

New on the Web:

ProCOR, an electronic conference on cardiovascular health in the developing world, cosponsored by the Lown Cardiovascular Center and SatelLife. Find it at www.healthnet.org/programs/procor.

Building Interdisciplinary Research in Environmental Health

Perhaps there once was a time when the scope of work for a researcher in environmental health was defined simply by the environment that surrounded an individual—the air that person breathed, the things he or she touched and otherwise physically contacted. Perhaps once, but no longer.

“We’ve entered a new era of environmental health research,” says David Christiani, professor of occupational medicine and epidemiology in the Department of Environmental Health. “We can’t limit our studies to the effects on health of exposure to various pollutants. If we could, then the environmental health role in a problem such as lung cancer would be played out—we know what causes the vast majority of lung cancer cases: tobacco smoke. But our work isn’t done yet because we still haven’t figured out the answer to the question ‘Why does only one in ten smokers get lung cancer?’ If we can figure this out, we can understand how other environmental exposures interact with individual factors to raise or lower the risk of cancer.”

Knowing what it is outside the human body that causes lung cancer, Christiani is looking inside the body to understand why different people have different reactions to the same exposures. It’s a question of susceptibility, and it’s a question that opens up a lot possibilities.

Genetics may provide a partial answer. “We’ve identified a few genes

Around the School

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that are important in conferring susceptibility to some types of cancer,” says Christiani. “But it’s not a complete answer—some genes are related to some cancers, but not to others.”

Acquired conditions also influence susceptibility to cancers. One condition can increase the likelihood of a second, in a relationship similar to that between icy streets and a greater likelihood of auto accidents.

In working towards answering the question of susceptibility, Christiani follows multiple paths of inquiry, including the epidemiologic, laboratory, and clinical. This takes him to the Massachusetts General Hospital (MGH) one day per week, where he treats patients with lung cancer and other kinds of respiratory disease.

“Lung cancer provides a good model for study to tease out the issues of susceptibility because its environmental-exposure aspect—tobacco—is so straight-forward. And what we get out of this research will, we hope, be important to researching other cancers and other diseases.

“There isn’t a lot we can do to cure lung cancer,” says Christiani, “and that’s why it’s important that we learn all we can about how to prevent it. We’re developing a new way to understand how exposures to various pollutants affect health. This requires a better understanding of the interactions between host factors like genetics or acquired susceptibility.”

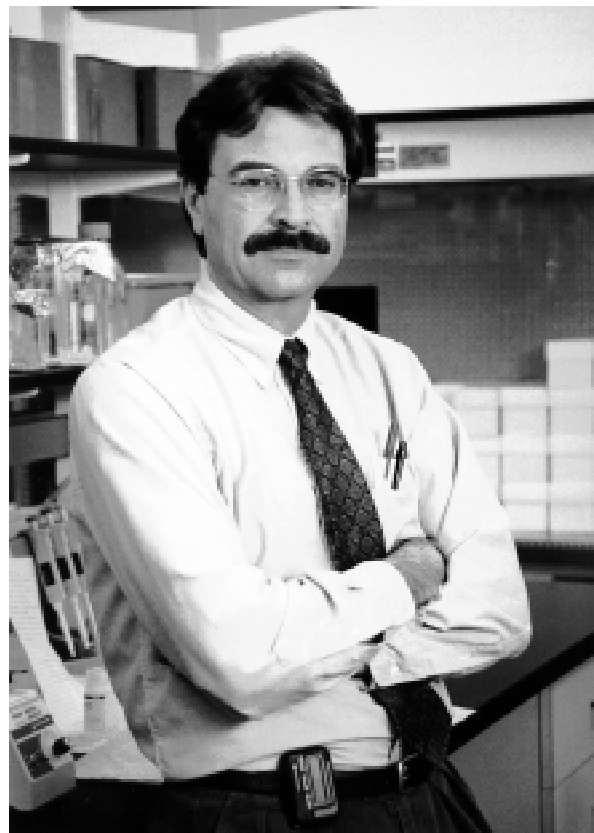
One place to which Christiani is exporting this multi-faceted approach is Shanghai, China. “We’ve been following a cohort of cotton-textile workers for sixteen years,”

says Christiani. “Originally, we were looking at the relationships between exposures and rate of lung loss and lung disease. Now, we’ve expanded the study to include an assessment of genetic factors that may also play a role in lung diseases.”

Working with this cohort has been one of the most challenging and rewarding tasks of Christiani’s career. “When we started this study, we had very few resources and were virtually alone in China, as far as support for our research was concerned. But we did manage to establish this research group, and the long-term collaboration had been tremendously rewarding. It’s really

Continued on page 3

David Christiani,
professor of
occupational
medicine and
epidemiology.



