

The Changing Face of Academic Health Centers: A Path Forward for the University of Colorado Denver

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Abstract

This article describes a decade of major changes at an academic health center (AHC) and university. The authors describe two major changes undertaken at the University of Colorado and its AHC during the past 10 years and the effects of these changes on the organization as a whole. First, the AHC's four health professional schools and two partner

hospitals were completely relocated from a space-limited urban campus to a closed Army base. The impact of that change and the management of its potential disruption of academic programs are discussed in detail. In the middle of this total relocation, the AHC campus was consolidated with a general academic campus within the University of Colorado

system, compounding the challenge. The authors describe the strategies employed to implement this major consolidation, including changing the organizational structure and selecting the new name of the university—the University of Colorado Denver.

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It is hard to imagine a time when Americans have needed the unique benefits and contributions of academic health centers (AHCs) more than they do today. As our population ages and health care workforce training becomes more constrained, it is imperative that AHCs remain the strong and vibrant centers of health care learning, research, and clinical care that they are today.

Yet, many AHCs are encountering difficulties—financial difficulties in light of rising health care costs, expanding research in an environment of flat or declining National Institutes of Health funding, declining state support for education—and have to adopt new strategies to thrive. Although the old adage, “If you’ve seen one medical school, you’ve seen one medical school,” is equally apropos to AHCs, one commonality among AHCs is that sustaining—let alone growing—them to serve the needs of society has consistently been a challenge. From the build-out of hospitals after World War II, to the recognition in the 1960s that physician

practice plans could generate funds, to the advent of increased federal funding for research, the economic underpinnings for AHCs have evolved along with the makeup of the populations they serve.

This constant evolution has been the case for our AHC, previously known as the University of Colorado Health Sciences Center (UCHSC). Two enormous changes—practically unprecedented among AHCs—are fundamentally redefining its identity. We describe the history and nature of these changes as our AHC continues to adapt to a shifting landscape to serve its mission with ever-increasing excellence. The stories we tell are distinct from one another, but they are alike in the magnitude of their impact on the cultural and physical settings of the AHC, and the lessons we learned along the way may serve to inform similar changes at other AHCs.

The Rebirth of a Campus

History

The medical school (established in 1883) and Colorado General Hospital (later renamed the University of Colorado Hospital [UCH]) had shared a building near downtown Denver until 1965, when the state appropriated the funds for a new hospital across the street. The medical school took over the old hospital space, and the two buildings were connected by a five-story research bridge. Although the research bridge space accommodated the early expansion and growth of the research enterprise of the medical school,

the new building was the last for the medical school for the next 25 years. In 1976, the UCHSC was formally established when the school of medicine (SOM) and partner hospital was joined by the school of nursing (established in 1936) and the school of dentistry (established in 1973). Although the additional research bridge space accommodated the early expansion and growth of the research enterprise of the medical school, the new building was the last for the next 25 years.

In 1992, plans were approved for a five-story research building to house cancer, neurosciences, and molecular biology research programs. The medical school was so short of space that the departments of medicine and pediatrics and the dean's office contributed an additional \$3.0 million to build three additional floors of research space in the new building. Two years later, the school of pharmacy moved from the Boulder campus to the UCHSC campus and took much of the last remaining land available for building on the downtown campus. By this time (1994), UCHSC had outgrown its facilities. Surrounded entirely by residential neighborhoods and six individual neighborhood associations whose residents were concerned with parking and congestion, it became clear that developing a facilities expansion plan to suit everyone involved was very unlikely.

