Program Plan

Ethics and Humanities Pavilion at Fitzsimons

The University of Colorado Health Sciences Center
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Introduction

The mission of the University of Colorado Health Sciences Center (UCHSC) is to educate and train health care professionals, advance knowledge through research in the health sciences and deliver health care and community service. At Fitzsimons, UCHSC has an extraordinary opportunity to build a campus that will thrust the institution into the top tier of health science centers in the country. This ambitious goal was outlined in the Institutional Master Plan, approved by the University of Colorado Board of Regents and Colorado Commission on Higher Education in 1998. This program plan requests permission to provide a new home for the program of Health Care Ethics, Humanities and Law at the Health Sciences Center which will be an integral part of facilities serving student and academic programs at the new campus.

The Ethics and Humanities Pavilion at the University of Colorado Health Sciences Center’s Fitzsimons campus is a facility critical to the success of the academic mission of the campus. The Program in Health Care Ethics, Humanities and Law was established in 1995 in order to work with students and faculty of the Health Sciences Center, its affiliated hospitals, and the public to address the ethical dimensions of health care. The vision that shapes the Program’s work is the transformation of health care. It seeks to help encourage that transformation by inspiring a balance between science and the humanities in health care delivery and biomedical research. This is accomplished through community involvement, clinical consultations, research, education, and consultations on ethical issues encountered throughout the health care setting.

To be constructed in the early development phase, the center will ensure that a physical presence exists in these critical disciplines to support the educational mission of the campus, and to support the activities of the research and clinical components as well as the broader community. Clinical care already has a strong presence with the opening of the Anschutz Centers for Advanced Medicine in early 2001. The first phase of the UCH inpatient facilities is currently in the design phase, to be completed early in 2004. Complementing these facilities will be Research Complex I, a facility comprised of two buildings totalling more than 600,000 gross square feet, which is currently under construction. It too, has an anticipated completion date early in 2004.

The Future of Health Professions Education - Fitzsimons

In envisioning for the future, the UCHSC will provide interprofessional learning opportunities and offer disciplinary, multidisciplinary, interdisciplinary and transdisciplinary models of curricula in fulfilling its academic mission. Specialized curricula will prepare individuals and groups for specialized roles and functions in the health professions and health sciences (disciplinary curricula), while core curricula will prepare them for shared and
collaborative roles and functions (multidisciplinary, interdisciplinary and transdisciplinary curricula).

Preparing practitioners, scientists and educators to function in an interprofessional environment will emphasize cost-effective role definition using shared information, and will create an atmosphere of mutual trust and respect. The vision for the educational enterprise at Fitzsimons is one that is strongly supported by the community within the UCHSC, within the University of Colorado system, with affiliates and with public constituencies. The education of health care professionals will increasingly occur in collaborative, interdisciplinary environments. Building community across schools aids in bridging gaps and fosters educational connectivity and networking capacities for sharing ideas and working with complementary purposes, combining the shared strengths, assets and resources of organizational units, agencies and institutions in partnership to build a more efficient and effective UCHSC.

Reflecting this vision, the Ethics and Humanities Pavilion will provide a forum for the continuing examination and discussion of issues that are becoming increasingly critical in the education of today’s health professionals. To keep pace with the evolving complex world of health care and the sciences, this facility at Fitzsimons, like the Given Institute in Aspen, could become an important international venue for the open discussion of critical issues of today and beyond, drawing scholars and clinicians from around the world. It could also facilitate and encourage community involvement in the evolving issues of health care by providing a forum for community and multi-professional interaction.

The educational vision also foresees that, in the information age, the concept of learning environments and learning modalities will continuously evolve. The Ethics and Humanities Pavilion will make use of educational technologies to support the basic mission of the center, technologies that could enable remote participation of citizens and health professionals from across the globe in these important sessions.

The program in Health Care Ethics, Humanities and Law touches nearly every student who passes through the Health Sciences Center. The opportunity to touch in some way every citizen in the community is nearly limitless. The development of space to meet the needs of this visionary facility addresses a number of programmatic ideas including:

- Space design that encourages interaction among participants;
- Flexible space to serve multiple functions and purposes;
- Exhibit space for the arts as an specialized and important component of human activity;
- A student and community-friendly and supportive learning environment;
- A location and facility design that encourages casual as well as structured interaction with the elements and activities of the program;
- A facility that is integrated technologically and is adaptable to new technologies;
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Existing Facilities

The UCHSC is among the nation’s top academic health science centers. To reach its goal of becoming a top tier health sciences institution, the new Fitzsimons campus will enable the UCHSC to reach its goal by accommodating program growth to meet the needs through the next century. The UCHSC/University of Colorado Hospital campus space inventory at 9th and Colorado in East Denver currently totals approximately 2.7 million gross square feet (gsf) on a 46-acre campus. The Fitzsimons campus development will involve a phased construction program which can accommodate a total facility development of more than 8 million square feet of education, clinical and research and affiliate program space and associated infrastructure on 217 acres.

The aging facilities and the inadequate physical plant at the 9th and Colorado campus site are significant obstacles to the continued success of the academic programs at the UCHSC. The current space allocated for education programs and activities is inadequate to support changes in curricula and teaching. Space for amenities and quality of life programs is almost nonexistent. Although instructional space has been renovated in the past few years, the renovations merely allow the UCHSC to maintain its status quo in the health profession education marketplace.

The Program is currently providing both interprofessional and profession-specific ethics education on campus but is hampered in these efforts because of current campus educational facilities. Beginning in the 2000-2001 academic year, there will not be a room at the 9th avenue campus large enough to accommodate the students and faculty in the course “Ethics in the Health Professions,” currently required of all CHA/PA, MD, ND, PharmD, and PT students.

A comprehensive study that was part of the institutional master plan process assessed the educational, research and clinical space needed at Fitzsimons. A survey of all Health Sciences Center/University of Colorado Hospital programs showed that during the next 25 years, an 88 percent increase in program space will be needed to support the program development and expansion requirements of the UCHSC and the University of Colorado Hospital (UCH). This includes needed spaces to support the academic mission of the institution. The Ethics and Humanities Pavilion fits into that mold. Currently, the 9th and Colorado Boulevard campus can not provide facilities suitable to support the needs of the program. Existing traditional lecture rooms and seminar facilities do not provide an appropriate venue for the activities and programs of the center. There is no suitable exhibit space, and conference facilities of appropriate size are also non-existent.
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The New Ethics and Humanities Pavilion

As health care continues to be transformed by developments in biomedical research and information technology as well as changes in health care financing, special and sustained attention must be paid to its humanistic dimensions. The scientific search for the causes of and treatments for disease processes must be tempered by the equally fundamental tasks of understanding and responding to the experience of patients and to the concerns of the public, those who fund the biomedical research and health care enterprises.

The relocation of the University of Colorado Health Sciences Center to the Fitzsimons campus offers the unique opportunity to create the premier academic health sciences center of the 21st century. Seizing this opportunity will require bold and creative thinking in order to forge new alliances between the University and its public, foster collaboration among the health professions and the disciplines which shape them, and invigorate the health sciences enterprise with imagination and moral circumspection.

A strong humanities and arts presence at Fitzsimons will help accomplish these crucial objectives. Constructing a building to support and promote the humanities and arts, both of which are central to the education, research, patient care and community service missions of the University, will insure that strong presence.

An academic health center that will be a model for the 21st century must have dedicated space for the humanities and arts as well as for biomedical research and patient care. The humanities disciplines and the fine arts examine the social setting of health care as well as the illness experience just as the health sciences investigate biological life processes. And just as the sciences require facilities to house their laboratories and advance their disciplines, so too must the humanities and the arts have a place to pursue knowledge and celebrate human creativity. The counterpart to microbiological research in the laboratory is moral deliberation in a meeting hall or seminar room; the counterpart to patient care in the clinical setting is aesthetic experience in an exhibit hall.

