

The Rocky Mountain Center

Gateway to OSH

Volume 5, Issue 2

Occupational Safety and Health

New Endowed Chair at University of Utah to Benefit Utah Workers' Health & Safety and Honor 20th Century Pioneer

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 Rocky Mountain Center for Occupational and Environmental Health (RMC) at the University of Utah is just one of 17 National Institute for Occupational Safety and Health (NIOSH) Education and Research Centers (ERCs) in the entire country. And Utah's own RMC has achieved a distinction that no other ERC has ever reached—having an endowed chair for its Director. This means the RMC will benefit from increased visibility, opportunities for more funding, and continued growth.

Since 1977, the RMC has been something of an unsung hero, teaching safety courses to more than 4,000 representatives from companies across the state and country each year, providing post-graduate education to hundreds of students, and bolstering workplace safety and occupational medicine statewide. The namesake of the new endowed chair is another of Utah's unsung heroes, Dr. Paul S. Richards, a 20th century pioneer in occupational medicine and a national force for workplace safety reform.

The creation of the Dr. Paul S. Richards Endowed Chair in Occupational and Environmental Health and Safety at the RMC was celebrated at an event hosted by University of Utah Sr. Vice President Lorris Betz on Monday, October 27, 2009, at the University of Utah Alumni House. Dr. Kurt Hegmann, who has served as the RMC director for five years, is the first endowed chair holder. The endowed chair is being established through donations by the Richards Memorial Medical Foundation and Workers Compensation Fund.

Beyond just another academic announcement, the creation of this endowed chair brings increased support for workplace safety. It also provides an opportunity to reflect on the legacy of Dr. Paul S. Richards. While workers today may take their right to workplace safety for granted, they may not know they owe a debt to impassioned revolutionaries like Dr. Richards, who was appalled by the working conditions of miners he treated at a small hospital in Bingham Canyon at the Kennecott Mine in the 1920s. The unassuming Harvard graduate, who had suffered from debilitating inflammatory rheumatism as a youth, set out to turn the tide of employers' negligence and ignorance. Dr. Richards' quest for a safer and healthier workplace not only improved conditions for local miners, but also led to his becoming a nationally recognized authority in industrial medicine.

"My grandfather was always devoted to helping the common man," said Clark Richards, Richards Memorial Medical Foundation spokesman. "He especially cared for those who lived in a hand-to-mouth situation. He found his gift as a healer in Bingham Canyon, but more important, he found he was a leader. He used his medical profession to bring together employers, civic leaders, and workers to create change. He felt he had an incredible responsibility to society, and he never once allowed personal gain to interfere with that passion."

Toward the end of his career, Dr. Richards established the Richards Memorial Medical Foundation using his own savings and the help of his brother Willard B. Richards, Jr., to make his vision of ongoing community service a reality. Dr. Richards charged his family and close friends who served as directors of the foundation with carrying on his legacy, which included improving workplace safety and health and supporting medical education, research and practice. Over the years, the foundation has fulfilled his wishes, and more recently, it has partnered with Workers Compensation Fund to establish the Dr. Paul S. Richards Safe Workplace Scholarships for graduate students studying industrial health and occupational medicine at the RMC. "We can't say enough good about Workers Compensation Fund. WCF has helped us accomplish so much with the foundation, and this endowed chair is a natural extension of all that my grandfather stood for. We are thrilled to make it possible, along with Workers Compensation Fund," added Clark.

WCF is likewise pleased to help in the effort. "At Workers Compensation Fund, one of our biggest priorities is helping the more than 30,000 companies we work with improve safety for their employees," said Dennis Lloyd, WCF senior vice president and general counsel. "It has been perfect for us to partner with the Rocky Mountain Center and the Richards family over the years. We are proud to be part of honoring Dr. Paul S. Richards' legacy with this endowed chair, and to ensure that the RMC continues to further the cause of workplace safety for years to come."

