



**University of Wyoming College of Health Sciences**  
**University Plan III: College of Health Sciences Academic Plan**



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## University of Wyoming College of Health Sciences

Fall 2008

### University Plan III: College of Health Sciences Academic Plan

#### Mission Statement

*The mission of the College of Health Sciences is to promote excellence in health and human services through university teaching, research and service with special emphasis on rural populations.*

The College meets its mission through academic studies, research, outreach, advising, development and service administered through its units and programs:

- Division of Communication Disorders
- Division of Kinesiology and Health
- Division of Medical Education and Public Health
  - WWAMI
  - Family Medicine Residency Programs in Cheyenne and Casper
  - Wyoming Area Health Education Center
- Fay W. Whitney School of Nursing [FWWSON]
- School of Pharmacy
- Division of Social Work
- Office of Student Advising
- Office of Development
- Bachelor of Sciences in Dental Hygiene
- Minor in Health Sciences
- Wyoming Institute for Disabilities
  - Minor in Disability Studies
- Center for Rural Health Research and Education
- Wyoming Geriatric Education Center
- Center on Aging
  - Minor on Aging
- Center for Community Health and Economic Development [CCHED]

#### Values

The College promotes values of excellence, leadership, access and inclusion. As the sole College of Health Sciences in Wyoming and as part of its land grant university the College of Health Sciences strives to impact Wyoming's health care by educating and training its health care professionals, producing high caliber biomedical research, conducting relevant health-care service and delivery research, providing leadership in developing state and national health care policy and providing direct health care services to the citizens of Wyoming.

#### Vision

As the College moves forward it envisions the following:

- Increasing **interdisciplinary** focus in education, research and clinical practice
- Taking **undergraduate and graduate education** to the next level of excellence

- Enhancing the College's commitment to **public outreach** to promote access to continuing patient and professional health education, clinical training and health professional degree/certificate programs and clinical services
- Increasing the quantity, quality and impact of **biomedical and clinical research**
- Producing **clinical innovations** in practice that will impact the access, quality and delivery of health care and clinical education in Wyoming and beyond
- Producing **innovations in health care policy** that impact access, quality and delivery of health care in Wyoming and beyond
- Provide **public service** to improve our communities and the quality of life in the State of Wyoming as responsible stewards of the public trust
- Providing Leadership** in helping Wyoming solve its most critical health care problems such as recruitment/retention of critically needed health care practitioners and establishing clinical innovation and health care policies that lead to improved access, quality and delivery of health care in Wyoming.

### **Strengths/Weaknesses**

Identified strengths within the College include the caliber and professionalism of its students, faculty and staff, its growing reputation and productivity in research, and its recognized leadership in health education throughout Wyoming and beyond. Weaknesses include over extended faculty and relatively low salaries which result in faculty and staff being hired away. The College of Health Sciences has the lowest graduate assistantships to faculty ratio in the University even though it educates the second highest number of students. Inadequate support for graduate assistantships results in diminished opportunities to attract graduate students and leaves faculty without necessary resources to fulfill teaching and research goals. Another perceived weakness is the absence of a Ph.D. program within the College. Doctoral level students would enhance the level and productivity of research within the college and provide much needed teaching assistance to undergraduate education. Graduates from a biomedical sciences Ph.D. find employment in medical centers, the biomedical-pharmaceutical industry and provide a much needed pool of future academicians for health sciences that are chronically in short supply. Finally, in part due to our success at attracting more students and more extramurally funded research, the College's teaching, office and research space is increasingly inadequate.

### **Opportunities/Threats**

Because of the new Health Sciences building and the fact that most faculty are now residing in the recently completed structure, several opportunities are now readily available that, in the past, lacked purchase. Opportunities that the College can envision taking advantage of over the next five years include expanding research opportunities including interdisciplinary research, expanding distance education opportunities, enabling faculty and units in increasing resource sharing, exploring more interdisciplinary teaching and practice opportunities and finally developing more partnerships within the College, University, State and beyond. Threats to the College's ability to seek excellence include extensive demands on faculty limiting their potential to achieve excellence in all areas of teaching, research, service and for many faculties, clinical practice as well. The recent departure of Dean Kelley and the unknowns of new leadership present a possible challenge to future advancement. Finally, while Health Sciences attracts many of the best students within the University, it is felt that greater efforts are required to sustain recruitment of high achieving, excellent students to the College.

### **Response to the 2004 Academic Plan**

The College of Health Sciences implemented the 2004-2009 Academic Plan by supporting the broad initiatives outlined, and specifically addressing each action item assigned to the College:

**Action Item:** *The College will focus, insofar as possible to meet accreditation requirements, future hiring requests in Pharmacy, Communication Disorders, Kinesiology and Health and the Division of Medical Education*

*and Public Health on individuals who are able to support strong, intercollegiate research in the molecular and cellular life sciences.*

The College, through the use of release time and indirect monies accounts has supported and promoted the hiring of research intensive faculty by providing new faculty research start-up funds, facilitating remodeling/renovations of laboratory space, purchase of laboratory equipment, providing support for technicians and post-docs and by continuing to provide small grants for pilot research projects.

**Action Item:** *Through the use of job descriptions, performance evaluations and conversations with the Dean of the Graduate School about administrative structures, the College will encourage faculty in these units to participate in cooperative supervision of Ph.D. students with faculty in other colleges. The long-term goal will be to establish a record of participation in graduate supervision and MCLS-oriented research which will support discussion of an interdisciplinary Ph.D. program in molecular and cellular biomedical sciences.*

Research intensive faculties in the College of Health Sciences now participate in cooperative supervision of Ph.D. students from other departments and programs, notably the department of Zoology/Physiology, the Neuroscience program and the Molecular and Cellular Life Sciences program. This cross-college participation has led to the drafting of a Biomedical Ph.D. program proposal with the participation of four colleges, Health Science, Agriculture, Engineering and Arts and Sciences.

