



University of Colorado  
Health Sciences Center

## CU Health: Reaching out to our communities

The University of Colorado Health Sciences Center has a rich history of providing world-renowned medical advances in education, research and clinical service. For decades, dedicated professionals have joined together to serve the healthcare and educational needs of Coloradans and others throughout the region and the world.

From highly developed urban areas to communities in rural Colorado, faculty and students representing many programs at the CU-Health Sciences Center combine their professional expertise with compassion and devotion to community outreach. This publication highlights examples of their dedication to reach out to Colorado.



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## About the University of Colorado Health Sciences Center

The University of Colorado Health Sciences Center is one of four campuses of the University of Colorado system. The CU-Health Sciences Center, including University Hospital and University Physicians Inc., is a community of 11,000 people with a \$775 million economy. Less than 10 percent of the total budget is funded by state sources. From 1997 to 1998, the CU-Health Sciences Center received more than \$190 million in research and training funds, student aid and gifts from a number of external sources, including the federal government.

The CU-Health Sciences Center is the only academic health center in the region. It is comprised of five schools: medicine, nursing, dentistry, pharmacy and graduate; two hospitals: University Hospital and Colorado Psychiatric Health; and 42 research centers and affiliates.

Affiliated with the CU-Health Sciences Center are such widely respected organizations as:

AMC Cancer Research Center  
Barbara Davis Center for Childhood Diabetes  
Belle Bonfils Memorial Blood Center  
Center for Health Services Research  
The Children's Hospital  
Denver Health  
Eleanor Roosevelt Institute  
JFK Partners  
Kempe Children's Center  
National Jewish Medical and Research Center  
Veterans Affairs Medical Center  
Webb-Waring Institute for Cancer, Aging  
and Antioxidant Research

### Medical research: a high priority for Colorado citizens

A large majority of Colorado residents agree that spending money on medical research benefits the state's economy. In fact, 86 percent of respondents to a recent survey say that it is very or somewhat important to spend money on medical research in Colorado because it adds jobs and benefits residents' incomes. Also, nearly all respondents (93 percent) say it is important for the state to be a leader in medical research. Two-thirds of Coloradans polled favor a proposal to double total national spending on government-sponsored medical research during the next five years.

When asked how the Colorado state government should spend the settlement money it would receive from various tobacco companies, 89 percent feel it should be spent on research into the prevention, treatment or cure of disease.

*These are some of the findings of an independent telephone survey of 800 Coloradans conducted in January 1999 by Charlton Research Co./L. Harris & Associates and sponsored by Research!America, a non-profit advocacy organization. Survey findings were announced in March 1999.*

# A commitment to improve the health care of all Coloradans

The University of Colorado Health Sciences Center is a dynamic organization committed to improving the health care of all Coloradans. In today's fast-paced world, the CU-Health Sciences Center routinely adapts its programs and services to address the ever-changing needs of the people it serves. Some of its most popular programs are described below.

## Community programs offered by the CU-Health Sciences Center

**Outreach Tours** CU-Health Sciences Center leaders make it a top priority to visit Colorado communities monthly to better understand their needs and adapt programs to serve those needs.

**Gove Middle School Partnership** This program offers career shadowing, stay-in-school scholarships, adopt-a-family for the holidays and an art mural project to eighth-graders from a neighboring urban school.

**Mini Med School** An award-winning, eight-week lecture-based course offered free each year to provide the public with a taste of what it is like to be a medical student. Courses are presented at the Denver campus, with satellite broadcasts to five outlying sites in rural Colorado.

**Speakers Bureau** Hundreds of faculty and other health professionals volunteer to speak on health topics to church and civic groups, retirement communities, schools and other organizations in different locations throughout the state.

**Rural Longevity Lectures** Faculty volunteers speak to the general public at lectures in rural areas throughout the state.

**Stout Street Clinic for the Homeless** School of Medicine students, under the supervision of volunteer attending physicians, offer medical services to the homeless in a student-managed, student-operated clinic. Other clinics and service-learning projects were created from the program's 10 years of success.

