A new Bachelor of Science in Occupational Safety and Health degree program is being planned by the RMCOEH and the RMCOEH Advisory Board. The proposal is to create a successful and high quality Baccalaureate of Science (BS) degree program in Occupational and Safety and Health (OSH). This proposed degree fills state, regional, and national undergraduate program gaps and complements existing University of Utah OSH academic programs (3 masters, 2 doctoral), continuing OSH professional education, and ongoing OSH research.

The program requires a minimum of 124 credits. After successfully meeting core academic requirements in general education, basic and applied sciences, it is anticipated that up to 30 qualified students will matriculate each year at the beginning of their third year. After matriculation, the program will require 64 credits of specialized training and education focusing on applied science, technical, business, and management skills identified as critical for success for OSH professionals. A practical learning experience in a professional setting is also an important requirement. The program is planned to meet the educational requirements for obtaining Certified Safety Professional (CSP) credentials.

Fundraising and Need

Start-up funding is being raised to help pay for the development of courses and curricula. The Utah State Legislature provided $125,000 in start-up support in the recently completed 2015 General Session. Worker’s Compensation Fund also has donated $100,000. Additional donations have been pledged. There are no comparable BS in OSH programs in the Intermountain West. The closest programs are at Montana Tech and University of Central Missouri. Shockingly, there are only 8 ABET-ASAC accredited undergraduate OSH programs in the US! Separately, Utah State University has a bachelor’s degree that emphasizes Industrial Hygiene.

Considering the deficit in the numbers of programs, it may be unsurprising that the BS in OSH addresses the single greatest deficit of OSH professionals identified nationwide in the NIOSH Workforces Survey (2011), with an estimated nationwide need of 5,000/year compared to 2,845 OSH graduates/year. That gap in supply of OSH graduates is forecasted to be further exacerbated by the National Assessment’s projected retirements of working OSH professionals.

Student Demand

Both traditional and non-traditional students will likely be program applicants. We anticipate that graduating high school students and undeclared students will be the typical students. However, there are a significant number of workers who have assumed OSH responsibilities after being employed. Many realize they need additional training and education to fulfill these roles. Others recognize the career benefit of a college degree and being credentialed. Therefore, a substantial demand from these non-traditional students is also expected.

The RMCOEH recently conducted a survey on this proposed BS-OSH program. Of 190 respondents, 88 expressed personal interest and 114 knew at least one other person with interest in this program. Additionally, over 40% indicated their employer was willing to financially support an employee in the program. These results do not include regional, national, or international interest as for practical reasons, the survey targeted Utahns.

Continue on page 5
Whether it’s a minor back strain or something as severe as paralysis, injuries on the job can have a significant impact on workers’ lives—and on their employers’ bottom line. Working tirelessly to improve workplace safety in Utah and the surrounding region, the RMCOEH ADVISORY BOARD MEMBERS have dedicated themselves to this cause.

Please consider supporting the Rocky Mountain Center for Occupational & Environmental Health (RMCOEH) by making a scholarship donation today! You can give to our general scholarship fund, or to one of the three specific scholarship funds. Those are: The Jeff Lee Memorial Fund, the Dr. Richard E. Johns Endowed Scholarship, and the Royce Moser Jr. and Lois H. Moser Endowed Scholarship. You may also designate a gift to support start-up of the BS in OSH program. For questions about giving to the RMCOEH or to mail a gift, contact:

Rachel Hester, Associate Director
RMCOEH
801-581-3532

Gordon Murdock has been a member of the Rocky Mountain Center’s Advisory Board since 2014. He participates on the board as the General Manager of Environment, Health and Safety for Questar Corporation. Gordon is responsible for safety, industrial hygiene and environmental activities for Questar’s natural gas distribution, transmission and exploration business units. He manages a staff of 13 EH&S professionals who provide service to approximately 1,800 employees working in six western states. Gordon has been employed with Questar for the past 19 years. Prior to joining Questar, Gordon worked as a Sr. Industrial Hygienist with Alliant Tech Systems.