The proposed facility anchors the north end of the Education Commons and symbolizes the union of the sciences, information technology and the humanities in the education of tomorrow’s health care professionals.

As it is envisioned, the center, combined with the Fitzsimons Theater, will create an arts and humanities complex to house the Program in Health Care Ethics, Humanities and Law, secure exhibit space, as well as performance, meeting and seminar space. The center is envisioned as a pavilion adjoining the south facade of the theater as a free standing building
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of approximately 15,000 gross square feet (gsf). The proposed center will be financed completely with private dollars and could be ready for occupancy in 2004.

The proposed site for the Ethics and Humanities Pavilion is adjacent to the existing theater building, which is located to the north and east of Building 500. The building would front on a major quadrangle, the Education Commons

Concept Siting Sketch of the Proposed Ethics and Humanities Pavilion

With the spaces for discussion groups, lectures, meetings and seminars, and secure and dedicated exhibit space for the exhibition of paintings, photography, and historic displays, the facility has the potential to transform campus daily life:

- Faculty and students can attend debates during the lunch hour about contemporary health care issues such as gene patenting, assisted reproduction, or access to health care;
- People walking from their offices or classrooms to the Town Center can see an exhibit of art work by cancer survivors or a nationally touring photography exhibit;
- Visitors can join faculty and students for an evening seminar exploring ways to incorporate community concerns and interests into the training of future health professionals.

Consistency with Institutional and Educational Objectives

The University of Colorado Health Sciences Center is charged with educating future health care professionals, advancing knowledge to better understand and treat human disease and advancing the interests of the communities it serves. The humanities play a vital role in these tasks. Faculty at the University who educate health professions students must ensure that their students master the science, techniques, and skills central to today’s health care. At the same time, they must also ensure that their students have intellectual depth and agility,
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emotional breadth and subtlety, imaginative empathy, and moral sensitivity. In order to accomplish all of this, study of the humanities must be integrated within the study of the health sciences and the mastery of clinical skills and techniques.

Moreover, the University of Colorado Health Sciences Center aspires to be a model of research integrity, requiring its investigators to give careful consideration to the moral dimensions of biomedical research. Research subjects must be treated respectfully and afforded appropriate levels of protection. New scientists must be mentored to adopt the highest professional standards. All such efforts are central concerns of medical humanities study and scholarship.

Finally, in order to be responsive to its various patient and community constituents, the institution must be aware of their concerns and values. Dialogue, collaboration, and debate all serve to create meaningful alliances between the University and the larger community. The meeting spaces planned for the facility and the activities that will occur in them will create and strengthen such alliances.

Consistency with the vision of the campus master plan

Many themes identified in the Master Plan are reflected in the proposed facility:

• The humanities and arts center of the type envisioned here distinctive in its capacity to infuse the arts and humanities into the intellectual and aesthetic pursuits of the institution, thereby promoting the institution’s efforts to rank among the highest echelon of academic health centers.

• Addressing issues of broad interest and serving the health professions collectively, the faculty of the Program have developed the campus’s only interprofessional course required among the four professional schools.

• The activities planned at the facility, ranging from meetings to exhibits to seminars, will be of the broadest appeal and will create opportunities to form new partnerships with numerous community groups and organizations.

Fostering moral deliberation among interdisciplinary and interprofessional groups of faculty and practitioners as well as among faculty, practitioners and the larger community is the central role of the Program. Such deliberation requires an appropriate facility.

The proposed facility will also enhance the stature of the existing historic post theater. Standing alone, the theater will likely be used on a limited basis for convocations and other special occasions. As part of a larger humanities and arts complex, there will be new
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opportunities to host theatrical and musical performances, film series, large public lectures and other events of broad appeal to the institution and community alike.

Strengthen growth in interprofessional and interdisciplinary relationships and activities

The Program has an interdisciplinary and interprofessional faculty trained in philosophy, literature, law and medicine. By joining humanities considerations to scientific research and by promoting interprofessional education and collaboration, the Program has instituted numerous collaborative activities such as interprofessional required and elective classes, clinical activities such as patient rounds and case conferences, and research projects designed to resolve disputes and improve patient care. The proposed building will allow the Program to expand its interdisciplinary and interprofessional mission to create opportunities for new educational and research ventures and to impact the intellectual and emotional life of the institution through the visual and performing arts.

Compatibility with campus funding availability and constraints

A humanities and arts complex was not conceived in the original campus planning process so there are no identified institutional monies available to fund the construction. The members of the Advisory Board for the Program have created the opportunity to raise the required funds. It is not anticipated that the fund raising campaign will create competition with other campus fund raising efforts. Rather, by targeting potential donors whose interests lay in the arts and humanities rather than in patient care, student education, or biomedical research, the fund raising campaign will attract a new constituency to the Fitzsimons fund raising effort.

Space: Traditional and Innovative

The Ethics and Humanities Pavilion will be comprised of 15,000 gross square feet of building space that will provide the kind of innovative meeting and instructional space that is essential to the mission of this important program in the education of today’s health professional. The facility will join the existing, historic post theater and will consist of the following primary meeting and exhibit areas:

- A forum seating 100 for discussion, with the capacity to expand to approximately 130 seats for selected events
- Multipurpose meeting and ‘breakout’ rooms
- Flexible exhibit and display spaces suitable for traveling exhibits and the display of student and faculty work
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- Reception area
- Offices
- Small conference room(s)
- Support spaces
- General storage

Note: The adjacent, existing theater can provide seating for as many as 1000 patrons.

While the facility will support traditional education in manner designed to reflect societal needs, the facility will also be innovative and ensure interprofessionalism and interdisciplinary education at all levels.

At the core of the curriculum of the center is a dedication to providing a suitable venue to support the inclusion of essential human concerns in the educational experience of every health care practitioner to serve Colorado's citizens.

Exhibit spaces configured to ensure accessibility by students, researchers, clinicians, faculty and the community will be the cornerstone of this facility which will support the shared learning environment across UCHSC schools and programs.

To support this innovative environment, technology infrastructure that incorporates 'smart' classroom technologies will provide flexibility and adaptability to make this facility a valuable resource for the campus community for many years.

The Capital Budget

The budget for this new facility is $5 million, which will be supported entirely by gifts.

Timing - Key to the Success of Fitzsimons

The new Ethics and Humanities Pavilion will complement the facilities to be constructed as the Education I and II programs included in the Education Facility Program Plan and the new Research Complex I. These facilities, along with the library, existing and new clinical facilities and administrative areas, and the new Nighthorse Campbell Native Health Center constitute the primary elements of the Early Development Program at Fitzsimons. In the second phase, a clinical education facility and additional research and
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clinical facilities will be built. In the later stages, the Education III and IV complexes are scheduled to open in 2008 and 2010, respectively.

Establishing a new campus is an effort that requires the coordinated development of related facilities. Building this facility is a necessity for the success of Fitzsimons for a number of reasons. But, most importantly, it will ensure the timely and effective integration of this essential program component into the education, research and clinical components of the campus mission.

