THE UNIVERSITY OF UTAH

18 October 2007

A. Lorris Betz
Senior Vice President for Health Sciences
Building 550, 5th Floor
Campus

Dear Vice President Betz:

At its meeting of 27 August 2007, the Graduate Council voted to approve a proposal to create Master of Science in Occupational Health (MSOH) and Master of Occupational Health (MOH) degrees to be awarded by the Department of Family and Preventative Medicine within the School of Medicine.

The MSOH and MOH degrees address significant market demands for which there are no alternatives in Utah. The degree programs are designed to prepare students in one of seven closely related fields of study: industrial hygiene, hazardous substances, occupational medicine, occupational injury prevention, occupational safety, ergonomics, and general occupational health.

The MSOH degree is designed for students with a science-based bachelor's training and will require an MS thesis. The MOH program is for physicians seeking additional training in occupational medicine and aerospace medicine residents to qualify to sit for Board examinations.

A copy of the proposal is attached for your approval and transmittal to the Academic Senate.

Sincerely,

David S. Chapman
Dean, The Graduate School

The Graduate School
302 Park Building
201 South Presidents Circle, Room 302
Salt Lake City, Utah 84112-9016
(801) 581-7642 • FAX (801) 585-6749
www.utah.edu/gradschool

UTAH SYSTEM OF HIGHER EDUCATION

PROPOSAL FOR A NEW DEGREE: MASTER OF SCIENCE IN OCCUPATIONAL HEALTH (MSOH) and MASTER OF OCCUPATIONAL HEALTH (MOH)

SCHOOL OF MEDICINE
FAMILY AND PREVENTIVE MEDICINE
ROCKY MOUNTAIN CENTER FOR OCCUPATIONAL AND ENVIRONMENTAL HEALTH
October 22, 2007

The School of Medicine at the University of Utah is providing this Proposal for the addition of a Master of Science in Occupational Health (MSOH) degree and a Masters of Occupational Health (MOH) degree. The primary difference in the two degrees is that the MSOH degree includes a requirement for a research project, and the MOH degree will primarily be for education of the Occupational Medicine (OM) residents Aerospace Medicine residents, and other students with significant professional experience to meet an equivalency requirement.

Background. The Rocky Mountain Center for Occupational and Environmental Health (RMCOEH), Department of Family and Preventive Medicine, University of Utah School of Medicine, was established in 1977. In 1978 the Center was designated as a National Institute for Occupational Safety and Health (NIOSH) Education and Research Center (ERC). It has continued as a NIOSH Center to the present, being one of only 16 such NIOSH Centers in the nation. At the most recent NIOSH site visit in February 2007, the Center received a score of 140 (scale: 100 no concerns-500 not fundable), one of the best scores any ERC has obtained (NIOSH was informed of the letter of intent for this proposal). The score means continued funding support for another five years with a 17% increase in a tight funding environment. The Center currently receives approximately $1.3 million per year in NIOSH support, with 60% of individual academic program funding restricted to student support. Faculty have been advised that this is the largest educational grant in the School of Medicine.

As a NIOSH Center, the RMCOEH is required to provide graduate programs in the diverse aspects of occupational health (OH). These aspects/emphases include industrial hygiene (IH), occupational medicine (OM), hazardous substances academic training (HSAT), ergonomics and safety (E&S), and occupational injury prevention research training (OIPRT) (See Appendix A for brief descriptions of these fields). The Center also has an extensive Continuing Education (CE) program providing over 60 courses a year to over 2,500 registrants. Each emphasis is separately supported by NIOSH funds. Until recently, the students graduating from the occupational medicine, industrial hygiene, and hazardous substances academic training programs received Master-level Public Health Degrees [Master of Public Health (OM) or Master of Science in Public Health (IH)] from the Department of Family and Preventive Medicine's Public Health Program. During the past few years, the Council on Education for Public Health (CEPH) has dramatically increased the number of credit hours required for an MPH or MSPH degree. Currently, the MPH requires 49 credit hours vs. 32 credit hours previously and the MSPH 59 credit hours vs. 42 previously. In addition to increasing the total number of hours, CEPH has

also markedly increased the public health content hours. These changes have had the following impact on the Center's programs.

1. It is no longer possible for residents in occupational medicine or aerospace medicine to complete the academic phase (leading to a master degree) required by the Accreditation Council for Graduate Medical Education (ACGME) for those specialties in two semesters. As a result:
    a. The U of Utah occupational medicine residency, regarded as one of the premiere programs in the country in view of 100% pass rates on certification examinations and no citations during the last two ACGME site visits, is now less competitive in attracting top applicants since they can obtain other master degrees in two semesters.
    b. The U.S. Air Force previously sent high quality occupational medicine and aerospace medicine residents to the Center to obtain master degrees in recognition of the fact that Center faculty have significant expertise in both areas, residents obtain a firm foundation in the specialties and the proximity of Hill AFB. However, the Air Force will only fund two semesters so the Center is no longer able to have Air Force residents in the program.
2. The increase in Public Health content has necessitated deleting quality courses with occupational medicine or industrial hygiene content. Thus, neither the occupational medicine residents nor the industrial hygiene graduates are as well prepared to provide appropriate services on graduation.

In view of these factors, RMCOEH faculty developed the proposal for the closely related MSOH and MOH degrees. The MSOH requires 43 credit hours and the MOH requires 32 credit hours. Both degrees can be taught with current RMCOEH and Departmental faculty. Although eight to ten students may move from the current Public Health Program to the MSOH/MOH, there will not be any net impact on the Department since both programs are located there and plans for this potential transition have already begun. Additionally, increased applications because of the attractiveness of the MSOH/MOH programs, including significant numbers of Air Force residents (as noted in the letter from the U.S. Air Force Surgeon General) could increase the Department's number of matriculated students.

The following are the current credit requirements for the MSPH/MPH and proposed MSOH/MOH programs.

	MSPH/MPH	**MSOH/MOH**
Current (or proposed) Credit Requirements	59/49	43/32

The credit requirements for the MPH are 49 and this would be 32 under the MOH degree. The difference between the MSOH and MOH is a research project (either thesis or publishable paper option). The MOH would primarily be Occupational Medicine and Aerospace Medicine residencies. There are expected to be few other students qualified for this option, as unless they have equivalent professional experiences such as several years of full-time practice in an Occupational Safety and Health discipline, they would need the MSOH for reasons of establishing qualifications in those fields.

A fortuitous aspect of the planning effort was the recognition that other University of Utah students could be attracted to the new degree program. As noted in the supporting letters, occupational and physical therapists, those without an engineering degree who desire training in safety, ergonomics, or occupational health, and others may find the MSOH/MOH degrees particularly attractive to meet their needs.

1.1. Program Description

Rationale: As noted above, the new CEPH requirements have necessitated elimination of some necessary courses for the occupational health students. This has reduced the quality of OH education programs for RMCOEH students. The proposed degrees will restore the quality of OH education, reduce the credit requirements to more appropriate levels and return the University of Utah to a competitive position for these students. It will also allow The University of Utah to once again compete for and accept outstanding physicians in the U.S. Air Force Aerospace Medicine residency program. Additionally, it is anticipated the new degrees will be attractive to other students desiring a master degree.

