1991-06

BUSM News & Notes: June/July
1991 no. 148

Boston University School of Medicine Office of Informational Services

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http://hdl.handle.net/2144/20946

Boston University
School endows two new chairs; Milunsky, Cohen named incumbents

Two newly endowed chairs have been established at the School of Medicine—a chair in human genetics and a chair in rheumatology. These are the fourth and fifth chairs endowed at the School in the past three years. Aubrey Milunsky, M.D., D.Sc., is the first incumbent of the chair in human genetics, and Alan S. Cohen, M.D., F.A.C.P., is the first incumbent of the chair in rheumatology.

Milunsky, a professor of pediatrics, obstetrics and gynecology and pathology, founded the Center for Human Genetics, a national academic reference center, in 1982. Under his direction, the Center provides important diagnostic and counseling services for genetic disorders and conducts epidemiological, molecular and biomedical research. Milunsky has been in the forefront of pregnancy screening for birth defects, especially those of the neural tube, such as spina bifida. Most recently, his team has focused on combined screening in early pregnancy aimed at detecting Down’s syndrome and other chromosome defects. A major recent accomplishment by Center staff was the mapping of the gene for sex-linked lympho-proliferative disease, a fatal disorder due to genetic susceptibility to the infectious mononucleosis virus.

Cohen, the Conrad Wesselhoeft Professor of Medicine and a professor of pharmacology at BUSM, was appointed in 1961 as the first director of the Section of Arthritis and Connective Tissue Diseases at the Evans Memorial Department of Clinical Research and Preventive Medicine at The University Hospital. Soon afterwards, Cohen established a unit at Boston City Hospital, and later at the Boston Veteran’s Administration Hospital. In 1977, Cohen’s research laboratory was chosen by the National Institutes of Health as one of only 15 Multipurpose Arthritis Centers in the country with a mission to develop and expand health-care research, education research and biomedical research. The Arthritis Center has emerged as an international leader, with trainees working all over the world.

Photodamaged skin is a reversible condition, multicenter study shows

A new multicenter study has found that avoiding sun exposure and using sunscreens when exposure is unavoidable has a therapeutic effect on skin, even when it is photodamaged or has precancerous lesions. BUSM researchers participated in two studies to assess the effectiveness of therapies to reverse the effects of photodamage. Results of the studies, published in the May issue of the Archives of Dermatology, confirm the findings from previous smaller studies indicating that topical retinoic acid (tretinoin)—the active agent in Retin-A—helps reverse the effects of photodamage.

The researchers compared the effectiveness of two strengths of a new emollient cream containing topical tretinoin (either 0.05-or 0.01-percent concentration) or the emollient cream without tretinoin on 300 study participants who had mildly to moderately...
Aid for Cancer Research (ACR) recently donated a thermal cycler, a state-of-the-art piece of biotechnical equipment capable of creating cloned DNA, to the Hubert Humphrey Cancer Research Center. From left, Herbert Woitz, M.D., former director of the Cancer Center; Phyllis Frank and Carol Epstein of ACR; Nadia Rosenthal, Ph.D., an associate professor of biochemistry; and Jacqueline Sharon, Ph.D., an associate professor of pathology. ACR is an organization of 25 women from the national Greater Boston area who raise funds to advance the fight against cancer. (photo by David Keough)

Lisa L. Paine, C.N.M., Dr.PH., has been appointed director of the School of Public Health's new Certified Nurse-Midwife Education Program. Paine will be responsible for directing all aspects of the clinical and academic training of nurse-midwives, who also will be educated as public-health professionals. She also will expand SPH's maternal and child health curriculum and research agenda.

Paine, who most recently served as director of Nurse-Midwifery Services at the Johns Hopkins Hospital, currently is the chairperson of the Division of Research of the American College of Nurse-Midwives. She recently received funding from the Robert Wood Johnson Foundation to study "Nurse-Midwifery Care for Vulnerable Populations in the United States." Her research interests also include development of low-cost obstetrical interventions and studies of differences in perinatal outcomes among various ethnic groups.

