Editor's note: For our non-scientist readers, "BIO SNPs" is a play on the acronym SNPs (pronounced 'snips'), single nucleotide polymorphisms, which are DNA sequence variations that occur when one of the structural components of DNA in the genome sequence is altered.

July 2002 Volume 3, Number 2

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AMDeC Academic Medicine Development Company

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BIO SNPs

AMDeC CONVENES SUCCESSFUL STATEWIDE BIOMEDICAL RESEARCH CONFERENCE: GOVERNOR PATAKI ANNOUNCES INITIATIVES TO SUPPORT BIOTECHNOLOGY

AMDeC, along with the Empire State Report Magazine, hosted an unprecedented conference on biomedical research in Albany on May 14, 2002, to convey to state policy makers major accomplishments and unique collaborations that have contributed to turning around New York's biomedical research and technology industry. According to industry leaders from business, academia, and the scientific community, New York State has made significant advances in strengthening its biomedical research and biotechnology enterprises, offering many economic opportunities for the State.

This theme was also reflected in Governor George Pataki's keynote speech. The Governor pledged to work with AMDeC and its key stakeholders to turn New York State into the biotech capital of the future, promising more state resources for biotechnology expansion and life sciences research. Earlier this year, the Governor announced a $5 million matching state grant to advance AMDeC's Genomics Core Facilities (see BIO SNPs article vol. 3, no. 1).

Dr. Maria Mitchell introducing the conference keynote speaker, Governor George Pataki, to conference attendees.

During her opening address to confer-ence attendees, Dr. Maria Mitchell remarked, "In the last several years, we have capitalized on our strengths and forged key collaborations to re-position New York as *the* biomedical epicenter. This new level of collaboration – developed between academia, business, and government – is critical to the advancement of the biomedical industry, and represents a true paradigm shift within New York's research community." The conference turnout was exceptional, in both attendance and media coverage, which helped convey to the Governor and State Legislature how important biomedical research and technology is to the health and wellbeing of New Yorkers and the state's economy.

New York State Senate Majority Leader Joseph Bruno escorted to the conference center by Dr. Mitchell.

DR. NEAL L. COHEN JOINS AMDeC TO INITIATE NEW CENTER ON BIOTERRORISM

In early 2002, AMDeC unveiled its newest initiative—the AMDeC Center on Bioterrorism—to apply the inter-institutional and collaborative AMDeC model toward bolstering the scientific knowledge base for bioterrorism preparedness. Under the leadership of the newly appointed Executive Director, Neal Cohen, M.D., former New York City Health Commissioner during the Giuliani administration, the Center will act as a facilitator of public-private partnerships that augment public health efforts to prevent, plan for, and respond to bioterrorism. Given New York's unique concentration of medical research institutions, its diverse population base, as well as its recent experience in managing a bioterrorist attack, New York has the resources to make a substantial contribution to improving the nation's bioterrorism preparedness. The AMDeC umbrella offers a unique vehicle for marshalling the resources of New York's academic health centers and research institutions in advance of, and in response to, a specific bioterrorist threat.

The Center on Bioterrorism will offer a wide range of programs and services in unison with AMDeC-affiliated member institutions. Beginning with strengthening the regional laboratory response network, AMDeC will assess and catalogue academic laboratory capacity, both clinical and non-clinical research facilities, as well as establish and disseminate standardized laboratory protocols for bioweapon detection. The Center on Bioterrorism will also create an inventory of current scientific capabilities of New York's research institutions that can aid biodefense. Once these resources are inventoried and catalogued, the Center will be able to work with public officials at the local, state, and federal level, as well as commercial entities, to fast-track promising initiatives that will strengthen our ability for early detection and effective response to bioterrorist threats. This model of cataloguing laboratory assets and creating partnerships between academic and public health laboratories can be replicated in other regions around the nation.

The Center will establish a bioterrorism information clearinghouse specifically designed for industry concerns, have AMDeC-affiliated scientists work with individual companies in conducting environmental assessments to develop specific containment instructions, and work with industry medical directors and human resources staff to produce plans and procedures to prepare for the possibility of future attacks. AMDeC's Center will also focus its efforts on identifying and supporting bioterrorism-related technology innovation, and facilitate the organization of these resources to advance product development.

On June 6, 2002, Dr. Cohen presented testimony before the New York State Assembly Task Force on University-Industry Cooperation. The public hearing explored ways in which the State can assist universities and businesses in attracting federal research dollars for counter-terrorism research. Dr. Cohen called on the state to fund shared use "core" technology facilities that support counter-terrorism research and to advocate to the National Institutes of Health that requests for counter-terrorism program project grants include incentives for multi-institutional collaborative projects.

Most recently, leaders from New York's business community approached AMDeC's Center on Bioterrorism to re-evaluate its preparedness for future acts of terrorism. The Center will bring leaders of business and industry together with the biomedical research community to ensure that new biomedical research discoveries can translate into standardized and practiced response protocols that address the possible impact of a wide range of biological or chemical threats in the workplace.