**Action Item:** *In collaboration with the Deans of Arts and Sciences and Agriculture, the College will investigate the feasibility of integrating more effectively the research and service functions of the Center for Rural Health Research and Education, the Wyoming Statistical Analysis Center and the Survey Research Center.*

WySAC and CRHRE researchers have submitted joint research proposals to NIH for evaluation of various health technology activities, and continue to exchange information on potential collaborations. Not only has feasibility been established but a strong collaborative effort has been created that supports the missions of both organizations without duplicating effort or competing for resources.

**Action Item:** *The leadership of the College will examine the feasibility of developing [interdisciplinary] clinical research appropriate to the expertise and clinical facilities available to the College: through the new Health Sciences Center Building, the Family Practice Residency Programs, clinical sites administered by the School of Pharmacy, and other ancillary clinics maintained or staffed by personnel of the College.*

The new CHS Associate Dean for Research is actively advocating throughout the College a greater participation in translational clinical research by educational efforts and the identification of external funding opportunities.

**Action Item:** *The Dean of the College, working with the leadership of each unit, and taking advantage of the design of the new Health Sciences Center, will develop interdisciplinary courses and clinical training opportunities for students engaged in the professional programs of nursing, pharmacy, medicine, social work and communication disorders.*

A College of Health Sciences Interdisciplinary Task Force was formed and chaired by Dr. Mary Burman with representatives from each academic unit. The Task Force developed symposia and coursework focused on the role of interdisciplinary/interprofessional practice in the care of selected patient groups such as stroke victims and pediatric populations.

A HRSA grant was granted in the Fall of 2007 to establish a Geriatric Education Center in the College of Health Sciences. The establishment of this center has involved a high level of interdisciplinary planning and activity involving all of the major academic units of the college and students. Interdisciplinary didactic and clinical training courses are being planned and implemented. Additional external funding has and is being obtained to guarantee sustainability.

**Action Item:** *Working with the Dean of Health Sciences, directors of academic units in the college will develop strategies for the effective use of both licensing examinations (where appropriate) and professional accreditation reviews as instruments of summative programmatic assessment. In addition, strategies for formative assessments of student progress in professional programs will be developed, to evaluate student mastery of both academic content*

*and the development of appropriate clinical/professional skills (in compliance with professional standards) required for professional accreditation.*

All academic units have established assessment committees or individuals which report annually to the Dean both summative and formative programmatic assessment data. The annual assessment review is coordinated by the Associate Dean of Academic Affairs.

**Action Item:** *Faculties of the School of Pharmacy, the Division of Communication Disorders, the division of Medical Education and Public Health and the division of Kinesiology and Health will work with the Dean of the Graduate School and the Dean of the College of Health Sciences to facilitate participation in existing interdisciplinary doctoral programs [e.g. Microbiology, Neuroscience, etc.] to enhance both the research environments in respective units and to benefit from shared research resources available through those doctoral programs.*

Research intensive faculties in the College of Health Sciences now participate in cooperative supervision of Ph.D. students from other departments and programs, notably the department of Zoology/Physiology, the Neuroscience program and the Molecular and Cellular Life Sciences program. This cross-college participation has led to the drafting of an Biomedical Sciences Ph.D. program proposal with the participation of four colleges, Health Science, Agriculture, Engineering and Arts and Sciences. The proposal has been presented to the Academic Dean's Council.

**Action Item:** *Faculties of the Division of Kinesiology and Health, the School of Nursing, the Division of Medical Education and Public Health and the Division of Social Work will explore the feasibility of developing a degree leading to the Master's of Public Health. A market analysis will be compiled to determine interest for such a program in the state and region. Current drafts of a proposed degree program indicate few, if any new resources will be required to assemble a marketable degree program.*

Priorities have changed within the College to emphasizing the development of a Biomedical Sciences Ph.D. graduate degree program.

**Action Item:** *Working with the Deans of Agriculture, Arts and Sciences and Health Sciences [and potentially Engineering], appropriate faculty in the School of Pharmacy, the Division of Communication Disorders, the Division of Kinesiology and Health, and the Division of Medical Education and Public Health will engage in the development of a broad based, interdisciplinary doctoral program in the Molecular and Cellular Life Sciences*

Cross-college participation has led to the drafting of an Biomedical Sciences Ph.D. program proposal with the participation of four colleges, Health Science, Agriculture, Engineering and Applied Sciences and Arts and Sciences. The proposal has been presented to the Academic Dean's Council.

**Action Item:** *Working with the Vice Presidents for Academic Affairs and Research, the Deans of Health Sciences, Agriculture, Arts and Sciences and Engineering, new strategies will be developed to strengthen the institution's infrastructure for basic and clinical research in the biomedical and biological sciences, through aggressive recruitment of external funding.*

The neuroscience COBRE recently achieved a 5 year renewal. COBRE has provided start-up funding for new neuroscientists within the College. The INBRE, started in 2004 currently has a five year renewal submitted in July 2008.

**Action item:** *Working with the Dean of Arts and Sciences and the Dean of Agriculture, the Dean of the College of Health Sciences will identify the resources needed to participate in a three-semester, undergraduate core course in the biological sciences, with the intention of providing all students a common pathway into basic and professional programs in the Life Sciences.*

A LIFE Sciences committee with cross college representation has successfully re-engineered the undergraduate core biological sciences courses into a three-semester, undergraduate core course series that now provides a common pathway into basic and professional programs for most students.

**Action item:** Working with the Dean of the College of Business, the Dean of the College of Health Sciences will link the B.S. degree in Health Sciences to the Masters program in Business Administration; thereby creating an opportunity for students to achieve an MBA with emphasis on health systems administration.

The B.S. in Health Sciences was downgraded to a minor therefore this initiative has been tabled pending further review.