"We hope this program will receive national recognition as a model for innovative nurse-midwifery education with a public-health interface," said Paine. The two-year program is the first master's level nurse-midwifery program in Massachusetts. It is also the only such program in the country based in a school of public health. The program's first students will be enrolled in the fall of 1991.

The researchers found that 79 percent of the subjects treated with .05-percent cream showed an improvement in four of eight signs of photoaging of the skin: fine wrinkling, roughness, mottled pigmented spots and lax skin. A less obvious improvement was seen in 37 percent of those who used the 0.01-percent cream. Forty-eight percent of those who used the emollient cream alone also showed improvement.

The researchers also documented improvements in skin thickness, and a decrease in melanin at the microscopic level in subjects using 0.05- and 0.01-per cent retinoic acid. These changes resulted in better skin texture and skin tone. Subjects using just the emollient cream also showed improvement, proving that practicing good skin care alone can have beneficial effects on the skin, according to Jag Bhawan, M.D., a professor of dermatology and pathology, and the lead author of a second study.

"The biopsy assessments confirm the beneficial effects of topical tretinoin for the treatment of photodamaged skin," said Bhawan. "These assessments add an important dimension for evaluating the therapies, because clinical or observational assessments alone cannot determine whether topical retinoic acid therapy appreciably alters skin structure."

Paine appointed director of SPH Nurse-Midwife Education Program

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The report states that Medicaid cuts harm both the economy and the patients who depend on the program. The cuts, according to Sager, state government is taking little effective action to slow this unaffordable and unnecessary increase. In fact, the report asserts that the 1988 Chapter 23 hospital payment law has helped to fuel higher spending.

The report states that Medicaid cuts harm both the economy and the patients who depend on the program. The cuts, according to the report, are no substitute for the state's persistent failure to attack the spending and clinical patterns that make Massachusetts health care the most expensive in the world. Sager points to a recent Federal Reserve Bank of Boston report that stated: "Because Medicaid operates as part of the state's high-cost health-care system, it cannot be reformed in isolation."

Sager said, "The state's budget and bond-rating crises have increased pressure to gut the Medicaid program at exactly the worst time and in exactly the worst ways."

He concluded, "Chopping Medicaid now is bad economics, bad politics, and very bad medicine."
Holick receives Nutrition Foundation award

Michael Holick, M.D., Ph.D., a professor of medicine and director of the Clinical Research Center, received the 1991 Osborne and Mendel Award from the International Life Sciences Institute—Nutrition Foundation. The award was presented to Holick in recognition of his outstanding recent basic research in nutrition.

Holick's research has focused on the biochemistry, metabolism and nutritional importance of vitamin D. He was the first to show that exposure to sunlight does not directly result in the synthesis of vitamin D₃, an essential factor in calcium and bone metabolism. Instead he found that provitamin D₃ was converted to previtamin D₃. In recent studies, he has shown that latitude and seasonal changes can have profound effects on the synthesis of vitamin D₃ in the skin. In addition, he has demonstrated that sunscreens prevent the skin from making vitamin D₃.

Pathology faculty receive long-term grants

Two senior professors of pathology have received renewals of National Institutes of Health grants that, combined, amount to more than $1 million in direct costs. Hugues J.-P. Ryser, M.D., was awarded a five-year renewal of his grant, entitled "Penetration of Macromolecules into Mammalian Cells." This grant has been active since 1961. The current emphasis of his research is on the processing of endocytosed macromolecules, in particular the reductive cleavage of disulfide bonds which results in the activation of toxins and immunotoxins. Collaborating with Ryser is Richard Mandel, Ph.D., an associate professor of pathology.

Nancy L.R. Bucher, M.D., a research professor of pathology, received a four-year renewal of her grant entitled "Cytoplasmic Factors in Cellular Growth," a grant that she has held since 1956. Bucher, a world-renowned pioneer in the field of liver regeneration, is currently investigating the effect of cell matrix, cell-to-cell interactions and growth factors on the expression of growth-associated genes in cultured hepatocytes. Collaborating with Bucher is Stephen Farmer, Ph.D., an associate professor of biochemistry.