As for being named the first recipient of the endowed chair, Dr. Hegmann said, "It is amazing. At a recent conference, I told the 16 other ERC directors about the upcoming announcement, and they burst into applause. It brings tremendous additional prestige to the Rocky Mountain Center to have an endowed chair, particularly in an academic arena that does not usually receive this type of recognition. It also benefits Utah and other western workers employers. Anything that strengthens the RMC will improve the business climate, increasing our ability to reduce injuries in the workplace."

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Written in part by Heather Beers

RMCOEH ADVISORY BOARD MEMBERS

Jim Judd has been active in the labor movement for more than 30 years, starting out with the Teamsters in the early 1970s in Las Vegas. In 1977, he joined the Ogden Fire Department and the local chapter of the International Association of Fire Fighters. Two years later, he was elected president of Local 1654. He has served as the Professional Fire Fighters of Utah president since 1985.

Twelve years ago, he joined the executive board of the Utah AFL-CIO. During that time, he worked on a number of labor issues. He has been a familiar face navigating the halls at the Utah legislature for numerous years lobbying on behalf of the working men and women of Utah.

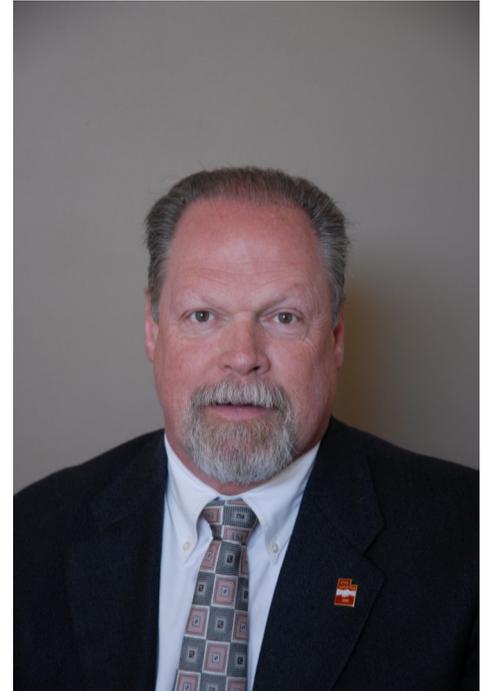
From 1970 to 1977, Jim also was a member of the International Brotherhood of Teamsters.

He joined the International As-

sociation of Fire Fighters in 1977 when hired by the Ogden City Fire Department and was a member of the Ogden City Fire Department 1977 to 1997 retiring as a Battalion Chief. From 1977 to present, he has been a member of the International Association of Fire Fighters (IAFF). Jim was elected Vice President of IAFF Local 1654 in 1978. He was elected President of IAFF Local 1654 the following year in 1979 and served on the executive board of the Local until 1989.

He was elected to the Utah AFL-CIO Executive Council in 1983. In 1985, Jim was elected President of the Professional Fire Fighters of Utah.

He served as Adjunct Faculty for Utah Valley State College 1992 to 2007. Jim was elected Vice President of the Utah AFL-CIO and now serves as President of the Utah AFL-CIO since 2007.



Roger Jensen

Roger Jensen has served on the RMCOEH Advisory Board since 2004. His participation strengthens the regional representation on the Board and connects the RMCOEH to the NIOSH supported programs at Montana Tech. Roger joined the Montana Tech faculty in 1999 and is currently a Professor in the Safety, Health, and Industrial Hygiene Department. He teaches undergraduate and graduate courses in occupational safety, systems safety, and ergonomics.

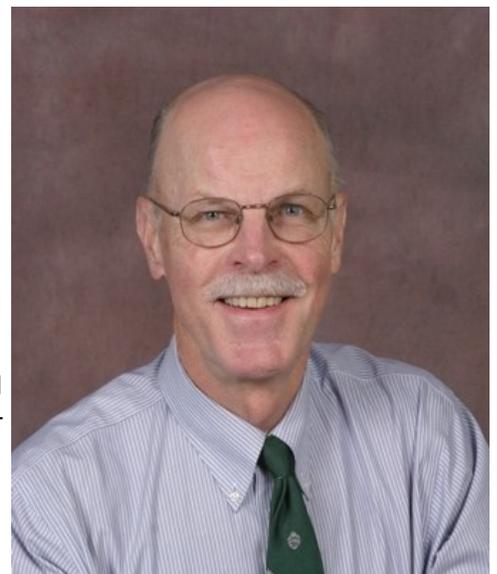
Montana Tech is a small, technically oriented university with an enrollment of about 2400 students. Intercollegiate sports teams compete in the same conference with Westminster College in Salt Lake. A Training Project Grant from NIOSH helps support programs leading to a B.S. in Occupational Safety and Health, and an M.S. in Industrial Hygiene.

