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1–2 weeks at one or two cancer societies in the region for staff and accredited volunteers from cancer societies in the Asia-Pacific or Latin American regions, respectively, to train in aspects of cancer society work. Application closing dates 1 May for LACTEF, 15 September for APCASOT, average award value $1,800.

For application material:
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The Section of Clinical Epidemiology at Mayo Clinic, in collaboration with the Mayo Cancer Center, is seeking a molecular/genetic epidemiologist to fill a new position in our large and active group. This position presents an exciting opportunity for the successful candidate to conduct population-based molecular epidemiologic studies of the occurrence, etiology, and outcomes of cancers, as well as evaluations of the impact of diagnostic and therapeutic interventions in these conditions.

Applicants should have a strong methodologic training in epidemiology with evidence of research productivity in molecular epidemiology as reflected by peer-reviewed publications and a demonstrated ability to attract extramural research funding. This individual will be expected to develop an independent program of research in collaboration with clinical and laboratory investigators.

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The USC/Norris Comprehensive Cancer Center is seeking to recruit a senior basic scientist with an international reputation in cancer research to provide scientific leadership to the biochemists, molecular and cell biologists, and immunologists who form the basis of the preclinical and translational work of the Cancer Center. This individual will have direct responsibility for the Gene Regulation and Cell Biology Programs and will have overlapping responsibility for ensuring the integration of these disciplines into the newly established disease-based programs within the Center. The Associate Director will have an active peer-reviewed funded research program and will share responsibility for recruitment with appropriate program leaders. The Associate Director will have a tenured position in an appropriate academic department of the School of Medicine and will foster existing training programs, develop new training programs, develop funding for new equipment, be responsible for the Mini-symposia Series and Seminar Program, and oversee the operation of Cancer Center core resources of particular relevance to basic science members. The position will be supported by the recently renewed Cancer Center Support Grant and by a newly established ENDOWED CHAIR. Space for the Associate Director’s research program, together with space for new cancer center recruitments in the basic sciences, will be available in the recently completed Topping tower, which has doubled the Center’s research space. Send C.V. and the names of 3 references to:

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CARCINOGENESIS FROM ENVIRONMENTAL POLLUTION: ASSESSMENT OF HUMAN RISK AND STRATEGIES FOR PREVENTION

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Ambient, Environmental, and Occupation Exposure and Cancer Risk
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Paulo L. Vineis / Turin, Italy
Stephen S. Hecht / Valhalla, USA
Krystyna Frenkel / New York, USA
Bernadette Schoket / Budapest, Hungary

Strategies for Prevention
Waun Ki Hong / Houston, USA
I. Bernard Weinstein / New York, USA
Anna Tompa / Budapest, Hungary

Roundtable Discussion
Paul Kleihues / Lyon, France
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Applicants are encouraged to submit abstracts for poster presentation.

Information and Application Forms

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UNIVERSITY OF SOUTH FLORIDA COLLEGE OF MEDICINE AND H. LEE MOFFITT CANCER CENTER AND RESEARCH INSTITUTE

PROGRAM IN OVARIAN EPITHELIAL CANCER PATHOBIOLOGY

The Department of Pathology and Laboratory Medicine and the H. Lee Moffitt Cancer Center and Research Institute at the University of South Florida College of Medicine are seeking a well-qualified Ph.D. applicant at the Assistant/Associate/Professor level with research interests in the area of Ovarian Epithelial Cancer Pathobiology. Appointment at the Assistant Professor level requires the applicant to have a minimum of two years of post-doctoral experience. Academic rank beyond that of Assistant Professor will be commensurate with qualifications and experience. This position may be tenure-earning.

As part of expansion of basic research, the Department is recruiting outstanding candidates who have completed three-to-five years of relevant postdoctoral research and are able to develop independent research in the following areas: a) cell-to-cell and cell-extracellular matrix interaction during benign and malignant morphogenesis; b) genetic and molecular alterations in cancer initiation and progression; c) in vivo, including transgenic/knock-out, and in vitro models of carcinogenesis as these areas relate to ovarian epithelial cancer pathobiology. Experience with cell cycle and morphogenesis regulators, ovarian-specific gene regulation and molecular and cell biology is desired.

Candidates are expected to participate in the graduate and postdoctoral teaching activities of the Department. Research space and support packages for a period of up to three years are available for recruited candidates. Applicants should send their curriculum vitae, a statement of their research interest and the names of three references to: Santo V. Nicosia, M.D., Professor and Chairman, Department of Pathology and Laboratory Medicine or Warren J. Pledger, Ph.D., Associate Center Director for Basic Research, H. Lee Moffitt Cancer Center and Research Institute, Office of Faculty Recruitment, 12902 Magnolia Drive, Tampa, FL 33612-9497. Applications must be postmarked by deadline date of July 5, 1996.