Planned Parenthood honors Edelin

The Planned Parenthood League of Massachusetts held "A Tribute to Kenneth C. Edelin, M.D.," on May 9 at the Westin Hotel in Boston. Edelin, a professor of obstetrics and gynecology and associate dean of students and minority affairs, was honored for "his unswerving commitment to improving women's health, protecting women's rights, serving the needy, and empowering the vulnerable." Governor and Mrs. William Weld greeted the audience, and Faye Wattleton, president of the Planned Parenthood Federation of America, presented the keynote address.

Faculty receive biomedical research grants

Three faculty members of the School of Medicine received research support in 1990-1991 from a federal Biomedical Research Support Grant to BUSM, according to Edward W. Pelikan, M.D., a professor of pharmacology and chairman of the BUSM Faculty Grants Committee. BRSG funds, which are distributed annually by the National Institutes of Health, are based on an institution's level of federal funding for the previous year.

The awardees and their research topics are: Jean Amos, Ph.D., an assistant professor of pathology and laboratory medicine, "The Inheritance of Tuberous Sclerosis;" Deborah Dobson, Ph.D., an assistant professor of biochemistry, "Activation of Glycerophosphate Dehydrogenase During Cell Differentiation;" and Philip Trackman, Ph.D., an assistant research professor of biochemistry, "Regulation of the Stability of mRNA."

Information about BRSG research support can be obtained from Pelikan at L-603, 638-4301 (x4301).

Students receive national recognition

Several M.D./Ph.D. students recently received national recognition for their research activities. Francis Cannizzo Jr. and Steven P. Treon received awards at the 32nd Annual National Student Research Forum for outstanding research in their category. Cannizzo received the Cancer Center Award in Oncologic Research, and Treon received the National Heart, Lung, Blood Institute-American Association of Blood Banks Transfusion Medicine Award. Cannizzo and Treon both conduct their research under the direction of Selwyn A. Broitman, Ph.D., a professor of microbiology and pathology.

In addition, Mona Lisa Schulz, a M.D./Ph.D. candidate in behavioral neurosciences, was awarded an American Association of...
University Women Fellowship for 1991. The $8,000 fellowship is offered annually to help women gain training in health and sciences. Schulz’s advisor is Deepak Pandya, M.D., a professor of anatomy and a research professor of neurobiology.

Briefly noted:

Aram V. Chobanian, M.D., dean of the School of Medicine, addressed the proposed "Veterans' Health Care and Research Amendments of 1991" before the subcommittee on hospitals and health care, Committee on Veterans' Affairs, U.S. House of Representatives....The School of Medicine hosted the Annual Meeting of the World Federation of Neurology---Research Group on Neuroepidemiology on April 22....Lindsay A. Farrer, Ph.D., an assistant professor of neurology, recently received a $2.1-million National Institutes of Health grant for a five-year, multicenter genetic epidemiological study of Alzheimer's disease....Christopher W. Akey, Ph.D., an assistant professor of biophysics, received a $350,000 instrumentation grant to pursue an existing research study investigating the nuclei in the cell....Researchers who presented abstracts at the Federation of American Societies of Experimental Biology Conference (FASEB) in Atlanta, Ga., were: John Bernardo, M.D., an associate professor of medicine; Elizabeth Simons, Ph.D., a professor of biochemistry, and Fred Hing, a Ph.D. candidate in the Department of Biophysics at BUSM...Presenting abstracts at the 92nd Annual Meeting of the American Gastroenterological Association in New Orleans, La., were: N.H. Afidhal, M.D., an assistant professor of medicine, J. Hoffman, M.D., a senior resident in medicine at BUSM, Paul Schroy, M.D., an assistant professor of medicine, K.R. Bhaskar, Ph.D., an associate research professor of medicine, and Ciaran Kelly, M.D., an assistant professor of medicine....Robert J. McCunney, M.D., an assistant professor of public health and the clinical director of the Occupational Health Program at The University Hospital, made three presentations at the annual American Occupational Health Conference (AOHC) in San Francisco. The AOHC is the largest occupational health meeting in the world.

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