This newsletter is the first “special topics” newsletter in the history of the COEH. It embodies the commitment of the UCLA and UCI COEHs to develop new initiatives in occupational health that reflect the changing nature of the work environment.

The COEHs were established in the late 1970s due to an alarming outbreak of sterility associated with worker exposure to the pesticide DBCP. Throughout the 1970s, occupational safety and health efforts in California and throughout the country focused on workplace exposures to toxic substances, e.g., lead, cotton dust, vinyl chloride and benzene. During the 1970s and the decades that followed, the COEHs contributed important research and outstanding training in occupational safety and health and there has been considerable progress in controlling workplace exposure to these and other chemical agents.

After nearly 25 years since passage of the enabling legislation that set up the COEHs, it is particularly important for these Centers to evaluate the current key issues in occupational safety and health, so that the training and research programs within them keep pace with a changing society and address emerging issues in the workplace environment.

In that regard, we recognize that while progress has been made in addressing chemical exposures, a new set of issues has emerged that requires focused attention and represent new areas of activity for the COEHs. Already, the COEHs have turned their attention to musculoskeletal injuries from repetitive work recognizing the importance of this area. Another evolving area of major importance is psychosocial factors in the workplace, the subject of this special newsletter. Examples of “psychosocial factors” are psychological demands, level of control, social support, and level of job satisfaction in the work environment.

The Northern and Southern California COEHs have begun developing new training programs, research activities and service efforts to address this important topic. The UCLA COEH is also developing research and training in psychosocial factors as part of its Fogarty International Program in Occupational and Environmental Health in Mexico.

The COEHs will work with members of the professional and scientific community in California to further develop these efforts. In addition to psychosocial factors in the workplace, we have recently developed an initiative in gene-environment interactions and new research and service programs on children’s environmental health issues. For example, the UCI and UCSF occupational and environmental medicine programs within the COEHs have been jointly designated as the Pediatric Environmental Health Specialty Unit for the western region of the country. We will keep our readership apprised of these developments as the COEHs proceed to implement new programs and address the field’s changing priorities.
This issue of the Newsletter focuses on the role of workplace psychosocial factors and health. A growing body of research has demonstrated that psychosocial work stressors are important causal agents in a variety of mental and physical disease outcomes:

- Cardiovascular disease (CVC), including hypertension
- Work-related musculoskeletal disorders
- Psychological distress/disorders
- Reproductive health effects
- Immune system suppression

Given the serious nature of these outcomes, and the growing recognition of the importance of work organization factors (and psychosocial factors in particular), the UCI and UCLA COEH’s have developed a joint initiative to enhance research, teaching, and workplace-based services in this important area. Faculty affiliated with the Northern California COEH are joining in with this initiative so a wide range of exciting programs are underway in California. This issue will describe some of these programs.

This initiative is intended to draw on the resources of the University of California COEHs and the Southern California NIOSH Education and Research Center to initiate, coordinate and provide the training, research and services to accomplish these goals.

1) Training - The success of this initiative will require the development of a comprehensive training program for graduate students and professionals to enhance their awareness of the role of psychosocial work factors in the etiology of psychological and physical disorders, hypertension and CVD. Programs for graduate students will provide them with skills to conduct surveillance, detect psychosocial exposures, and obtain a psychosocial work history from employed people. Training for professionals will provide similar skills but focus more heavily on the development of the appropriate clinical skills (e.g. taking a medically relevant history of workplace psychosocial exposures) necessary for the detection, evaluation and treatment of work-induced CVD. (See article on page 8 for more information.)

2) Research - A research program will be carried out in parallel with the service component of the initiative, with the purpose of evaluating 1) the surveillance and treatment programs and 2) informing subsequent intervention and prevention programs for the target population aimed at reducing the burden of injuries and CVD. Observational studies of naturally occurring changes in the workplace can be conducted through ongoing surveillance at the workplace with reevaluation of psychosocial exposures and associated changes in workplace blood pressure.

