health care professionals within its four-county service area prompted the Northern Arizona Area Health Education Center to offer a

wide diversity of programs during 1993-94. Programming at the grassroots level has generated numerous program planning coalitions, as well, including the Behavioral Health Coalition and the White Mountain Continuing Education Coalition. Noteworthy among the 138 programs offered during fiscal year 1993-94, attended by approximately 4,000 persons, are the following:

- In a unique joint venture, NAHEC and the Southern Nevada AHEC provided a **Clinical Update** in July for primary care physicians. Forty physicians from Arizona were exposed to the latest medical knowledge in cardiology, psychiatry, and radiology. Samuel M. Butman, MD, and Paul E. Fenster, MD, both of the University of Arizona College of Medicine, presented the latest trends in managing myocardial infarctions and congestive heart failure; John N. Chappel, MD, of Reno, Nevada, conducted a workshop on recognizing and managing drug and alcohol emergencies, managing the violent patient in the emergency room, and caring for the chronically depressed patient; and Stephen V. Ward, MD, of Flagstaff, and Thomas C. Barcia, MD, of Reno, addressed physicians on current medical knowledge of the cervical spine, the chest, and common fractures.

- NAHEC provided an **Annual Pharmaceutical Update** for physicians, physician assistants, and nurse practitioners in September 1994. Martha Fankhauser, MS Pharm., UA College of Pharmacy, addressed workshop participants on Child/ Adolescent Psychopharmacology and also reviewed psychotropic medications used in other neuro-psychiatric or medical conditions; Donna Grier, Pharm.D., discussed hormonal replacement therapy; and Norman Levine, MD, described anti-acne drugs and anti-infective agents. Program participant Karen Holder, a Nurse Practitioner who attends many NAHEC continuing education events, termed the Pharmaceutical Update "the best pharmaceutical update that NAHEC has ever done."

## 1993-94 Individual AHEC Accomplishments (NAHEC)

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•Twenty-one (21) participants from the northland were graduated from the NAHEC's **Substance Abuse Academy** during 1994, offered for the first time in northern Arizona at Northland Pioneer College in Holbrook. The program assisted Native American paraprofessionals who work as substance abuse counselors to obtain their statewide certification. This program's inaugural year yielded 15 hours of community college credit. Several Academy instructors from Rio Salado Community College and elsewhere around the state implemented the Academy's curriculum via customized, culturally-sensitive instruction in the following areas: foundations of chemical dependency; psychopharmacology; family dynamics; professional ethics; case report writing; dual diagnoses programming; and recovery and relapse. Native American instructors or instructors who have worked among Native Americans were selected for the Academy. NAHEC plans to offer this prototypical format next summer during three additional academies throughout the northland. Upon completion of the course, participants may enroll in a local study group to prepare them for the statewide Certified Addiction Counselor tests. Dormitory accommodations were provided for students who attend this five-week intensive Academy.

•In April 1994, NAHEC presented a two-day workshop on **Behavioral Health Case Management**, a technical assistance program for managers to assist them in defining and implementing a managed care behavioral health care system for the Navajo Nation. NAHEC undertook the task of providing needed technical assistance, which should provide even greater opportunities to assist the Navajo Nation, including the provision of continuing education programs for the recertification of behavioral health staff.

•During 1993-94, the NAHEC **Learning Resources Library** has grown to include an impressive assemblage of audio/visual aids, books, posters, slides, cassette tapes, health career informational and promotional material, and other graphic aids for health care education in a manner that affords ready accessibility, often via computer. Plans are underway to expand this library service, which is an adjunct to the NAHEC's current Medical Library Service now available within the NAHEC's service area, through direct computer searches via linkage to the National Library of Medicine in Bethesda, Maryland.

•**Mini-Sabbatical** support during 1993-94 enabled 14 rural health care providers from various disciplines to travel to larger urban or regional facilities to obtain the specialized training requisite to remain professionally competent and current in their rural practice settings. Examples of support included those from the following programs: RN-BSN Completion Programs, Effective Nursing Management, Trauma Updates, and BSN Satellite Courses, among others.

### NAHEC American Indian Outreach Division Continues Program Expansion

The Mission of the American Indian Outreach Division is to empower and promote the well-being of American Indian people in Northern Arizona by improving health care provider resources and service delivery through community-based initiatives. The primary target population served by this Division of NAHEC is American Indians who live on and off the reservation. These tribes include: Hopi, Navajo, Havasupai, Hualapai, White Mountain Apache, Kaibab Paiute, Yavapai Apache, San Juan Paiute, Yavapai Prescott, and Camp Verde Apache.