**Action item:** Working with the Vice Presidents for Academic Affairs and Budget and Planning, the Dean of the College of Health Sciences will develop a new practice plan, tailored to the unique characteristics of both Family Practice Residency programs, which will address fiscal market issues for compensation of clinical faculty and staff, and that will address deficiencies in the support services required to conduct clinical practice at those sites. Such a plan would provide base salary for attending to residency education; a negotiated component based on net receivables for clinical practice; and a negotiated component for administration (if applicable).

At the UW Cheyenne Residency Program, increased patient visits, the addition of subspecialty physicians [rheumatologist, general surgeon], and increased numbers of health care professionals [Pharm.D.s, APRNs and PAs] has provided an enriched educational climate for residents. Resident compensation has been reviewed and updated to be compatible with regional salaries. Data is being compiled for faculty compensation via the WWAMI Residency network and necessary increases to remain competitive will be included in the next biennial budget. In Casper the program is dependent on the CHC for support services. In Cheyenne support services have increased to keep pace with the marked increase in patient visits, and faculty expansion

**Action item:** Working with the Vice Presidents for Academic Affairs and Administration and Finance, the Dean of the College of Health Sciences will re-examine the affiliation agreement between the University of Wyoming and the Community Health Center of Central Wyoming. The University of Wyoming will continue to be the sponsoring agency to the American Council on Graduate Medical Education and its Residency Review Committee. The affiliation agreement will be revisited to more effectively define: the relationships between partners; the resources needed to support the graduate medical education mission of the residency program (including appropriate shared governance of the residency; the role and governance of a community-based oversight board for the residency; the fiscal accountability for the UW block grant required by governing boards of both partners for fiscal responsibility; the rules for shared recruitment of participating faculty; an equitable compensation structure between partners; and the appropriate representation of the University on the governing board of the CHCCW).

A new affiliation agreement and organization has been drafted and finalized among the UW Casper Residency Program, the University of Wyoming and the Community Health Center of Central Wyoming [CHCCW]. The agreement requires approval by the UW Trustees and approval by the federal Health Resources Security Administration [HRSA].

**Action item:** Working with the Program Directors of the Family Practice Residency Programs in Cheyenne and Casper, the Dean of the College will move to affiliate each residency with the WWAMI Family Practice Network.

The Family Practice Residency Programs in Cheyenne and Casper are now affiliated with the WWAMI Family Practice Network.

**Action item:** Working with the Vice President for Academic Affairs, the Vice President for Government and Community Relation, and the President, the Dean of the College will develop recommendations to link the undergraduate WWAMI program in medical education with the Family Practice Residency programs; including recommendations to the legislature for revision of statutes stating provisions for payback of state support for medical education through the WWAMI program (loan forgiveness connected to the residency training opportunities in Casper and Cheyenne).

WWAMI students who complete three years of a UW Family Medicine Residency in Cheyenne or Casper will have one year of their medical education loan provided by the State of Wyoming forgiven.

**Action item:** Working with the Program Director of the residency program in Cheyenne, the Dean of the College will develop a business plan that will evaluate the size and scope of the residency, including the satellite clinic in Pine Bluffs; provide incentives for increasing clinical revenues; evaluate markets for clinical procedures provided

*by the residency; evaluate the capacity for new contracts for clinical services; and evaluate options for providing health care to uninsured populations through the Cheyenne residency center.*

At the UW Cheyenne Residency Program, increased patient visits, the addition of specialty physicians [rheumatologist, general surgeon], and increased numbers of health care professionals [Pharm.D.s, APRNs and PAs] has provided an enriched educational climate for residents and brought in new clinical revenues. Consequently, a revision of the Residency's state budget has been crafted and approved.

**Action item:** *Working with the Vice President for Academic Affairs, the Dean of the College of Health Sciences and the Dean of the School of Pharmacy, a new tuition structure will be developed which will provide the sustainable funding needed for the acute-care and advanced community care experiential components of the Doctor of Pharmacy curriculum.*

The differential tuition in Pharmacy has been increased twice which has allowed a new way, apart from CPM, to finance new clinical faculty positions and support the Doctor of Pharmacy program.

**Action item:** *Working with the Vice President for Academic Affairs and the Dean of the College of Health Sciences, recommendations will be developed for funding and sustaining undergraduate medical education administered by the university through the College of Health Sciences. Size of both WWAMI and WICHE programs will be evaluated; and the costs of sustaining both programs will be evaluated as a function of the block grant to the university (in contrast to a potential line-item appropriate from the legislature to support medical education in the state). In keeping with other states, a repayment provision for students supported through WICHE/PSEP will be evaluated; and recommendations developed to reinvest a [significant] percentage of those funds derived from contract repayments from WWAMI and WICHE, if recommended, in support of medical, and other professional education by the university.*

Funding for the residencies and WWAMI medical education programs has been taken out of the University 067 "block grant" budget and is now its own legislated 167 budget. The 167 budget is more prescriptive in its application but has assured the medical education programs a consistent level of support. WWAMI professional education loan payback funds are now being aggressively used for support of medical students and for recruitment of these students back to Wyoming to practice. (WICHE PSEP currently does not have payback in any of the 9 fields supported in Wyoming)

**Action item:** *Working with the Dean of the College of Health Sciences and the Vice President for Academic Affairs, the Dean of the School of Nursing will develop strategies that comply with legislation supporting career development of students and faculty in the Fay W. Whitney School of Nursing through engagement in programs accessible through WICHE (NEON), the University of Colorado Health Sciences Center and the Oregon Health Sciences University.*

The Dean of Nursing is actively working with Universities with Nursing Ph.D. programs in an effort to pave a pipeline to increase the number of Nurse Ph.D.s. Nurse PhDs are in short supply and are sorely needed to provide academic professors in nursing.