Proposed Program: The University of Utah MSOH and MOH Degrees are proposed to meet significant market demands for which there are no alternatives in Utah. The degree programs are designed to prepare students in one of the following seven closely related fields of study: 1) Industrial Hygiene (IH), 2) Hazardous Substances Academic Training (HSAT), 3) Occupational Medicine (OM), 4) Occupational Injury Prevention Research Training (OIPRT), 5) Occupational Safety, 6) Ergonomics, and 7) General Occupational Health. The Occupational Safety and Ergonomics emphases are targeted for students who have been assigned as chief or director of plant safety or plant safety and ergonomics. However, they cannot enroll in the Ergonomics and Safety program of the Center as that degree is provided by Mechanical Engineering. A prerequisite is an engineering academic degree, which many of the safety directors do not have (especially not calculus). The Center has received numerous requests for a graduate safety program that does not require an engineering background.

Brief Description. The MSOH Degree Program will consist of Core Curricula for each program that are depicted in the Appendix B. Electives will be selected from a list of options with guidance from the student's assigned faculty advisor. The electives will tend to focus on those needed for the student's area of emphasis (e.g., industrial hygiene and toxicology for the Industrial Hygiene emphasis). All MSOH students will additionally complete a Master's Thesis or publishable paper option. All MSOH emphases will be 43 credit hours.

The IH and HSAT programs are being designed to have MSOH degree requirements of 43 credit hours to meet the American Board of Engineering Technologies (ABET) Applied Science Accreditation Commission (ASAC) requirements for those programs (as discussed below) (See Appendix B).

The MOH Degree Program will also assign faculty advisors. The Occupational Medicine and Aerospace Medicine residents will both take the identical, pre-set curriculum without electives (See Appendix B). That curriculum will be 32 credits.

Students such as those in the IH and HSAT programs are currently required to complete 59 credits to receive a Master of Science in Public Health degree (or MSPH). For comparison

purposes, the differences between this proposed MOH curriculum and that of the Public Health Programs' MPH curriculum are provided (See Appendix C).

Demand for RMCOEH graduates is robust. However, the jobs are increasingly complex and necessitate interdisciplinary problem solving. For example, prevention of injuries in a particular area of a manufacturing facility often requires the combination of a safety specialist, industrial hygienist and the plant medical personnel. These increasing complexities have been taken into consideration when designing this degree program by including coursework that actually addresses such problem solving situations.

Entering Student Qualifications. MSOH students will typically have completed bachelors training, usually sciences-based, although occasional students matriculate with other degrees. Competitive students applying for the MSOH degree will have strong baccalaureate backgrounds in sciences and math. Typical Industrial Hygiene students will have backgrounds in chemistry or biology. Typical Ergonomics students in the MSOH degree will have Physical Therapy or Occupational Therapy backgrounds. Typical Safety MSOH students will generally have a science-related baccalaureate degree, but lacking a graduate degree. Those interested in the Ergonomics and Safety options with engineering backgrounds are more likely to retain the option of a Masters in Mechanical Engineering, which is the only option currently available, though it necessitates a much stronger calculus and physics background than that required for the majority of current job positions. Entering MSOH students will have had to achieve competitive GRE scores.

The MOH program is for physicians seeking additional training in occupational medicine and aerospace medicine residents to become qualified to sit for the Board Examination (American Board of Preventive Medicine) in the specific sub-specialty. As entering MOH students who have an MD or DO, they will not be required to take the GRE.

A conservative estimate would be 12 -15 students enrolled in the first year and 12 enrolled in the second year in the combined IH and HSAT programs alone. We anticipate 3 occupational medicine students per year. Within two years, we also anticipate 4-7 full time student equivalents in the Ergonomics and Safety emphasis. Approximately 5-8 aerospace medicine residents are anticipated within two to three years of initiating the proposed degree program. Brief summaries of each of these areas of study in occupational health are listed in Appendix A.

MSOH / MOH Full Time Effort Students per Year

Program	Matriculating Students per Year	Full Time Student Totals
IH / HSAT	6-8	12-15
Ergonomics	2	4
Safety	2	3
Occupational Medicine	3	3
Aerospace Medicine	5-8	5-8
Totals	**18-23**	**27-33**

Five Year Projection for MSOH / MOH Full Time Effort Students per Year

Program	Year 1	Year 2	Year 3	Year 4	Year 5
IH / HSAT	12 -15	20	20	20	20
Safety	3	4	5	6	7
Occupational Medicine	3	3	3	3	3
Aerospace Medicine	5-8	5-8	5-8	5-8	5-8
Totals	27-33	36-39	38-40	40-43	42-49

Proposed Programmatic Oversight and Accreditation Issues
All these programs are currently funded and have been developed under the 29-year old Rocky Mountain Center for Occupational and Environmental Health (RMCOEH). The Center is sponsored by a federal grant from the National Institute for Occupational Safety and Health that is over $1,300,000/year.

Curriculum development is guided by external Advisory Boards and committees, including the Rocky Mountain Center for Occupational and Environmental Health Advisory Board, the Industrial Hygiene & Hazardous Substances Advisory Committee, the Occupational Medicine Residency Advisory Committee and the Ergonomics and Safety Advisory Committee. All have active and ongoing input into curricular design, implementation and evaluation.

Accreditation is planned through the American Board of Engineering Technologies (ABET) Applied Science Accreditation Commission (ASAC), which already accredits the University of Utah's Industrial Hygiene, Hazardous Substances Academic Training, and Ergonomics and Safety programs. The Occupational Medicine residency program is also accredited through the Accreditation Council for Graduate Medical Education (ACGME)'s Preventive Medicine Residency Review Committee.

1.2. Mission Fit

The University of Utah Master of Science in Occupational Health and Master of Occupational Health Degree Programs will fill an unmet need at the University of Utah. Though occupational health training has been available for 29 years, changes in external accreditation standards no longer allow for a quality education experiences, as previously noted. These programs target previously identified areas for Utah State Higher Education (USHE) development involving health, engineering and the environment through enhancing and preserving a renowned program; retaining access of students to such programs in Utah; providing businesses in Utah with access to a supply of diverse, well trained occupational safety and health professionals; and continuing to improve the business climate of the State of Utah. The improved competitiveness for business is provided through programs that prevent occupational injuries and illnesses, lower workers compensation costs, and make Utah more competitive than other states as businesses seek expansion sites.

Projected impacts on other programs

This proposal is expected to result in no net loss of students in the University of Utah's Public Health Programs (MSPH or MPH Programs). This is because while those programs are expected to partially lose about 10 students per year under this plan, the RMCOEH has been informed by Public Health Programs Administration that they have far more qualified applicants for positions than can be accepted, thus contingency plans of filling any vacancies created have already been made and this will result in no net loss. There is no negative impact on the Department of Mechanical Engineering programs. Rather, they anticipate broadening the curricular offerings and involvement in training additional students in the proposed MSOH/MOH programs. The Departments of Physical Therapy and Occupational Therapy anticipate no net negative loss. Rather, this proposed program broadens potential offerings to help train their students in additional competencies involving ergonomics. (Please see letters of support from the Deans of the Colleges of Engineering and Health).