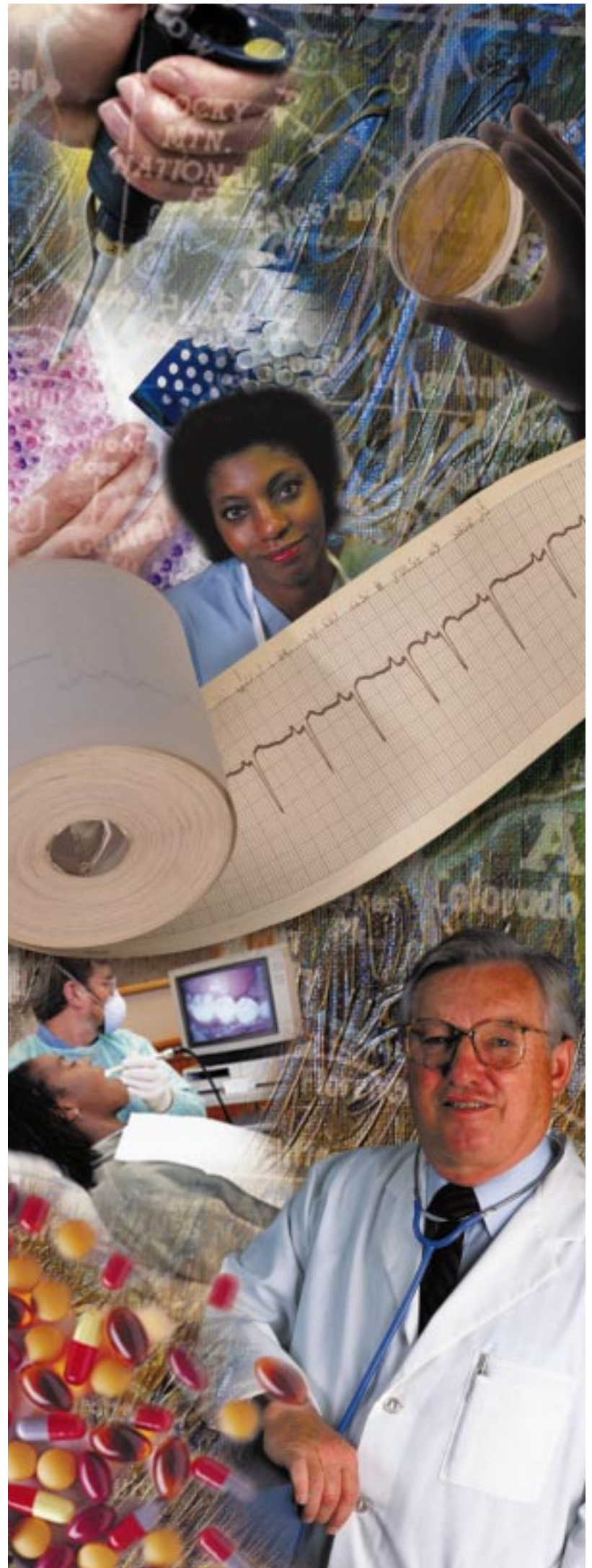
**Salvation Army/Globeville Clinic** Students and faculty volunteer at this primary care clinic that works with individuals in a residential urban alcohol and drug rehabilitation program.

**Camp Wapiyapi** (*Lakota Sioux for "healing"*) Medical students volunteer each year to help with this year-round camp for children with cancer and their families.

**Warren Village** Medical students volunteer weekly to provide clinical services at this inner-city program for low-income single-parent families.

**Angel Trees** Students from all five CU-Health Sciences Center schools set up trees on campus during the holidays and collect gifts for families at shelters for the homeless.

**Health Fairs** Students and faculty volunteer countless hours to staff a variety of health fairs in metro Denver and throughout the state.



## Rich history leads to healthy future

**H**ispanic families have resided in Colorado's San Luis Valley since the time of the Spanish land grants. Many of today's San Luis Valley families trace their roots to people who settled in the area in the 1600s. Anglo families subsequently moved into the area with ancestries from a variety of northern European countries.

The stable population and ethnic diversity make the San Luis Valley a perfect place to study a serious medical problem in the country: the high rate of diabetes among Hispanics. Richard F. Hamman, MD, DrPH, professor and chair, Department of Preventive Medicine and Biometrics at the University of Colorado Health Sciences Center's School of Medicine, has found that Hispanics are two to four times as likely to suffer from diabetes as Anglos.

Aided by a National Institutes of Health grant, Dr. Hamman and his research team have been conducting studies in the San Luis Valley since 1983. The project is specifically focused on type II or non-insulin dependent diabetes, which tends to occur in adults older than 45 years of age. This form of diabetes is far more prevalent than insulin-dependent diabetes, which usually occurs in young people.

Called the San Luis Valley Diabetes Study, it is one of the largest field-based studies of its kind in the world and one of only two current population-based studies of Hispanics in the United States. The diabetes study is part of the larger San Luis Valley Health Studies, which also addresses health and aging, insulin resistance atherosclerosis, genetics and promoting healthy lifestyles in rural communities. There is no shortage of volunteers to participate. Those who live in the area are highly aware of the prevalence and risk of diabetes.