**Action item:** *The Division of Communication Disorders and the School of Nursing should assess the markets, and institutional capacities, for degree completion and master's programs offered through the Outreach School. Strategies for enhancing frequency and predictability of graduate courses offered through these technologies will be developed, with emphasis on identifying resources needed to assure quality and sustainability of these programs.*

Nursing provides undergraduate [RN/N, BRAND] and MS degrees through Outreach. The Division of Communication Disorders provides a Masters in Communication Disorders through Outreach.

**Action item:** *Working with the Vice President for Research, the Dean of the College of Health Sciences and the Dean of the Outreach School, the leadership of the School of Pharmacy will develop strategies and resources necessary to the development of a telepharmacy program, connecting community clinical training sites with the UW campus in Laramie, and facilitating faculty development of adjunct faculty in distant clinical sites.*

Video-conferencing and distance education equipment has been disseminated to major regional clinical training sites, however, the optimal use of the systems has not been obtained at this point.

**Action item:** *Working with the Dean of the College of Health Sciences and the Dean of the Outreach School, the Faculty of the Division of Social Work will develop strategies for enhanced use of distance education technologies and on-line instruction to permit engagement of both undergraduate and graduate student populations in site-bound settings.*

The Division of Social Work provides a Masters in Social Work degree through Outreach. W courses are provided at UW Casper College through UW Outreach as well. Social Work also participates in WICHE ICE as a means of reaching and meeting the needs of more students.

**Action item:** *The Dean of the College of Health Sciences, working with the Vice President for Academic Affairs and the Director of the Wyoming Institute for Disabilities (WIND), should examine the desirability of creating a Division of Disability Studies in the College of Health Sciences.*

A minor in disabilities studies is currently provided through the Wyoming Institute for Disabilities [WIND] in the College of Health Sciences.

**Action item:** *The Center for Rural Health Research and Education is a research and development unit of the college charged with facilitating student and faculty research in biomedicine and public health; contracting with state and federal agencies (viz. the Wyoming Department of Health, the National Institutes of Health, and the Health Resources and Services Administration) for analysis of data specific to rural health issues; and developing the infrastructure specific to telehealth initiatives useful to the college. The Dean of the College of Health Sciences, working with the Vice President for Research, the Vice President for Academic Affairs, the Dean of Library Services, and the Director of the Center for Rural Health Research and Education (CRHRE), will examine the desirability of developing the CRHRE as an academic unit for biomedical and health informatics in the college.*

Plan not developed but discussions are ongoing.

### **Curriculum:**

With the exception of some undergraduate and master's degree programs in the Division of Kinesiology and Health, all professional degree offerings in the College of Health Sciences have their curriculum directed, to various degrees, by professional accreditation requirements. All professional degree programs in the college are currently accredited.

### **Assessment:**

All academic units in the College of Health Sciences have plans for both formative and summative assessment of student learning and professional skills development. In addition, many of the professional degree programs require professional accreditation and licensing examinations of students as they complete academic training and enter clinical practices. These assessments also provide a clear metric for summative assessment of educational program outcomes.



### **Institutional Issues - Creating the Future III:**

The College of Health Sciences contributes significantly in the following areas identified in Creating the Future III.

- **Building Depth**
- **Reinforcing/refining Areas of Distinction**
- **Access to Higher Education**
- **Fostering Excellence**
- **Cultivating leadership**

**Building Depth:** Creation of the Future 3, states when discussing depth versus breadth that “... we can turn our [small] scale into an asset through interdisciplinarity” and building depth requires “promoting shared scholarly interests and overlapping areas of expertise across department and college boundaries.” Also it is discussed that to achieve depth the temptation to add new programs must be balanced very carefully with existing resources and priorities.

The College of Health Sciences has focused on building depth by phasing out unnecessary degree programs [Medical Technology, Master of Science in Audiology, B.S. in Health Sciences] and by replacing outmoded degree programs with new viable ones [Pharm.D. replaced the B.S. in Pharmacy]. Depth also has been created by emphasizing interdisciplinary teaching, research, service and clinical practice.

In the new academic strategic plan the College envisions adding depth and value to its portfolio by replacing the nursing Masters programs focused on family nurse practitioner and psychiatric mental health nurse practitioner education with the **Doctor of Nursing Practice [DNP]**. The Fay W. Whitney School of Nursing [FWWSON] has developed a feasible plan for transitioning to the DNP program, including outlining the needed resources and how they will be garnered.

In addition, the college proposes to add depth and value by establishing a new interdisciplinary Biomedical Sciences Ph.D. degree program. **The Biomedical Ph.D.** is distinctive from other biologically oriented graduate programs in that it involves research that is applicable to the pathogenesis, detection, diagnosis, prevention and treatment of human disease or pathologies. In this manner it is distinct from *in vivo*, cellular or molecular research that explores basic biological principles, mechanisms and systems that is not targeted specifically towards human conditions. The Biomedical Ph.D. will involve the interdisciplinary efforts of individuals from four colleges [Agriculture, Engineering, Arts and Sciences and Health Sciences]. Most of the proposed participants come from units that do not presently offer a Ph.D. The Biomedical Ph.D steering committee has produced a proposal documenting that the foundation, curriculum and funding exists to support the new program. Participating faculty have the expertise, grantsmanship, research productivity and experience in graduate education required to assure success. The biomedical faculty, curriculum and funding for the degree program are created primarily from currently existing resources. Evidence suggests that the degree would be

desirable to students due to expanded research and job opportunities in industry, government, medical institutions and academia.

**Reinforcing/Refining Areas of Distinction:** In the 2004 Academic Plan, two areas of distinction surfaced for Health Sciences, the Life Sciences and Professions Critical to the State and Region. To achieve distinction, the College in its former plan focused on building research infrastructure and enhancing an interdisciplinary environment. In the new 2009-2014 plan the College proposes to further these goals by developing the **Biomedical Sciences Ph.D.**, the **Doctor of Nursing Practice**, increasing the number of **graduate assistantships**, coordinating and improving the use of **space and resources** existing with Health Sciences, creating a **research mentoring program**, participating in **multi-institutional research initiatives** especially in the area of translational research and building **innovations in clinical practice**.