Room to grow

In 1994, Lowry Air Force Base (which was located two miles east of the campus)

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closed, and UCHSC was offered 55 acres of its land for a price of \$6.5 million, but the offer was not accepted because of a lack of funds. However, later that year, Congress closed the Fitzsimons Army Medical Base (located approximately six miles from the campus) in Aurora, the state's third-largest city. The health sciences schools had used Fitzsimons facilities for decades for training medical, nursing, pharmacy, and dental students. In fact, 30% of all medical student clerkship experiences were already provided at Fitzsimons. After investigating potential opportunities to expand into this space, it became evident that the Army could, under the Base Closure Act, convey the one-square-mile property to the U.S. Department of Education, which could, in turn, convey the property to a nonprofit educational institution. The city of Aurora also was crafting a proposal to develop a bioscience park and associated development on the same site. Because the space constraints faced by UCHSC on its current campus limited its development as a state-of-the-art AHC, the then UCHSC chancellor and the UCH president determined that the move was essential to the future of the health sciences in the region. Within a short time, the city of Aurora and UCHSC agreed to a plan that would grant UCHSC 227 acres to build a new AHC, and the city 323 acres for a planned bioscience park and affiliated development projects. Although the initial estimates were in the range of 20 to 50 years for the build-out of the UCHSC portion of the campus, a financial feasibility study was performed, and the revised estimate—which was independently validated by the Urban Land Institute—predicted that most of the build-out of the educational and research facilities could be achieved by 2012.

The planning stage

In the fall of 1997, the University of Colorado Board of Regents, a publicly elected board that oversees the entire University of Colorado system, voted unanimously to move the entirety of the health sciences disciplines to the former Fitzsimons base. The UCH board also voted unanimously to make the move. The hospital board comprises a representative from each of Colorado's seven congressional districts as well as two at-large members. By state statute,

three of the nine positions are filled by the University of Colorado, and the chancellor of UCHSC serves as the chair (the state statute was revised during the 2007–2008 legislative session, and the hospital board now comprises 11 members, of whom four will be from the University of Colorado, effective August 2008). Additionally, the Fitzsimons Redevelopment Authority was formed to oversee the development of the biosciences park portion of the full build-out and to provide effective management, maintenance, and oversight throughout the redevelopment corridor. To fully integrate the needs of the city of Aurora with those of the university, the Fitzsimons Redevelopment Authority Board comprises a member of the University of Colorado Board of Regents, representatives from UCHSC, representatives from UCH, and representatives from the Aurora civic and governmental community.

As the Army spent two years phasing out its operations on the base, UCHSC leadership began a master planning process that envisioned a campus with research and teaching facilities as well as space for its affiliated partners and hospitals. While the health sciences disciplines of UCHSC were engaged in this master planning, the university hospital was doing its own master planning under its own governance structure. Plans included outpatient facilities such as an eye institute, a clinical cancer center, and an ambulatory care facility. Construction on these facilities began in 1998, and they were opened in 2002. The UCHSC master planning process resulted in the decision to build zones corresponding to the missions of UCHSC rather than dividing the campus into distinct schools, and three zones—research, education, and clinical care—were designed.

Funding

As a national and statewide economic downturn unfolded in 2002, it became clear that the precipitous decreases in construction costs and financing would allow UCHSC to build space more quickly than originally planned, thus speeding up the build-out projections substantially from the initial 2012 estimates. These positive developments were given a further boost by the decision of The Children's Hospital in Denver (TCH) to move from its facilities, which

were located approximately four miles from the old UCHSC campus, to the new campus. Like UCHSC earlier, TCH found itself in aging facilities and unable to expand beyond its landlocked borders. The unanimous decision of the TCH board also allowed the reunification of the pediatric faculty of UCHSC in one location (the pediatric programs had physically moved from the old UCHSC campus to TCH in 1990).

Philanthropy was an important source of funding to further accelerate the pace of building. Private funding facilitated the building of the cancer center, the outpatient pavilion, the eye institute, a center for oral facial clinical practice and research, and a center for diabetes treatment and prevention. The largest general campus gift totaled \$91 million. The majority of gifts from this donor came at the very earliest phase of the campus development and served as a catalyst for further investment in the campus. In recognition of the important role played by these early gifts from businessman Philip Anschutz, the new campus was renamed the Anschutz Medical Campus in November 2007.

