



Research for a Cure

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6th Annual Szent-Györgyi Prize for Progress in Cancer Research Awarded to Beatrice Mintz, Ph.D.

Bethesda, Md. - March 8, 2011 - The National Foundation for Cancer Research (NFCR) announced today that Beatrice Mintz, Ph.D. has been awarded the 6th Annual *Szent-Györgyi Prize for Progress in Cancer Research*. Dr. Mintz, Professor and Jack Schultz Chair in Basic Science at the Fox Chase Cancer Center in Philadelphia, PA, received the Prize for her discoveries of the relationship between development and cancer, based on construction and analysis of chimeric and transgenic mouse models. Her work has enabled the study of cancer and other genetic diseases to be carried out within the framework of the whole organism.

The annual *Szent-Györgyi Prize for Progress in Cancer Research* was established by the National Foundation for Cancer Research to recognize outstanding scientific achievements in the war against cancer and to honor pioneering scientists who have made extraordinary contributions in cancer research. The focus of the Prize is on the critically important role that basic science plays in cancer research and in its application to cancer therapies. The Prize, which includes a \$25,000 honorarium, will be presented to Dr. Mintz on March 8, 2011 at The Westin New York at Times Square in an award ceremony. The keynote address will be given by Lewis C. Cantley, Ph.D., Professor, Beth Israel Deaconess Medical Center.

“Dr. Beatrice Mintz’s ground-breaking research has changed the way scientists are able to investigate the progression and metastasis of cancers and shed light on this disease,” said Peter K. Vogt, Ph.D., Chair, 6th Annual Szent-Györgyi Prize Selection Committee and last year’s prize winner. “Her contributions to the field of cancer research are remarkable.”

Dr. Mintz first analyzed development by producing chimeric individuals in which genetically different cells coexisted throughout life. She found that normal development is based on an expanding clonal organization in which a succession of small numbers of stem cells are competent to divide or to differentiate further. In cancer, the differentiation option is diminished, while the capacity to divide may increase. Thus, cancer may be regarded as an aberration of development.

Dr. Mintz was also the first to discover the importance of the microenvironment in the behavior of stem cells in the organism. Her experiments showed that when stem cells from a teratocarcinoma, a type of tumor derived from a “multipotent” stem cell, were transferred into a normal early embryo, those cells contributed, along with host cells, to development of the wide range of normally functioning tissues. This “normalization” of the tumor stem cells is attributable to the normal microenvironment in which they were placed, and has influenced many fields of biology.

The first transgenic model of malignant melanoma was produced in Dr. Mintz’s lab. This genetically engineered model is currently the only one that encompasses different subtypes of primary skin melanomas, which undergo widespread metastasis, thereby mirroring the disease in people.

“Dr. Mintz’s discoveries have a broad relevance for cancer research and for new cancer treatment prospects,” said Sujuan Ba, Ph.D., Co-Chair of the 6th Annual Szent-Györgyi Prize Selection Committee and Chief Operating Officer of NCFR.

Dr. Mintz has received numerous awards, including the Bertner Foundation Award in Fundamental Cancer Research, the New York Academy of Sciences Award in Biological and Medical Sciences, the Lewis S. Rosenstiel Award in Basic Medical Research, the Genetics Society of America Medal, the Ernst Jung Gold Medal for Medicine, the March of Dimes Prize in Developmental Biology, and the American Cancer Society National Medal of Honor for Basic Research, among others. She has also been honored by election to membership in prestigious academies, including the National Academy of Sciences and the American Philosophical Society.

“The Szent-Györgyi Prize is an honor to receive in celebration of Dr. Szent-Györgyi’s extraordinary vision and accomplishments,” said Dr. Mintz. “This recognition is an encouragement for ongoing research, public education about cancer, and improved treatments. I am deeply pleased to find myself in the company of previous awardees whose work I have long admired,” she added.

The *Szent-Györgyi Prize for Progress in Cancer Research* was established by the National Foundation for Cancer Research in honor of its co-founder, Dr. Albert Szent-Györgyi, recipient of the 1937 Nobel Prize for Physiology and Medicine for his studies on vitamin C and cell respiration. Dr. Szent-Györgyi was a leading advocate for developing resources to provide scientists with the financial support necessary to pursue novel cancer research ideas. The award ceremony is held annually in New York City and is attended by prominent scientists and physicians, and leaders in the biotech and pharmaceutical industries, as well as public supporters for cancer research.

The 6th Annual Szent-Györgyi Prize Selection Committee was Chaired by Peter K. Vogt, Ph.D., and Co-Chaired by Sujuan Ba, Ph.D. The other selection committee members included leaders in cancer research and drug development from academic institutes and biotech and pharmaceutical industries: Webster K. Cavenee, Ph.D.; Carlo M. Croce, M.D.; Ronald A. DePinho, M.D.; Paul B. Fisher, M.Ph., Ph.D.; Richard B. Gaynor, M.D.; Neil W. Gibson, Ph.D.; Paul Mischel, M.D.;

Richard O'Reilly, M.D.; Luis F. Parada, Ph.D.; Scott D. Patterson, Ph.D.; Helmut Sies, M.D.; Wai-Kwan Alfred Yung, M.D.; and General Secretary Yi Michael Wang, M.D., Ph.D.

About the National Foundation for Cancer Research

The National Foundation for Cancer Research (NFCR) is a leading charity dedicated to funding cancer research and public education relating to cancer prevention, earlier diagnosis, better treatments and, ultimately, cures for cancer. NFCR promotes and facilitates collaboration among scientists to accelerate the pace of discovery from bench to bedside.

Since 1973, NFCR has provided over \$275 million in direct support of discovery-oriented cancer research focused on understanding how and why cells become cancerous, and on public education relating to cancer prevention, detection, and treatment. NFCR scientists are discovering cancer's molecular mysteries and translating these discoveries into therapies that hold the hope for curing cancer. NFCR is about *Research* for a Cure—cures for *all* types of cancer. For more information, please visit www.NFCR.org.