•**American Indian Outreach Advisory Council:** The American Indian Outreach Advisory Council is a group of community leaders, tribal representatives, and USPHS Indian Health Service providers who work in partnership with the NAHEC American Indian Outreach Division staff. The Advisory Council provides culturally-sensitive advice and assistance with regard to community

## 1993-94 Individual AHEC Accomplishments (NAHEC)

development, identification of health care needs, program development, and strategic planning. The members advise and assist with program promotion and implementation. Members further assist with curriculum development, training, and human resource management. Membership is open, with formal meetings held biannually.

• **American Indian Outreach Division Programs:** Following is an abbreviated description of current NAHEC American Indian Outreach programs throughout the NAHEC's four-county service area:

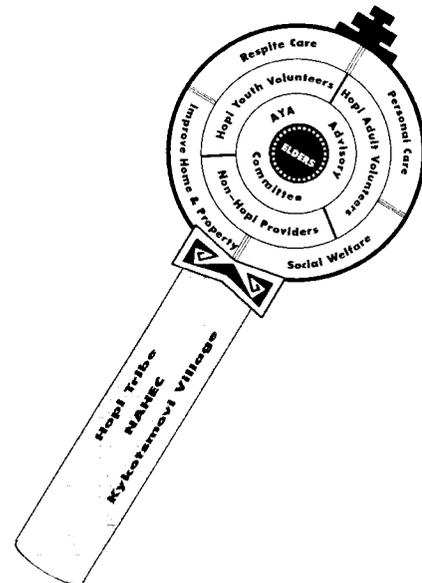
Hopi Health Start Program: trains lay health workers, called "Resource Mothers," to educate women during home visits about pregnancy, childbirth, and well-baby care.

Perinatal Outreach Project: promotes early comprehensive and continuous health care for the women and children who live in the Navajo Nation community of Dilkon, Arizona.

Opening Doors Program: identifies and develops methods to reduce sociocultural barriers to health care for women and children who live on the Havasupai and Hualapai Indian Reservations.

Native American HIV/AIDS Education Program: increases awareness of HIV/AIDS and actively promotes its prevention.

The AYA Project: addresses the physical and psychosocial needs of the Hopi elders in the village of Kykotsmovi through respite care, personal care, social welfare, and home improvement projects.



The Native American Health Outreach Project: provides health education and in-service training for the project's outreach workers in the Page area.

Native American Cancer Education and Training Initiatives: develops strategies for effective cancer prevention education programs for Hopi women.

The Substance Abuse and Media (SAM) Project: creates media interventions designed to foster self-esteem and substance abuse resistance skills among high-risk Native American youth.

The American Indian Women's Cancer Advisory Committee: plans and develops health education and early detection strategies appropriate for Arizona's Indian women in an effort to reduce the number of deaths caused by breast and cervical cancer.

*"AYA" means rattle in the Hopi language, the project's symbol representing the components and participants. The elders represent the seeds or noisemaking elements at the core of the rattle. They voice the needs and send out vibrations through all project components and participants. The rattle is supported by a handle representing the tribal and village governments and the NAHEC.*

# 1993-94 Individual AHEC Accomplishments

## Southeast Arizona Area Health Education Center (SEAHEC)

### *THE SOUTHEAST ARIZONA AHEC EMBARKS ON ITS TENTH YEAR OF SERVICE*

In July of 1985, the Articles of Incorporation forming the Southeast Arizona Area Health Education Center (SEAHEC) were filed, creating Arizona's first Area Health Education Center. With much hope and vision, a steering committee of community leaders selected SEAHEC's first Board of Directors and began the task of implementing the federal AHEC goals in service to rural southeast Arizona.

The next several years showed steady growth in programming. Students from many health professions disciplines began venturing into rural areas in the SEAHEC service region, including rural Pima, Cochise, and Santa Cruz Counties; new sites for clinical education rotations were developed; sites for continuing education and continuing medical education programs were established; "train-the-trainer" models for health education programming were developed; and new models of reaching youth were developed, including health careers education and health education programs.

Participants in these programs grew from a few hundred in the early years to thousands by the 1990s.