Due to market issues and baby boomer retirements, health science educators [especially in nursing, pharmacy and medicine] are and will continue to be in short supply. Doctoral programs such as the DNP and Ph.D. are pathways to supplying a critical mass of doctorate level trained health science educators. Likewise to reinforce and deepen the strength of biomedical research and professional instruction, graduate assistantships, [increased numbers and level of support] are needed. Ultimately, doctorate programs in health sciences, while enhancing research productivity, also produce better educators who are able to demand better scholarship from students. Logically, better prepared students result in better clinicians and researchers.

**Access to Higher Education:** The College of Health Sciences in association with the Outreach School educates and graduates an increasing number of students in the Health Sciences by distance education technologies. Outreach courses are provided through a combination of on-line and on-campus delivery mechanisms in the divisions of Kinesiology and Health, Social Work, and Communication Disorders, and the Schools of Nursing and Pharmacy. Two undergraduate nursing programs are delivered through Outreach. Graduate degrees at the Master's level are available in Kinesiology and Health, Nursing, Social Work and Communication Disorders. Finally, the dental hygiene program is a cooperative venture between UW CHS, Outreach, and Sheridan College and serves as a model for other such programs.

Academic and non-academic units in the College of Health Science directly provide continuing education to health care providers through a combination of delivery mechanisms. The recently funded Wyoming Geriatric Education Center [WyGEC] housed in the college of Health Sciences provides didactic and clinical education opportunities to health care students, health care educators and health care providers that serve the elderly in Wyoming. A variety of delivery mechanisms are used that include workshops and delivery by distance learning technologies. In addition the Center on Aging and the Aging Minor were recently moved into the college of Health Sciences.

As the College moves into University Plan 3, it envisions that the College in coordination with the Outreach School will develop **an Outreach/Distance Education Plan**. Part of this plan, for example, may explore the feasibility of new outreach avenues, such as more on-line courses, certificate programs, delivery of clinical training and continuing professional education. The Distance Education Plan will also hammer out standardized budgets and funding for all involved units within the College of Health Sciences.

Creating an atmosphere and environment that fosters both cultural and intellectual diversity is an important part of the College of Health Sciences. While both our faculty and student body are diverse, courses and activities that explore the richness of cultures and thought could be further enhanced. Therefore, the College, in the next five years will develop a College of Health Sciences **Diversity Plan** which will initiate a strategic process that strengthens our commitment to a diverse academic environment.

A final note on the issue of access involves the apparent success of the Hathaway Scholarship Program. If freshman enrollment continues to rise, the number of students interested in pursuing health related degrees and careers will also rise. According to OIA data, Health Science degrees are the highest sought after degrees in the University. While this is a measure of success, all degree programs within the College are operating at maximal capacity. In order to provide access for more students an array of strategies should be contemplated, including providing more on-line instruction and instructors.

**Fostering Excellence in Human Capital:** The College of Health Sciences is committed to achieving excellence in teaching, research, service and professional practice. The primary element required to build excellence in these areas is to **recruit and retain superior, high achieving students, faculty and staff**. In order to further promote excellence in years to come, the College through the efforts of the academic units and the Office of Undergraduate and Pre-professional Advising will develop a **Scholars of Distinction Program** which will focus on the recruitment and retention of top students in the University and region to the College of Health Sciences. Also, a **research mentoring plan** will be developed for college faculty to promote excellence in faculty research. Finally, the College through the efforts of the Dean's Office, academic units and the CHS development officer will craft an **Endowment Plan** that will foster donor giving to support human capital [graduate assistantships, residencies, fellowships and faculty] as well as facilities renovations and improvement within the college of Health Sciences.

**Cultivating Leadership:** In Creation of the Future 3 under "Leadership" the College of Health Sciences is asked to develop a **comprehensive clinical education plan**. It also states, "Such a plan is the natural context in which to weigh the costs and benefits of clinically oriented graduate and professional programs..... The plan should also review and delineate mechanisms for **UW's involvement in statewide policy discussions related to health care.....**"

In response to this discussion on leadership, the College of Health Sciences proposes to create an **Comprehensive Clinical Education Plan** that will include mechanisms for sustainability and will address state and regional needs for health care professionals. The plan will be sensitive to the emerging changes in Wyoming's population, future trends in health care and will underscore the college's role in helping develop sound health care policy.

Also, as expression of the Clinical Education Plan, the College in the next five years will partner with the VP of Student Affairs, the Provost, the Office of the President and others to plan a clinical practice/education/research **collaboration between The College of Health Sciences, Student Affairs and Student Health Services**. In addition it is proposed that the Clinical Education plan will include the development of an "Interdisciplinary Clinical Learning Center" that will utilize the expertise of faculty, clinicians, students and staff to provide an array of clinical services, education and research. In this manner, interdisciplinary clinical environments will provide a rich training ground for students while allowing clinical faculty to mentor clinical

skills. Clinical environments will also serve as an “incubator” for the development and research of new clinical care and innovative clinical teaching models. It is proposed that distance telehealth technologies will be important in the delivery of services.

As part of the Clinical Education Plan the College of Health Sciences will “review and delineate mechanisms for ***UW’s involvement in statewide policy discussions related to health care...***”. The College of Health Sciences in addition to its research faculty is the home to several health focused research-policy evaluation units: The Center for Community Health and Economic Development [CCHED], the Wyoming Institute for Disabilities [WIND], the Center for Rural Health Research and Education [CRHRE], the Nightingale Center for Nursing Scholarship, the Geriatric Education Center [WyGEC] and the Center on Aging. The College academic plan proposes to bring representatives from each of these units together with individual faculty as members of a College Health Care Policy Committee to create a plan that would coordinate policy generating research activities in the College that will ***stimulate statewide health care policy discussions***. In addition this committee’s plan would establish partnerships with other University entities, for example, the President’s Climate Commitment Curriculum Subcommittee where policy proposals could be drafted that are responsive to the health consequences of global climate change or the newly minted cross-college **interdisciplinary mental health collaborative**.