Prior to this academic appointment, Roger worked seven years as the Senior Ergonomist for a

technical services company in Ohio, and 22 years in research and management positions with NIOSH. His initial assignment in 1969 with the NIOSH predecessor (Bureau of Occupational Safety and Health) was facilitated by his cousin, Jeffrey Lee -- the former director of the industrial hygiene program at the U of U.

Roger received his B.S. in engineering from the U of U in 1969. He earned his Juris Doctorate by attending night law school while he worked for NIOSH in Cincinnati. During his career as a Public Health Service Officer, he was able to complete a Master of Science in Engineering degree at the University of Michigan (1979) and a Ph.D. in engineering at West Virginia University (1989). He is also a Registered Professional Engineer in Ohio, a Certified Professional Ergonomist, and a Certified Safety Professional. The American Society of Safety Engineers recently awarded him the First Place, 2007 Professional Paper Award for authoring *Risk Reduction Strategies (Professional Safety, 52(1):24-30, 2007)*.

Roger lives in Butte, Montana with his wife of 33 years, Marian. Their daughter Lea completed an M.S. in Industrial Hygiene at Montana Tech and works in Portland as a Loss Control Consultant for Liberty Northwest Insurance



New Deputy Director

At RMCOEH

We are pleased to welcome Matthew Hughes, MD, MPH, who will be serving as the Deputy Director for the Center and Clinical Assistant Professor in the Department of Family and Preventive Medicine at the University of Utah, joining our faculty in the fall of 2008. Dr. Hughes' teaching and research interests include practical applications of occupational health management, medical information management systems, international medicine, toxicology, medico-legal aspects of occupational health, and methods for optimizing health to achieve a competitive strategy in the workplace.

Prior to his appointment, he developed an extensive background in corporate medical man-

agement as the Western Hemisphere Medical Director for British Petroleum and as Associate Medical Director for Marathon Oil Company. He has led corporate and national efforts to improve employee health and safety programs, international public health, and employee benefits related programs including absence management. He was a recipient of the American College of Occupational and Environmental Medicine (ACOEM) Corporate Health Achievement Award in 2003 for program excellence at Marathon Oil Company. He initiated and implemented a comprehensive malaria control and elimination project in the country of Equatorial Guinea, which has seen tremendous reduction in parasitemia rates in children

and dramatic reduction in malaria cases across the country, and has led to over \$25 Million in program aid from multiple public-private partnerships.



Police Officer and Firefighter Health Study

Firefighters and police officers face unique exposures as part of their day to day work. A study was funded by the State of Utah to investigate the possible relationship between some of these exposures and cancers. A comprehensive literature review demonstrated there is not a single, published epidemiological study of risks for cancer among police officers from methamphetamine-related tasks. However, there are numerous epidemiological studies of firefighters with different findings among the various studies. The most common cancers generally found to have been elevated were: colon, rectal, Non-Hodgkin's lymphoma, melanoma, and prostate cancer, although other studies found no relationship between the firefighting occupation and cancer.

We identified 144 municipalities or agencies for police officers and 29 agencies for firefighters. Of these, 70 (49%) and 27 (93.1%) respectively, agreed to participate. Most participating municipalities agreed to provide names of officers, but not addresses thus mailings of enrollment information and study identification numbers were sent out from the municipalities which in turn promised to mail the enrollment information. This produced an average 15.5% among police and 19.6% among firefighters returned questionnaires due to incorrect addresses.