With a well established program, few people realized the difficulty that the transition from federal to state funding would create. The constituency of an AHEC program is very narrow, but extremely important. These constituents include health professionals who need continuing education; colleges and universities which need assistance in encouraging and supporting their health professions students in rural health training; and public school officials who request enrichment programs to help motivate students into higher education.

The need for educational services in rural areas was told over and over to legislators by AHEC Board members and rural health providers, and in 1990 the SEAHEC became the first state-sponsored AHEC program in Arizona. SEAHEC is very grateful for the continuing opportunity to serve southeast Arizona through state appropriations.

### SEAHEC: The First Ten Years of Service to Southeast Arizona

Next year will be the tenth anniversary of the Southeast Arizona Area Health Education Center. The 1992-93 AzAHEC Annual Progress Report announced the return to Nogales (SEAHEC's home base) of Dr. Maria Piña, a native of Nogales who was the first medical student in Arizona to undertake an AHEC-sponsored rural rotation. Another former SEAHEC-sponsored medical student, Alison Dalrymple, joined Dr. Piña this year on the staff of the Mariposa Community Health Center in Nogales.



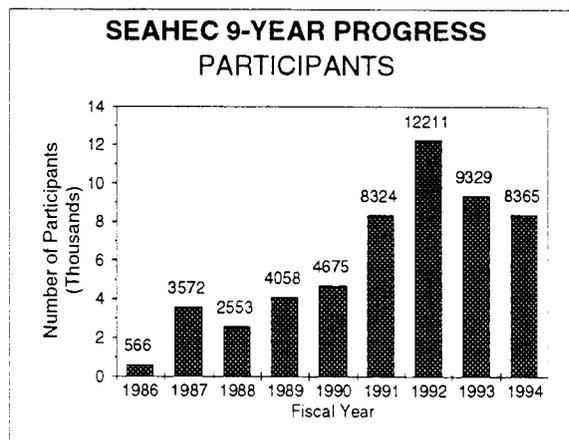
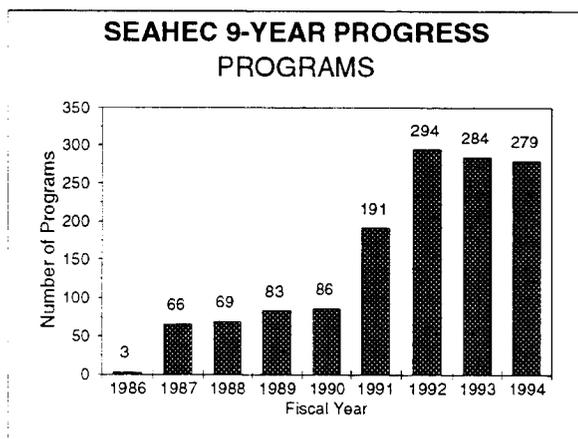
These, and other SEAHEC success stories, which are featured in this Annual Report, are especially rewarding to the SEAHEC Program, particularly in view of the length of time required before a medical student's education is completed. It is increasingly evident that AHEC is a program that works. In each of Arizona's AHEC Centers, health professions students who complete AHEC-sponsored educational experiences are now returning to practice in rural or other medically underserved communities, not just in Arizona, but throughout the United States.

The number of public school students, college students, health professions students, health professionals, and communities that have been impacted by the Arizona AHEC System during its first ten years will be particularly highlighted in the System's 1995 Annual Report -- "Ten Years of Progress." Since its inception (note that 1984 and 1985 were planning and development

## 1993-94 Individual AHEC Accomplishments (SEAHEC)

years), SEAHEC has provided 1,355 programs for 53,653 participants. These programs included youth health career activities, student rotations, continuing education, and community education.

The following charts illustrate the extent and impact of the SEAHEC programs for the past nine years. Of obvious concern is the levelling off and particular decline noted in the number of programs and participants served by the SEAHEC from 1991 to the present. This is reflective of the shortfalls in funding realized in recent years, wherein the state's appropriations to AHEC have not kept pace with the federal funding levels provided in the first six years of the SEAHEC's existence.



### SEAHEC: Health Professions Education Programs in 1993-94

SEAHEC offered 152 continuing education programs in its three-county service area in 1993-94, and provided 97 health education programs for the community. Close to 100 health professions students rotated through the SEAHEC service region; 25 of these were students of medicine and over 40 were students in nursing.