The program of Humanities, Ethics and Law significantly enhances the mission of the UCHSC in service to Coloradans -- education of health professionals and health sciences investigators; research to advance human knowledge and understanding related to health and health care; and to enhance the quality of life through clinical care.
University of Colorado Health Sciences Center

Program Plan for the Ethics and Humanities Pavilion at Fitzsimons

I. Program Plan Purpose

The purpose of this facility program plan is to seek appropriate approvals from the University of Colorado Board of Regents and the Colorado Commission on Higher Education (CCHE) to:

**Permit the University of Colorado Health Sciences Center to proceed with the planning, design, and construction of 15,000 gsf of specialized space to house the program in Humanities, Ethics and Law at the Fitzsimons campus.**

Project funding sources include an anticipated $5 million to be derived from gift funds.
II. Program Plan Process

In order to assure that the work of the Program in Health Care Ethics, Humanities and Law addresses public aspirations and concerns regarding health care, a community-based Advisory Board was established in 1996 to provide guidance and clarity to the Program’s activities. During the 1999-2000 academic year, Board members entered into discussions with Program faculty to discuss how the relocation of the Health Sciences Center to the Fitzsimons campus could advance the work of the Program as well as bioethics in general throughout the state. These discussions culminated in the decision by the Board in the summer of 2000 to seek approval for a building at Fitzsimons in order to provide adequate space to accommodate future Program growth, create a facility that could facilitate a broad array of bioethics activities, and to serve as a magnet and gathering place for people throughout the state and region who have an interest in bioethics and the medical humanities. In addition to consultation with Board members, planning activities have followed the Fitzsimons master plan and the guiding criteria set forth in that plan.

The resulting facility program and program plan has been presented to and approved by an executive committee of the Health Sciences Center comprised of the Chancellor and the Deans of the five schools.
III. Related Institutional Planning Guidelines

Developing a Facility in the Education Zone

The Master Plan for the future of the Health Sciences Center was developed during an 18-month period in 1997 and 1998. The education vision within the plan that was developed by a campus-wide education committee was designed to accommodate current and future generations of Health Sciences Center students and faculty. The vision is of a strong, integrated campus community that utilizes emerging technologies, faculty and interprofessional learning opportunities efficiently and effectively.

The UCHSC estimates that approximately 8,600 community members participate in on- or off-campus programs offered by schools in the Health Sciences Center. Although spaces are not specifically programmed for these other learners, the documented activities of the campus in support of on-going learning by the community strengthens the role of the Ethics and Humanities Pavilion within the University environment.

Institutional Master Plan
Final Phase

Note: Light yellow color designates buildings for educational use.
1: Building 500; 2: historic post theater; 21: Campus Center
32: proposed UCHSC library
III. Related Institutional Planning Guidelines

The Ethics and Humanities Pavilion is sited at the crossroads of the major pedestrian spaces in the education complex where the paths linking the library and principle research and administrative facilities connect with the education commons.

![Concept Siting Sketch of the Proposed Ethics and Humanities Pavilion](image)

Nearby community spaces within the library and the education facilities will make the location of the Ethics and Humanities Pavilion a focal point of activity on the Fitzsimons campus. In addition to traditional lecture halls and laboratories, spaces within the education complex are based on concepts in use at Oxford University, Harvard’s Medical Education Center, and Loyola University’s Stritch School of Medicine education building. The concept integrates a student commons area, a break room, lockers and mailboxes creating student community spaces that serve as ‘home bases’ for students and meeting grounds for interdisciplinary study and collaboration. Multi-professional areas for learning (M-PALS) are envisioned to be contiguous with small group learning rooms. The M-PALS will be coupled with small group learning space for structured and unstructured learning on a 24-7 basis.

The library is also planned to operate on a 24-7 clock, providing anytime access to study spaces and facilities at the heart of the campus and near to the Ethics and Humanities Pavilion.
III. Related Institutional Planning Guidelines

The existing theater which has a seating capacity of 1000 is directly adjacent to the Ethics and Humanities Pavilion, and the future Campus Center, a center for nutritional studies and the Fitzsimons Commons development of commercial office, hotel, housing and retail development surrounding the Red Cross Building. A proposed light rail transit stop is also located in the immediate vicinity.

Availability of Land and Appropriate Site

To maximize the potential positive relationship between the Center for Humanities and other related campus uses, a site near the future campus center and the existing theater should be considered for the project. One of the possible sites is an existing open area to the south of the existing theater. This site is at the crossroads of two major pedestrian routes. Toward the south, the site overlooks the education commons. Extending east and west from the site, a main east-west pedestrian corridor connects the site to the village center and to the research complex to the west. The area immediately south of the theater will likely serve as a venue for a variety of formal and informal events including commencement exercises. Plans for this area also include the construction of an amphitheater.

The addition of the Center for Humanities to the theater building could strengthen the theater complex as an anchor for the education commons, both by expanding the functional diversity at this important location, and by creating an improved architectural presence at this site. Activities, exhibits and displays of the Center would offer visitors to the theater a chance to participate in the Center’s programs in conjunction with lectures and performances at the theater complex.

With over a thousand seats, the theatre will be a focus for much of the campus activities involving large groups. If the Center for Humanities and theater building form a complex of complimentary uses, the theater traffic should provide increased visibility for the Center’s activities.

Near the site is the proposed location of the campus student center, and as a part of the village center, an alumni center may also be located in close proximity to the proposed site for the Center. With the potential availability of additional meeting rooms and conference spaces as well as the potential for related activities, the proximity of the Center to these facilities could offer a wealth of opportunities for complimentary uses and joint activities serving the student and faculty populations at large, as well as other opportunities to offer activities and programs available to the general community.
III. Related Institutional Planning Guidelines

Impact on short and long term site development, programmatic, economic considerations and future alternative opportunities:

As an historic structure, the theater is designated to remain as an asset to the campus in the development of the new Health Sciences Center. Roadways, parking facilities and other infrastructure systems are planned to reasonably serve the theater area while allowing the growth of the new campus facilities.

The existing theater contains many large murals painted in the 1940’s. There is a possibility that additional murals could become a part of the design of the total complex with the addition of the Center to the theater building.

The maximum economic gains in terms of the construction of the Center for Humanities and the renovation of the theater could be achieved if a coordinated design and construction program could be in place for both facilities. Any plans for the improvement of the exterior of the theater should be an integral part of the design for the addition of the Center.

As with most sites on the Fitzsimons property, the construction of the Center for Humanities will require the relocation of some existing utilities, and the development of permanent campus infrastructure to support the Center, and other buildings in the immediate area. To allow the construction of the Center, a portion of Uvalda Street between 19th Avenue and 19th Place would probably have to be relocated.

Institutional Master Plan and Revisions

The University of Colorado Board of Regents approved the initial revision in September 1999 to the Institutional Master Plan of October 1998. The Colorado Commission on Higher Education approved the original plan in December 1998. In addition to describing all of the UCHSC’s programs, the approved plan projected a total need of 320,000 gsf of instructional space at Fitzsimons. The plan anticipated the build-out of instructional space in five phases. The first four phases will meet the entire transitional needs of the campus in a 12-year time period. The fifth phase will meet the long-term instructional campus goals beyond the first 12 years. The total project budget for education space in the initial 12-year build-out was estimated to cost $65 million.
III. Related Institutional Planning Guidelines

The 20/20 Core Vision Team’s Education Statement

As part of the Master Plan development process, campus core vision teams comprised of representation from the entire institution were engaged to develop vision statements for the year 2020. One of those core teams focused on education. The essential elements identified by the core vision team for education include:

- Supporting a strong sense of community within the UCHSC, the University of Colorado system, with affiliates and public constituencies;
- Responding to health-related workforce needs in preparing health care professionals and investigators;
- Building stronger community partnerships for continuing education and public and consumer health education through evolving information technologies;
- Possessing diverse cultural, learning and experiential backgrounds and diverse interests, needs and aspirations;
- Using evolving educational technologies to enable diverse learners to take advantage of different learning modalities, led by UCHSC faculty;
- Investing in faculty and staff development to ensure the best possible educational environment and experiences;
- Providing interprofessional learning opportunities and offering disciplinary, multidisciplinary, interdisciplinary and transdisciplinary models of curricula; and
- Ensuring UCHSC graduates demonstrate professional competence in knowledge, skills and attitudes intrinsic to their fields of study and practice.
The Information Technology Strategic Plan

The successful implementation of new technologies will depend on the ability to solve problems associated with the "human factor." In other words, integrating technology in a manner that individuals will learn how to use and apply new tools will be critical.