3) Surveillance - A comprehensive plan of surveillance with detection of psychosocial exposures and incipient illness will be initiated in cooperation with interested corporations, health care providers, public agencies, and labor unions. Working people with identified health problems will be referred to COEH facilities for evaluation and treatment by COEH and medical center staff, including cardiologists.

Secondary prevention/treatment programs will be conducted at the participating worksites using staff (e.g., clinicians, industrial hygienists, occupational health psychologists) trained to understand the role of workplace psychosocial factors in the etiology of work-related diseases. Knowledge gained over time through ongoing surveillance and by working with employers and employees will be utilized to design primary intervention/prevention programs.

4) Primary Prevention - Prevention programs will be developed that focus on changes in work organization and job characteristics. These programs will be developed in close collaboration with management, employees and employee organizations. Interventions will be informed by knowledge of the workplace accumulated over time through ongoing surveillance of the workforce and implemented observational studies (see research above).

As part of the initiative, UCLA has joined UCI in implementing a program aimed at improving the workplace through Surveillance, Training and Early Prevention – Project STEP. To ameliorate the health problems associated with psychosocial stress, a comprehensive program is needed for the improvement of the psychosocial well-being and musculoskeletal and cardiovascular health of working people through 1) Surveillance, 2) Early detection with referral for evaluation and treatment of individuals with early manifestations of disease, and 3) Interventions at the workplace intended to reduce exposures and prevent illness.

For more information about this program, please contact: Peter L. Schnall MD, MPH Center for Occupational and Environmental Health 19722 MacArthur Blvd., Irvine, CA 92612 Phone: 949-824-7686
Cardiovascular disease (CVD), including heart disease and stroke, is the major cause of morbidity and mortality in the industrialized world. Worldwide, it is projected that CVD “will climb from the second most common cause of death...in 1990, to first place, accounting for more than 36 percent of all deaths in 2020”\(^1\). In the past, the traditional biomedical approach to CVD had focused on identifying genetic susceptibility and individual traits or behaviors, like smoking, diet, or a sedentary lifestyle as causes, and utilizes drugs and lifestyle changes to prevent or treat disease.

This approach is challenged by social epidemiological studies of work stressors, hypertension and CVD that emphasize the importance of social position and social experiences as key causes of disease processes. This research has shown that the epidemic of hypertension is of relatively recent origin and is primarily a disease of industrial society that is patterned by social class, race, urbanicity, and gender. These studies produced convincing results that suggest workplace reform which promotes prevention and treatment is needed.

Elevated blood pressure (BP), or hypertension, is a major risk factor not only for coronary heart disease, but also for left ventricular hypertrophy, stroke, renal disease, and other major pathologic processes. Roughly 95% of cases of hypertension have no known physical cause (such as a heart defect), and are labeled “essential hypertension”. Essential hypertension is a very common disease; approximately half the adult population in industrialized countries has a persistently elevated BP by age 60. Only a small part of the risk of essential hypertension is explained by identified risk factors such as age, genetics, obesity, salt or alcohol intake.

However, a variety of workplace physical exposures (noise, heat, cold, heavy lifting) and chemical exposures (lead, carbon monoxide, carbon disulfide) increase the risk of CVD. The workplace risk factors that explain the largest proportion of CVD, by far, are psychosocial work stressors — also labeled work organization. These include long work hours, shift work, threat-avoidant vigilant work (work that involves continuously maintaining a high level of vigilance in order to avoid disaster, such as bus, taxi and truck drivers, and air traffic controllers), work that combines high efforts and low rewards (support, respect, income, job security) and job strain (work that combines high demands and low control)\(^2\).

The evidence that psychosocial work factors are an important cause of CVD among men and women is strongest and most consistent for job strain, including results from 14 longitudinal studies over the past 20 years. Among men, the impact of job strain on CVD is more consistent and stronger for blue-collar workers, with risk ratios as high as 10, than among men with higher socioeconomic status\(^3\). Return to work with job strain is a significant, independent predictor of heart disease-related mortality in men who have already suffered a first heart attack\(^4\).