More than 450 young people participated in SEAHEC-sponsored youth recruitment programs in the 1993-94 year. These programs have included several hands-on experiences in which children learn about their own bodies as an introduction to the sciences and to health careers. Some examples are learning about germs, becoming familiar with how the heart works, and offering CPR instruction for older children. Still popular are field trips to large hospitals and presentations by health professions students to middle and high school age youth.

### *Platicamos Salud/Let's Talk About Health*

For three years, SEAHEC reports have highlighted the training of lay health educators -- *promotoras* and teen peer outreach workers. This project, entitled "*Platicamos Salud/Let's Talk About Health*," is a Mariposa Community Health Center outreach program funded by the federal government with a Rural Health Outreach Grant. Reports have focused on the students and the types of training they have received.

Now that the three years of funding are ending, the impact of the program will be evaluated, with a particular emphasis on how the health promoters view the value of this project after three years of service to their community. The services of the lay health educators have included case finding, education, psychosocial support, home visits, referral to needed services, follow-up, transportation,

## 1993-94 Individual AHEC Accomplishments (SEAHEC)

advocacy, and community presentations. The three-year grant also supported human service programs relating to transportation, physical examinations, and diagnostic tests for people unable to afford health care services.

After their initial training in health promotion, listening, and coaching skills, each group of health promoters was further trained in targeted disease prevention efforts through an expanding curriculum designed to accommodate the specific and changing needs of the community. This curriculum included cancer screening, self-breast exam, prenatal care, and stress management training, which were consistently emphasized throughout the project. Additional topics included sexually transmitted diseases, AIDS, drug and alcohol abuse, diabetes, domestic violence, and immunizations, allowing all health promoters to be confident in "talking health" with their clients and encouraging people to seek professional care.

More than 800 people received physical exams during the project. Education about disease prevention was an integral part of each client contact. More than 2,500 units of health education and 5,000 instances of follow-up services (which means following a case to see that the client obtained the needed services and understood any instructions or test results given to them) were delivered. *Promotoras* in the *Platicamos Salud* Project report it was not unusual to find that the birth of a woman's last child was also the occasion of her last physical examination, including Pap test and breast examination. In some cases this represented a 10-20 year time span.

While the majority of the clients have been female, a significant number of males (479) have been reached by the health promoters as well, and the introduction of teens as health promoters has brought peer counselors, knowledgeable about all areas that concern adolescents, into community groups and schools. Fifteen hundred (1,500) youth between the ages of 12 and 19 have participated in this program.

Often people ignore their health due to fear, lack of transportation, language barriers, financial

barriers, and general lack of knowledge about services. The outreach of the *Platicamos Salud* Project has removed these barriers, bringing health education information and improved access to health care to hundreds of people who would not otherwise have been served.

### SEAHEC: Building for the Future

SEAHEC looks forward to the 1994-95 year of programming with several new projects underway. An Interdisciplinary Training Grant has been awarded to the University of Arizona College of Pharmacy in which the SEAHEC, Arizona State University's School of Social Work, the University of Arizona College of Nursing, and the Arizona Graduate Program in Public Health are also involved. Student training for this Interdisciplinary Project will occur in Santa Cruz County, with SEAHEC-supported clinical education placements.



*UA Nursing students participated in SEAHEC rotations*

Also beginning this fall is a new "train-the-trainer" project focusing on adolescent health. In addition, SEAHEC has applied for training center status for both Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS) courses. Intensive training programs in the recognition of child abuse and in detoxification at the primary care level are also being planned.

Each year brings new opportunities for educational activities, and SEAHEC continues its work to provide quality programs throughout its three-county service region in southeast Arizona.

# 1993-94 Individual AHEC Accomplishments

## Western Arizona Area Health Education Center (WAHEC)

### Student Recruitment into Health Careers

WAHEC's student health career programs totaled 14 this past year with over 1,500 elementary, junior high, high school, and college students attending "Hands-on-Health" Career Day programs, health career fairs, and other health career forums. In addition, WAHEC assisted the Junior Pre-Med Health Club in Mohave County with their extracurricular activities. One highlight of the year for the health club members was traveling to Phoenix for the Arizona Hospital Association's "Hands-on-Health" Day held in the spring.