Gordon is a Certified Industrial Hygienist and a Certified Safety Professional. He holds a BS degree in Public Health (Industrial Hygiene) from Utah State University and has over 26 years of experience in the EH&S profession. He currently serves as a member of the American Gas Association Environmental Matters and Environmental Regulatory Action Committees, the Interstate Natural Gas Association of America’s Environmental, Safety and Health Committee, and is past Chair of the Western Energy Institute Occupational Safety & Health Committee. Gordon also serves on the Board of Directors of the Utah Safety Council.

Gordon and his wife Teri have been married for 28 years and they reside in Heber City where they were both born and raised. They have four handsome sons ranging in age from 15 to 25 years old. Gordon loves to coach basketball, travel to new places, and participate in almost any activity that allows him to spend time with his family.

Occupational Medicine: We are pleased to announce that three of our Occupational Medicine resident graduates successfully passed the American Board of Preventive Medicine Board (ABPM) certification exam this past year. We are honored to extend our congratulations to the following graduates: Myra Cruz, MD, MOH and Aren Giske, MD, MOH, and Rodothea Milatou, MD, MPH. This brings the number of ABPM Occupational Medicine Diplomates who graduated from the RMCOEH since 1992 to a total of 66.

Industrial Hygiene: Christopher Neild (2012) Recently passed the American Board of Industrial Hygiene examination and now is a Certified Industrial Hygienists (CIH). Congratulations to all!!

RMCOEH now has over 560 graduates and we would love to know where you are. Please send a photo of yourself either alone, in front of the sign of your employment, or elsewhere and a brief description of your job to: Toni.Chambers@hsc.utah.edu

We plan to highlight alumni in every newsletter.
Upcoming Continuing Education Classes and Events

June Courses
- Lead Safety for Renovation, Repair & Painting (LRRPR) Refresher Training (1/2 day course)
- OSHA Courses: 511, 503, 501 Occupation Safety and Health Standards for General Industry
- OSHA 3115 Fall Protection
- DOT Hazardous Material Transportation Training
- DOT Training for Shippers of RCRA-Regulated Waste
- OSHA 2055 Cranes in Construction

July Courses
- OSHA Courses: 510, 500, 502 Trainer Course in Occupational Safety and Health Standards for the Construction Industry
- 40-Hour HAZWOPER Training
- Asbestos Project Designer, Contractor/Supervisor, Inspector/Management Planner Refreshers

August Courses
- Comprehensive Review of Industrial Hygiene
- Pulmonary Function Testing
- OSHA Courses: 511, 503, 501 Occupation Safety and Health Standards for General Industry

September Courses
- OSHA 3095 Electrical Standards
- OSHA Courses: 510, 500, 502 Trainer Course in Occupational Safety and Health Standards for the Construction Industry
- DOT Hazardous Material Transportation Training
- DOT Training for Shippers of RCRA-Regulated Waste
- OSHA 2055 Cranes in Construction

October Courses
- 32nd Annual Utah Conference on Safety and Industrial Hygiene
- Asbestos Contractor/Supervisor Training
- Lead Safety for Renovation, Repair & Painting (LRRPR) Refresher Training (1/2 day course)
- Asbestos Contractor/Supervisor, Inspector/Management Planner Refreshers

November Courses
- Lead Inspector, Risk Assessor, Supervisor Refreshers
- Confined Space (NIEHS)
- Lead Supervisor Training
- OSHA Courses: 510, 500, 502 Trainer Course in Occupational Safety and Health Standards for the Construction Industry

Correspondence Courses (Enroll at any time)
- OSHA Courses: 510, 500, 502 Trainer Course in Occupational Safety and Health Standards for the Construction Industry

Occupational Solutions Course

The RMCOEH’s interdisciplinary, capstone OSH Solutions course continues to produce educational and fun projects for businesses and students. Projects this year included Daily’s Meats (3 ergonomics projects), Sun Products (noise), and Ultradent (noise and aerosols). This year’s class also took a tour of the Kennecott Smelter (pictured). Students underwent pre-trip respirator fit testing, training, and then toured the smelter to understand the operations that result in 98% pure copper ingots. Purposes of this tour also include use of PPE, and understanding the need for respirators (SO2, As, Pb, Cd, etc). This smelter produces 25% of the US copper supply and is a great educational tour!