1.3. Current Faculty Preparedness

Faculty for this proposed program have extensive experiences in robust curriculum design (baccalaureate, masters, doctoral, residency), administration, furnishing quality mentorship, monitoring progress, instructional methods, evaluation strategies, accreditation compliance, and assuring that students graduate with a quality educational experience and credentials. Together, they have over 100 years of combined academic experience. All have current or past responsibilities for student advising and service on committees. Adjunct Faculty will also serve such roles as needed to serve the needs of the students. Faculty credentials are in Appendix D.

1.4. Market Demand

The importance of occupational health and safety (OHS) is supported by the Institute of Medicine (IOM, 2000) which states that the number of new cases of occupational illness (1992) was 860,000, with 60,000 annual deaths. In 1997 over 6 million Americans were injured on the job, with over 7,000 deaths. The economic costs were $26 billion related to illness, and $145 billion related to injury. Thus, the tangible benefits of occupational health professionals reducing those injuries is very high.

This proposed Masters Program has extensive, demonstrable market demand. National and regional demand for Industrial Hygiene and Hazardous Substances trainees have not been quantified. However, the demand for the RMCOEH's Industrial Hygiene trainees is such that most are placed in advanced career jobs before they complete the training program. As well, requests for RMCOEH Industrial Hygiene students are so high that it is not possible to fill the summer externship positions that local, regional and national industry would like the RMCOEH to fill each summer.

The shortage of trained Occupational Medicine Physicians has been estimated at 3,000-5,000 (Institute of Medicine). Consequently, there is no problem with placement of University of Utah Occupational Medicine residents and most jobs in the US go unfilled. Ergonomics and Safety students are similarly placed without difficulty prior to graduation. Occupational Injury Prevention Research is a relatively new field involving interdisciplinary solutions to workplace injury problems. The RMCOEH has successfully received PhD funding for this program, but

needs to develop a Masters emphasis to remain competitive. Job demand is believed to be flourishing.

The numbers of students placed per year average:

Program	Ave. number of students placed/year
Industrial Hygiene	4
Hazardous Substances Academic Training	1.5
Occupational Medicine	3
Ergonomics & Safety*	4
Occupational Injury Prevention Research Training (PhD)	1

*Ergonomics and Safety is combined in the engineering department, but they are different yet related fields and are separate in this proposed curriculum as the main target students (PT & OT) do not typically have substantial interest in safety.

The numbers of positions available for graduates is essentially impossible to quantify. We currently have no students who graduate and are not placed in positions. We are routinely contacted for additional graduates and have none available. This is supported by the lack of sufficient students for summer externships. An additional factor is that many of the initial graduates from the RMCOEH in the 1970s are now at retirement age, and this has already begun to show up in the RMCOEH Graduate Surveys. It is believed that a coming wave of retirements is likely to exacerbate these shortfalls of occupational health and safety professionals.

The numbers of students interested in the RMCOEH's programs has been rising. Currently, there are 5 new IH and HSAT students entering this fall and another 3 are interested in entering January 2008. There is an average of approximately 10 applications for 3 occupational medicine positions each year. Each year multiple telephone calls are received from students without engineering backgrounds who seek graduate training in ergonomics and/or safety. Currently, training cannot be provided to them, a need which this proposed degree program will fill. Aerospace medicine residents are sent by the US Air Force for training, have their tuition and living expenses paid by the Air Force and therefore the Air Force does to a significant extent direct where they may train (see Letter of support from the Air Force).

1.5. Student Demand

The RMCOEH has graduated over 363 graduate students from its programs since founding of the Center at the University of Utah in 1977. There is continuing, strong student demand for RMCOEH programs, as has been the case for over 29 years. However, RMCOEH students are not satisfied with the increased general public health requirements which have detracted from a quality OHS academic experience (2006 Graduates survey performed for NIOSH training grant competitive renewal).

1.6. Budget: Five-Year Revenue and Expense Projections

Background Information on Program Budgets

Budgets Combined for MOH/MSOH Program

For budget purposes, the MOH/MSOH degree programs are inseparable. Students will be taking

the same coursework taught by the same instructors at the same times and the programs share the same administrative support structure. The sole significant difference between the MOH and MSOH for budget purposes is the added time, student credit hours and ultimately the expense involved in the *thesis* component of the MSOH student curriculum. The MOH and MSOH are therefore presented together in the following program revenue and expense projections.

Required MOH/MSOH Courses Are Currently Taught

With few exceptions, the MOH/MSOH curriculum is already taught as courses through the DFPM Graduate Program in Public Health. Implementation of the MOH/MSOH curriculum does not require extensive preparation or teaching of new courses. The budgetary impact on the RMCOEH of teaching costs of implementing the new degrees is relatively minimal.

No Additional State Funds Requested

The RMCOEH receives no direct allocation of state funds and no additional state funds are requested to fund the MOH/MSOH programs.

Mission Based Management (MBM) Educational Funds (SCH Support)

Host departments of educational activities and programs within the University Health Sciences Center receive educational funds (state, tuition, and other) through a formula developed and administered by the HSC Mission Based Management Advisory Committee (MBMAC). The relevant funding formula for allocations associated with the MOH/MSOH program would be derived from student contact hours (SCH's). Currently, the Department of Family and Preventive Medicine already receives the SCH related funds for the existing RMCOEH-based courses destined for the MOH/MSOH degree programs.

Calculation of MBM Student Contact Hour Support

Student contact hours for the MSOH/MOH are estimated to be at an average of 18.4 credit hours per student, per year. For budget purposes, MBM educational funding projections are based on current dollar per SCH figures. This formula is $327 per credit hour X student contact hours X number of students per year, with $327 being the balance of $460 per student contact hours minus a departmental overhead of 29%). It is projected that there will initially be 10-12 students entering the MSOH/MOH programs each year, with an annual total active student headcount of 27-33, rising to 42-49 over the next five years.

ERC Grant Support for RMCOEH and the MOH/MSOH Program

As a NIOSH Education and Research Center, faculty time (in FTE's), including time spent teaching courses, is supported in part by the ERC grant. It is difficult to separate ERC supported teaching time, as would be associated with the MOH/MSOH program, from other faculty activities. It is the faculty FTE (up to 40%) that is supported by the grant and not their specific activities. The relationship between the ERC grant funding and support of the MOH/MSOH programs is therefore substantial, but difficult to separate as a specific MOH/MSOH revenue source.

Program Budgets are Part of the Overall RMCOEH Budget

Because of these overlaps in funding sources for the whole of RMCOEH and of the MOH/MSOH degrees, **Table 1** represents the entire RMCOEH budget with the MOH/MSOH ***specific*** portion highlighted with bold/italics. **Table 2** is an estimated stand-alone budget for the MOH/MSOH programs, applying approximate portions of the ERC grant and other RMCOEH funding that would be relevant to these programs.