The Ethics and Humanities Program utilize technology, didactic methods, discussion, displays and exhibits, and other education techniques to focus, in part, on evaluating the appropriate uses, integration, and limitations of technology in the caring process.

Individual skills relating to the wise use, interaction, and "filtering" of information available through technology will be required at more sophisticated levels than ever before. This will be accomplished through informatics curricula, research, and programs. Informatics will serve at the bridge between technology and professional activities.

The Ethics and Humanities Program will utilize available technological resources to identify curricula, research, and programmatic activities in ethics and humanities at other institutions and in other cultures for their applicability to evolving standards of health care.

The evolution of technology and its implementation in both the broader world and at the UCHSC will result in greater decentralization of information and decision-making within the institution.

The Ethics and Humanities Program will effectively utilize high technology capabilities in its didactic presentation capabilities and in its display techniques in its efforts to disseminate information and highlight issues to its students and to the community at large.

Decision support systems will be a primary tool used by health care practitioners and patients alike.

The Ethics and Humanities Program will evaluate the effectiveness and appropriateness of reliance upon high technology by practitioners as well as the impact of more educated consumers in the health care setting.

The University will be both an importer and exporter of technology-based courses and programs.

The Ethics and Humanities Program will identify various technological means of transmitting the outcomes of its evaluations and deliberations on ethical issues in health care to a broader health care community world wide.
IV. Program Description

The Program in Humanities, Ethics and Law

The Program in Health Care Ethics, Humanities and Law was established in 1995 in order to work with students and faculty of the Health Sciences Center, its affiliated hospitals, and the public to address the ethical dimensions of health care. The vision that shapes the Program’s work is the transformation of health care. It seeks to help encourage that transformation by inspiring a balance between science and the humanities in health care delivery and biomedical research. This is accomplished through community involvement, clinical consultations, research, education, and consultations on ethical issues encountered throughout the health care setting.

Since its inception, the Program has worked to engage the public to explore a wide array of ethical and policy issues in health care, ranging from access to care to the responsible development and introduction of genetic advances in clinical medicine. In order to assure that the Program’s work addresses public aspirations and concerns regarding health care, a community-based Advisory Board was established in 1996 to provide guidance and clarity to the Program’s activities. The Board has proved invaluable in shaping the nature and scope of the Program’s work and in helping to assure that its work reflects the complexity and breadth of moral issues in health care.

As health care continues to be transformed by developments in biomedical research and information technology as well as changes in health care financing, special and sustained attention must be paid to its humanistic dimensions. The scientific search for the causes of and treatments for disease processes must be tempered by the equally fundamental tasks of understanding and responding to the illness experience of patients and to the concerns of the public, those who fund the biomedical research and health care enterprises.

The humanities disciplines and the fine arts examine the social setting of health care as well as the illness experience just as the health sciences investigate biological life processes. And just as the sciences require facilities to house their laboratories and advance their disciplines, so too must the humanities and the arts have a place to pursue knowledge and celebrate human creativity. The counterpart to microbiological research in the laboratory is moral deliberation in a meeting hall or seminar room; the counterpart to patient care in the clinical setting is aesthetic experience in an exhibit hall.

An academic health center that will be a model for the 21st century must have dedicated space for the humanities and arts as well as for biomedical research and patient care. A description of a proposed humanities and arts center at the Fitzsimons campus follows. The center, combined with the Fitzsimons Theater, will create an arts and humanities complex to house the Program in Health Care Ethics, Humanities and Law, secure exhibit space, as well as performance, meeting and seminar space.
V. Functional and Space Requirements

Facility Concept

Concept Sketch of the Proposed Ethics and Humanities Pavilion

This view shows the Education Commons in the foreground. The existing theater building is in the background.

Situated at the north end of the Education Commons, it will be either a pavilion adjoining the south facade of the Theater or a free standing building, with approximately 15,000 gross square feet. The proposed center will be financed completely with private dollars and could be ready for occupancy in 2004. Fund raising responsibilities will reside with the Program in Health Care Ethics, Humanities and Law and its Advisory Board. All fund raising efforts will be coordinated with the University’s Development Office.

The relocation of the University of Colorado Health Sciences Center to the Fitzsimons campus offers the unique opportunity to create the premier academic health sciences center of the 21st century. Seizing this opportunity will require bold and creative thinking in order to forge new alliances between the University and its public, foster collaboration among the health professions and the disciplines which shape them, and invigorate the health sciences enterprise with imagination and moral circumspection.
V. Functional and Space Requirements

A strong humanities and arts presence at Fitzsimons will help accomplish these crucial objectives. Constructing a building to support and promote the humanities and arts, both of which are central to the education, research, patient care and community service missions of the University, will insure that strong presence. The opportunity has arisen to raise funds to build such a building.

Concept Sketch of the Proposed Ethics and Humanities Pavilion

This view shows the Education Commons to the exterior in the foreground. The forum room would be to the left of the circulation gallery, which is open to the office area on the second level. The gallery provides exhibit space and a casual gathering area for students, faculty, and visitors.

The facility, envisioned either to adjoin or be near the Fitzsimons Theater, will anchor the north end of the Education Commons and symbolize the union of the sciences, information
V. Functional and Space Requirements

technology and the humanities in the education of tomorrow’s health care professionals. The building will house the Program in Health Care Ethics, Humanities and Law, meeting space for discussion groups, lectures, meetings and seminars, and secure and dedicated exhibit space for the exhibition of paintings, photography, and historic displays.

To the south of the Center, an intimate open space is envisioned to provide an exterior area that could be developed as a sculpture garden or fountain court to complement the interior space of the exhibit gallery.

Auto access to the theater and the Center would be directly from 19th Place.

The facility has the potential to transform campus daily life:

- Faculty and students can attend debates during the lunch hour about contemporary health care issues such as gene patenting, assisted reproduction, or access to health care;
- People walking from their offices or classrooms to the Town Center can see an exhibit of art work by cancer survivors or a nationally touring photography exhibit;
- Visitors can join faculty and students for an evening seminar exploring ways to incorporate community concerns and interests into the training of future health professionals.

The University of Colorado Health Sciences Center is charged with educating future health care professionals, advancing knowledge to better understand and treat human disease and advancing the interests of the communities it serves. The humanities play a vital role in these tasks. Faculty at the University who educate health professions students must ensure that their students master the science, techniques, and skills central to today’s health care. At the same time, they must also ensure that their students have intellectual depth and agility, emotional breadth and subtlety, imaginative empathy, and moral sensitivity. In order to accomplish all of this, study of the humanities must be integrated within the study of the health sciences and the mastery of clinical skills and techniques.
Moreover, the University of Colorado Health Sciences Center aspires to be a model of research integrity, requiring its investigators to give careful consideration to the moral dimensions of biomedical research. All research subjects must be treated respectfully and afforded appropriate levels of protection. New scientists must adopt the highest professional standards. All such efforts are central concerns of medical humanities study and scholarship.

Finally, in order to be responsive to its various patient and community constituents, the institution must be aware of their concerns and values. Dialogue, collaboration, and debate all serve to create meaningful alliances between the University and the larger community. The meeting spaces planned for the facility and the activities that will occur in them will create and strengthen such alliances.