As building continued on the campus, an additional funding source became available to assist UCHSC and its affiliates to more quickly develop the campus. In 2003, the Colorado General Assembly approved a previously unused funding mechanism, called certificates of participation (COP), that allowed UCHSC to begin a \$202 million construction project on seven buildings including all the facilities planned for the campus' educational zone. Under the COP, the state pays annual lease payments to a trustee-lessor, allowing UCHSC to occupy and use the facilities. The trustee raises funds to build the facilities by issuing COPs, which gives the holders the right to receive a portion of any annual lease payments.

The COP mechanism could not be used to fund research space. By the late 1990s, the research enterprise at the UCHSC had grown to be quite sizable, with annual expenditures of approximately \$110 million. Bonds were issued to finance the building of research space with the intention of using future indirect cost allocations from research grants to service the debt. The first research

facility, which cost \$216 million and contains 500,000 square feet of basic science research space, was opened in 2003. The second research building, containing an additional 550,000 square feet of research space, opened in August 2008.

Addressing the challenges of change

Although many factors lined up fortuitously to assist UCHSC in funding the new campus construction to the specifications of the initial master plan and well ahead of the initial timeline, the internal decision making posed the greatest challenges in making the Anschutz Medical Campus a reality. Although there currently exists a consensus among faculty, students, and staff that moving to the new campus offers tremendous opportunities and was the correct decision, it was not always that way. Although the board of regents, the president of the University of Colorado system, the chancellor of the UCHSC, and the president of the UCH were unwavering in their decision to move, raging debates on the wisdom of this move were commonplace among the faculty, particularly within the SOM. The leadership of several departments and, in particular, the department of medicine, the largest and best research-funded department, argued that the move would drain resources from the institution and retard the research mission of the school and the AHC. Their argument, in part, was that the resources going into the buildings would be better spent supporting research programs. While these arguments raged, the planning went on, which led to the marginalizing of input from other SOM department chairs, who were not included in the planning process to the extent they felt appropriate. In hindsight, it is obvious that the plan would have greatly benefited from their more active engagement.

Ultimately, buy-in of the faculty for this move was achieved. Among the many factors that likely contributed to the buy-in are the following:

- Recognition that the planned facilities were indeed going to be built and that these facilities were going to be superior to the existing facilities.
- The decision by TCH to move to the new campus, thus allowing the reunification of the pediatric faculty.

- Allowing those departments and divisions of the SOM that wanted to move the opportunity to move first, and supporting faculty who made the move.
- The establishment of a more open line of communication between the faculty and the administration.

Change is often difficult. The lives of many faculty, staff, and students have been disrupted, and they have had to endure, and continue to endure, major inconveniences. The fact that the “project” is now almost completed is a testament to the far-reaching vision and heroic leadership of UCHSC and hospital (both UCH and TCH) leadership, the resilience of our faculty and their overriding desire to pursue even greater excellence, and the assistance of multiple partners including the city of Aurora, state legislators, and private philanthropists. At the time of this writing (April 2008), both UCH and TCH have moved into their new facilities, and 3.4 million square feet of additional education, clinical, and research facilities have been completed. The monetary investment thus far has totaled more than \$2.3 billion dollars. All of the health sciences students began classes in the new, state-supported educational space in January 2008. With the completion of the second research building in August 2008, the remaining research faculty from the departments of medicine and neurology moved to the new campus, and the entire enterprise will have accomplished this move in a little more than 10 years.

The Making of a Comprehensive, Premier Research University

As planning and building continued on the new UCHSC campus in Aurora, University of Colorado leadership began to consider the future of both this campus and the Denver campus, which consists of eight schools and colleges and provides comprehensive educational programs.

Background

To have a context for the eventual reorganization of the University of Colorado, a brief explanation of its history and governance would be useful. The University of Colorado has an elected board of regents with nine members who each serve six-year terms,

renewable once. The regents appoint the president of the University of Colorado, who oversees the entire university system. The University of Colorado began in Boulder, Colorado, in 1876, and a constitutional amendment in 1912 allowed the university to exist outside of Boulder, opening the door for extension campuses in other areas of the state. In the mid-20th century, the University of Colorado operated from its Boulder campus, and the other campuses in Denver and Colorado Springs were considered extension campuses.