An orientation session for recently hired non-exempt staff will be held from 9:00 to 11:30 a.m. on February 10 in MEC-L008, 260 Longwood Avenue, HMS. The program includes an overview of Harvard's organizational structure and mission, benefits, retirement plans, facilities, programs, and services. Benefits Office consultants will be on hand to answer questions.

Then-Dean, now-Provost Harvey Fineberg dancing with Dolan Camille Anthony at last year's *Celebrity Salsa!* Anthony is the daughter of Maria Anthony, assistant dean for admissions and financial aid and registrar.



Celebrity Salsa!

Students reveling at the January 31 Charity Ball at the Park Plaza Hotel in Boston. More than 150 students, staff, alumni, faculty, and friends attended the benefit dance, raising more than \$2000 for Prevention Now!, an afterschool program for children in high-risk communities.



Celebrity Salsa!

If you've ever wanted to dance with Acting Dean James Ware or with Deborah Prothrow-Stith, Director of the Division of Public Health Practice, or with Camara Jones, assistant professor in the Department of Health and Social Behavior (HSB), or Sidney Atwood of the Information Technology Department, then you'll want to be at the second annual *Celebrity Salsa!* on February 12. The event will feature these and other HSPH and Mission Hill "celebrities" showing off their dance steps, lessons in various dances, and live music provided by Jorge Arce and Humano (voted "Best of Boston" Latin Dance Band).

Admission to this year's *Celebrity Salsa!* is free, although the dance sponsors will be requesting donations to benefit the Young Achievers Math and Science School in Mission Hill.

Joseph Falcone, an HSB master's student who has been working through the Center for Health Promotion to organize this event, said, "Our top priority this year is to have a fun event that brings together the various stakeholders of Mission Hill public health: the residents of Mission Hill, community service professionals, HSPH students, and HSPH staff and faculty."

In addition to the Center for Health Promotion, the dance is sponsored by the Division of Public Health Practice, Sisters Together, and the Hispanic-American Chamber of Commerce.

Free tickets, which double as dance cards and raffle tickets, will be available all week, during lunchtime, in the Kresge cafeteria. Dancers who get their dance cards signed by both a Mission Hill student,

resident, or community service professional and an HSPH student, staff, or faculty member, will be entered into a drawing for a free dinner at Sterling Cafe, a compact disc by Jorge Arce and Humano, or a free dance lesson from the HMA Ballroom Dance Club.

For more information, contact Falcone or Gillian Steel at the Center for Health Promotion, 432-3754; or via Email: jfalcone@hsph.harvard.edu and gsteel@hsph.harvard.edu.

Student-Faculty/ Administrator Luncheon

HSPH students are invited to take a faculty member or administrator to a free luncheon on February 19, from 12:00 to 2:00 p.m., courtesy of the Student Coordinating Committee (SCC) and the Office of the Dean.

The SCC is sponsoring this event so that students and faculty members or administrators can get to know each other outside of the formal settings of offices and classrooms.

To participate, students should pick up a registration form, available in the Kresge lobby from 12:30 to 1:30 p.m., beginning February 9. One to three students may invite a single guest, and the invited guest must sign the form indicating confirmation of participation. The form must be returned to the sign-up table before February 13.

The luncheon is limited to sixty persons, so early registration is recommended. For more information, contact Eileen Ming, SCC co-chair, at eming@hsph.harvard.edu.



On January 21, the 1997 Harvard Award for Excellence in Children's Health was presented to Crittenton Hastings House for its Services to Teen Parents and their Children program. The competitive, \$10,000 award is sponsored by the Harvard Center for Children's Health, Children's Hospital, and the City of Boston. Pictured above at the presentation ceremony is (from left) James Ware, acting dean; Robert Fraser, of Counsel, Goodwin, Procter, and Hoar and head of the Award Selection Committee; Elizabeth Reilinger, president and CEO, Crittenton Hastings House; Thomas Menino, mayor of Boston; Wideline Bien-Aime, a recipient of services from Crittenton Hastings House; and David Weiner, president and CEO, Children's Hospital.

Christiani, cont'd.

something to follow a group of people as they get older and see how their health changes over time—you get to know them, and they get to know you. We're aging together. Study results study have actually led to improvements in their work environment, and I'm proud of that."

In addition to the work at MGH, Christiani has research projects on three continents, including another study in China of the reproductive effects of exposures to chemicals, a study in Taiwan of the relationship between arsenic exposure and bladder and skin cancer, an African study of the respiratory effects of paraquat exposure, and a study of the effects of exposure to

respiratory irritants contained in soot in Central America. At HSPH, he runs the Occupational Health program, which trains researchers and practitioners in occupational and environmental health. In addition, he directs the Educational Resource Center for Occupational Safety and Health and teaches several courses. This load of tasks, interests, and responsibilities is tremendous, but Christiani doesn't find it burdensome: "I love my job, and I love my work. If I didn't love it as much as I do, then I would stop. But I like the people I work with, both my colleagues at Harvard and those around the world, and I like the results that can come of my work. I like what I do."