Many of the themes identified in the Master Plan will be reflected in the proposed facility:

- **UCHSC will rank among the top 10 academic health centers in the country**: A humanities and arts center of the type envisioned here may very well be the only one of its kind at an academic health center. It will certainly be distinctive in its capacity to infuse the arts and humanities into the intellectual and aesthetic pursuits of the institution, thereby promoting the institution’s efforts to rank among the highest echelon of academic health centers.

- **Programs will be integrated, interdisciplinary, and interprofessional in nature**: The educational, research, and community service activities of the Program generally focus on health care rather than on any one health profession. Addressing issues of broad interest and serving the health professions collectively, the faculty of the Program have developed the campus’s only interprofessional required course among the four professional schools and are currently working to expand such educational opportunities.

- **New partnerships will be created**: The medical humanities and the fine arts reflect and illuminate the human experience of illness, not disease processes. This perspective touches every health care constituent: investigator, clinician, patient, employer, legislator, and advocate. The activities planned at the facility, ranging from meetings to exhibits to seminars, will be of the broadest appeal and will create opportunities to form new partnerships with numerous community groups and organizations.
V. Functional and Space Requirements

In resolving the limitations of the 9th Avenue physical plant, the proposed facility will significantly improve the work of the Program. For instance, the Program is currently providing both interprofessional and profession-specific ethics education on campus but is hampered in these efforts because of current campus educational facilities. Beginning in the 2000-2001 academic year, there will not be a room at the 9th avenue campus large enough to accommodate the students and faculty in the course “Ethics in the Health Professions,” currently required of all CHA/PA, MD, ND, PharmD, and PT students. The renovated Fitzsimons Theater will solve this problem - this class will fill nearly half of the seats in the Theater. The Theater also will provide opportunities to incorporate more fully theatrical performance into the class, something which is already occurring but which is greatly hampered by the limitations of Denison Auditorium.

The proposed meeting facility in the humanities and arts center will increase the Program’s opportunities to promote collaborative work. Fostering moral deliberation among interdisciplinary and interprofessional groups of faculty and practitioners as well as among faculty, practitioners and the larger community is the central role of the Program. Such deliberation requires an appropriate facility. The proposed meeting facility will be a small, semi-circular amphitheater to accommodate approximately one hundred people for meetings and classes. No such setting exists at the 9th Avenue Campus, yet a suitable meeting space is desperately needed so that the Program can advance its work.

The proposed exhibit space will make it possible to display the creative work of international, national and local guest artists, of faculty, staff and students, and of the larger community in response to special Program events such as children responding to violence or living with cancer. There are only two spaces at the 9th Avenue Campus for such exhibits, the ground floor hallways at UCH and the main hallway in the School of Nursing, both of which are drastically limited in size and suitability and neither of which is secure. As a result, it is not possible at the present time to display art that requires a secure space, focused lighting, signage, and curatorial design. Most importantly, neither space promotes reflection or aesthetic appreciation. The new exhibit space will eliminate all of these shortcomings and will create the opportunity to host multiple exhibits simultaneously and throughout the year. In addition, permanent historic exhibits related to the Theater can be housed.

The proposed facility will also enhance the stature of the Theater. Standing alone, the Theater will likely be used on a limited basis for convocations and other special occasions. As part of a larger humanities and arts complex, there will be new opportunities to host theatrical and musical performances, film series, large public lectures and other events of broad appeal to the institution and community alike.
V. Functional and Space Requirements

The Program has an interdisciplinary and interprofessional faculty trained in philosophy, literature, law and medicine. By joining humanities considerations to scientific research and by promoting interprofessional education and collaboration, the Program has instituted numerous collaborative activities such as interprofessional required and elective classes, clinical activities such as patient rounds and case conferences, and research projects designed to resolve disputes and improve patient care. The proposed building will allow the Program to expand its interdisciplinary and interprofessional mission to create opportunities for new educational and research ventures and to impact the intellectual and emotional life of the institution through the visual and performing arts.

A humanities and arts complex was not conceived in the original campus planning process so there are no identified institutional monies available to fund the construction. The members of the Advisory Board for the Program have created the opportunity to raise the required funds. It is not anticipated that the fund raising campaign will create competition with other campus fund raising efforts. Rather, by targeting potential donors whose interests lay in the arts and humanities rather than in patient care, student education, or biomedical research, the fund raising campaign will attract a new constituency to the Fitzsimons fund raising effort.
V. Functional and Space Requirements

Planning Assumptions

Planning assumptions used to determine the functional and space requirements for the proposed facility include the following:

- Consistent with the current Institutional Master Plan for UCHSC.

- The facility will contain spaces designed to support the program in Humanities, Ethics and Law for the education of future health professionals, and to provide a forum for the support of discussions and exhibitions related to the humanities and the arts in relationship to the issues of health care.

- To provide space that is truly flexible in nature, telecommunications facilities, mechanical, electrical and security systems must be designed to allow displays of valuable artistic materials and to provide a venue for public gatherings related to exhibits and group discussions. Toilet rooms, janitor’s closets, closets, offices for educational support personnel, and trash rooms must be designed to support storage, maintenance and catering activities normally associated with these events.

- Parking will be provided on a campus-wide basis and is not currently planned specifically for this complex.

- The design of the facility should encourage chance encounters among students and faculty of various departments and disciplines.

- The design and construction of this building in the education zone will lend itself to expansion and possible integration with other buildings in the future.

- The entire complex will have technology infrastructure to accommodate the changes that will occur in the future.

- The utilities and infrastructure will be based upon the utilities and infrastructure requirements and guidelines of the Master Plan. Waste removal, water supply and utilities will be handled on a campus-wide system.

- There is a central steam and chilled water system on the campus to provide the energy to serve the entire complex.

- The gallery area will require special ventilation due to the exhibition of environmentally sensitive materials.
V. Functional and Space Requirements

Flexibility in technology and space design accommodates small group learning, clinical learning, self-study and computer-facilitated learning throughout the facility. Small meeting rooms will be used as break-out seminar rooms. They will be able to seat up to 12 people around conference tables.

Advanced Technology and Network Server Rooms

The technology infrastructure requirements for the network environment are extensive, and are listed in Appendix H.

100-Seat Forum

Similar to the facility of the Given Institute in Aspen, the 100-seat forum will require fixed tables with telecommunications links for laptop computers. The hall must be equipped for slide and computer projection.

Small Group Rooms

This space will include up to two small group rooms that faculty and students can use for peer discussion.
V. Functional and Space Requirements

Hours of Operation

The facility will be open to students and faculty members through normal hours of operation, in the evening and on weekend for special events. The main entrance will be open during daily business hours for visitors.

Utilization

The Ethics and Humanities Pavilion will be used specifically for the Ethics program, and for various working groups convened by the Program, for the Colorado Healthcare Ethics Forum, and various community organizations.

Staffing

The following staffed positions are expected to support the operations of the center including program and conference facilitation:

<table>
<thead>
<tr>
<th>Position</th>
<th>Staff Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director</td>
<td>1</td>
</tr>
<tr>
<td>Faculty</td>
<td>1</td>
</tr>
<tr>
<td>Senior Administrative Staff</td>
<td>1</td>
</tr>
<tr>
<td>Junior Administrative Staff</td>
<td>3</td>
</tr>
</tbody>
</table>
V. Functional and Space Requirements

Operational Support System Assumptions

The facility contains various functions, all of which support health sciences education. Specific functions within the building have operational requirements outlined in the following narrative.

Access and security

- A controlled key/card system will be provided at all building entry points.
- Alarm systems will be incorporated to protect the safekeeping of expensive equipment and exhibit materials.
- Security systems will be included that allow after hours access and use.
- Alarm systems will be installed to protect areas from unauthorized users.