Creating the Future 3 also addresses the “***persistent shortage of primary care physicians***” in the state. To address these concerns the Director of Medical Education and Public Health, will coordinate with State agencies, the state medical societies, UW and community physicians to establish a ***recruitment, training and retention plan*** for Wyoming’s physicians. The two Family Medicine Residencies under the guidance of the Director of Medical Education and Public Health will develop a strategic plan that will address opportunities to meet the state’s critical need for primary-care physicians. In addition, the Division of Medical Education and the CHS Advising Office will develop strategies for the recruitment of Wyoming students into the WWAMI program. To address physician pipeline issues, the goals of the pre-professional Advising Office will be aligned with those of the WWAMI medical education program and activities will begin to target and reach out to high-school students. Finally, innovative ways to ***use funds from WWAMI Medical Education Contract repayment account and discussion of broader eligibility criteria for WWAMI will be explored***.

Other units such as nursing have newly instituted research and development projects to enhance the state’s nursing workforce. The FWWSON also addresses the shortage of primary care providers through its nurse practitioner graduate program. The transition of the nurse practitioner program to the DNP will enhance the contributions of these primary care providers to the health care system in Wyoming.

To further promote recruitment and retention of vital health care professionals and to improve health care quality, access, and delivery within the state of Wyoming, the College of Health Sciences in collaboration with the College of Engineering, state agencies, institutions and health care providers will seek innovative ways to utilize telehealth distance technologies to deliver much need medical services and education to frontier communities.

One of the critical shortages that the University of Wyoming and all institutions of higher learning face is the persistent shortage of health science faculty. A benefit of the proposed DNP

and the Biomedical Sciences Ph.D. is that both degrees will provide doctorate trained professionals that will have the qualifications to teach in Health Sciences at the University level.

As implied earlier, in the next five years the College of Health Sciences in collaboration with the Colleges of Education and Arts and Sciences proposes to establish an interdisciplinary mental health collaborative plan that will bring a cohesive effort to help the state battle its mental health crisis.

Finally, *continued institution-level funding from the federal INBRE program* is already underway as a means to advance biomedical research not only in the college but in the institution [including community colleges] as a whole. With continued funding and progress the INBRE program will provide the leadership required in the state to take biomedical research to levels of excellence. The development and implementation of the **Biomedical Science Ph.D.** is viewed as an important outcome of the INBRE and is primary evidence of its success.

#### **COLLEGE OF HEALTH SCIENCES GOALS FOR 2009-2014**

- Excellence in...
  - Graduate Education
  - Undergraduate and Professional Education
  - Research
  - Health Care Policy
  - Clinical Practice
  - Access, Outreach and Diversity
  - Recruitment/retention of health care professionals in Wyoming
  - Institutional Development

#### **COLLEGE OF HEALTH SCIENCES ACTION ITEMS for 2009-2014**

##### **Goal One: Excellence in Graduate Education**

Action Item One: By Working with the Graduate School and Academic Affairs seek approval and implementation of the Biomedical Sciences Ph.D. *Institutional Issues: Depth, Refining Areas of Distinction; Excellence in Human Capital*

Action Item Two: By interfacing with Academic Affairs, Government Affairs, Institutional Development, the Research Office and the Graduate School seek to increase the number of state supported, endowed and grant funded graduate assistantships. *Institutional Issues: Excellence in Human Capital; Depth and Refining Areas of Distinction.*

Action Item Three: Develop and implement the Doctor of Nursing Practice [DNP] program focused on advanced practice in two areas: family nurse practitioners and psychiatric mental health nurse practitioners. *Institutional Issues: Refining Areas of Distinction – Professionals critical to the state and region; Excellence in Human Capital; Leadership.*

Action Item Four: By working with the Dean of the Outreach School and Academic Affairs the College will develop an Outreach Distance Education Plan that will provide increased and improved access to Master's level graduate programs offered by units within the College of

Health Sciences. *Institutional Issues: Refining Areas of Distinction – Professionals critical to the state and region; Access*

**Goal Two: Excellence in Under Graduate and Professional Education**

Action Item Five: Working with the Vice President of Student Affairs, the College of Health Sciences Student Advising office and the units of the College will develop a Student Diversity Plan. The goal of this plan will be to increase the diversity of students and enrich the multi-cultural experiences of all students within the CHS. *Institutional Issues: Refining Areas of Distinction – Professional critical to the state and region; Excellence in Human Capital; Access.*

Action Item Six: By working with the Outreach School and Academic Affairs develop an Outreach Distance Education Plan that will provide increased and improved access to Undergraduate level programs offered by units within the College of Health Sciences. *Institutional Issues: Refining Areas of Distinction – Professional critical to the state and region; Excellence in human Capital; Access.*

Action Item Seven: The Manager of the CHS Office of Student Advising with advice and assistance from the office of the University Student Affairs, and College unit representatives will develop a CHS Scholars of Distinction Program. The goal of the Scholars program is to attract top students to the College by providing challenging and rewarding educational experiences, specifically research in health sciences. *Institutional Issues: Refining Areas of Distinction – Professionals critical to the state and region; Excellence in Human Capital.*

Action Item Eight: The Dean of Health Sciences working with state professional health organizations, the heads of academic units, the Office of the Provost and an outside consultant will establish a CHS Interdisciplinary/Inter-professional Clinical Education Plan that will serve the needs for undergraduate, professional and graduate health care programs. This plan will serve to establish excellence in clinical training while optimizing available clinical resources. *Institutional Issues: Refining Areas of Distinction – Professional critical to the state and region; Leadership; Excellence in Human capital.*

