Moores UCSD Cancer Center Director Honored With International Award For Drug-Discovery Work

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The American Association for Cancer Research has announced that Dennis A. Carson, M.D., UCSD professor of medicine and director of the Rebecca and John Moores UCSD Cancer Center, is the recipient of the 23rd annual AACR-Bruce F. Cain Memorial Award. The award recognizes an individual or research team for outstanding pre-clinical research that has implications for the improved care of cancer patients.

According to the AACR, Carson was selected for his extraordinary accomplishments in developing and seeing through to clinical use an effective therapy for hairy cell leukemia, as well as for developing other therapies for patients that target specifically a number of cancer-producing mutations, which he also discovered.

The award will be presented during the 95th AACR Annual Meeting to be held in Orlando, Florida, in March. As the 2004 recipient of this award, Carson will receive an honorarium of $10,000 and will deliver one of the meeting's key lectures.

Carson, an internationally respected immunologist and cancer biologist, was selected for his landmark work in developing a new agent called 2-chlorodeoxyadenosine, or 2-CdA, for the treatment of hairy cell leukemia. This drug, now marketed as Leustatin, is the treatment of choice for this disease and has resulted in long term, complete remissions in about 75 percent of patients, often after just a single infusion. It is also effective in other lymphoid cancers, multiple sclerosis and psoriasis.

He has also discovered a number of cancer-producing gene mutations and has developed therapies for patients with these mutations. For example, Carson and colleagues isolated a defective gene, called cyclin-dependent kinase 4 inhibitor, which is involved in brain cancer, leukemia, lung cancer and melanoma. When it functions normally, the gene suppresses tumors. When defective, usually due to tobacco and UV exposure, the gene leads to cancer. Working with Cancer Center colleagues, Carson developed a drug treatment that preferentially kills cancer cells with the defective gene. The drug, called Alanosine, is now in Phase II clinical trials. In another collaborative study, Carson determined that microinjection of naked DNA, a new gene therapy technique, can induce therapeutic changes throughout the body for at least several weeks. The simple technique may lead to treatments for cancer and chronic immune-system diseases.

AACR and the Warner Lambert Company (now Pfizer) established the award in 1982 to honor Dr. Bruce F. Cain, whose scientific interests involved the design, synthesis, and biological evaluation of potential anti-tumor drugs.

Founded in 1907, the American Association for Cancer Research (AACR) is a professional society of more than 20,000 laboratory and clinical scientists engaged in cancer research in the United States and more than 60 other countries. AACR's mission is to accelerate the prevention and cure of cancer through research, education, communication and advocacy.

The Rebecca and John Moores UCSD Cancer Center is one of just 39 centers in the United States to hold a National Cancer Institute (NCI) designation as a Comprehensive Cancer Center. As such, it ranks among the top centers in the nation conducting basic and clinical cancer research, providing advanced patient care and serving the community through outreach and education programs.

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