Although the Boulder campus was initially the primary administrative home of the University of Colorado, over time these extension campuses and the UCHSC campus began to function as their own entities, each headed by a chancellor, to whom the deans of the individual schools and colleges reported. By 1972, both the Colorado Springs campus and the Denver campus were independently accredited by the North Central Association of Schools and Colleges (NCASC). As noted earlier, the University of Colorado Medical Center was renamed the Health Sciences Center in 1976. The university's four campuses, as well as the chartering for the University of Colorado system, is contained in the Colorado Constitution¹ and is further clarified in state statute.² The delineations of the four campuses appear as follows:

1. The Boulder campus of the University of Colorado shall be a comprehensive graduate research university with selective admission standards. The Boulder campus of the University of Colorado shall offer a comprehensive array of undergraduate, masters, and doctoral degree programs. The Boulder campus of the University of Colorado has exclusive authority to offer graduate programs in law. The Colorado commission on higher education, in consultation with the board of regents, shall designate those graduate level programs that are the primary responsibility of the Boulder campus of the University of Colorado. The university has the responsibility to provide on a statewide basis, utilizing when possible and appropriate the faculty and facilities of other educational institutions, those graduate-level programs. The commission shall include in its funding recommendations a level of general fund support for these programs.

2. The Denver campus of the University of Colorado shall be an urban comprehensive undergraduate and graduate research university with selective admission standards. The Denver campus shall offer baccalaureate, masters, and a limited number of doctoral degree programs, emphasizing those that serve the needs of the Denver metropolitan area. The Denver campus has statewide authority to offer graduate programs in public administration and exclusive authority in architecture and planning.
3. The Colorado Springs campus of the University of Colorado shall be a comprehensive baccalaureate university with selective admission standards. The Colorado Springs campus shall offer liberal arts and sciences, business, engineering, health sciences, and teacher preparation undergraduate degree programs, and a selected number of masters and doctoral degree programs.
4. The Health Sciences Center campus of the University of Colorado shall offer specialized baccalaureate, first-professional, masters, and doctoral degree programs in health-related disciplines and professions. It shall be affiliated with the UCH and other health care facilities that offer settings for education, clinical practice, and basic and applied research. It shall have exclusive authority in medicine, dentistry, pharmacy, and physical therapy.¹

Consolidation: Distinct missions with a common future

A new president for the University of Colorado system arrived in 2000. The president, in an earlier career, was provost at the University of Illinois–Chicago, which consolidated its urban undergraduate campus with its health sciences campus 25 years ago. The new president decided to implement a similar change at the University of Colorado and announced a potential consolidation of the University of Colorado at Denver (UCD) and the UCHSC. A study was begun to determine the feasibility of joining the two campuses into a single institution, each with distinct missions but sharing a common future. This study occurred during the same time as the planned retirement of both the chancellor of UCHSC and the chancellor of the UCD,

and the chancellor of UCD did retire in 2003. After much discussion, the chancellor of UCHSC agreed to stay on through the consolidation feasibility study, accepting the first joint appointment as chancellor at UCHSC and interim chancellor at UCD.

On the basis of the feasibility study findings, which were developed by committees comprising faculty, staff, and students from all the University of Colorado campuses, the board of regents voted to consolidate the UCHSC and UCD campuses into a single institution in July 2004. At the time, the study found that opportunities for cross-disciplinary research could improve grant funding and educational opportunities for all students. Additional findings included budget diversification, particularly for UCHSC, as a reason consolidation could contribute to the long-term success of both campuses.