Table 1. Five year revenue and expense projections for the RMCOEH

RMCOEH - Five-Year Revenue & Expense					
	2007-08	2008-09	2009-10	2010-2011	2011-2012
Revenue					
NIOSH Education and Research Center Training Grant	$1,320,900	$1,320,900	$1,320,900	$1,320,900	$1,320,900
Research Grants	$954,000	$960,000	$970,000	$980,000	$990,000
Contracts	$380,000	$380,000	$380,000	$380,000	$380,000
Continuing Education	$450,000	$455,000	$460,000	$465,000	$470,000
MBM start-up*	***$120,000***	***$120,000***	***$57,216***		
MBM Formula	***0***	***0***	***$62,784***	***$238,056***	***$244,596***
Tuition Course Fees	***$2,000***	***$6,000***	***$8,000***	***$20,000***	***$22,000***
Tax Credit Donations**	$250,000	$270,000	$280,000	$300,000	$300,000
Income	**$3,476,900**	**$3,511,900**	**$3,538,900**	**$3,703,956**	**$3,727,496**
Expenses					
Faculty Salaries	$1,547,126	$1,593,540	$1,641,346	$1,690,586	$1,741,304
Staff Salaries	$927,752	$955,585	$984,252	$1,013,780	$1,044,193
Student tuition / stipends, etc from the RMCOEH's NIOSH Training Grant	***$300,000***	***$300,000***	***$300,000***	***$300,000***	***$300,000***
Operations	$672,022	$630,776	$579,302	$663,590	$603,999
MSOH/MOH Operational Expense	***$30,000***	***$32,000***	***$34,000***	***$36,000***	***$38,000***
Expenses	**$3,476,900**	**$3,511,900**	**$3,538,900**	**$3,703,956**	**$3,727,496**
Net (loss)	**$0**	**$0**	**$0**	**$0**	**$0**

*Proposed MBM Start-up support until MBM SCH funds are received (two year initial delay)
**Primarily dollar for dollar tax credits against workers compensation premiums paid by qualified donors under S.B. 159, 2005 General Legislative Session

Table 2. Five year revenue and expense projections, MOH/MSOH Programs

MS Occupational Health and MOH Programs Combined - Five-Year Revenue and Expense Projections‡					
	2007-08	2008-09	2009-10	2010-2011	2011-2012
Revenue					
NIOSH Education and Research Center Training Grant***	$740,000	$762,200	$785,066	$808,618	$ 832,877
MBM Start-up*¶	$120,000	$120,000	$57,216		
MBM Formula			$62,784	$238,056	$244,596
Tuition Course/fees	$2,000	$6,000	$8,000	$20,000	$22,000
Tax Credit Donations**	$37,056	$38,168	$39,313	$40,492	$41,707
Income	**$899,056**	**$926,368**	**$952,379**	**$1,107,166**	**$1,141,179**
Expenses					
Faculty Salaries	$256,000	$264,030	$270,331	$353,441	$366,638
Staff Program Support	$176,056	$181,338	$186,778	$243,907	$249,888
MS Student tuition /stipends& fees	$300,000	$309,000	$318,270	$327,818	$337,653
MS Tuition / Fees	$137,000	$140,000	$143,000	$146,000	$149,000
MSOH/MOH Operational Expense	$30,000	$32,000	$34,000	$36,000	$38,000
Expenses	**$899,056**	**$926,368**	**$952,378**	**$1,107,166**	**$1,141,179**
Net (loss)	**$0**	**($0)**	**$0**	**($0)**	**($0)**

*Proposed Start-up Support until MBM support is received.
**Primarily dollar for dollar tax credits against workers compensation premiums paid by qualified donors under S.B. 159, 2005 General Legislative Session
***Actual faculty and staff salary support of the $1.1M training grant. Remainder is graduate student support.
‡ The MSOH and MOH have been combined in the tables as there is not a meaningful way to separate those out as there is such extensive administrative and course overlap.
¶The MBM formula is a student contact hours driven formula in the University of Utah's Health Sciences Center that is routed to the generating Department chair for purposes of budgeting with HSC. These figures are the estimates of revenues for the MSOH/MOH programs that would devolve to the RMCOEH's budget based on these conservative projections.

Table 3 : Year 1 – MSOH / MOH Estimated MBM funding (Reflected in 2010-11)

Program	Number of Students	MSOH/MOH Course credit Student Contact hours per year	$460 per hr / per student (minus 29% Dept overhead)	MBM Funding
IH/HSAT	20	20	$327	$130,800
Ergonomics	6	8	$327	$ 15,696
Safety	6	12	$327	$ 23,544
Occupational Medicine	3	26	$327	$ 25,506
Aerospace Medicine	5	26	$327	$ 42,510
Totals	**40**			**$238,056**

The budget in Table 1 is spread across all the programs. There are no adverse budgetary impacts anticipated from the MSOH/MOH programs. It is anticipated that the MSOH/MOH programs will modestly enhance RMCOEH-related revenues. Those revenues will be needed to offset the higher faculty and staff costs for increased student headcounts and programmatic operations.

Tuition courses/fees are directly related to conservative projections of enrollments in the MSOH/MOH programs, budgeting at in-state tuition rates. Students in the Safety, Ergonomics would be paying tuition. Occupational Medicine, Industrial Hygiene, Hazardous Substances Academic Training would have tuition paid by the NIOSH grant. Aerospace medicine residents would have their tuition paid by the US Air Force.

The Tax credit donation has been footnoted in the tables. It is a dollar for dollar tax credit against the tax on state workers compensation premiums paid by qualified donors that is then routed to the RMCOEH in support of occupational safety and health programs at the center. Potential donors include workers compensation insurers and self-insured companies. This tax credit was enacted in the 2005 General Legislative Session (S.B. 159).

The Mission Based Management (MBM) formula for funding allocations is a student contact hours driven formula in the University of Utah's Health Sciences Center that is routed to the generating Department chair for purposes of budgeting with HSC. These figures are the estimates of revenues for the MSOH/MOH programs that would devolve to the RMCOEH's budget based on these conservative projections. The MBM start-up funds will support the programs for the first two years until the MBM formula based revenue takes effect.

1.7. Similar Programs Already Offered in the USHE

There are no similar programs at any USHE campus.

However, this program will continue to work with the Public Health programs to identify ongoing areas of mutual interest, including research areas. This program will continue to rely on the Public Health Programs for the Biostatistics core curriculum. It is anticipated that the staff to run these programs would be shared and the programs will be closely coordinated. This program will also maintain close ties with the Mechanical Engineering programs.

1.8. Institutional Priority

This proposal addresses a unique need at the University of Utah and in the State of Utah that include prevention or and reductions in work-related deaths and injuries, reductions in workers compensation costs, reduced injuries among University of Utah employees, major research projects including support for the National Children's Study through providing the environmental measurements necessary for that project, as well as several other extramurally funded research projects. The RMCOEH is also unique in the breadth and extent of the interdisciplinary, cross-campus collaborations that are utilized for both educational and research missions. The proposed MSOH/MOH Programs will further increase these educational and research missions and therefore, this proposal is an institutional priority.

1.9. Exceptional Program

It is possible that some may consider this proposal as an exceptional program as it has features of unique content in the State of Utah and region, the coverage of the entire working-age population, transdisciplinary transcampus education and research components, provision of improvements in the business climate in Utah through lowering injuries and worker's compensation costs, and high student demand combined with the need to protect what is reportedly the largest training grant at The University of Utah.

Appendix A. Brief Descriptions of MSOH and MOH programs emphases.

1. Industrial Hygiene includes education in the sciences associated with determination of risks to human health, development and/or use of measurement methods to evaluate the hazards to which people are or may be exposed, setting allowable limits, and implementation of exposure controls (e.g., personal protection, and/or engineering or administrative controls) when needed. This program is heavily involved in the National Children's Study (Ed Clark, MD, PI) to perform the measurements that will be used to ascertain environmental and occupational exposures.