This study enrolled 553 (5.30% of 10,429 eligible) police officers and 549 (13.91% of 3,946 eligible) firefighters. Exposures were determined by algorithms primarily relying on answers to several questions to categorize workers into high, medium and low levels of exposures to methamphetamine

laboratory and combustion products, respectively while blinded to health status. For purposes of worst case analyses, those who were deceased had largely absent exposure data and were included in the high risk category.

The police officers' most frequent cancers reported and confirmed by the Utah Cancer Registry were prostate, non-Hodgkin's lymphoma and rectal cancer. The overall cancer rate was increased in the medium methamphetamine exposure group and was non-statistically significantly elevated in the high exposure group. The firefighters' most frequent cancer reported and confirmed by the Utah Cancer Registry was prostate. The overall cancer rate was increased in the medium combustion products exposure group (3.1-fold) and was non-statistically significantly elevated in the high exposure group (2.4-fold). Risk estimates were stronger among confirmed cases (8.5- and 4.2-fold respectively). Risks for individual cancers were unstable due to small numbers. Skin cancers were significantly elevated in both the high (4-fold) and medium (3.4-fold) categories.

Thus, there are some suggestions of elevated risks for lymphoma, melanoma and colon and rectal cancers among police officers conducting methamphetamine-related tasks. There also are suggestions of elevated risks for all cancers combined among firefighters. These conclusions must be viewed cautiously based on the low participation rates.

Thus the results were unable to support legislation for presumptive coverage under workers compensation. The full report is available on-line at <http://www.medicine.utah.edu/rmcoeh>.

Upcoming Continuing Education Classes and Events

May Courses

- OSHA 503: Update for General Industry Outreach Trainers
- OSHA 501: Trainer Course in Occupational Safety and Health Standards for General Industry
- Environmental Issues & Regulations (Night Class)
- Asbestos Contractor/Supervisor Refresher
- Asbestos Worker Refresher (In Spanish)
- Asbestos Inspector Refresher (Green River, WY)

June Course

- OSHA 2225: Respiratory Protection
- OSHA 6000: Collateral Duty Course for Other Federal Agencies
- Air Monitoring for Toxic Substances
- Transportation of Dangerous Goods: Compliance with IATA
- International Air Transportation Association (IATA) Training
- Chemical Compatibility and Storage

July Courses

- OSHA 2045: Machinery and Machine Guarding Standards
- 8-Hour HAZWOPER Refresher
- Asbestos Inspector Management Planner Refresher
- DOT Hazardous Material Transportation
- Chemistry for the Non-Chemist
- Asbestos Worker Training in Spanish
- Hazardous Materials: Incident Command

August Courses

- Comprehensive Review of Industrial Hygiene
- Asbestos Inspector/Management Planner Refresher
- 40 Hour Hazardous Waste Operations and Emergency Response Course (HAZWOPER)
- OSHA 500: Trainer Course in Occupational Safety and Health Standards for the Construction Industry

September Courses

- Asbestos Contractor/Supervisor Refresher (Pocatello)
- Core Concepts in Safety and Health (Night Class)
- CAOHC-Approved Occupational Hearing Conservation
- OSHA 2250: Principles of Ergonomics Applied to Work-Related Musculoskeletal & Nerve Disorders
- OSHA 511 Occupational Safety and Health Standards for General Industry

October Courses

- 26th Annual Conference on Safety and Industrial Outreach Trainers

November Courses

- Occupational Safety and Health (ONLINE)
- Respiratory Protection & Fit Testing
- Lead Supervisor/Contractor Training

December Courses

- OSHA 7300 Understanding OSHA's Permit-Required Confined Space Standard
- Effective Safety Committees

For additional information on CE classes, please visit the continuing education section of the RMCOEH website: <http://medicine.utah.edu/rmcoeh/>

Debut of Book's Third Edition

*D*r. Moser's text Third edition of Effective Management of Health and Safety Programs—A Practical Guide discussing practical aspects of health and safety programs was published in March 2008. The new edition contains five new chapters”

- Planning health care responses to natural disasters, terrorism, and other mass casualty situations.
- Entrepreneurship: Implementing or expanding health and safety programs.
- Leadership—What works and what doesn't.
- Health and productivity enhancement.
- Preparing for and providing health and safety legal testimony.