The chancellor of the combined institution, now named the University of Colorado at Denver and Health Sciences Center (UCDHSC), eventually retired in 2005, and an interim chancellor was selected while a search for a permanent chancellor was undertaken. In August 2006, one of the authors (M.R.W.) began his duties as chancellor of UCDHSC. During the first year of consolidation, all of the administrative units were consolidated, including areas such as human resources, institutional research, budgeting, information technology, and facilities maintenance. Although these budgeting and operational areas merged almost immediately, for the most part, the campuses continued to function as separate entities with very different cultures.

Facing the challenges of consolidation

Consolidating a general academic campus with a health sciences campus is difficult, and perhaps the most challenging aspect is bridging the cultural differences. For example, the general academic campus functions on a nine-month calendar, whereas the health sciences campus functions on a 12-month calendar; the general academic campus faculty receive virtually all of their salaries from either state appropriations or tuition, whereas the health sciences campus faculty are much more entrepreneurial in salary support; the budget model is highly centralized through the provost on the general academic campus and is highly

decentralized through the individual health professions schools on the health sciences campus; and expectations of the faculty, staff, and students with regard to governance and the process of decision making differ between the two campuses. Additionally, in our case, the UCHSC was very mature in its research enterprise with research expenditures of \$358 million in 2007, whereas the general academic campus was still developing its research culture and capabilities with research expenditures of \$35 million.

Although we understand that full consolidation of two previously distinct institutions into a single university entity is a long-range process that may take decades, we have undertaken very aggressive steps to accelerate the process during the past year. The major initiatives, discussed in detail below, have included the following:

- changing the organizational structure of the consolidated university's executive leadership team to better align with achievement of UCDHSC-wide goals;
- initiating a UCDHSC-wide strategic planning process that will also serve as a planning document for a 2010–2011 university accreditation site visit; and
- changing the name of UCDHSC and initiating a comprehensive branding effort.

Organizational restructuring

A university must be administratively organized in a way that will facilitate achieving university-wide goals. Ours was not. After extensive input was solicited from faculty, staff, and students, a major reorganization of the executive leadership was undertaken to realign our administrative structure with the university-wide goals. The highlights of the restructuring were as follows:

- changing the position of executive vice chancellor, which historically was a UCHSC position, to a new position, vice chancellor for external affairs, with responsibility over engagement of the business communities and legislators of both Aurora and Denver;
- creating the position of vice chancellor for health affairs and combining this position with the position of dean of the SOM;

- expanding the role of provost on the general academic campus to include the title of vice chancellor for academic and student affairs, with broad oversight responsibilities over academic support, student services, and academic processes on both campuses;
- creating a new position, vice chancellor for university initiatives, with broad responsibilities for consolidation efforts, such as preparation for university accreditation, executive-level oversight of the newly consolidated graduate school, and creation of a new school of public health;
- expanding the role of chief of staff to include the title of vice chancellor for university advancement, with oversight responsibilities over university-wide alumni affairs, institutional development, and marketing/communications; and

- creating a new position, associate vice chancellor for diversity and inclusion, with broad oversight responsibilities over university-wide diversity policies and efforts and which coordinates with and augments efforts in place within many of the individual schools and colleges.

Such major changes must be made with the knowledge that faculty and staff will appropriately be attentive and will likely question the cost of the reorganization in balance with spending on academic support and programs. In our case, through the elimination of some positions that were specific to each campus and the expansion of other positions, the above organizational restructuring was achieved without a net increase in the number of administrative leaders. In fact, an executive organization comparison preconsolidation and

postconsolidation showed the same number of positions and a net increase in spending of only \$20,000. During the same period, the administrative budget increased from \$227 million to \$280 million, and virtually all of the funds were spent on covering an increase in mandated costs and on academic support. The current administrative structure of the consolidated university is shown in Figure 1. We believe that this administration structure will serve us at least through our initial accreditation site visit. At that time, the need to make additional modifications will be assessed.