Nine 10th grade students from Yuma, La Paz, and Mohave Counties attended the **AzaAHEC Summer Health Careers Camp** held at Northern Arizona University in Flagstaff, Arizona. Students learned about a variety of health care professions straight from the source -- the professionals themselves. It was an exciting week for all, with the added opportunity of being able to experience campus life. Five high school juniors attended the **University of Arizona's Med-Start Program** in the summer of 1994. This seven-week program zeros in on students who have already decided that the health care field may be for them.



*1994 AzaAHEC summer health careers program participants*

### Health Professions Students Clinical Education Rotations - WAHEC Region:

During fiscal year 1993-94, the Western Arizona Area Health Education Center (WAHEC) provided health professions rural rotations for about 15 students and medical residents in La Paz, Mohave, and Yuma Counties.

### Pharmacy Student Rotations

One major source of student rotations in the WAHEC service area is the University of Arizona's College of Pharmacy, whose Clerkship Coordinator, Karen Sauer, places students in WAHEC communities. WAHEC sponsored nine (9) pharmacy students in clinical rotations this past year.

Visiting Yuma County were pharmacy students: Matt Curley, Keith Packard, Joshua Villareal, Wendy Cantrell, John Musil, Lillian Keilholtz, and Aldona Manka. Within Yuma, the two main sites for pharmacy student rotations are the Yuma Regional Medical Center's (YRMC) Department of Pharmacy and the Kachina Pharmacy, a retail pharmacy located across the street from the hospital.

YRMC Pharmacy Manager Tom Van Hassel welcomes every opportunity to work as a preceptor for students. He knows the value of hands-on work for these students, many of whom may be experiencing their first opportunity to work in a pharmacy when they come to Yuma. Matt Curley and Keith Packard did their rotations at YRMC in September of 1993. Of this experience, Matt noted that he was able to apply his clinical pharmacy knowledge, as well as see the results of his interventions. Wendy Cantrell related that developing an appreciation for the cost of drug therapy and the importance of maximizing its usage was one of the benefits of her experience.

## 1993-94 Individual AHEC Accomplishments (WAHEC)

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Working at Kachina Pharmacy were Joshua Villareal, Lillian Keilholtz, and John Musil. These students were given the opportunity to understand the importance of over-the-counter patient education and to learn about the business of a retail pharmacy. In addition, the Kachina Pharmacy helps students learn about home health supplies.

Anthony Liska chose the USPHS Indian Hospital in Parker (La Paz County) for one of his clinical rotations. While there, he became familiar with the Colorado River Indian Reservation, and its people, and about how the Public Health Service Hospitals operate. "I had a good experience with the Native Americans, which was completely new to me," commented Tony.

Traveling to Mohave County and Kingman Regional Medical Center (KRMC) was University of Arizona pharmacy student Kathleen Chan. Kathleen rated her experience there as very important. "Although KRMC is a small hospital, I feel the size was ideal for someone who has no hospital experience. The pharmacy staff was a pleasure to work with -- they made me feel very comfortable." Kathleen found it a great place to learn about her future profession and believes that a pharmacy student can learn just as much at a smaller hospital as at a larger one in Phoenix or Tucson.

### **Medical Student and Resident Physician Rotations**

University of Arizona first-year medical student, Catherine Harmon, wanted to extern at the Valley Health Center Family Planning Center located in Yuma, Arizona for two reasons: first, to visit a rural site, and, second, to have an opportunity to practice her second language, Spanish. She reported finding Yuma to be an excellent learning experience for both! Her work experience helped her develop skills in performing breast, PAP, and pelvic exams, as well as counseling clients on birth control. "My Spanish proficiency has improved greatly, and I can now feel comfortable doing an interview and a patient exam in Spanish."

Bullhead Community Hospital (BCH) is now a family practice residency rotation site for their affiliate, Phoenix Baptist Family Medicine Center. WAHEC has helped sponsor four resident physicians so far this year. They are: Nisal Samarasekeral M.D., Michael Tushla M.D., Griffin Cipolla D.O., and Tracy Saffer M.D. These residents have learned about the limitations in a rural community, noting that, "Referrals are not as easy here -- limited to minimal preventative services and a few specialists -- with a subsequent over-utilization of the emergency services with non-emergency problems," a problem that most rural health care providers know all too well. All the medical residents reported very positive experiences in Bullhead City. Michael Tushla found that Bullhead Community Hospital offered a great opportunity for a wide variety of complex medical conditions.