Annual Dr. Paul S. Richards Keynote Speaker

Roy J. Rando, ScD, CIH was the Keynote speaker for the Annual Dr. Paul S. Richards Endowed Distinguished Visiting Lectureship in Occupational Medicine. This lecture was given in conjunction with the 13th Annual Regional National Occupational Research Agenda (NORA) Young/New Investigators Symposium.

Dr. Rando’s presentation title: “Flood Restoration Work, Exposure, and Respiratory Health: The Post-Hurricane Katrina Experience”

Dr. Rando has been a member of the faculty of Tulane University since 1987 and is currently Vice Chair, Professor, and Academic Director of the ABET-accredited Industrial Hygiene Program in the Department of Global Environmental Health Science in the Tulane School of Public Health & Tropical Medicine. He is also adjunct Associate Professor of Environmental Medicine in the Tulane Medical School.

Dr. Rando’s research is focused on assessment and epidemiology of occupational respiratory disease, inhalation toxicology, occupational and environmental inhalation exposure assessment, and industrial hygiene chemistry.

Dr. Rando’s interesting presentation reviewed the health hazards of flood disasters, mitigation efforts and chronic health effects documented in New Orleans.
The publication rate for the RMCOEH faculty and students has increased sharply in the past several years. In each of the past two years, over two dozen publications have been produced by a team of researchers. This is in large part due to our “Research Team.” The origins of this team start in the early 2000s when Dr. Hegmann hired part time graduate Research and Teaching Assistants. Gradually over time, the team has grown in size and scope. The team is currently directed by Matt Thiese, PhD, MSPH, with daily operations overseen by Ulrike Ott, PhD and Atim Effiong, MPH, CHES.

The Team currently consists of 11 part time Research Assistants (RA) from a variety of backgrounds. We are working on 9 different ACOEM guidelines simultaneously (Back, Ankle/foot, knee, shoulder, Neck, Eye, TBI HWF, Chronic). The team also analyzes data from the upper extremity, low back pain and trucking studies. In addition to ACOEM, we are working on guidelines for a major railroad on Sleep Apnea. The research team also currently works on abstracts and papers of all kinds.

Our Research Team comes from all around the world. We have one RA who fled the war in Bosnia and another RA fled the genocide from Uganda at age 5, spent 6 years in a refugee camp before coming to the US. Both are thriving working with us.

Leslie Cepeda-Echeverria, a RA from Columbia, recently received the Beehive Honor Society Award! The Beehive Honor Society was founded at the University of Utah in 1913 for the purpose of honoring graduating seniors who have demonstrated leadership, scholarship and service to the University and the community. On average, one in 1,000 students at the University of Utah is inducted into the Beehive Honor Society.


The team has been busy this year with publications, presentations, and conferences:

**PUBS**

We have several publications that were accepted/published in the past couple months including:

- **Ott U**, Stanford JB, Murtaugh MA, Greenwood JLJ, Gren LH, Hegmann KT, Thiese MS. Associations with Changes of Weight and Total Cholesterol Among two Occupational Cohorts over 10 Years. (Accepted by JOEM April 2015)

- **Matthew S. Thiese**, PhD, MSPH, Ulrike Ott, PhD, MSPH, Riann Robbins, BS, Atim Effiong, MPH, Maureen Murtaugh, PhD, MS, Melissa R. Lemke, MS, Gwen Deckow-Schaefer, OT, Jay Kapellusch, PhD, Eric Wood, MD, MPH, Deborah Passey, BS, Natalie Hartenbaum, MD, MPH, Arun Garg, PhD, Kurt T. Hegmann, MD, MPH. Commercial Driver; Epidemiology; Risk Factors, Cross Sectional; Accident; Health and Safety; Occupational Injury and Illness. J Occup Environ Med. (submitted January 2015)


**CONFERENCES**

We also submitted a total of 4 abstracts to Guidelines International Network (GIN) and Cochrane conferences.