2. Hazardous Substances is a parallel or co-discipline of Industrial Hygiene and involves training on acceptable methods for handling and disposing of hazardous chemicals (e.g., protection of workers at Superfund sites).

3. Occupational Medicine is a subspecialty of Preventive Medicine and involves preventing workplace injuries among workers and the medical treatment of them when injuries and illnesses occur. This is MD/DO residency training program that requires a master's degree. This training is analogous to that of Aerospace Medicine Residents, which is reflected in the Air Force's interests in this program for training its residents.

4. Occupational Injury Prevention Research Training is a more recent discipline that involves studying injuries and working to prevent them (it is analogous to the Injury Center at the University of Utah, but this discipline is particularly focused on workers).

5. Occupational Safety involves the prevention of more acute accidents and events (e.g., eye protection, fall protection) that when neglected result in injuries or fatalities.

6. Ergonomics involves the fitting of the work to the worker and typically deals mostly with musculoskeletal disorders as they relate to job physical factors.

There is also a planned General Occupational Health emphasis designed to give students a broad background without concentration in one area.

APPENDIX B. Proposed Curricular Plans for the Master of Science in Occupational Health & Master of Occupational Health by Emphasis.

MSOH – INDUSTRIAL HYGIENE (IH):

IH Emphasis Course Requirements

Course #	*REQUIRED COURSES*	Credit Hours	Semester Offered
FPMD 6100	Introduction to Biostatistics	3	Fall & Spring
FPMD 6XXX	Introduction to Occupational Epidemiology	3	Fall
FPMD 6760	Occupational Health and Safety Administration	3	Spring
FPMD 6750	Fundamentals of Industrial Hygiene	2	Fall
FPMD 6751	Advanced Industrial Hygiene	3	Spring
FPMD 6752	Introduction to Occupational and Environmental Aspects of Toxicology	3	Fall
FPMD 6753	Industrial Ventilation	2	Spring (Odd Years)
FPMD 6754	Noise and Other Physical Agents	2	Spring (Even Years)
FPMD 6758	Occupational Environmental Health Clinic	1	Fall, Spring, & Summer
MEEN 6960	Occupational Health and Safety Solutions	3	Spring
FPMD 67XX	Occ. Health Practicum	3	Fall, Spring & Summer
FPMD 6975	Project Research – MSOH OR	6	Fall, Spring & Summer
FPMD 6977	Thesis Research - MSOH	6	Fall, Spring & Summer
	Core Credits:	**34**	
Electives	Students Choice (see below)	**9**	
	MSOH-IH Total Credit Hours:	**43**	

IH Electives (desired by Student):

Course #	Course Title	Credit Hours	Semester Offered
FPMD 6756	Hazardous Substances	3	Fall
FPMD 6730	Quantitative Risk Assessment	3	Spring
MEEN 6100	Ergonomics	3	Spring
MEEN 6110	Safety	3	Spring

MSOH – HAZARDOUS SUBSTANCE ACADEMIC TRAINING (HSAT):

HSAT Emphasis Course Requirements

Course #	REQUIRED COURSES	Credit Hours	Semester Offered
FPMD 6100	Introduction to Biostatistics	3	Fall & Spring
FPMD 6XXX	Introduction to Occupational Epidemiology	3	Fall
FPMD 6760	Occupational Health and Safety Administration	3	Spring
FPMD 6750	Fundamentals of Industrial Hygiene	2	Fall
FPMD 6751	Advanced Industrial Hygiene	3	Spring
FPMD 6752	Introduction to Occupational and Environmental Aspects of Toxicology	3	Fall
FPMD 6756	Hazardous Substances	3	Fall
FPMD 6730	Quantitative Risk Assessment	3	Spring
FPMD 6758	Occupational Environmental Health Clinic	1	Fall, Spring, & Summer
MEEN 6960	Occupational Health and Safety Solutions	3	Spring
FPMD 67XX	Occ. Health Practicum	3	Fall, Spring & Summer
FPMD 6975	Project Research – MSOH OR	6	Fall, Spring & Summer
FPMD 6977	Thesis Research - MSOH	6	Fall, Spring & Summer
	Core Credits:	**36**	
Electives	Students Choice (see below)	**7**	
	MSOH-HSAT Total Credit Hours:	**43**	

IH Electives (desired by Student):

Course #	Course Title	Credit Hours	Semester Offered
FPMD 6753	Industrial Ventilation	2	Spring (Odd Years)
FPMD 6754	Noise and Other Physical Agents	2	Spring (Even Years)
MEEN 6100	Ergonomics	3	Spring
MEEN 6110	Safety	3	Spring

MSOH - Ergonomics Emphasis Course Requirements

Course #	Course Title	Hrs	
MEEN 6100	Introduction to Ergonomics	3	Fall
FPMD XXX	Introduction to Occupational Epidemiology	3	Fall
FPMD 6100	Introduction to Biostatistics	3	Fall
MEEN 6130	Design Implications for Human Machine Systems (or 6120)	3	Fall
MEEN 6120	Human Factors in Engineering Design (or 6130)	3	Spring
MEEN 6960-6	Interdisciplinary Seminar in Occupational Injury Prevention	1	Fall
MEEN 7100	Advanced Ergonomics	3	Spring
FPMD 6760	Occupational Health and Safety Administration	3	Spring
FPMD 6750	Fundamentals of Industrial Hygiene	2	Fall
MEEN 6960	Occupational Health and Safety Solutions	3	Spring
FPMD 6975	Project Research – MSOH OR	6	Fall, Spring & Summer
FPMD 6977	Thesis Research - MSOH	6	Fall, Spring & Summer

MSOH-Ergonomics Credit Hours: 33

Electives Students Choice **10**

MSOH-Ergonomics Total Credit Hours: 43

Occupational Safety Emphasis Course Requirements

Course #	Course Title	Hrs	
FPMD 6607	Injury Surveillance	2	Spring
MEEN 6110	Introduction to Industrial Safety	3	Spring
DFPM 7100	Biostatistics II	3	Spring
MEEN 6960-4	Work Physiology and Occupational Heat Stress	3	Summer
MEEN 7120	Musculoskeletal Functional Anatomy for Engineers	3	Spring
FPMD 6760	Occupational Health and Safety Administration	3	Spring
FPMD 6311	Research Design	3	Fall
FPMD 7310	Epidemiology II	3	Spring
FPMD 7530	Design Implementation and Evaluation of Public Health Programs	3	Spring
MEEN 6960-6	Interdisciplinary Seminar in Occupational Injury Prevention	1	Fall
MEEN 6960	Occupational Health and Safety Solutions	3	Spring
MEEN 7960	Computer Applications & Research Methods in Occupational Injury Prevention	3	Spring
FPMD 6975	Project Research – MSOH OR	6	Fall, Spring & Summer
FPMD 6977	Thesis Research - MSOH	6	Fall, Spring & Summer