University-wide strategic planning

In response to a request from the board of regents, UCDHSC began a university-wide strategic planning process in March 2007. By coincidence, the timing was also appropriate for planning work that

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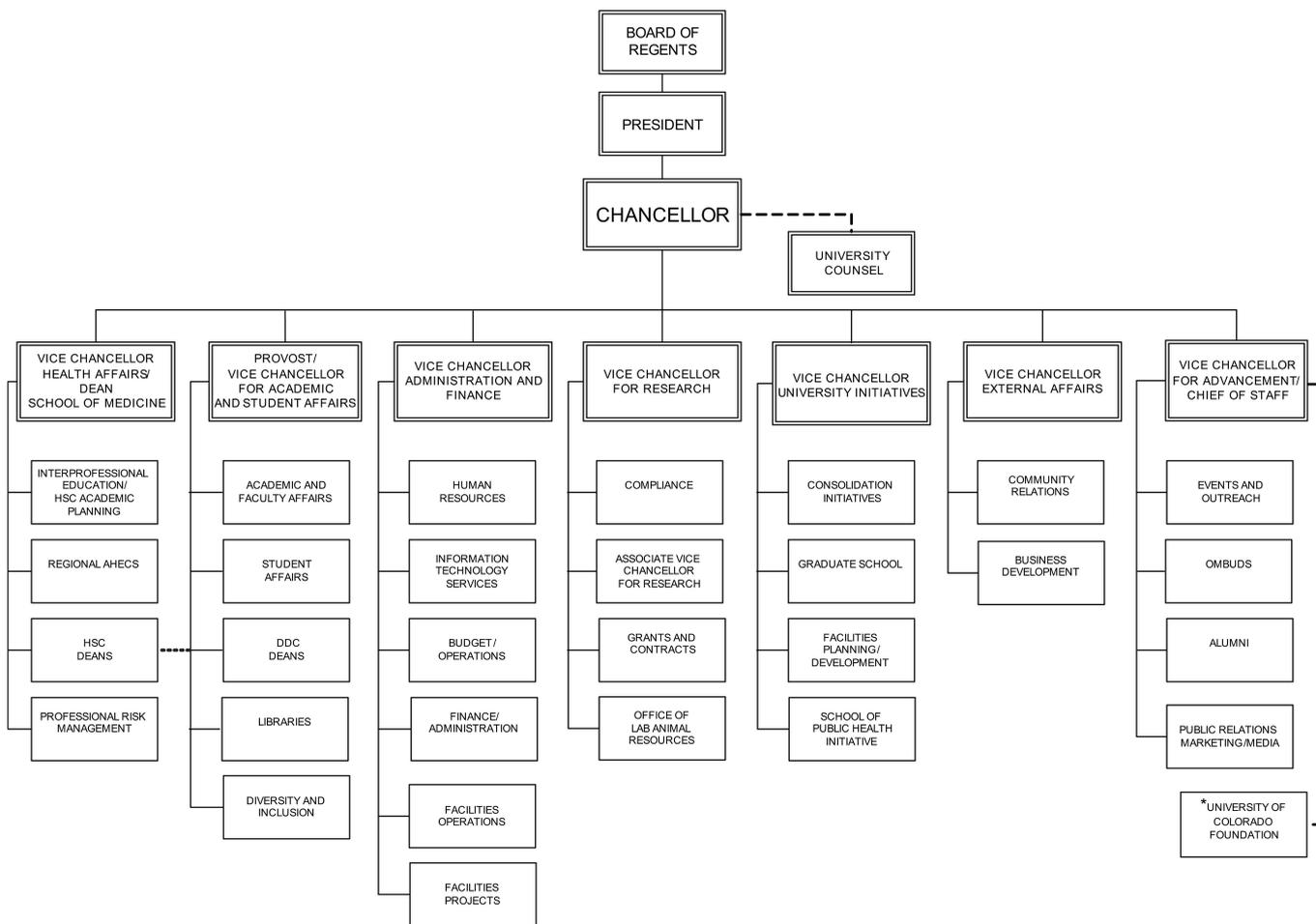


Figure 1 General organizational chart for the University of Colorado Denver, October 2007.