- Research team has 2 presentations accepted.
David Wu, MD with OM Program, was awarded the fourth Hanford Scholarship. Jessica Hanford, MD, MPH (OM 2009) stipulated requirements of a poem on safety and health with the winner drawn at random. Following is the poem by David Wu:

What If Safety?
It is not the number of days between accidents,
Not a luxury affordable only by the occident;
Is not just about the OSHA recordable,
Nor should work-related be debatable.

It is everyone’s business,
Not simply to add busyness;
To prevent, to be vigilant
Not to relent, but be diligent;
That is what safety is.

Faculty
We estimate that successful program operation requires at least 3 additional faculty members. There are 23 FPE current faculty in the existing RMCOEH's programs. The existing faculty members have extensive academic and professional experience that are well suited for the introduction of this undergraduate educational program. They are looking forward to working with undergraduates.

Organizations are determining that, as their OSH programs are becoming increasingly sophisticated, they require professionals with specific training and problem solving skills consistent with the educational emphases that are incorporated in the BS in OSH. Many organizations have identified a need for BS level trained OSH professionals who can work to assure accidents are prevented, worker’s compensation costs are reduced, and regulatory requirements are met. The BS-OSH program addresses major demonstrable market needs in areas including those generated through businesses; consulting companies; insurance underwriters local, state and federal governments; academic and research institutions. Specific industries in Utah and the Intermountain West with these needs include manufacturing, mining, utilities, construction, transportation and healthcare.

Business competitiveness improves when programs that prevent occupational injuries and illnesses, lowering workers compensation costs. Therefore, access to qualified OSH professionals improves the overall business and workforce climate. This program will provide employers a larger supply of diverse, well-trained, OSH professionals. The RMCOEH Faculty, staff, students and Advisory Board look forward to implementing this program!

Scholarships Awarded
Andrew Phillips, MD, received the Royce Moser, Jr., and Lois H Moser Endowed Scholarship in Occupational Health.
Dr. Phillips embarked on Radiology residency training, that is until he learned of Occupational Medicine!

Jolene Mitchell MD, received the Dr. Richard E. Johns Endowed Scholarship.
Dr. Mitchell worked on the RMCOEH Research Team in 2008, then completed Medical School, entered Neurology training but re-discovered the Occupational Medicine training at the Center.
Nancy Williams, MD, MPH, (Class of 2008)

As the Medical Epidemiologist at the Southern Nevada Health District (the local health agency serving >2 million people in the Las Vegas metro area), I oversee the offices of epidemiology and vital statistics. Because Nevada is poorly funded in public health functions compared with most other states, our staff is thin, but our epidemiologists manage to stay on top of chronic disease, infectious disease, and injury epidemiology. We also perform disease investigations and respond to disease outbreaks, environmental exposures, etc.

Although regrettably few of these involve OEM, some do. We recently investigated a serious case of lead-poisoning, an illness and death that we determined to have been caused by household exposure to carbon monoxide from an improperly ventilated grill, and a fatal case of tuberculosis affecting a pregnant woman and her infant twins that also resulted in occupationally acquired tuberculosis among hospital staff.

Many of our investigations are covered by the media. For example, in 2013, partnering with our agency’s environmental health team, my staff quickly identified and controlled what was probably the largest restaurant-based salmonellosis outbreak ever to have occurred. The restaurant was one of the most popular in town (and that says something in Las Vegas!), so the outbreak generated tremendous media coverage. On this topic, and on other topics such as increases in the incidence of pertussis or the trends in seasonal influenza, I have gotten to do my share of media interviews. One of my favorite responsibilities is being primary supervisor for our CDC Epidemic Intelligence Service fellow.

This job keeps me hopping, but I also find time to participate in a co-ed softball team, to do some hiking and a little biking, and (one of the benefits of living near a major airline hub city) to make frequent weekends trips to Tahoe. Also, in 2013, I ‘ran’ my first marathon (at Lake Tahoe). The quotes are because I’m not really a runner. However, finishing inspired me to repeat the race in 2014 (and even to do some training beforehand). Unfortunately, I’m still not much of a runner!