"I think the studies do a good job," says Cordilia Candelaria, 61, who has participated in numerous studies in the valley since 1984. "They give you good information about your health. I like to hear the test results, and I am interested in what has been learned."

Nestled in the valley near the snowcapped Sangre de Cristo mountains, the close-knit people of the San Luis Valley are contributing to medical research that will greatly impact the health of future generations in their own community and throughout the nation. Like their ancestors who settled this land, they are pioneers for those who will follow.



Professional Research Assistant Melissa Lierly checks Cordilia Candelaria's blood pressure as part of the San Luis Valley Diabetes Study.

### Community Service [Research]

#### Rocky Flats Community Assessment

Assessing health and safety concerns for those who live or work within a five-mile radius of Rocky Flats and includes the preparation of a document, titled *A Guide to the Conduct of Community Needs Assessment for DOE Nuclear Weapons Clean-up Sites*. This will become a national project to assist other sites. Research was conducted for the U.S. Department of Energy.

#### Summer cancer fellowships

Providing opportunities for more than 100 high school and college students to work in research labs and clinics. Many of the students are underrepresented minorities.

#### Healthcare delivery to Colorado's rural elderly

Determining how health and wellness are experienced by older people and their families in rural areas, and how health care is delivered to them.

#### Treatment of pain in infants and children

Sharing study results with clinicians throughout the state at seminars and through newsletter articles.

#### Prenatal and infancy home visits for low-income women

Improving the outcomes of pregnancy by helping women reduce their use of harmful substances such as tobacco, alcohol and illegal drugs and helping women obtain medical care. It is also designed to improve the health and development of the child by helping the parent provide responsible and competent care.

#### Colorado Rural Health Scholars Program

The program introduces rural high school students to health science careers and targets minority, economically disadvantaged and first-generation college students. The program provides six weeks of intensive studies and volunteer experiences at the CU-Health Sciences Center.

# Colorado's medical miracle

**B**irthdays, sunsets, family breakfasts and walks in the park have new meaning for Lanai Wallin, a Denver native whom many consider a medical miracle. In 1995, doctors told her she had two months to live. A malignant mole removed 11 years earlier had developed into a life-threatening cancer that traditional chemotherapy could not cure.

On spring break from her job teaching first-graders, Lanai was hospitalized with pneumonia-like symptoms. "When doctors said I had an advanced form of cancer, I thought, 'That's ridiculous. I have a preschool son who's not even registered for kindergarten!'" Lanai said.

Physically and emotionally fatigued, Lanai immediately sought help from a local oncologist who referred her to the University of Colorado Cancer Center's Melanoma Research Clinic. Clinic Director Rene Gonzalez, MD, prescribed a promising new treatment that uses interleukin-2, a biologic agent that stimulates the body's immune system to identify and attack cancer cells. Treatments like this are available only through studies offered by research facilities like the CU Cancer Center.

After four cycles of treatment, plus



Lanai Wallin celebrates the joy of every moment with her husband Joe and her son Taylor.

"one more for good measure," Lanai has remained cancer-free for more than four years. Some say it's a miracle. Perhaps Lanai states it best.

"I fully believe my survival is a result of a triangle of support," she says. "First there's my family and friends. Then there are the skilled practitioners at the CU-Health Sciences Center who have all of the knowl-

edge of research and treatment in one place. And then, there's God."

Today, the energetic 38-year-old runs her own interior design business and cherishes every minute with 9-year-old son Taylor and husband Joe. "I live my life differently now," Lanai says. "I appreciate the joy of every moment."

## Community Service [Clinical care]

**Cancer Clinical Trials** Enrolling 4,133 individuals in 1997-98 for therapeutic and cancer control clinical trials.

**Gilliam Youth Services Center** Providing health care for youth ages 10 to 17. Partnership with Colorado Division of Youth Corrections.

**Public Health Outreach Nursing Service** Providing culturally sensitive, bilingual health assessments, case management and health education to immigrants and refugees who may not understand the U.S. health care system or speak English.

**Samaritan House Clinic for the Homeless** Offering health care to homeless men, women and children.

**Women in Crisis Health Service** Providing health care to victims of domestic violence in Jefferson County.

**Denver School-based Health Centers** Increasing access to primary health care for underserved children at local schools.

**Pharmacies, Clinics and Senior Centers** Providing pharmaceutical care and education to underserved populations via pharmacies, clinics, senior centers and nursing homes throughout the state.