BIOINFORMATICS CORE OFFICIALLY OPENS TO ALL AMDEC MEMBER INSTITUTIONS

After months of hardware and software installations, operational procedures developed and checked, pilot testing completed, and on-site training conducted, AMDeC's Bioinformatics Core, located at Columbia University's Genome Center is officially open to all AMDeC member institutions. AMDeC's first genomics core facility to go live, the Bioinformatics Core promotes the development of new analytical tools, databases, and methods to study the genetic underpinnings to health and disease. The Core's services include access to key genomic databases and libraries of software; training, outreach; and research development. Several major bioinformatics projects are underway that compare genomic DNA sequences from the Core's libraries with the genomes of other model organisms. These comparisons may shed light on DNA sequences that inhibit or cause specific diseases. To learn more about AMDeC's Bioinformatics Core Facility and to gain access to the Core via the internet, log onto AMDeC's website and register on the investigator's resources section.

AMDeC RECEIVES $250,000 AWARD FROM HIP HEALTH PLAN FOR TYPE 2 DIABETES INITIATIVE

The HIP Health Plan of New York awarded $250,000 to AMDeC to initiate its Type 2 Diabetes and Obesity Study in youth with a high risk for this disease. Considering how costly the diseases of obesity and type 2 diabetes are to the nation's health care system, AMDeC is seeking to partner with the insurance industry to examine the molecular physiology of type 2 diabetes and look at novel approaches to treatment.† Although scientists recognize that type 2 diabetes is frequently inherited, the responsible genes are unknown. Diabetes results primarily from a combination of an impaired ability of the pancreas to make insulin and of muscle and liver to respond to insulin (insulin resistance). Each of these defects alone is a major diabetes-risk factor and one or the other of these defects can be identified in over 50% of non-diabetic immediate relatives of known type 2 diabetics. Insulin resistance (usually a result of weight gain) will exacerbate any defect in the ability of the pancreas to make insulin, ultimately resulting in diabetes and progressive further damage to the pancreas.

In this 1-year pilot project, Dr. Rudolph Leibel, the project's Principal Investigator and director of Columbia University's Division of Molecular Genetics, will group adolescents pre-disposed to type 2 diabetes and their first-degree relatives for genetic analysis and analysis of genetic variability in selected genes responsible for the disease. HIP's leadership grant lays the foundation for Dr. Leibel and his team to set up the infrastructure for a larger multi-site, multi-million study of the genetics of type 2 diabetes and pre-diabetic traits.

TELEVISION PRODUCER AND PERSONALITY CHUCK BARRIS PROMOTES THE NEW YORK EARLY LUNG CANCER ACTION PROJECT

Over the past few months, AMDeC, along with the New York Early Lung Cancer Action Project NY-ELCAP Central Coordinating Site, designed and implemented a comprehensive recruitment campaign that will continue throughout the summer to promote enrollment into the study. This centralized campaign supplements local and community outreach and recruitment efforts undertaken by the individual enrollment sites. The campaign maximizes NY-ELCAP's exposure to the public through targeted paid radio advertising, a centralized call center staffed by telephone operators, and a personalized direct mail request delivered to 17,000 New York City residents over the age of 60, meeting NY-ELCAP's enrollment criteria.

Central to this strategy is the use of television celebrity and producer, Chuck Barris, best known as the creator and host of the "Gong Show." Chuck offered to be NY-ELCAP's spokesperson following a successful surgical removal of an early stage lung cancer detected by his Columbia-Presbyterian physician using a low-dose spiral CT scan. In his capacity as spokesperson, Chuck agreed to tape radio and television public service announcements and to speak in public on the benefits of early lung cancer screening. Chuck also generously donated $10,000 to offset production and distribution costs. With the help of Chuck Barris, enrollments have doubled over the past two months.

If you or someone you know would like to participate as a study volunteer in NY-ELCAP, please call toll-free 1-866-NY-ELCAP or visit www.nyelcap.org.

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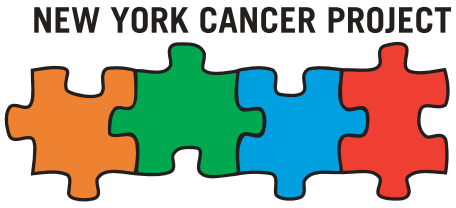
NEW YORK CANCER PROJECT DATA READY FOR USE: NATIONAL SCIENTIFIC ADVISORY COMMITTEE TO FACILITATE DATA ACCESS

AMDeC's New York Cancer Project (NYCP) recently reached the successful conclusion of its large-scale recruitment and data collection pilot phase, producing an enormous database of health information with companion genetic material on 20,000 individuals of diverse racial and ethnic backgrounds. The NYCP database contains the subjects' self-reported data on demographics, personal and family medical history, and lifestyle, which is categorized by bar code on a de-identified basis. NYCP participants also donated approximately 60 milliliters of blood, which is stored in the NYCP Biorepository at the North Shore-Long Island Jewish Research Institute – linked via barcode to the information in the NYCP database. The Cancer Project's database and biorepository are significant resources for conducting innovative genomics research studies.

During the second phase of this project, a NYCP Scientific Advisory Committee, comprised of a national panel of highly respected biomedical research scientists, is being established to develop guidelines and an application procedure to make these resources available to the scientific community nationwide. Dr. Ramon Parsons, Assistant Professor of Pathology and Medicine from Columbia University's College of Physicians and Surgeons, chairs the Scientific Advisory Committee. The Advisory Committee will control access to the data along with revising the existing



data access and publications guidelines to ensure appropriate use of this important scientific asset. For a limited time, researchers from AMDeC-affiliated institutions can access the NYCP database on a pilot basis before AMDeC broadens the availability. Please contact Tara Vazquez, New York Cancer Project Manager, at (212) 218-5640 or email nycp@amdec.org for more information.