All other chapters have been revised and current references are provided. The text continues to emphasize the

skills and techniques that have proven effective in designing, implementing, managing, and evaluating health and safety programs. Prior editions have been referred to as a “Pocket MBA”, and this edition retains the focus on useful information that will benefit anyone who is in charge of all or parts of health and safety programs. The book remains the primary text for the Center's required graduate course, FPMD 6760, Health Care Administration—Management of Health and Safety Programs. The text is 130 pages longer than the prior edition, and, in view of the increased length and new material, the Rocky Mountain Center's correspondence course has been approved by the University of Utah's Department of Continuing Medical Education for 45 *AMA PRA Category 1 Credits*™. The correspondence course is also approved for 4.0 Continuing Education Units and 5.0 ABIH points. (Further information on the correspondence course may be found at: <http://uuhsc.utah.edu/rmcoeh/ContEdProg/Brochures/PAMGMT.pdf>)

RMCOEH News Corner

Resident Wins Competition

To encourage resident participation in the activities of the Western Occupational Health Conference, the leadership of WOEMA and its Board of Directors, has set aside funding every year for resident scholarships (i.e., tuition fee waivers), stipends, and poster competitions.

It is with great pleasure to see residents from four of the five residency programs in the region eagerly participate at this year's WOHC, September 17-20, 2008 in Napa, California. Dr. Anne Donohue and Dr. Nancy Williams from the OEM program at the U of U Rocky Mountain Center were both recipients of the scholarship and stipend.

Dr. Nancy Williams's poster was chosen as the first-prize winner in the competition.

Dr. Royce Moser Recognized

The RMCOEH received a letter from Joseph J. Angello, Jr., of the Office of the Secretary of Defense, to "recognize the contribution of a member of your faculty to a significant issue concerning both prevention and national defense". In the mid-1980's the Department of the Air Force began developing a computer program suitable for incorporation in advanced fighter aircraft that would automatically prevent the aircraft from hitting the ground if the pilot became distracted, disoriented or made an error in judgment. This technology was ready for production and incorporation into aircraft by the end of the last century, but Air Force leadership at that time rejected it.

Recently, the Aviation Safety Technology Working Group (ASTWG) of the Defense Safety Oversight Council championed Automatic Ground Collision Avoidance Technology (Auto-GCAS) as a technology needed in future aircraft: To sell their case, they sought to develop evidence suggesting to implement manual collision avoidance technology to reduce

the loss rate of fighters to controlled flight into terrain (CFIT). A key reference was discovered supporting this fact. A paper written by Royce Moser, MD, MPH: '*Spatial Disorientation as a Factor in Accidents in an Operational Command*' was published in *Aviation Medicine, Vol 40, #2, pp174-176* in 1969. This paper contained information allowing the ASTWG to quantify loss rates in the late 1950s and early 1960s and prove that manual systems installed in the intervening years had no effect on reducing CFIT rates. The outcome has been that the USAF has now fully embraced Auto-GCAS and it will be installed in advanced fighter aircraft.

Mr. Angello said, "This decision will preserve hundreds of aircraft and lives over the next quarter of a century, it will prevent loss of 6% to 9% of the total purchase of the Joint Strike Fighter, saving the taxpayers billions of dollars". Dr. Royce Moser's paper was a significant influence in the success of this initiative.

Congratulations, Dr. Moser!

Brush Wellman Beryllium Mine

Occupational Medicine Residents Nancy Williams, MD, and Jessica Hanford, MD accompanied David Deubner, MD, MPH, Corporate Medical Director for Brush Wellman, Inc. on tours of the Brush Wellman Beryllium Mine in Delta, Utah in September 2008. The Brush Wellman Beryllium mine in Delta is one of only two active Beryllium mines in the

world. Dr. Deubner, a long time supporter of RMCOEH, regularly invites residents and students to accompany him during his site visits to the facility.