Environmental Control Systems

- The forum and exhibit areas have special environmental control needs to maintain and support the mission of the facility. A preliminary assessment of the special environmental control needs of the Center would indicate that air volumes would need to be minimized to allow voice and musical presentations to occur without interference from mechanical background noises. Too, environmental controls of temperature and humidity may be necessary to support the exhibition of some forms of art materials. Exhibits may involve large numbers of people in relatively small spaces – spaces which may be largely unoccupied at other times. Environmental systems must be able to meet needs over a wide range and be economical and energy efficient in the process.

Information technology

- This complex will have access to a centralized computer network/fiber optics system.
- All learning spaces will be equipped to utilize a variety of educational technologies. These “smart” learning areas will be capable of using audio/video and computer graphics.
V. Functional and Space Requirements

Electrical Systems and Lighting

Several of the spaces within the Ethics and Humanities Pavilion have specialized requirements for electrical systems and lighting.

- Flexible electrical and communication systems will be necessary in the forum and in other meeting and exhibit spaces to support a range of functional requirements.

- Lighting in display areas must be flexible and of ‘museum’ quality – able to illuminate a wide variety of materials and situations (receptions and other gatherings as well as static displays).

- In the forum space, lighting must be able to illuminate the ‘audience’ when the space is used as a venue for discussions; to respond to the needs of audio-visual presentations; and serve the requirements of a wide range of presentation methods, lecture formats and even musical and theatrical events.

Service/trash/materials management

- Trash from office areas is expected to be normal for this type of use. Trash from meetings and special events will be combined with the trash facilities designed to support the theater use. No hazardous waste will be generated within this facility.

- Service areas will be combined with the theater complex.

- An elevator will be required for movement of materials and people within the facility.

Adjacencies/Access

- Primary assembly and exhibit areas should be on the ground floor. The gallery space should have a strong visual relationship with the education commons. To enhance privacy, offices and meeting rooms could be on a second level.
V. Functional and Space Requirements

Facility Layout and Design

Diagrams illustrating the conceptual organization envisioned for the facility are included in Appendix B. Simply stated, the forum room (auditorium) is the heart of the facility. Access to the auditorium is from the circulation gallery, a multi-function space that also provides an exhibit area for sculpture and other materials. Light sensitive materials would be exhibited in a small gallery area adjoining the main exhibit gallery. Non-public functions, the office areas, the library and Boardroom, are planned to be located on the second level. Portions of the second level are planned to be open to the gallery area below.

The exhibit gallery provides a ‘public’ circulation space within the Pavilion that echoes the public space of the Education Commons, the quadrangle which is the heart of the education zone on the campus. Sun shading and high-performance glazing provide a pleasant light-filled area for gatherings and exhibits, while maintaining the desired transparency of this space from the exterior.

The circular configuration of the auditorium, where no person is more than twenty-five feet from the center, provides an intimate setting for conferences and discussions. (See seating diagram in Appendix B). The auditorium is planned to have a tiered configuration to further enhance the personal contact between all participants. The upper level of the auditorium (two-thirds of the seating) is accessible to the handicapped. The area near the screen would be constructed with removable seating sections to provide additional flexibility in the layout and use of the space. A mechanical lift in this area would provide access to lower levels of the auditorium for the handicapped.

While the emphasis of the Ethics and Humanities Pavilion is on personal contact, the facility design would also include provisions for the technology available to increase flexibility of use as a learning center and a venue for national and international discourse. (See Technology Integration, Appendix A).

Although the Ethics and Humanities Pavilion adjoins the existing historic post theater, it is envisioned as a free-standing building, connected to the theater by a common ‘gallery’ space providing a service corridor that maintains the existing egress patterns from the theater.

To meet the goals of the program and the vision for this unique facility, and to further the general goals of the campus institutional master plan, the design of the facility will be responsive to the following principles:
V. Functional and Space Requirements

- To expand the functionality of the facility, all spaces will be flexible to accommodate a variety of different functions.

- Offices and other work spaces and conference areas will be fitted with flexible furnishings and technology support so they can serve as work places for resident and/or visiting faculty and staff.

- Gallery and exhibit areas should also serve as circulation elements to increase the efficiency of the facility.

- A main entrance is needed for students, faculty and visitors.

- The aesthetic appearance of the complex will comply with Institutional guidelines.

- Building design will consider energy life cycle costs.

- The structure should be independent of the theater building, allowing the existing egress from the theater to remain, although a circulation gallery may provide sheltered access to and from side entrances to the theater.

- Service functions should be combined with the theater for convenience and efficiency.

- To allow flexibility in the types of materials to be exhibited, a high level of security will be required for the building, but this security should be ‘transparent’ to the primary goal of achieving an inviting place for people to gather, observe, and interact.
V. Functional and Space Requirements

Space Program Summary

<table>
<thead>
<tr>
<th>Space</th>
<th>Square Feet</th>
<th>Number</th>
<th>Total SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director's Suite</td>
<td>300</td>
<td>1</td>
<td>300</td>
</tr>
<tr>
<td>Faculty Offices</td>
<td>150</td>
<td>9</td>
<td>1350</td>
</tr>
<tr>
<td>Snr. Staff</td>
<td>125</td>
<td>1</td>
<td>125</td>
</tr>
<tr>
<td>Jnr. Staff (3) including reception</td>
<td>100</td>
<td>4</td>
<td>400</td>
</tr>
<tr>
<td>Board Rm</td>
<td>800</td>
<td>1</td>
<td>800</td>
</tr>
<tr>
<td>Exhibit Space/Rec</td>
<td>1500</td>
<td>1</td>
<td>1500</td>
</tr>
<tr>
<td>Meeting Facility auditorium</td>
<td>2250</td>
<td>1</td>
<td>2250</td>
</tr>
<tr>
<td>Meeting Facility break out rooms</td>
<td>200</td>
<td>2</td>
<td>400</td>
</tr>
<tr>
<td>Projection and IT Room</td>
<td>150</td>
<td>1</td>
<td>150</td>
</tr>
<tr>
<td>Library/Seminar Room</td>
<td>300</td>
<td>1</td>
<td>300</td>
</tr>
<tr>
<td>Kitchen/Storage</td>
<td>250</td>
<td>1</td>
<td>250</td>
</tr>
<tr>
<td>Restrooms/Misc</td>
<td>950</td>
<td>LS</td>
<td>950</td>
</tr>
<tr>
<td>Copy/Stor</td>
<td>175</td>
<td>LS</td>
<td>175</td>
</tr>
</tbody>
</table>

Total ASF: 8950

Total Gross Square Feet (60% Eff): 15000

Ground Level

<table>
<thead>
<tr>
<th>Space</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhibit Space</td>
<td>1500</td>
</tr>
<tr>
<td>Meeting Facility auditorium</td>
<td>2250</td>
</tr>
<tr>
<td>Projection and IT Room</td>
<td>150</td>
</tr>
<tr>
<td>Meeting Facility break out rooms</td>
<td>400</td>
</tr>
<tr>
<td>Restrooms</td>
<td>400</td>
</tr>
<tr>
<td>Kitchen/Storage</td>
<td>250</td>
</tr>
<tr>
<td>Misc.</td>
<td>150</td>
</tr>
</tbody>
</table>

Total ASF: 5100

Upper Level

<table>
<thead>
<tr>
<th>Space</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director's Office</td>
<td>300</td>
</tr>
<tr>
<td>Faculty Offices</td>
<td>1350</td>
</tr>
<tr>
<td>Snr. Staff</td>
<td>125</td>
</tr>
<tr>
<td>Jnr. Staff (3)</td>
<td>300</td>
</tr>
<tr>
<td>Reception</td>
<td>100</td>
</tr>
<tr>
<td>Board Rm</td>
<td>800</td>
</tr>
<tr>
<td>Library/Seminar Room</td>
<td>300</td>
</tr>
<tr>
<td>Restrooms</td>
<td>300</td>
</tr>
<tr>
<td>Copy/Stor</td>
<td>175</td>
</tr>
<tr>
<td>Misc. and IT</td>
<td>100</td>
</tr>
</tbody>
</table>

Total ASF: 3850
VII. Site and Utility Requirements

Site and Utility Infrastructure

Extensive evaluation has been completed regarding development of utilities and infrastructure on the Fitzsimons campus. The evaluation is detailed in the Health Sciences Center Physical Master Plan just completed. This Center will fit into the existing utility and infrastructure systems as well as be supported by the proposed infrastructure development plan for the site.