MSOH-Occupational Safety Credit Hours: 39

Electives Students Choice **4**

MSOH-Occupational Safety Total Credit Hours: 43

MOH – OCCUPATIONAL MEDICINE: OM Emphasis Course Requirements

Course #	REQUIRED COURSES	Credit Hours	Semester Offered
FPMD 6100	Introduction to Biostatistics	3	Fall & Spring
FPMD 6XXX	Introduction to Occupational Epidemiology	3	Fall
FPMD 6760	Occupational Health and Safety Administration	3	Spring
FPMD 6750	Fundamentals of Industrial Hygiene	2	Fall
FPMD 6752	Introduction to Occupational and Environmental Aspects of Toxicology	3	Fall
FPMD 6703	Occupational Injuries and Diseases	3	Fall
MEEN 6960	Occupational Health and Safety Solutions	3	Spring
FPMD 67XX	Occupational Health Practicum	3	Fall, Spring & Summer
MEEN 6100	Ergonomics	3	Spring
FPMD 6504	Clinical Prevention and Behavioral Aspects of Occupational Medicine	3	Spring
FPMD 6702	Advanced Topics in Occupational & Environmental Medicine	3	Spring

MOH-OM Total Credit Hours: 32

MSOH – OCCUPATIONAL INJURY PREVENTION (OIP):

OIP Emphasis Course Requirements

Course #	*REQUIRED OIP COURSES*	Credit Hours	Semester Offered
FPMD 6XXX	Intro to Occupational Epidemiology	3	Spring
FPMD 6100	Introduction to Biostatistics	3	Fall, Spring
FPMD 6607	Injury Surveillance	2	Spring
FPMD 6703	Occupational Injuries and Diseases	3	Fall
FPMD 6730	Quantitative Risk Assessment	3	Spring
FPMD 6750	Fundamentals of Industrial Hygiene	2	Fall
FPMD 6753	Industrial Ventilation	2	Spring (Odd Years)
FPMD 7300	Epidemiology II	3	Spring
MEEN 6100	Ergonomics	3	Spring
MEEN 6110	Introduction to Industrial Safety	3	Spring
MEEN 6960	Occupational Health and Safety Solutions	3	Spring
MEEN 6960-6	Interdisciplinary Seminar in Occupational Injury Prevention	1	Fall
MEEN 7110	Systems Safety	3	Spring (Odd Years)
MEEN 7960	Computer Applications & Research Methods in Occupational Injury Prevention	3	Spring
FPMD 6975	Project Research – MSOH OR	6	Fall, Spring, Summer
FPMD 6977	Thesis Research - MSOH	6	Fall, Spring, Summer

MSOH – OIP Credits: 43

MSOH – GENERAL OCCUPATIONAL HEALTH:

GOH Emphasis Course Requirements

Course #	*REQUIRED COURSES*	Credit Hours	Semester Offered
FPMD 6XXX	Intro to Occupational Epidemiology	3	Spring
FPMD 6100	Introduction to Biostatistics	3	Fall, Spring
FPMD 6703	Occupational Injuries and Diseases	3	Fall
FPMD 6730	Quantitative Risk Assessment	3	Spring
FPMD 6750	Fundamentals of Industrial Hygiene	2	Fall
FPDM 6758	Occupational Environmental Health Clinic	1	Fall, Spring & Summer
FPMD 67XX	Occ. Health Practicum	3	Fall, Spring & Summer
FPMD 6790	Occupational Health and Safety Administration	3	Spring
MEEN 6100	Ergonomics	3	Spring
MEEN 6110	Introduction to Industrial Safety	3	Spring
MEEN 6960	Occupational Health and Safety Solutions	3	Spring
MEEN 6960-6	Interdisciplinary Seminar in Occupational Injury Prevention	1	Fall
MEEN 7110	Systems Safety	3	Spring (Odd Years)
MEEN 7960	Computer Applications & Research Methods in Occupational Injury Prevention	3	Spring
FPMD 6975	Project Research – MSOH OR	6	Fall, Spring, Summer
FPMD 6977	Thesis Research - MSOH	6	Fall, Spring, Summer

MSOH – GOH Credits: 43

APPENDIX C. Generic Comparison Between the MPH and MOH degrees (note that the MSPH/MSOH degrees add a thesis or publishable paper, with credits for the MSPH of 59 credits and MSOH of 43 credits.)

Master of Public Health	**Master of Occupational Health***
49 credits	32 credits
Core courses	**Core Courses**
Intro to Public Health	Occupational Health and Safety Solutions
Epidemiology I	Introduction to Occupational Epidemiology
Biostatistics I	Biostatistics I
Health Policy and Managed Care**	Intro to Ergonomics
Environmental Health Problems	Occup. Health and Safety Administration
Public Health Administration	Occupational Injuries and Diseases
Social Context of Medicine	Fundamentals of Industrial Hygiene
Public Health Practicum	Intro to Occup. & Env. Toxicology
	Occupational Injuries & Diseases
	Occupational Health Practicum
Elective Courses**	Clinical Prevention & Behav. Aspects of OM
Infectious Disease Epidemiology	Advanced Topics in Occup & Env Medicine
Epidemiology II	
Biostatistics II	
Introduction to SAS	
International Health	
No summative course	Summative course on Occupational Safety and Health problems solving in Utah Businesses

*This is the Occupational Medicine Emphasis, which is also taken by the Aerospace Medicine residents. There are 6 other closely related proposed emphases (Industrial Hygiene, Hazardous Substances, General Occupational Health, Ergonomics, Industrial Safety, and Occupational Injury Prevention). All receive separate funding support from NIOSH. Also, the mixture of courses is substantially different in the different emphases.

APPENDIX D. Faculty

Full Professional Effort Faculty

Kurt T. Hegmann, MD, MPH will head the M.S. in Occupational Health Degree Program. Dr. Hegmann is Associate Professor and Center Director of the Rocky Mountain Center for Occupational and Environmental Health (RMCOEH). Dr. Hegmann teaches Occupational Injuries and Diseases (FPMD 6703, 3 credits), and Clinical Prevention (FPMD 6504, 3 credits). He will develop the Occupational Epidemiology course (FPMDXXYY, 3 credits) for this proposed program, which will be the core epidemiology course for this curriculum. He has experience teaching this graduate course at introductory and advanced levels. Dr. Hegmann has had extensive experience in accreditation site visits including at two institutions, involving approximately seven programs and five different accreditation organizations. He has completed a Medical Education Fellowship program.

Edward Holmes, MD, MPH is Associate Professor and Director of the Occupational Medicine Program. Dr. Holmes teaches Occupational and Environmental Health (FPMD XXX, 2 credits), which is an adaptation of an existing course.

Rod Larson, PhD, MS, CIH is Assistant Professor and Director of the Industrial Hygiene Program and the Hazardous Substance Academic Training Program. Dr. Larson has extensive prior, real world experience as a lead Industrial Hygienist for Exxon. Dr. Larson teaches the Introduction to Industrial Toxicology course (FPMD 6752, 2 credits) with assist from Dr. Eric Wood, MD, MSPH; and the Quantitative Risk Assessment course (FPMD 6730, 3 credits).

Royce Moser, Jr., MD, MPH is Professor and Deputy Center Director for the RMCOEH. Dr. Moser has world-wide expertise in bioterrorism. He also has administrative acumen derived from years of experience and his textbook serves as the primary instructional source for his course. He teaches the Occupational Safety and Health Administration course (FPMD 6760, 3 credits).