The predictive power of job strain was demonstrated in the New York City Work Site Blood Pressure Study conducted by Dr. Peter Schnall and colleagues, the only long-term study of psychosocial work factors and ambulatory BP. Cross-sectionally, adjusted for possible confounders, men with job strain had systolic BP 6-7 mm Hg and diastolic BP 3-5 mm Hg higher than men without job strain. Chronic job strain exposure over 3 years had an even stronger association with BP — about 11 mm Hg systolic and 7-9 mm Hg diastolic. Men who had left a situation of job strain at 3-year follow-up showed a significant decline in their mean BP, about 5 mm Hg systolic and 3 mm Hg diastolic\(^5\).

Another related finding with serious public health implications in the New York City Study was that of widespread “occult”, or hidden, workplace hypertension. Twenty percent of the male study participants had normal BP in a clinical setting but elevated ambulatory BP while at work. The hypertension in this group was undiagnosed by traditional means and therefore untreated\(^6\).

Over the past century, scientific management (Taylorism) has profoundly reshaped the workplace using the assembly line to improve productivity. Even white-collar work, through office automation, has been shaped by the principles of the assembly line. The job strain construct, with its focus on high job demands coupled with low job control, captures the essence of the assembly-line approach to job design. Combine this with the increasingly stressful nature of the workplace, compounded by longer hours and increased demands, and it is easy to see that a comprehensive strategy for prevention and treatment is needed.

Continued on page 4
Recently, experts from Europe, Japan and the U.S. called for “surveillance at individual workplaces and monitoring at national and regional levels in order to identify the extent of work-related stress health problems and to provide baselines against which to evaluate efforts at amelioration. They recommend that workplaces assess both workplace stressors and health outcomes known to result from such exposures on an annual basis”.

Such programs are underway or are being planned in Southern California. They include work site surveillance for stressors such as job strain and illnesses like hypertension, the development of the field of occupational cardiology, professional training, public education, workplace interventions (including “heart healthy” changes in job design and work organization), and regulatory efforts to reduce or prevent job stress.

References

Dr. Dean Baker, Director, UC Irvine COEH
Dean Baker, MD, MPH, Professor and Director of the UC Irvine Center for Occupational and Environmental Health, has been involved in job stress research for more than two decades. Dr. Baker completed his BS in Bio-Systems Engineering at UCLA; MD at UCSD; and MPH in Epidemiology at UC Berkeley. He did his Family Medicine Residency at the Montefiore Medical Center, New York, and Occupational Medicine Residency with NIOSH. While in New York during the late 1970’s, Dr. Baker began a collaboration with Dr. Robert Karasek, creator of the leading theoretical model of job stress, commonly known as the Job Strain or Job Demand-Control model.

Dr. Karasek and Dr. Baker conducted research on the prospective relationship between job strain and cardiovascular disease in Sweden, which was published in 1981. This seminal report laid the foundation for a substantial body of research in this area during the past two decades. Dr. Baker also collaborated on a NIOSH grant on job strain and cardiovascular disease in the United States. During the ‘90s, Dr. Baker’s research addressed the role of job strain and organizational factors in office indoor air health complaints, and the interplay of job strain and ergonomic factors in causing musculoskeletal complaints among clerical workers.