Utilities

The Ethics and Humanities Pavilion will be constructed on the Fitzsimons Campus on a site which is adequate for the proposed building, and for related minor expansion of the facility to be constructed in the future. Parking near the education zone will be located east and west of the site.

A summary of on-site infrastructure and utilities serving the Fitzsimons campus site is provided below:

Potable Water

The City of Aurora is the current water supplier for Fitzsimons. Static water pressure at the city water connection is 75 p.s.i.

Sanitary Sewer

Effluent generated on the Fitzsimons site is conveyed to a City of Aurora sanitary sewer interceptor to the north of the Fitzsimons development. This interceptor line feeds into the Metro Wastewater Reclamation District Treatment Plant. Existing lines vary in size from 4” to 18”; much of the existing system will require replacement since the majority of the system is at least 50 years old.

Stormwater Sewer

On-site storm drainage is collected in an underground system and is to be discharged into Toll Gate Creek and Sand Creek.

Natural Gas

Natural gas is available at the center of the Fitzsimons development.
VII. Site and Utility Requirements

Electrical

As with natural gas, PSCo is the current supplier of electrical service to Fitzsimons. The existing system includes both above and below grade lines in combination with pad-mounted transformers.

Telecommunications

As part of the Administrative Building Fitzsimons renovation project, a telecommunications control and switch room facility has been constructed. The communication system will be extended from Building 500 to serve the new facility.

Landscape Development

There are many large, mature trees in the existing landscape at the Fitzsimons site. The landscape is closely tied with Fitzsimons’ historic heritage. The site was originally developed as a nursery prior to the establishment of the Fitzsimons Army Medical Center in the early 1900’s. Some of the existing mature trees may be traced to the 1920’s, when more than 200 trees were transplanted from Pike National Forest to the Fitzsimons site as a part of the development of the Fitzsimons site as a treatment center for tuberculosis. In addition, there is a proposed landscape plan being developed for the entire site.
VII. Codes and Standards

Applicable Codes and Standards

The University of Colorado Health Sciences Center maintains jurisdiction over the interpretation and enforcement of code requirements for the construction of projects on campus. The Education Facility buildings will be designed to meet the latest UCHSC adoption of the following codes and standards:

Codes

- Uniform Building Code
- Uniform Plumbing Code
- Uniform Fire Code
- Uniform Mechanical Code
- National Electric Code (NFPA No. 70)
- Life Safety Code (NFPA No. 101)
- Aurora Fire Code

Standards

- State of Colorado Model Energy/Efficiency Construction and Renovation Standards for Non-Residential Buildings
- 1983 C.R.S. (Colorado Revised Statutes) Volume 3 – Title 9, Article 2 – Safety Glazing Materials
- 1980 ANSI A 117.1 Specifications for Making Buildings and Facilities Accessible to and Usable by Physically Handicapped People
- Americans with Disabilities Act
VIII. Life Cycle Costs

A summary of the projected operational costs for the utilization of the Ethics and Humanities Pavilion at Fitzsimons is provided in the table below. The cost factors used to determine this estimate are based upon historical cost values of similar functional type facilities at the Health Sciences Center campus.

Projected Facility Operational Costs

<table>
<thead>
<tr>
<th>I. Component</th>
<th>Cost/GSF/Year</th>
<th>Annual Operating Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilities</td>
<td>$2.55</td>
<td>$38,250</td>
</tr>
<tr>
<td>Building maintenance and repair</td>
<td>$1.80</td>
<td>$27,000</td>
</tr>
<tr>
<td>Environmental services</td>
<td>$0.77</td>
<td>$11,550</td>
</tr>
<tr>
<td>Grounds maintenance</td>
<td>$0.26</td>
<td>$3,900</td>
</tr>
<tr>
<td>Environmental health and safety</td>
<td>$0.25</td>
<td>$3,750</td>
</tr>
<tr>
<td>Police/security</td>
<td>$0.72</td>
<td>$10,800</td>
</tr>
<tr>
<td>Insurance</td>
<td>$0.22</td>
<td>$3,300</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$6.57</td>
<td>$98,550</td>
</tr>
</tbody>
</table>
IX. Program Plan Capital Budget

The capital construction budget for the construction of Ethics and Humanities Pavilion will be funded by gift funds. The estimated project cost is detailed in the following table.

A. Land Acquisition:
   (1) Total Land Acquisition Costs $0

B. Professional Services:
   (1) Arch/Engrs (Bldg)
       8% sum C(1) through C(4) $308,000
   (2) Arch/Engrs (Other)
       6% sum C(1) through C(4) $231,000
   (4) Total Professional Services $539,000

C. Construction:
   (1) Building (New)
       15,000 GSF @ $225/SF $3,300,000
   (2) Site work
       50,000 GSF @ $10/SF $500,000
   (4) Total Construction Costs 2 $3,850,000

D. Equipment and Furnishings:
   (1) Equipment (New) $175,000
   (2) Total Equipment Costs 1 $175,000

E. Miscellaneous:
   (1) Art in Public Places
       1% sum C(1) through C(4) $38,500
   (2) Project Contingency
       Approx. 5% sum C(1) through C(4) $192,500
   (3) Information Technology
       8% sum C(1) through C(4) $308,000
   (4) Relocation
       1% sum C(1) through C(4) $38,500
   (5) Total Miscellaneous Costs $577,500

Total Project Costs $5,141,500

Notes:
1. Fixed seminar tables and built-in audio-visual equipment for the forum space, and built-in shelving and cabinetry are included in the building construction cost. Does not include an allowance of $90,000 for technology equipment which is included in item E.3. Refer to Appendix A for description of equipment and technology.

2. Construction costs include a proportionate allowance for the construction of a connection to the existing post theater.
X. Project Development Schedule

The information below reflects the project implementation schedule for the design and construction of the Education Facility at the Fitzsimons Campus.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Expected Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Plan Completion</td>
<td>April 2001</td>
</tr>
<tr>
<td>Regent Approval</td>
<td>June 2001</td>
</tr>
<tr>
<td>CCHE Approval</td>
<td>September 2001</td>
</tr>
<tr>
<td>Legislative Authorization</td>
<td>May 2002</td>
</tr>
<tr>
<td>Selection of Architect</td>
<td>June 2002</td>
</tr>
<tr>
<td>Design/Construction Documents Completion</td>
<td>June 2003</td>
</tr>
<tr>
<td>Bidding</td>
<td>July 2003</td>
</tr>
<tr>
<td>Construction Completion</td>
<td>June 2004</td>
</tr>
<tr>
<td>Occupancy</td>
<td>July 2004</td>
</tr>
</tbody>
</table>
## Equipment Requirements