Leon Pahler, PhD, MSPH, CAIH is an Instructor in the Industrial Hygiene Program. He has a Ph.D. in Organic and Heterocyclic Chemistry. His prior experience includes work as a Senior Environmental Specialist at a major petroleum company's shale oil facility in Colorado. Dr. Pahler will be teaching the Hazardous Substance course (FPMD 6756, 3 credits).

Eric Wood, MD, MSPH is an Assistant Professor in the Occupational Medicine Program. However, he is dual trained, having completely prior training in Industrial Hygiene. He co-teaches the Introduction to Industrial Toxicology course (FPMD 6752, 2 credits) with Dr. Larson. He also teaches the Occupational and Environmental Health Clinic course (FPMD 6758, 1 credit).

Scott Collingwood, PhD, BSE is an Instructor in the Industrial Hygiene Program pending defense of his dissertation. He has a prior Master of Science degree in Mechanical Engineering from Iowa, and worked as an industrial hygienist for the University of Iowa Dept. of Occupational and Environmental Health. Scott Collingwood teaches the Fundamentals of Industrial Hygiene course (FPMD 6750, 2 credits); and co-teaches the Occupational Health and Safety Solutions course with Dr. Sesek and Dr. Wood (MEEN 6960).

Hannah Edwards, MD, MPH is Instructor in the Occupational Medicine Program. She is co-teaching the Occupational Injuries and Diseases (FPMD 6703, 3 credits), and Clinical Prevention (FPMD 6504, 3 credits) courses.

As well, the quality of the faculty will allow for ongoing accommodations to readily adjust to changing curricular needs.

Adjunct Faculty:

Donald Bloswick, PhD, CPE is Professor and Director of the Ergonomics and Safety Programs at the University of Utah. He teaches the Introduction to Ergonomics course (MEEN 6100, 3 credits).

Richard Sesek, PhD, MSPH, CPE, CSP is Assistant Professor of the Ergonomics and Safety Programs at the University of Utah. He teaches the Safety course (MEEN 6110, 3 credits) and OEH&S Field Trips (FPMD 6759, 1 credit). Dr. Sesek will take the OEHS Field Trips class and work with Scott Collingwood to develop the core Interdisciplinary Occupational Safety and Health Problems Solving course (MEEN 6790-3, 3 credits). This course involves taking problems in industry, researching the problems and implementing solutions to attempt to solve them. Students are planned to be divided into appropriate sized teams and then work with faculty to solve them. Industrial and workplace problems are to be submitted from any of the approximately 500 companies with which the RMCOEH has contacts.

Stephen Alder, PhD is Assistant Professor in the Department of Family and Preventive Medicine. He teaches the core Introduction to Biostatistics course (FPMD 6100, 3 credits), Research Design elective (FPMD 6958, 2 credits) and Biostatistics II (FPMD 7110, 3 credits).

Dean A. Byrd, MD is a Professor in Psychiatry and teaches the Social Context of Medicine course (FPMD 6600, 3 credits).

George White, Jr., PhD, MSPH is Professor of Family and Preventive Medicine and Director of the Public Health Programs. He teaches the Introduction to Public Health Course which is an elective (FPMD 6500, 2 credits).

Dean R. Lillquist, PhD, MSPH, CIH is a visiting lecturer for the Fundamentals of Industrial Hygiene course (FPMD 6750) and Introduction to Industrial Toxicology course (FPMD 6752). He is the past IH Program Director for the Rocky Mountain Center, and is now the Director of the (federal) OSHA Technical Center that is located in Salt Lake City, Utah.

Jeff Burton, MS, PE, CIH is a part-time instructor for the Industrial Hygiene Program. He is a past president of the American Industrial Hygiene Association. He is also internationally recognized for his expertise in ventilation design and evaluation, having written a number of books on the subject. He teaches the ventilation course (FPMD 6753).

Frank D. DeRosso, MSPH, CIH was an instructor at the Rocky Mountain Center and as an adjunct co-teaches the Advanced Industrial Hygiene course (FPMD 6751). Mr. DeRosso has twenty years of professional IH experience including a strong background in safety and environmental compliance. He is board certified in the comprehensive practice of IH.

James Nelson, PhD, CIH was a part-time RMCOEH faculty member in previous years, starting when the IH Program was first established. Now as an adjunct, he teaches the chemistry portion of the Advanced Industrial Hygiene course (FPMD 6751). Dr. Nelson is the Past-President of DataChem Laboratory, which is one of the largest occupational and environmental hygiene laboratories in the world. He is certified in chemical aspects by ABIH and has served as Chairman of the AIHA Laboratory Accreditation Committee.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON DC

7 July 2006

HQ USAF/SG
1780 Air Force Pentagon
Washington, DC 20330-1780

Royce Moser, Jr., M.D., MPH
Professor, Rocky Mountain Center for Occupational and Environmental Health
University of Utah School of Medicine
391 Chipeta Way, Suite C
Salt Lake City, Utah 84108

Dear Dr. Moser:

I am very pleased to learn of the plans to provide an accredited Master of Science in Occupational Health (MSOH) at the University of Utah. Like you, we were disappointed when the Council on Education for Public Health increased the course credit requirements to the point that students will not be able to complete the program in two semesters. The new requirement precludes our sending residents to the current Utah MPH program as the final semester conflicts with the beginning of the practicum phase of the U.S. Air Force's Residency in Aerospace Medicine.

The planned MSOH will overcome this problem since it is structured to be completed in two semesters and meet the American Board of Preventive Medicine and the ACGME Preventive Medicine Residency Review Committee requirements. We are pleased the new program will continue to offer FPMD 6706, Studies in Aerospace Medicine, as this course has enabled our residents to perform and publish a number of research projects beneficial to both the University of Utah and the Air Force.

I assure you approval and implementation of the proposed change would be most welcome and once again allow our residents to strongly consider your program. Please keep me advised of the outcome of your efforts.

My point of contact for this issue is Colonel Andrew Marchiando, at AFMSA/SGPA, 110 Luke Avenue, Room 405, Bolling AFB, Washington DC 20032-7050, telephone (202) 767-4200, andrew.marchiando@pentagon.af.mil

Sincerely

GEORGE PEACH TAYLOR, JR.
Lieutenant General, USAF, MC, CFS
Surgeon General

SG DOC: 06-0217

THE UNIVERSITY OF UTAH

Richard B. Brown
Dean of Engineering
Department of Electrical and Computer Engineering, and School of Computing
1495 East 100 South, 214 KennB
Salt Lake City, Utah 84112
PH: (801) 585-7498 FAX: (801) 581-8692
brown@coe.utah.edu
March 16, 2007

Michael Magill, MD,
375 Chipeta Way Suite A
Salt Lake City, UT 84108

Re: Support for Master of Science in Occupational Health Degree

Dear Dr. Magill,

The College of Engineering is fully supportive of the Department of Family of Preventive Medicine's proposed Master of Science in Occupational Health degree program.

The College of Engineering's Mechanical Engineering Department has had a long standing relationship with your department as two programs of the Rocky Mountain Center for Occupational and Environmental Health have been housed in that department for more than 20 years. This proposed program would strengthen those ties. We anticipate increased opportunities for students and improved ability to leverage grants, in both departments.