**Goal Three: Excellence in Research**

Action Item Nine: The CHS Associate Dean of Research working with the Dean, administrative unit heads and faculty will develop a Research Mentoring Program that encourages and facilitates excellent research by faculty. *Institutional Issues: Excellence in human capital; Areas of distinction*

Action Item Ten: The CHS Associate Dean of Research working with the Dean, unit heads and faculty will develop a plan for Research Excellence. This plan will identify areas of excellence as well as areas of research opportunities which will be promoted for faculty research success. *Institutional Issues: Excellence in Human Capital; Areas of Distinction.*

Action Item Eleven: The CHS Associate Dean for Development and Planning will develop a Space and Resource Sharing Plan that will allow the College to optimize the utilization of research, animal facility, office and teaching space. The plan will also allow for optimal sharing of resources, especially research capacity amongst faculty. *Institutional Issues: Excellence; Areas of distinction.*

Action Item Twelve: Seek continued institution-level funding from the federal INBRE program as a means to advance biomedical research not only in the college but in the institution [including community colleges] as a whole. With continued funding and progress the INBRE program will provide the leadership required in the state to take biomedical research to levels of excellence. The development and implementation of the **Biomedical Science Ph.D.** is viewed as an important outcome of the INBRE and is primary evidence of its success.

#### **Goal Four: Excellence in Health Care Policy**

Action Item Thirteen: The Dean of the College will develop a College Health Care Policy Committee to create a plan that would coordinate policy generating research activities in the College with a broader University wide Center for Policy Research. For example, WIND, Social Work, FWWSON, Pharmacy, the CHCEPC, CRHRE and the GEC share common research and outreach themes that impact health care policy. An interdisciplinary exchange of ideas will provide opportunities for research and outreach collaboration and enrich the outcomes of these efforts. In addition this committee's plan would establish partnerships with other University entities, for example, WySAC, CRHRE, and Psychology for the Mental Health Collaborative or the President's Climate Commitment Curriculum Subcommittee. Coordination of efforts should bring fresh perspectives on how to be responsive to the health consequences of inadequate health care in one instance and evolving global stressors such as climate change in the other. *Institutional Issues: Leadership; Excellence;*

#### **Goal Five: Excellence in Clinical Practice**

Action Item Fourteen: Working with the VP of Student Affairs, the Dean of Health Sciences along with appropriate unit heads and the Director of Student Health will develop a Student Affairs/CHS Student Health Service Collaboration Plan. This plan will allow clinical faculty the opportunity to provide excellent direct patient care to students of the University of Wyoming while providing a supervised practice learning environment for health science students. *Institutional Issues: Leadership; Excellence in Human Capital; Areas of Distinction- professions critical to the state and region*

Action Item Fifteen: The Dean of Health Sciences working with the Provost, the President and the Trustees, along with CHS academic unit heads, CHS Research Directors, the VP of Student Affairs, the UW Foundation and local, state and national agencies will establish a plan to create a University of Wyoming Interdisciplinary/Inter-professional Clinical Learning Center. The goal for this learning center is to provide an environment that will serve as a place for health care, student and resident clinical training, continuing education and clinical research. In this setting the learners will be individuals from high school thru post-graduate medical. The scope will

include pre-hospital emergency personnel, learners from multiple departments in the college of health sciences, practicing providers from Wyoming and surrounding States, as well as the resident physicians of the two family medicine residency programs. This plan will establish a clinical learning center that will be utilized primarily by clinical faculty, medical residents and health science students to serve the health care needs of the community and employees of the University and State. Also it will serve as a resource and education center for similar learners from surrounding state and the WWAMI residency affiliation. In addition, this clinic will serve as a clinical research facility where new models of health care delivery [for example, Telemedicine] and new models of clinical training can be tested and evaluated. It will also serve as a site for clinical research in many primary care outcome related issues. *Institutional Issues: Leadership; Excellence in Human Capital; Areas of Distinction- professions critical to the state and region.*

Action Item Sixteen: Working with the College of Education, the Department of Psychology, the Department of Family and Consumer Sciences, State Mental Health Agencies, State Professional Organizations, units [FWWSON and Social Work especially] in Health Science will work together to develop an Interdisciplinary Mental Health Collaborative Plan. The goal of this plan is to create mechanisms that will help provide optimal mental health services to Wyoming and its citizens. *Institutional Issues: Leadership; Excellence in Human Capital; Areas of Distinction – professions critical to the state and region.*

#### **Goal Six: Excellence in Access, Outreach and Diversity**

*See Action Items Four, Five and Six*

#### **Goal Seven: Excellence in the Recruitment/retention of critically needed health care professionals in Wyoming**

Action Item Seventeen: The College of Health Sciences will partner with State Agencies, other institutions of higher learning, State government, private agencies, practitioners and medical care institutions to develop strategies that will lead to improved recruitment and retention of critically needed health science students, faculty, adjunct faculty and health care providers in Wyoming. For example, to assure a better pipeline for Wyoming physicians, the use of funds from WWAMI Medical Education Contract repayment account and discussion of broader eligibility criteria for WWAMI will be explored. This recruitment/retention plan will be devised in conjunction with the Clinical Education Plan [see Action Item Eight]. *Institutional Issues: Leadership; Access; Excellence in human capital; Areas of distinction – professions critical to the state and region.*

#### **Goal Eight: Excellence in Development**

Action Item Eighteen: The Dean of Health Science, along with the College Development Officer with input from the Foundation, Provost, Government Affairs and the VP of Administration will develop a CHS Development Plan that will seek donor funding for endowments that will fund:

- Endowed Graduate Fellowships



- Endowed UW Faculty of Excellence
- Facilities remodeling/renovations
- Endowed Research Funds
- Excellence Funds to support academic innovations

*Institutional Issues: Depth; Access; Excellence in Human Capital; Areas of Distinction-professions critical to the state and region.*