Dr. Baker has published numerous articles and book chapters on job stress, including the chapter in the Occupational Health textbook edited by Levy and Wegman. He is a co-editor of the OM:STAR monograph entitled, “The Workplace and Cardiovascular Disease” published in 2000. Dr. Baker’s current research interest is on the role of work organization and psychosocial factors in the etiology of cardiovascular disease and immune dysfunction. He is collaborating with Dr. Peter Schnall in establishing the STEP program.
The Southern and Northern California COEHs have begun a new collaborative initiative focused on the role in health of psychosocial factors at the workplace. As part of this initiative, the Northern California COEH (UC Berkeley, SF, Davis) organized a spring symposium on worker health and the organization of work, held April 5, 2002, at Berkeley. According to past research, changes in the economic environment have altered the way that work is organized and distributed and these changes, in turn, affect the health of workers and the communities they live in. This symposium consisted of a wide range of interdisciplinary presentations from universities and community agencies describing the factors that are affecting the health of our workers and innovative new ways to modify them. Seventy-eight participants from universities, non-profit organizations, and industry attended this one-day symposium.

The day was broken into various sessions, the first one introducing the problems that are currently facing our workforce and the mechanisms by which these problems can affect health. One presentation introduced theoretical frameworks for biomechanical and psychosocial factors in work organization that affect worker strain while another discussed the transformation of work and employment in the new economy. The sessions that followed were based on studies that used an interdisciplinary community-based approach to changing traditional jobs in terms of ergonomic improvements. This approach focuses on the need to include the affected workers in every stage of the research, so that researchers do not miss pertinent issues and that they produce real, practical solutions. Presentations were made that focused on the Asian Immigrant Garment Worker Project and a participatory research project with hotel room cleaners. These were followed by presentations on the affects of work organization on particular health condition, namely the cardiovascular consequences of job strain and the correlation between work organization and musculoskeletal disorders. The last session was called “Changing Nature of Work: Community Approaches,” and included presentations by numerous community organizations and foundations.
Over the past decade, there has been an increasing number of projects focusing on the effects of psychosocial work stressors and work organization on the health of the individual. The following are just a few examples of the projects being conducted in California, apart from the COEH initiatives. Contact information has been provided should you wish to find out more about these important issues.

### UCLA Nurses Study
This study by Drs. Iris Goldstein and David Shapiro focused on the effects of psychosocial factors at work on ambulatory blood pressure, heart rate, and neuroendocrine responses in 138 registered nurses, aged 25 to 50 years. It found that nurses scoring high on job demands had elevations in daytime systolic BP, daytime HR only on work days, and nighttime epinephrine on work days. Although the work environment leads to increased activity of the cardiovascular and sympathoadrenal medullary system in healthy women, the effects are modified by the woman’s domestic role, by the length of her employment, and by the demands of her job.

**Contact:** Dr. Iris Goldstein, irisg@ucla.edu.

### Workplace Surveillance of Psychosocial Exposures and HBP at Detroit and Los Angeles Auto Plants
This 2-year, 2-part study on job stress, hypertension and cardiovascular disease (CVD) risk, which began on 9/1/01 was funded by the United Auto Workers-DaimlerChrysler (DC) and the National Joint Committee on Health and Safety. The first study of job stress and CVD risk among autoworkers in the US, it involves four components: an analysis of existing company records on sickness, accident and disability, workers’ compensation and health promotion, a survey of DC blue-collar and white-collar employees from three work sites assessing job stressors, the measurement of employees’ blood pressure while they are working, and interviews of labor and management representatives and selected employees.

**Contact:** Dr. Paul Landsbergis, landsp01@doc.mssm.edu.

### San Francisco MUNI Study of Health and Hypertension
For the past 24 years, Dr. June Fisher and Dr. David Ragland have been working with the San Francisco Municipal Transit (MUNI) Workers in a study that corroborated early observations that the transit operators had higher rates of hypertension compared to referent groups of employed persons. This study has now developed into a long-term program, not only to identify the impact of work on the operators’ health status, but also to make recommendations for improving their work environment.