Another example of the synergistic benefit of this proposed program is our interest to develop a certificate program in Industrial Engineering. This proposed Master of Science in Occupational Health degree program would enhance our ability to offer that certificate program and thus improve our compliment of training opportunities at the University of Utah.

In short, we are in full support of the proposed program and do not see redundancies with our existing programs.

Sincerely,

Richard B. Brown, Ph.D.
Dean, College of Engineering

cc Kurt Hegmann, MD, MPH

The University of Utah
Office of the Senior Vice President
for Health Sciences

A. Lorris Betz, M.D., Ph.D.
Senior Vice President for Health Sciences
Executive Dean, School of Medicine
CEO, University Health Care

March 21, 2007

Dean David Chapman
Associate Vice President
Sr. Vp for Academic Affairs
John R. Park Bldg.
201 Presidents Circle Rm 205
Salt Lake City, UT 84112

COPY

Re: Support For Master of Science in Occupational Health Degree

Dear Dean Chapman:

This letter is in strong support of the Master of Science in Occupational Health/Master of Occupational Health (MSOH/MOH) degree program which is being proposed for the University of Utah.

There are many promising, cross-campus synergies that are likely to be founded and/or enhanced through this proposed degree program. The proposal will include teaching faculty from the School of Medicine, College of Health, College of Engineering, School of Business and College of Social and Behavioral Sciences. Within the School of Medicine, this would increase current significant interactions between other departments including Physical Medicine and Rehabilitation, Internal Medicine, Pediatrics, as well as the home Department of Family & Preventive Medicine. Undoubtedly, this proposal will also enhance current and future collaborative research through improved occupational safety and health programs at the University of Utah.

In summary, we see significant benefits from this proposed MSOH/MOH program and look forward to its implementation at the earliest possible date.

Sincerely,

Lorris Betz, M.D., Ph.D.

Senior Vice President for Health Sciences
175 N. Medical Drive East
Salt Lake City, Utah 84132-5901

THE UNIVERSITY OF UTAH

College of Health
Office of the Dean

January 16, 2007

Michael Magill, M.D.
375 Chipeta Way Suite A
Salt Lake City, UT 84108

Re: Support for Master of Science in Occupational Health Degree

Dear Dr. Magill:

This letter is in enthusiastic support of the Master of Science in Occupational Health (MSOH) degree program which your department is proposing for the University of Utah.

We have met and discussed this with our departments of Health Promotion and Education, Occupational Therapy and Physical Therapy and they are in strong support of the proposed program. We can see a number of synergistic possibilities, including utilizing some of the MSOH degree program's courses to assist in training selected graduate students from the College of Health. Physical Therapy students, for example, may wish to pursue an additional degree in Occupational Health to prepare for careers in Occupational Physical Therapy. Additionally, in the case of our Occupational Therapy program, this proposed degree would function well as a possible area of emphasis for some students. We also see collaborative research possibilities with the capability of obtaining extramural funding by building more robust occupational safety and health programs that have multidisciplinary interests with several College of Health departments at the University of Utah.

In summary, we see several positive aspects to an MSOH program at Utah with no overlap and no down side from this program and look forward to the implementation of this program at the earliest date possible

Sincerely,

James Graves, Ph.D.
Dean, College of Health

cc Kurt Hegmann, MD, MPH

Communication Sciences and Disorders • Exercise and Sport Science
Health Promotion and Education • Nutrition • Occupational Therapy • Parks, Recreation and Tourism • Physical Therapy
250 S. 1850 E. Rm 200
Salt Lake City, Utah 84112-0920
(801) 581-8379 • FAX (801) 581-5580

February 3, 2007

Dear Dr. Hegmann:

I want to tell you how excited I am that you are proposing a Master of Occupational Health (MOH) program. With the increasing public health credit hour requirements that the Council on Education for Public Health is imposing, the Master of Public Health is no longer a practical option for nurses who want an advanced degree. The Master of Occupational Health will not only permit completion in two semesters but also allow students to focus on occupational and environmental safety and health.

As you know, I teach in the BSN program at Weber State University. Thus, I have an excellent opportunity to explain the benefits of an Occupational Health Nursing (OHN) career to the students in the BSN program. The MOH will be especially attractive to those desiring an OHN emphasis as well as to those who may wish to emphasize a different occupational safety and health aspect, such as a safety manager. I know four or five current students that might be quite interested in an MOH program when it is established, so please let me know when the program is in place.

I appreciate the high quality education program that the Rocky Mountain Center provided for me, and that effort set the stage for my current doctoral research. I look forward to the opportunity to participate in the MOH program as a small way to repay you for the important contributions you have made to my professional career

Sincerely,

Kathleen Sitzman

Kathleen Sitzman, MS, RN
Assistant Professor and Doctoral Candidate
Nursing Program
Weber State University
3903 University Circle
Ogden, Utah 84408-3903

THE UNIVERSITY OF UTAH

Spencer S. Eccles Health Science Library

August 24, 2007

Michael Magill, MD
375 Chipeta Way, Suite A
Salt Lake City, UT 84108

Re: Support For Master of Science in Occupational Health/Master of Occupational Health Degree Programs

Dear Dr. Magill:

We appreciate the opportunity to express strong support for the Master of Science in Occupational Health/Master of Occupational Health (MSOH/MOH) degree programs which are being proposed for the University of Utah.

We understand that there will be promising, cross-campus synergies that will be founded and/or enhanced through this proposed degree program. The Eccles Health Sciences Library looks forward to being part of these significant interactions between departments. This proposal will also enhance current and future collaborative research through improved occupational safety and health programs at the University of Utah.

The libraries believe we can provide the resources required by this program. We also offer access to the interlibrary loan services of the National Network of Libraries of Medicine supported by the National Library of Medicine. This network provides access to collections of all the major health sciences libraries in the country.

In summary, there are significant benefits from the proposed MSOH/MOH program and we look forward to its implementation.

Sincerely,

Joan Stoddart

Joan Stoddart
Interim Director

University Health Sciences Center
University of Utah
Eccles Health Sciences Library
10 North 1900 East
Salt Lake City, Utah 84112-5890
(801) 581-8771
FAX: (801) 581-3632

10.3.1. Signature Page to Accompany Proposals Requiring Board Consent - This signature page, with all appropriate signatures included, should be sent to the Commissioner's Office and kept on file at the proposing institution.

Institution Submitting Proposal: University of Utah

College, School or Division in Which Program/Administrative Unit Will Be Located: School of Medicine

Department(s) or Area(s) in Which Program/Administrative Unit Will Be Located:

Program/Administrative Unit Title: Master of Science in Occupational Health and Master of Occupational Health (MSOH/MOH)

Recommended Classification of Instructional Programs (CIP) Code: __ __ . __ __ __ __

Certificate, Diploma and/or Degree(s) to be Awarded: Master/Master of Science

Proposed Beginning Date: Fall 2007

Institutional Signatures (as appropriate):

Center Director-Kurt Hegmann, MD, MPH

Department Chair – Michael Magill, MD,

Dean or Division Chair – David J. Bjorkman, MD,

Senior Vice President for Health Sciences – A. Lorris Betz, MD, PhD

Graduate School Dean – David S. Chapman, Dean

President – Michael K. Young

Date