Mary Henderson, advisor to foreign students and scholars at the Harvard International Office, will hold office hours at HSPH on February 12 from 10:00 a.m. to 1:00 p.m. in Kresge G-10. Drop by or call 495-4088 to schedule an appointment. Please remember to bring your passport and other visa documents.

Students interested in being involved in a pilot study looking at the relationship between drug-related policing and injectors' health and risk behaviors should attend an information meeting on February 9 from 12:30 to 1:30 p.m. in Kresge 204. The project will include a trip to New York City during the "f" period and is sponsored by the Health and Human Rights student group. For more information, contact Pamela Surkan at psurkan@hsph.harvard.edu.

Calendar

Submit calendar listings to Ethan Cohen, Kresge 1005, by noon on Monday of the week preceding the event. Listings may be transmitted via Email (ecohen@hsph.harvard.edu).

The Countway Library of Medicine offers free classes in the use of its electronic resources. A presentation on Electronic Journals will be given on February 9 at 11:00 a.m.; a demonstration of the World Wide Web is scheduled for February 10 at 12:00 p.m.; and a program on accessing MEDLINE via Telnet will be held on February 13 at 11:00 a.m. All classes meet in the Knowledge Lab on level L-1. Call 432-2134 to register.

Monday, February 9

"Atherogenicity of Plasma Triglyceride-Rich Remnant Lipoproteins"

Speaker: Jeffrey Cohn, senior scientist, Clinical Research Institute of Montreal, associate professor of medicine, University of Montreal
Sponsor: Department of Nutrition
FXB G-13, 12:00-1:00 p.m.

Tuesday, February 10

"Oxygen-free Radicals: Damaging Agents or Second Messengers?"

Speaker: Beatriz Gonzales-Flecha, associate professor, Department of Biomedical Engineering, Boston University
Sponsor: Department of Environmental Health, Physiology Program
SPH I-1301, 9:30-10:30 a.m.

"The SEK1/MKK4 Knockout: Genetic Analysis of the Stress-Activated MAP Kinase Cascades"

Speaker: Leonard Zon, associate investigator, Howard Hughes Medical Institute, associate professor, Children's Hospital, Boston
Sponsor: Center for Blood Research
Latham Library, 200 Longwood Ave, 12:00 p.m.

"Access to Necessary Cardiac Care in VA Medical Centers"

Speaker: Laura Petersen, instructor in medicine, HMS, and Brockton/West Roxbury VA Medical Center
Sponsor: Center for Quality of Care Research and Education
Kresge G-2, 12:30-1:30 p.m.

"Adhesion and Host Cell Invasion by Toxoplasma"

Speaker: David Sibley, Washington University Medical School
Sponsor: Department of Immunology and Infectious Diseases
FXB G-12, 12:30-1:30 p.m.

Wednesday, February 11

"Legal and Ethical Dilemmas in Case Management"

Speaker: Richard Bourne, Office of the General Counsel, Children's Hospital
Sponsors: Judge Baker Children's Center, Children's Hospital Department of Psychiatry, Harvard Medical School
Judge Baker Children's Center, 4th floor auditorium, 3 Blackfan Circle, 9:00-10:30 a.m.

"Towards an 'Ecological Immunology': Reservoir Immunity in Lyme Disease Vector Competence"

Speaker: Sam Telford, III, lecturer, Department of Immunology and Infectious Diseases
Sponsor: Department of Immunology and Infectious Diseases
FXB G-11, 12:00-1:30 p.m.

"Linkage Analyses of Complex Traits: The Challenges of Psychiatric Genetics"

Speaker: Paul Van Eerdewegh, director, Statistical Genetics, Genome Therapeutics Corporation
Sponsor: Harvard Institute of Psychiatric Epidemiology and Genetics
Goldenson, (Bldg. B) 122, HMS, 4:00-5:30 p.m.
(CME credits available)

Thursday, February 12

"UNDP's Gender Related Indices: A Critical Review"

Speaker: Stephan Klasen, Centre for History and Economics, King's College, Cambridge University
Sponsor: Harvard Center for Population and Development Studies
9 Bow Street, Cambridge, 4:30-6:00 p.m.

Exams and Defenses

Xiaolin Wang, doctoral student in the Department of Biostatistics, will present her thesis, "Contributions to Statistical Genetics and Survival Analysis," on February 11 at 1:00 p.m. in Kresge 606.

Francine Laden, doctoral student in the Department of Epidemiology, will present her thesis, "Environmental Risk Factors and Breast Cancer," on February 12 at 3:30 p.m. in Kresge 904.



Around the School can be found on the World Wide Web at <http://www.hsph.harvard.edu/ats/>.

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