**Contact:** Dr. June Fisher, tdictproj@aol.com or Dr. David Ragland, Davidr@ucilink4.berkeley.edu.

### Migrant Worker Studies
Since 1994, the UC Agricultural Ergonomics Research Center (AERC) team has conducted research on musculoskeletal disorders related to the cultivation of fruits and vegetables. In the past, this work has focused primarily on engineering interventions to reduce ergonomic risk factors. Several AERC studies reported successes in tool and machine design that resulted in symptom reduction for workers with minimal or no impact on productivity. A new proposal has now been submitted to NIOSH to investigate several organizational factors related to the development of fatigue and musculoskeletal symptoms: work rest cycles, incentive pay systems, heat exposure, job control, and teamwork processes.

**Contact:** Dr. Julia Faucett, jaf@itsa.ucsf.edu
Your Help Is Important!

We need your help in accessing worksites for our study.
If you are currently connected to a worksite or know someone who
may be interested in participating in our study,
please fill out the tear-off sheet below.

Are you connected to a worksite that might be appropriate for our workplace stress
and health study?

☐ YES

Please list the name of the company or worksite(s):

__________________________________________________________

Your Contact Information:

Name: _______________________________________________________
E-mail: _______________________________________________________
Phone: _______________________________________________________

Please contact Maritza Jauregui at mjauregu@uci.edu or (949) 824-1859 for additional
comments or questions or mail form to address on back.

Would You Like Training in Work Stress and Cardiovascular Health?

We are planning to offer educational and training activities in assessment of stress at the
workplace and we would like to know your preference in the type of training activities
offered.

Would you be interested in any of the following training activities? (check all that apply)

☐ one day introductory seminar in theoretical models and assessment protocols at the workplace
☐ one day practicum in cardiovascular risk factor assessment at the workplace
☐ week long workshop in mastering cardiovascular risk factor assessment
☐ ten week continuing education course in work stress and cardiovascular health

Would you like to receive continuing education credit for any of the above-mentioned
training activities?

☐ YES  ☐ NO

Please contact Dr. Peter Schnall at pschnall@workhealth.org for additional comments or
questions or mail form to address on back.
ATTN: Maritza Jauregui
Center for Occupational and Environmental Health
19722 MacArthur Blvd.
Irvine, CA 92612

Center for Social Epidemiology
710 Wilshire Blvd., Suite 525
Santa Monica, CA 90401
San Francisco Hospital Workers Study

This study is also entitled the Gradients of Health in Hospital Workers Study (GROW Study), which is a new 5-year study of how risk-exposures relate to differences in health outcomes across various job categories and pay levels in the hospital workforce. The health outcomes studied will be: occupational injury of the strain and sprain sort, quality of life and physical and mental functioning, blood pressure and salivary cortisol levels (as an indicator of potentially unhealthy “stress” responses in the body), and overall absence from work due to sickness or injury of any type. This is study is scheduled to begin in the First Quarter, 2002 at two institutions in San Francisco. Contact: Dr. Jeff Braff, Jpbraff@medince.ucsf.edu.

Ethnographic Component of the GROW Study

The Health Gradients and the Workplace (GROW) Study has an ethnographic component, which is aimed at: a) exploring how context, both on macro (hospital-wide) and micro (unit level) levels, modifies risks, health and safety; b) exploring how individual background factors modify perceptions and practices around risks, health and safety, and in turn, injury and recovery; c) identifying psychological, social or cultural risks in the workplace relevant to primary or secondary prevention; d) describing the actual health and safety mechanisms operative in a particular hospital setting that can serve as a basis for improvement; and e) exploring the different perspectives and priorities on health and safety issues within the hospital. Contact: Dr. Deborah Gordon, Debgord@aol.com.

Asian Immigrant Garment Workers

This study is an example of effectively using an interdisciplinary approach to change traditional jobs. In this particular study, planning was initiated through the grassroots involvement of the Asian Immigrant Women Advocates. Ergonomic and behavioral changes to reduce workplace stress were advocated and implemented through the community partnership model.

Contact: Ms. Barbara Burgel, barbara.burgel@nursing.ucsf.edu or Dr. Bob Harrison, rharris@itsa.ucsf.edu.