**Rural Primary Care Education is Highlighted by the WAHEC/Bullhead Community Hospital/Phoenix Baptist Hospital Emergency Room Residency Program:** In this program, WAHEC provides travel support to the rotating medical residents. Rotations at other sites in Mohave County (Dolan Springs, Peach Springs, Mohave Valley) are also being supported by the WAHEC.

### **Midlevel Health Professions Students**

Staci Jett came to Bullhead City from the University of Colorado for her physician assistant rotation with Dr. Cynthia Brennan at the Silver Creek Family Practice Office. She reported that one of the highlights of her rotation was being able to counsel an HIV-infected patient. Gaining knowledge about money and insurance limitations was another unique aspect of her rotation.

### **Nursing Career Ladder**

**Arizona State University (ASU) School of Nursing -- Masters in Nursing Program in Yuma County:** Ten registered nurses from Yuma County received their Masters in Nursing degree from Arizona State University this past year. The two-year program was financially supported by the Western Arizona Area Health Education

## 1993-94 Individual AHEC Accomplishments (WAHEC)

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Center, which provided funds for faculty travel and lodging in Yuma. To complete their masters degree, the students developed community programs/projects in their specific area of interest/expertise that would benefit patients/clientele in the community. These projects included:

**Immunization Project:** A project to increase age-appropriate immunizations in Yuma County for children aged two and under.

**Support Group for Critically Ill Clients and their Families:** Development of support groups for critically ill clients and their families that benefit the long-term outcome of the patient.

**Post-Partum Home Follow-up Program:** A follow-up program for high and low-risk mothers and infants who have short stays at the local hospital.

**Post-Partum In-patient Follow-up Discharge Program:** A discharge educational program that contains condensed instructions of the most useful information, thus allowing more rest time for the post-partum women.

**Other Projects:** Music Therapy for the Critically Ill Patient; Pain Assessment in the Patient; and a Cancer Prevention and Control Project for Somerton, Arizona.

### Continuing Education for Health Professionals

During 1993-1994, WAHEC sponsored and cosponsored a total of 110 continuing education programs for 2,200 physicians, nurses, emergency medical providers, respiratory therapists, pharmacists, and behavioral health professionals in the tri-county region.

By example, WAHEC provided the Community Emergency Response Training (CERT) Program in La Paz County. This is a training program provided through St. Joseph's Hospital and Medical Center at the Parker Community Hospital. WAHEC subcontracted with St. Joseph's Hospital to provide the CERT program

on a monthly basis during FY 1993-94, reaching approximately 100 pre-hospital providers in La Paz County.

### Community Health Education Programs

During 1993-1994, WAHEC provided community health education programs reaching 3,000 individuals on such topics as cancer prevention, self-esteem, and medication awareness for seniors (Medi-Sense).

### WAHEC Special Initiative Programs

**WAHEC/Health Education Training Center (HETC) Project:** By initiating a community-oriented and community-based strategy, which uses students from multiple health care disciplines, this project extends the basic AHEC mission of educating health professionals and providing health education programs and services for community participants, particularly in border communities.

WAHEC's HETC was instrumental in the formalization and coordination of the Binational San Luis Rio Colorado, Sonora, Mexico/Yuma County, Arizona Health and Environment Council. Subcommittees were established by the Council to address health issues impacting this border area, including Communicable Diseases (sexually transmitted diseases and HIV/AIDS), Drug Abuse Prevention, Maternal and Child Health, Environmental Health, and Emergency Medical Response.

The Binational Council meets on a quarterly basis, with an average of 50 health professionals from both sides of the San Luis R.C./Yuma County border attending these meetings. Two successful projects carried out by the Western Arizona HETC Project this year include:

**HIV/AIDS Education Outreach** - Over 200 people learned about HIV and AIDS in 13 workshops held within Yuma and La Paz Counties for students, teachers, volunteer workers, and *promotoras* this fiscal year. In

## 1993-94 Individual AHEC Accomplishments (WAHEC)

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addition, the Medical Students' Rural AIDS Education Project was presented to over 1500 Yuma County high school teens.

**WAHEC/Border Volunteer Corps (BVC):** A program sponsored by the Corporation for National Service through the Arizona-Mexico Commission, in conjunction with the U.S./Mexico Border Progress Foundation, WAHEC (host site) and its partnership organizations (Behavioral Health Services, Yuma County Health Department, Yuma Says No to Drugs, Catholic Community Services, City of Somerton, Governor's Alliance Against Drugs, and Somerton Migrant Community Health Center) are sponsoring a "Healthy Communities Project" to provide "home-based" education, support, and assistance in accessing a variety of health care services with Border Volunteer Corps members serving as community outreach workers.