RMCOEH EXPANDS

With the addition of our new MOH/MSOH master level programs, increasing class sizes and steady growth in research activity, The Rocky Mountain Center is pleased to have expanded our facility into adjacent space that recently became available in time for the new semester. With the additional of approximately 3,200 square feet, we have established a larger classroom able to accommodate up to 40 students, equipped with the latest in audiovisual and distance education tools. We have created additional lab space for our Occupational Injury and Prevention Research program, and look forward to future enhancements in our industrial hygiene laboratory. We are pleased to have improved functional space that will be afforded to our students, staff and faculty.

CALL FOR PILOT/SMALL RESEARCH PROJECTS IN OCCUPATIONAL SAFETY AND HEALTH

The Rocky Mountain Center for Occupational and Environmental Health announces continued support of pilot/small research projects in Occupational Safety and Health (OSH) for 2009-2010. This Pilot/Small Projects Research Program is supported by the National Institute for Occupational Safety and Health (NIOSH) and the RMCOEH. It is anticipated that four to six research projects will be funded at a level of approximately \$5,000 to \$10,000 per project. Projects are expected to be completed within 12 months, and are non-renewable. Research project applications must be submitted by May 15, 2009 with intent to notify successful investigators on July 1, 2009.

For complete program and application details, please watch for the official announcement on our website at <http://www.medicine.utah.edu/rmcoeh/>.



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Developments in Evidence Based Practice Guidelines

*F*aculty and research staff at the Rocky Mountain Center are pleased to be engaged as the principal researchers and authors of the American College of Occupational and Environmental Medicine (ACOEM) Occupational Medicine Practice Guidelines, revised 2nd edition. Using enhanced methodology to identify and evaluate original research studies on nearly every conceivable work-related disorder, the RMCOEH team is at the heart of analyzing the available data and drafting practice recommendations which are then edited and peer reviewed by large, multi-disciplinary panels of healthcare professionals and subsequently by external professional organizations. The final product, published as the revised 2nd edition, is an unparalleled comprehensive effort to provide the strength of evidence in practice recommendations to restore or improve the health of workers with occupational injuries and illnesses. Distilled from over 2,000 moderate and high quality clinical trials, these newly enhanced practice methods are quickly identifying successful interventions that should be more widely adopted in medical practice, as well as highlighting other current practices and procedures that should be reserved or eliminated. Further, these guidelines are becoming widely adopted by other professional organizations and government organizations as the quality publication of choice to assist in the medical management of injured workers.

Dr. Kurt Hegmann serves as the Editor-in-Chief, for this colossal effort, working closely with RMCOEH Deputy

Director, Matthew Hughes, MD, MPH. Faculty member Matt S. Thiese, PhD, MSPH manages the research team including identification of evidence and data management efforts. Hannah Edwards, MD, MPH, and Eric Wood, MD, MPH conduct analyses of the evidence and contribute to authorship. We have also enjoyed enormous support from the research team and students, including Ulrike Ott, MSPH, Debra Robertson, Sivithree Srisukhumbowornchai, MS, Deborah Gwenevere Passey, Cooper Kennedy, Riann Robbins, Atim Effiong, and Tessa Langley.

Revised guidelines have now been completed for disorders of the low back, elbow, and for the massive topic of chronic pain. Work is near completion for disorders of the hip and groin, hand wrist forearm, carpal tunnel syndrome, and foot and ankle. Work is underway for neck disorders and soon for the shoulder and knee. When asked how he copes with the tremendous task of the project as Editor in Chief, Dr. Hegmann responded "reading and grading the available evidence, followed by compilation of evidence tables and analysis of strength of evidence recommendations may sound tedious, but it is extremely exciting when the evidence paints a clear picture of best available practice, and that, when implemented, truly improves the health of the injured worker. The constant challenge is to re-learn that which is widely taught and in common practice, yet is just not the best clinical practice. I have seen this occur in my own practice in ways I had never imagined. Nothing can be more professionally satisfying than that!"