Economic Costs of Psychosocial Factors and Health

This study estimated the annual incidence, mortality, and direct and indirect costs associated with occupational injuries and illnesses in California in 1992. To assess incidence of and mortality from occupational injuries and illnesses, data from state and national surveys were examined with an attributable risk proportion method. The direct ($7.04 billion, 34%) plus indirect ($13.62 billion, 66%) costs were estimated to be $20.7 billion, injuries cost $17.8 billion (86%), and illnesses $2.9 billion (14%). Contact: Dr. Paul Leigh, jpleigh@epm.ucdavis.edu.

Technological Breakthrough Aids Surveillance

An ambulatory blood pressure monitor (in the photo an Omron device) worn at the wrist enables blood pressure measurement while the individual conducts their normal daily activities. The wrist monitor is a lower-cost alternative to ambulatory blood pressure monitoring devices, which are best used in research settings, versus the Omron device which can be used for worksite surveillance programs.

Tamara Haas of the UCI COEH demonstrates the monitor’s sleek design.
As part of the UCI-UCLA psychosocial initiative, an extensive training program is being developed for graduate students and health professionals to enhance their awareness of the role of workplace based psychosocial factors in the etiology of mental health disorders, physical injury, hypertension and cardiovascular disease. Two courses have been developed to date and are being taught yearly.

1. First, Occupational Health Psychology: Work Organization and Health (CHS278) offered in the UCLA School of Public Health (SPH) provides graduate students with the opportunity to focus on psychological models, contextual factors, as well as build skills in conducting surveillance, detecting psychosocial exposures, and obtaining a psychosocial work history from employed people.

2. Second, a course in Occupational Cardiology developed by Drs. Karen Belkic and Peter Schnall for health professionals was taught this past winter at the UCI COEH to the occupational medicine residents and COEH staff. The course provides similar skills to CHS278 while focusing on the development of the appropriate clinical skills necessary for the detection, evaluation and treatment of workplace induced CVD.

A critical facet of the courses is the student’s hands-on experience administering a psychosocial packet to working people which includes, among others, the Job Content Questionnaire (to assess job strain), the Effort-Reward Imbalance Questionnaire, as well as the Occupational Stress Index. These instruments assess a range of psychosocial exposures experienced at the workplace. The course participants then score the questionnaires and use the collected information to write a work history that can be used for interventions at the workplace as well as for clinical evaluations, such as return-to-work assessment.

An additional goal of this program is to develop multidisciplinary training that is integrated into the core curriculum of all occupational health students, including those enrolled through the SC NIOSH Education Resource Center (ERC) and UCLA SPH. The initial courses were developed with funds from a 2-year grant awarded September 2000 thru August 2002 by APA/NIOSH to UCLA faculty Dr. Judith Siegel and Dr. Peter Schnall.

Working closely with the COEHs is the Center for Social Epidemiology (CSE), a private non-profit foundation established in 1988 through a bequest from Larry Schnall to promote public awareness of the role of environmental and occupational stress in the etiology of cardiovascular disease. The Center has a number of initiatives, one being the maintenance of the Job Stress Network’s website (www.workhealth.org). This site was developed to provide a primary source for relevant information on job stress research, as well as to facilitate communication among researchers and the public interested in the relationship between the work environment, the individual, and health. The Center’s goals include developing, conducting and presenting research projects, scientific papers and educational materials related to these issues, as well as conference information, news, and announcements.

The CSE also sponsors the California Work and Health Study Group which meets three times a year to discuss current issues about occupational stress. This group is in the process of planning several state-wide educational conferences as well as discussing the development of a white paper on the state of California research and work organization concerning job stress and psychosocial research.