**Genetic Counseling** Offering information to high school students and at-risk populations.

**Rural Colorado Community Assessment of Medically Underserved** Identifying medical needs of underserved populations in Eagle, Pitkin and Garfield counties.

**Dental Outreach for Clinical Services and Training** Providing dental care and education throughout rural Colorado to the underserved, including minority and elderly patients. The program is a national model.

**Chopper Topper** Participating in preventive dental care for children.

**Perinatal/Pediatric Outreach Program** Improving health care for pregnant women, newborns, children and their families throughout Colorado. Collaborative program with The Children's Hospital and University Hospital.

**Mental Health Partnerships with State and Local Agencies** Providing mental health services to at-risk and underserved populations, including juvenile offenders with severe mental illness.

**Uncompensated Care** Programs of the CU-Health Sciences Center, including University Hospital, Colorado Psychiatric Health and University Physicians Inc., provided a total of \$47 million in uncompensated care to the medically indigent as measured in costs during fiscal year 1998.

# “Homegrown” students

## A solution to rural Colorado’s shortage of healthcare personnel

**H**undreds of residents in some of Colorado’s most remote rural communities now have access to the same high-quality health education as urban dwellers. This is possible through a unique partnership between the University of Colorado Health Sciences Center and five community-based Area Health Education Centers (AHECs). With regional offices in Alamosa, Grand Junction/Clifton, Greeley, Pueblo and Denver, AHEC serves every county in the state.

AHEC’s mission is to enhance the supply, distribution, efficiency and effectiveness of healthcare delivery in rural, minority and underserved populations through a variety of educational outreach programs. One program, the Mountain and Plains Partnership (MAPP), offers health educational opportunities to individuals throughout Colorado, Wyoming and neighboring states.

Based at the CU-Health Sciences Center at Fitzsimons, MAPP is comprised of 16 educational institutions, government agencies and community organizations that work together to provide educational opportunities for “homegrown” students. The program’s goal is to improve health care in underserved areas by increasing the number of nurse practitioners, certified nurse-midwives and

physician assistants in those areas. MAPP was established in 1995 with an initial grant from the Robert Wood Johnson Foundation’s Partnerships for Training Initiative.

More than 85 students, including 12 who have now graduated, have used interactive video and computers for distance learning. This high technology has reduced barriers to higher education for those rural and urban students who are committed to underserved communities and who cannot leave their homes and families to go to school while remaining employed.

All MAPP students receive on loan their own TeleLearning Center (video conferencing desktop computer) that provides them with access to the Internet-based MAPP ONLINE Common Curriculum and TeleHealth Information Systems. Students have access to professional journals and global library resources.

MAPP continues to expand its services. New interactive video sites have been established at Montrose, Craig and Cortez.

“The past two years have been very exciting,” says Elinor M. Greenberg, EdD, MAPP regional coordinator. “MAPP has opened up new opportunities in higher education for rural residents. We are proud to be at the forefront of technology-based education for the 21st century.”



Four of the first CU-Health Sciences Center’s MAPP program graduates are, from left, Theresa Balet, Montrose; Suzanne Carmody, Montrose; Lynne Bigler, Grand Junction; and Margaret Franz, New Castle. Other members of their class not pictured are Vicki Brownrigg, Alamosa, and Cheryl Chesnut, Craig.

## Community Service [Education]

### Drug Information Center

Provides free, statewide access to pharmaceutical information and research.

### K-12 Outreach/Service Program

Introduces economically disadvantaged rural high school students to medical careers.

### Colorado/Wyoming Junior Academy of Sciences

Provides 400 students representing 24 high schools with health career information.

### High School Teachers Research Residency Program

Recruits minority students into science and medical careers through intensive summer training of teachers.

### Tar Wars

Educates fifth-graders about the dangers of tobacco use.

### Lunch and Book Buddies

Medical and nursing students volunteer weekly to read to and have lunch with students at a neighboring elementary school.

### Outreach Graduate Nursing Education

Provides outreach graduate nursing education to rural Colorado.

### Seeds For Health

Teaches health nutrition to third-graders throughout the state.

### Healthy Nations Initiative

Offers financial support, programmatic supervision and technical assistance to 14 American Indian and Alaska native communities.

### Colorado AIDS Education and Training Center

Educates primary healthcare providers about HIV infection, including prevention, diagnosis, treatment and psychosocial issues.

### CU Student Rural Health Network

Hosts an annual *Rural Health Week* to support and stimulate interest in rural health care.