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Enrique Rozengurt / London, England
Nancy E. Hynes / Basel, Switzerland
Bernd Groner / Freiburg, Germany
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Renewed interest in the effects of fatty acids on cancer growth and metastasis and in the potential for dietary intervention, as one element in the management of the cancer patient has been generated through the work of David P. Rose (bottom) and Michael J. Tisdale (top). Dr. Rose and his colleagues at the American Health Foundation (Valhalla, NY) have shown that linoleic acid, an ω-6-polyunsaturated fatty acid, stimulates both human breast cancer cell proliferation and invasion in culture (Cancer Res., 50: 7139, 1990; Cancer Lett., 75: 137, 1993) and the growth and metastasis of these cells when introduced into the mammary fat pads of athymic nude mice (J. Natl. Cancer Inst., 83: 1491, 1991; Cancer Res., 53: 4686, 1993; Cancer Res., 54: 6557, 1994). In contrast, they have found that the ω-3 fatty acids contained in fish oils suppress breast cancer progression in this nude mouse model (J. Natl. Cancer Inst., 85: 1743, 1993; J. Natl. Cancer Inst., 87: 587, 1995). This stimulation of invasion is due, at least in part, to the formation of lipoxigenase products, notably 12(S)-hydroxyeicosatetraenoic acid, from linoleic acid by the cancer cells (Clin. Exp. Metastasis, 14: 145, 1996), a process that is inhibited by ω-3 fatty acids.

ω-3 Fatty acids are also attracting interest because of their therapeutic potential in reversing the cachexia that accompanies the progress of some forms of cancer, notably carcinomas of the pancreas, ovary, and lung. Dr. Tisdale and his associates in the Department of Pharmaceutical and Biological Sciences at Aston University (Birmingham, England) have demonstrated that eicosapentaenoic acid, one of two ω-3 fatty acids present in high concentrations in some marine oils, reverses cachexia when fed as a dietary supplement to tumor-bearing experimental animals while inhibiting tumor growth (Prostaglandins Leukot. Essent. Fatty Acids, 48: 105, 1993; Br. J. Cancer, 70: 6, 1994). Eicosapentaenoic acid is undergoing clinical evaluation in the United Kingdom in patients with pancreatic carcinoma.

Dr. Rose moved to the United States from the University of London (London, England) in 1972, having earlier received M.D. and Ph.D. degrees from the University of Sheffield. While Professor of Human Oncology at the University of Wisconsin, in collaboration with the late Thomas E. Davis, he described the suppressive effects of adjuvant chemotherapy on the ovarian function of premenopausal breast cancer patients (Lancet, 1: 1174, 1977; Cancer Res., 40: 4043, 1980) and also characterized the endocrinological characteristics of rat mammary carcinomas induced by N-nitrosomethylurea, a widely used model for hormone-responsive breast cancer (Cancer Res., 40: 235, 1980; Cancer Res., 42: 35, 1982; Cancer Res., 43: 2588, 1983). On moving to the American Health Foundation as Associate Director and Chief of the Division of Nutrition and Endocrinology in 1983, he began to investigate the influence of dietary fat and fiber on circulating estrogen levels in the context of breast cancer risk (J. Natl. Cancer Inst., 78: 623, 1987; Am. J. Clin. Nutr., 54: 520, 1991). More recently, his research has been focused on important and novel effects of dietary fatty acids on breast and prostate cancer progression. In 1985, he received a D.Sc. degree from the University of Sheffield for his contributions to cancer endocrinology.

Dr. Tisdale earned a Ph.D. at the University of London for research at the Institute of Cancer Research with W. C. J. Ross on the synthesis and evaluation of radiometric attributes of bifunctional alkylating agents (Eur. J. Cancer, 8: 255, 1972; 9: 89, 1973). Subsequently, he studied their metabolism and mode of antitumor activity (J. Natl. Cancer Inst., 50: 243, 1973). Dr. Tisdale moved to St. Thomas Hospital Medical School, where his research interests turned to the mechanism of action of intracellular messengers in relation to tumor and normal cell differences (Exp. Cell Res., 88: 111, 1974; Biochem. Pharmacol., 24: 205, 1975; Cancer Treat. Rev., 6: 118, 1979). In turn, this approach led to the discovery of methionine as a required amino acid to support growth of many neoplastic cells (Biochem. Biophys. Acta, 609: 296, 1980; 675: 366, 1981). In 1981, Dr. Tisdale moved to Aston University. Also, he was awarded a D.Sc. from London University in 1983. A major area of current interest evolved, namely, the mechanism of cachexia in tumor-bearing hosts (Exp. Cell Biol., 51: 250, 1983; Br. J. Cancer, 56: 39, 1987; Cancer Res., 49: 3800, 1989). Thus, Dr. Tisdale and associates observed that inhibition of tumor growth stemmed from a depletion of linoleic acid ω-6-polyunsaturated fatty acids, and that cachexia was associated with lipolytic factors (J. Natl. Cancer Inst., 82: 1922, 1990; Br. J. Cancer, 63: 337, 1991). In contrast, and in agreement with the results of Dr. Rose from a different approach, Dr. Tisdale noted that ω-3-polyunsaturated oils, such as eicosapentaenoic acid, not only reverse cachexia, but inhibit tumor growth (Cancer Res., 51: 6089, 1991; Biochem. Pharmacol., 45: 2189, 1993). Recently, it was found that cachexia is mediated by circulatory catabolic factors, which induce breakdown of host body tissues. A proteoglycan of $M_c = 24,000$ was purified from a mouse tumor, and it produced cachexia in vivo by inducing catabolism of skeletal muscle. The $M_c = 24,000$ material was also present in the urine of cachectic cancer patients, but absent in that of normal subjects, in patients with weight loss due to causes other than cancer, and in cancer patients without weight loss (Cancer Res., 55: 1458, 1995; Nature (Lond.), 379: 739, 1996). Dr. Tisdale now is Professor of Cancer Biochemistry and Head of the Department of Pharmaceutical and Biological Sciences at Aston University.

Dr. Rose is an active member and Dr. Tisdale is a corresponding member of the American Association for Cancer Research.

John Weisburger