*Manages campus relationship with University of Colorado Foundation with policy direction from chancellor.

needed to commence in preparation for a site visit by NCASC in the 2010–2011 time frame for consideration of accreditation as a consolidated institution. Task forces were formed to address the following areas: mission, vision, and values; discovery, creativity, and innovation; engagement; health care; institution image; learning; and resources. More than 200 faculty, staff, and students from both campuses have worked intensely alongside the administration to produce an overarching plan that will serve as both a strategic plan and a NCASC accreditation planning document. The strategic plan was approved by the board of regents in March 2008 and can be accessed at (<http://www.ucdhsc.edu/admin/upac>).

Name change

The name, University of Colorado at Denver and Health Sciences Center, accurately reinforced the consolidation and had served as an effective placeholder. However, it had limitations as a permanent university name, not the least of which was its length. In January 2007, a marketing consulting firm was hired, and work began on identifying a new university name. Focus groups of key stakeholders, both internal and external to the university, were consulted. This was followed by a Web-based survey of the university community and a random, phone-based survey of the metropolitan Denver community. After discussion of the survey results with the university community through open forums, a final round of yet another survey was administered to the university and metropolitan communities.

This process of identifying a new name has generated some intense discussions.

Many people have expressed strong opinions either for or against specific naming options. Some of the differences in opinion have been divided along campus lines and some along city lines (i.e., Denver and Aurora). One fact has become very obvious: whatever name is selected, some people will find it unsatisfactory and will object to it.

The name, University of Colorado Denver, was selected and approved by the board of regents in January 2008. A bigger issue than the actual name of the university is the underlying work we must conduct to create awareness of the university by its new name in our key strategic areas through effective branding and marketing. One of the challenges is to brand the new, consolidated university as a premier research university that is affiliated with, but is separate and distinct from, the University of Colorado at Boulder. Another is to brand the newly consolidated university as a single entity while simultaneously marketing the Anschutz Medical Campus and downtown Denver campus differently to separate audiences. A key component of our strategy was to develop a new university logo, and this is near completion. We also plan to enhance the identity of the 13 schools and colleges of the university and to market them aggressively. In a past effort to promote the identity of the UCHSC, the individual schools had lost their identity. For example, a professor in the department of pediatrics in the SOM would have been identified as a professor of pediatrics at UCHSC. Under the umbrella of the new university name, faculty affiliation will be with their school on either the Anschutz Medical Campus or the downtown Denver campus.

Ultimately, the new university name will come to reflect not what it is now but what we become as a consolidated institution. That, in turn, will be influenced by the strategic plan and the dedicated work of our faculty, staff, and students. We are further along than we were last year, but there is much more to do.

Summary

The past 10 years have been a time of massive change for our AHC. Historically, only a few AHCs have been consolidated with a general academic campus to form a new university entity. In fact, just two, the University of Illinois–Chicago in 1982, and the University of Alabama–Birmingham in 1966, have undertaken consolidation in recent memory. We are not aware of another AHC that has moved completely—with its affiliated hospitals—from one location to another. These changes have occurred during a time of extreme budget cuts to our AHC, and the budget has yet to be restored to the 2001 level. The physical and organizational upheaval has been particularly difficult for our faculty and staff, yet they have endured. The move is now completed, and the consolidation is well underway. The ultimate reward for all of us is that the university we are building will be a great one, and, years from now, hindsight will prove that both decisions—to move the AHC to the Anschutz Medical Campus and to consolidate the AHC with the general academic campus—were the right ones and the best ones.

References

- 1 Colorado Constitution, Article XIII, Section 5 and Article IX, Section 12 and 13.
- 2 State of Colorado Revised Statutes, 23-20-101.

Did You Know?

In 2003, Ohio State University College of Medicine and Public Health researcher Christopher Walker, PhD, discovered the role that helper T cells play in controlling infections caused by tumor viruses.

For other important milestones in medical knowledge and practice credited to academic medical centers, visit the “Discoveries and Innovations in Patient Care and Research Database” at (www.aamc.org/innovations).