<table>
<thead>
<tr>
<th>Unit</th>
<th>No.</th>
<th>Unit Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditorium Seating</td>
<td>128</td>
<td>300</td>
<td>$39000</td>
</tr>
<tr>
<td>Board Room Table and Seating</td>
<td>LS</td>
<td>15000</td>
<td>15000</td>
</tr>
<tr>
<td>Conference Tables and Seating for Break-out Rooms</td>
<td>2</td>
<td>4000</td>
<td>8000</td>
</tr>
<tr>
<td>Directors Office Furnishings: Desk, Conference Table, Chairs</td>
<td>1</td>
<td>5000</td>
<td>5000</td>
</tr>
<tr>
<td>Faculty Office Furnishings: Desk, Chair, Guest Chairs</td>
<td>9</td>
<td>2000</td>
<td>18000</td>
</tr>
<tr>
<td>Open Work Stations</td>
<td>4</td>
<td>3000</td>
<td>12000</td>
</tr>
<tr>
<td>Filing/Storage Units</td>
<td>LS</td>
<td>8000</td>
<td>8000</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>LS</td>
<td>10000</td>
<td>10000</td>
</tr>
<tr>
<td>Audio Visual and Display - Allowance</td>
<td>LS</td>
<td>15000</td>
<td>15000</td>
</tr>
</tbody>
</table>

### Total Furnishings and Equipment

$265000
Technology Integration

Visual presentation technology, network connectivity and digital control systems will be integrated into the teaching and conference rooms of the Center for Healthcare, Ethics, Humanities and Law. Each meeting room will be equipped with video, audio, fiber and data network interfaces. The auditorium, seminar and board rooms will have built in video/data projection systems and sound reinforcement. Breakout rooms will have similar capability on a setup basis. The auditorium will utilize a computer based management program to control projection, sound and lighting systems. The touch screen design will provide manual as well as automated control for ease of operation by those with little familiarity with the system. Audiovisual capabilities will include slide projection, videotape/DVD playback, three dimensional/document projection, videoconferencing, computer projection and television studio/network/satellite connectivity.

Technology costs: 1

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network connectivity (12 port interface jacks)</td>
<td>$ 12,000*</td>
</tr>
<tr>
<td>Portable audiovisual equipment (slide, video, data and document projectors)</td>
<td>$ 26,500</td>
</tr>
<tr>
<td>Seminar and board room projection and sound systems</td>
<td>$ 23,800</td>
</tr>
<tr>
<td>Auditorium control system (touch screen, lighting and sound)</td>
<td>$ 26,600</td>
</tr>
<tr>
<td>Auditorium audiovisual equipment (slide, video, data and document projectors, computer, VCR, microphones, podium, electronic whiteboard)</td>
<td>$ 48,500</td>
</tr>
</tbody>
</table>

* To be included in the building construction cost

Note 1. Of the additional costs listed, $90,000 is assumed to be within the IT allowance (Item E.3) of the Program Plan Capital Budget.
Planning Diagrams

Upper Level

Ground Floor Level
No Scale
XI. Appendix B

Auditorium Seating Diagram

Auditorium Seating 126 Seats

Ground Floor Level

Seating is planned as moveable chairs at fixed seminar tables. Floor of auditorium is to be tiered. A mechanical lift or ramp will provide access for handicapped persons to the speaker's area. All upper tier seats are accessible to the handicapped.
The development of this program plan would not have been possible without the expert design and planning assistance of Hartronft Fauri Architects, P.C., Boulder, Colorado, and the technical expertise of the staff of the Health Sciences Center.
Financial Information

Center for Humanities Program Plan

Projected Funding Sources for Facility Operating Costs
Projected Occupancy Date – July 1, 2004

<table>
<thead>
<tr>
<th>COFRS Fund</th>
<th>04-05</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>310 - Unrestricted Fund Non-Exempt</td>
<td>$98,550</td>
<td>$98,550</td>
</tr>
<tr>
<td>Total</td>
<td>$98,550</td>
<td>$98,550</td>
</tr>
</tbody>
</table>

Projected Funding Sources for Capital Development

<table>
<thead>
<tr>
<th>COFRS Fund</th>
<th>02-03</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>330 - Restricted Fund – Exempt Gift Giving</td>
<td>$5,141,500</td>
<td>$5,141,500</td>
</tr>
<tr>
<td>Total</td>
<td>$5,141,500</td>
<td>$5,141,500</td>
</tr>
</tbody>
</table>

Form CC-C: Capital Construction Building Project Request FY 02-03 is included on the following page.
XI. Appendix E

Third Party Review

The third party review of this program plan, conducted by H + L Architecture, Denver, Colorado, is attached on the following pages.
14 June 2001

Mr. Noel Copeland
Office of Institutional Planning
University of Colorado Health Sciences Center
Building 500, Fitzsimons Campus
Denver, CO 80262

Re: Program Plan - 3rd Party Review
Ethics and Humanities Pavilion at Fitzsimons

Dear Noel:

The following represents our third party review of the University of Colorado Health Sciences Center Program Plan (undated) for the Ethics and Humanities Pavilion at Fitzsimons.

Our review comments focused on four topics:

- Conformance with Facilities Master Plan
- Feasibility of Concept
- Applicable Codes
- Reasonableness of Cost Estimate.

CONFORMANCE WITH FACILITIES MASTER PLAN

The University of Colorado Health Sciences Center has developed a Facilities Master Plan for the 217 acre Fitzsimons Campus. The University of Colorado Board of Regents approved the initial revision in September 1999 to the Institutional Master Plan of October 1998. CCHES approved the original institutional plan in December 1998.

The Program Plan contains approximately 15,000 gross square feet at the Fitzsimons campus to house the Ethics and Humanities Pavilion. The total project cost for the project $5,141,500. The construction of the new Ethics and Humanities Pavilion at Fitzsimons is consistent with the UCHSC’s mission as outlined in the Master Plan.

The University of Colorado Health Sciences Center is charged with educating future health care professionals, advancing knowledge to better understand and treat human disease and advancing the interests of the communities it serves. The humanities play a vital role in these tasks. UCHSC also aspires to be a model of research integrity, requiring its investigators to give careful consideration to the moral and ethical dimensions of biomedical research. The Ethics and Humanities Pavilion at the UCHSC Campus is a facility critical to the success of the academic mission of the campus.

FEASIBILITY OF CONCEPT

This Project is the proposed as a single phase of new construction.

The proposed project building elements include offices for a Director and Faculty, Staff, Reception Area and a Board Room. Meeting spaces include a small Auditorium, Break Out Rooms, Exhibit Space, a Library, Kitchen, Storage and Support Spaces.
Page 2
Mr. Noel Copeland
June 14, 2001

The facility proposed will need to be designed with flexible space to serve multiple functions and purposes. Exhibit space for the arts will be a critical part of this facility. The Pavilion will make use of educational technologies to support the basic mission of the Center. The proposed location of the facility will encourage casual as well as structured interaction on campus especially with the proposed construction of the New Library at Fitzsimons north of Building 500.

APPLICABLE CODES

The proposed additions and upgrades will be required to comply with all applicable codes, regulations, laws and ordinances as well as standards adopted by UCHSC. These codes and standards are identified in Section VII. Codes and Standards and, in our opinion, are applicable and consistent with the campus standards and necessary approvals.

REASONABLENESS OF COST ESTIMATE

The project budget for construction is estimated to total $5.14 million. The proposed center will be financed completely with private dollars and could be ready for occupancy in 2004.

Cost estimates and bids that have been received recently indicate that new construction falls within the assumptions that have been made in this Program Plan. Given the present rate of inflation in the construction market, the high level of construction activity in the Front Range, and the high degree of cost variances for technology, the cost estimate contained in the Program Plan is considered to be sufficient.

Subject to the comments above, the Program Plan appears to be a reasonable solution to accommodate the Ethnic and Humanities Pavilion proposed for the UCHSC Fitzsimons Campus.

If you have questions regarding this review, please do not hesitate to contact us at your earliest convenience.

Sincerely,

H+L ARCHITECTURE, LTD., AIA

Michael E. Ossian, AIA
Principal

Enclosures

MEO/ith