Director: Peter L. Schnall MD, MPH
Center for Social Epidemiology
710 Wilshire Blvd., Suite 525
Santa Monica, CA 90401
Phone: 310-319-6595
Faculty: Paul A. Landsbergis PhD, EdD, and Karen L. Belkic MD, PhD.
Website creator and administrator: Susan Holcomb
Certified Hazardous Materials Manager Review & Exam
August 13-15, 2002
The purpose of this 2 1/2 day review course is to promote solid professional hazardous materials management principles and allow students to prepare for certification as a Hazardous Materials Manager. The CHMM credential is nationally recognized and promotes career advancement and recognition in the field of hazardous materials management and engineering. Content areas are defined by the Institute of Hazardous Materials Management. Sponsor: Southern CA Education & Research Center
Cost: $600.00

Occupational Health Nursing Review
August 14-16, 2002
This 2 1/2 day course provides an intensive overview of the principles of occupational health nursing practice, comprehensive manuals, resource materials, and test taking techniques for those nurses preparing for the COHN and COHN-S examination. This course also provides state-of-the-art knowledge to prepare OHNs for the future. Sponsor: Annette B. Haag-DVDiBenedetto & Associates. Cost: $575.00 Late Fee: $625.00

Disability and Workers Compensation Case Management
August 17-18, 2002
This intensive 2 day course designed for today’s health care leaders and professionals includes comprehensive manuals, resource materials and test taking techniques. Attendees will gain expertise and creative approaches in administering and measuring the effectiveness of Disability and Case Management Programs in today’s dynamic health care environment, and assist professionals in obtaining certification in their field of expertise (i.e., CCM, COHN/CM, COHN-S/CM). Sponsor: Annette B. Haag-DVDiBenedetto & Associates. UCLA Discounted Fee: $525.00 Late Fee: $575.00

CAOHC Approved Occupational Hearing Conservation Training
September 12-14, 2002
Participants will become familiar with all aspects of occupational hearing conservation programs including noise measurement and control, anatomy and physiology of the auditory system, hearing protection and employee education. OSHA standards, Worker’s Compensation and Federal Regulations are discussed. Sponsor: Occupational Marketing, Inc. Cost: $495.00

NIOSH Approved Pulmonary Function Testing
November 15-16, 2002
Course provides instruction in all aspects of spirometry through lectures, practicums and testing. Training is intended for occupational health nurses, physicians, technicians, industrial hygienists and others responsible for performing accurate pulmonary function testing of employees. Sponsor: McIntyre-Birkner & Associates, Inc. Cost: $500.00

Certified Hazardous Materials Manager Exam
December 6, 2002
The Southern California ERC at UCLA has been approved by the Institute of Hazardous Materials Management (IHMM) as a testing site for the Certified Hazardous Materials Manager (CHMM) Exam. The 3 hour exam is approximately 160 multiple choice questions. Application and exam fees should be made payable to the IHMM, not the University of California. To take the exam, you must apply to the IHMM six weeks prior to the exam date. To request an application or obtain additional information contact: IHMM, 11900 Parklawn Drive, Suite 450, Rockville, MD 20852. Phone: 301/984-8969, Fax: 301/984-1516; ihmm@cyclenet.com

Certification of maintenance points are available for all programs. For additional information, call (310) 206-2304 or email niosherc@ucla.edu
CALENDAR OF UPCOMING PSYCHOSOCIAL EVENTS

November 5, 2002 - UCLA
SCERC and SC COEH Symposium on the Importance of Workplace Psychosocial Stressors in Occupational Health: A Need for Surveillance

February 2003 - UCI
Workshop: How to Conduct Workplace Surveillance

March 20-22, 2003 - Toronto, Canada
APA/NIOSH Fifth Interdisciplinary Conference on Occupational Stress and Health - Work, Stress and Health: New Challenges in a Changing Workplace

October 2003
California State-Wide Symposium: Psychosocial Factors at Work and Health

November 2004 - UCLA
4th ICOH International Conference on Work and Cardiovascular Disease

COURSES:
UCLA: Occupational Health Psychology (Spring 2003)

UCI-UCLA: Occupational Cardiology (Winter-Spring 2003-tentative date)