**WAHEC/La Paz and Mohave County Health Start/Un Comienzo Sano Perinatal Outreach Program:** Funded by the Office of Women's and Children's Health, Arizona Department of Health Services, through a subcontract with the La Paz and Mohave County Health Departments, this WAHEC initiative provides prenatal outreach services using lay health workers/*promotoras*. In addition to promoting early prenatal care, this program also provides such services as family planning, prenatal and infant nutrition, well-baby care, and immunizations.

**WAHEC/Substance Abuse and Media Project:** Coordinated by the Western Arizona AHEC and the University of Arizona Rural Health Office, this project recently completed 18 months of Substance Abuse Prevention workshops at Somerton Middle School. During 1993 and part of 1994, at-risk students enthusiastically participated in group activities designed to teach them skills to recognize and resist peer influences to use drugs. Through facilitated exercises they also acquired skills and knowledge that enabled them to create their own substance abuse prevention public service messages for the broadcast media. These student-produced prevention messages are now being aired locally as public service announcements.

**WAHEC "Entre Amigas/Between Friends," A Cancer Prevention and Control Project:** A *promotora* project for the prevention of breast and cervical cancer, implemented in the rural Hispanic community of Somerton, Arizona located with Yuma County. The project emphasizes the importance of health promotion/disease prevention in the areas of: good nutrition, healthy life styles, importance of breast and cervical clinical examination, and importance of self-breast examination. This project has been established in Yuma County, thanks to the Arizona State University Nursing Master's Program, Class of 1994, and the Arizona State University Hispanic Research Center, in cooperation with WAHEC.

Thirteen local women attended a series of eight classes to become *Entre Amigas promotoras*. Since their graduation in April 1994, over 25 classes have been given and 196 women have been reached in the communities of San Luis, Somerton, and Yuma.

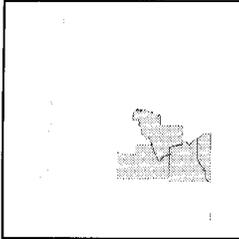


*Promotoras from the Entre Amigas Cancer Control Project*



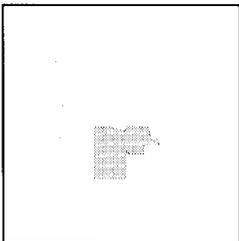
**Arizona Area Health Education Center (AzaAHEC)**

Rural Health Office  
College of Medicine  
The University of Arizona  
2501 East Elm Street  
Tucson, AZ 85716  
602/626-AHEC (2432)



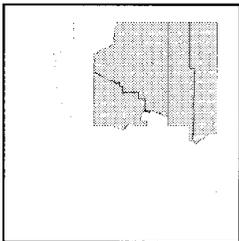
**Central Arizona Area Health Education Center (CENAHEC)**

918 Live Oak Street  
Miami, AZ 85539  
602/473-2422



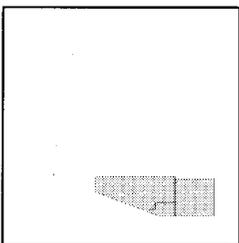
**Maricopa Area Health Education Center (MAHEC)**

4001 North Third Street, Suite 115  
Phoenix, AZ 85012  
602/351-8535



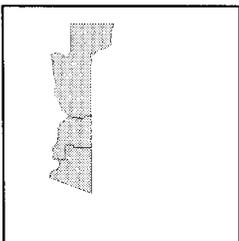
**Northern Arizona Area Health Education Center (NAHEC)**

2501 North Fourth Street, Suite 9  
Flagstaff, AZ 86004  
602/774-6687



**Southeast Arizona Area Health Education Center (SEAHEC)**

1171 W. Target Range Road  
Nogales, AZ 85621  
602/287-4722



**Western Arizona Area Health Education Center (WAHEC)**

Yuma Regional Medical Center - East Wing  
2004 South Avenue A  
P.O. Box 1492 (mailing address)  
Yuma, AZ 85366  
602/726-8270

**All who serve, teach.  
All who teach, serve.**

*Ben Gurion University of the Negev  
Beersheba, Israel*