## IMPLEMENTATION PLAN TIMELINE – College of Health Sciences Academic Plan 2009-2014

Goal/Action Item	Timeline	Participants
<b>Goal One: Excellence in Graduate Education</b>		
<u>Action Item One:</u> Integrative Biomedical Sciences [IBS] Ph.D.	2009: Institutional/Trustee approval of IBS Ph.D.  2009: Refine program, faculty status, materials, Curriculum, policies and procedures 2010-11: Appoint director, steering committee, Standing committees, Solicit applications, external funding 2011-12: Admit 1 <sup>st</sup> students, assessment, refinement 2014-15: 5-year program review	Steering Committee Dean Graduate School Provost's Office CHS Assoc Dean of Research Deans CHS, Ag, CoEAS, A&S Steering committee, faculty  Steering committee, faculty Standing committees  All of the above Assessment Committee
<u>Action Item Two:</u> Increase GAs	2008-2009: Seek funding resources for GAs  2009-2014: Set up 1 yr Endowed GA Apply for grant funded GAs Request state supported GAs if needed	Dean CHS, Unit Heads Associate Dean of Research Associate Dean Planning/Dev College CDO See above Research faculty Dean CHS, Unit heads
<u>Action Item Three:</u> DNP	2009-10: Seek institutional & Trustee approval	Dean FWWSON Dean CHS
<u>Action Four:</u> Graduate Outreach Distance Education Plan	2009-10: Develop Outreach Distance Education Plan 2010: Implement Plan 2014 : Assess ODE Plan	Dean CHS Dean Outreach Affected Unit Heads

<b>Goal Two: Excellence in Undergraduate and Professional Education</b>		
<u>Action Item Five:</u> Student Diversity Plan	2009-10: Develop Plan	CHS Student Advising CHS Dean
	2009 and ongoing: Implement approaches	Student Advising Unit Heads College Faculty
	2014: Assess Plan	CHS Student Advising CHS Dean
<u>Action Item Six:</u> Undergraduate Outreach Distance Education Plan	2009-10: Develop Outreach Distance Education Plan	Dean CHS
	2010: Implement Plan	Dean Outreach
	2014 : Assess ODE Plan	Affected Unit Heads
<u>Action Item Seven:</u> CHS Student Honors Program	2009-10: Develop Plan	CHS Student Advising CHS Dean
	2009 and ongoing: Implement approaches	Student Advising Unit Heads College Faculty
	2014: Assess Plan	CHS Student Advising CHS Dean
<u>Action Item Eight:</u> Clinical Education Plan	2009-10: Contract with consultant	CHS Dean
	2010-11: Consultant plan delivered	Consultant group
	2011-12: Implementation Committee	CHS Dean, Associate Deans Unit Heads
	2012-14: Initiate plan	Implementation Committee Unit Heads, Faculty
<b>Goal Three: Excellence in Research</b>		
<u>Action Item Nine:</u> Research Mentoring Program	2009-10: Needs assessment	CHS Assoc Dean Research
	2010-11: Develop, Disseminate, approval of Plan	Faculty Development Com.
	2011-: Implement Plan	Faculty, Assoc Dean Research
	2014: Assess plan	Faculty Development Com.
<u>Action Item Ten:</u> Research Excellence Plan	2009-11: Develop, Disseminate, approval of Plan	CHS Dean
	2011-: Implement Plan	Assoc Dean Research
	2014: Assess plan	Faculty, Assoc Dean Research Unit Heads
<u>Action Item Eleven:</u> Space and Resource Sharing Plan	2009-10: Needs assessment	CHS Assoc Dean Planning
	2010-11: Develop, Disseminate, approval of Plan	Unit Heads
	2011-14: Implement Plan	CHS Dean
	2013-14: Assess plan	CHS Assoc Dean Planning

<b>Goal Four: Excellence in Health Care Policy</b>		
<u>Action Item Twelve:</u> Health Care Policy Plan	2009-10: Form Coordination, Planning Committee  2010-11: Disseminate Survey; Establish partnerships 2011-: Disseminate outcomes 2014: Assess outcomes	CHS Dean Unit Heads HC Policy Committee HC Policy Committee HC Policy Committee
<b>Goal Five: Excellence in Clinical Practice</b>		
<u>Action Item Thirteen:</u> Student Affairs/CHS Student Health Service Plan	2009-10: Form planning group; assess needs/resources 2010-11: Solidify plan 2011-14: Initiate plan 2013-14: Assess plan	CHS Dean VP Student Affairs Director Student Health Participating unit heads Participating faculty/staff
<u>Action Item Fourteen:</u> Interdisciplinary Clinical Learning Center	2009-10: Assess needs/resources; procure funding 2009-10: Solidify plan 2009-11: Renovate FMR 2011-14: Open Clinical Learning Center 2013-14: Assess Clinical Learning Center	CHS Dean; CHS-CDO Director Medical Education Director FMR Deans Nursing, Pharmacy Director of CRHRE
<u>Action Item Fifteen:</u> Interdisciplinary Mental Health Collaborative Plan	2009-10: Form planning group; assess needs/resources 2010-11: Solidify plan 2011-14: Initiate plan 2013-14: Assess plan	Dean Nursing College of Education Department of Psychology Division of Social Work Family and consumer Sciences Participating faculty/staff
<b>Goal Six: Excellence in Access, Outreach and Diversity</b>		
<u>SEE Action Items Four, Five and Six:</u>		
<b>Goal Seven: Excellence in Recruitment and Retention</b>		
<u>Action Item Sixteen:</u> Recruitment/retention Plan	2009-11: Develop, Disseminate, approval of Plan  2011-: Implement Plan 2014: Assess plan	CHS Dean Director Student Advising Director of Medical Education Unit Heads
<b>Goal Eight: Excellence in Development</b>		
<u>Action Item Seventeen:</u> CHS Development Plan	2009: Develop Plan 2009- ongoing: Initiate Plan 2013-14: Evaluate Plan	CHS- CDO CHS Dean Unit Heads.