



RESEARCH & DEVELOPMENT COUNCIL OF NEW JERSEY

For Immediate Release

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R&D Council Selects Edison Patent Award Winners for 2012 and Celebrates 50th Anniversary

Special Awards for ExxonMobil's Dr. Jeffrey S. Beck, posthumously, Celgene's Former CEO Sol Barer, and Rutgers' School of Pharmacy Dean Dr. Joseph S. Barone

Newark, NJ (September 11, 2012) . . . Kicking off its 50th Anniversary celebration this year, the Research & Development Council of New Jersey is pleased to announce that over 30 inventors and thirteen New Jersey companies and universities will be awarded with the organization's coveted Edison Patent Award. Applied Communication Sciences, Avaya, Alcatel-Lucent Bell Labs, Bristol-Myers Squibb, ExxonMobil Research & Engineering Company, Honeywell, Immunomedics, Merck Research Laboratories, NJIT, Rutgers, Siemens Corporation, Corporate Research & Technology, TE Connectivity SubCom and UMDNJ will all be recognized for innovative patent work spanning thirteen categories, including: agriculture, biotechnology, emerging technology, enabling technology, industrial processes, materials technology, medical device, medical diagnostic, medical imaging, pharmaceutical, pharmaceutical process, and telecommunications.

"We are thrilled to honor such significant and interesting patent work for the Council's 50th Anniversary," says Ian Shankland, Vice President and Chief Technology Officer of Honeywell Performance Materials and Technologies, and Chairman of the R & D Council of New Jersey. "When you think of the tremendous history that New Jersey has in innovation, dating back to Thomas Edison in the late 1800s, the Council is fairly young at 50 years, but we have accomplished a lot during this time and we are excited to celebrate this milestone."

Along with the patent awards, a posthumous honor will be given to Jeffrey Beck, Ph.D., who was a scientist and researcher at ExxonMobil. Dr. Beck is the recipient of the Council's Science & Technology Medal, which is awarded to an individual for outstanding and unparalleled advancements in the fields of science and technology, with extraordinary performance in bringing innovation from the laboratory to the marketplace. Dr. Beck's selection for this award was based on his outstanding contributions to the discovery and commercialization of novel catalysts and processes for the production of key petrochemicals and clean fuels.

Sol J. Barer, Ph.D. will receive the Chairman's Award in 2012. Dr. Barer was selected for his leadership at Celgene Corporation, coupled with his public service as the Chairman of the UMDNJ Governor's Advisory Committee and as a Commissioner of the NJ Commission on Science and Technology.

Joseph A. Barone, Pharm.D., will be honored as the 2012 Educator of the Year. Dr. Barone is Acting Dean and Professor at Rutgers' Ernest Mario School of Pharmacy. He was selected for this honor for his accomplishments as both a leader and educator at one of the most prestigious pharmacy programs in the country.



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This year's award winners will be honored at the Council's 50th Anniversary Celebration & 33rd Edison Patent Award Ceremony & Reception on November 8, 2012 at the Liberty Science Center, home to the nation's largest IMAX Theater, where an original film will highlight each patent and its inventors.

Council President Anthony Cicatiello says, "For decades now, the Council has made it a priority to recognize the contributions of New Jersey researchers from academia, industry and government laboratories, and this year is in keeping with that tradition. The individuals and inventors being honored are changing the world, and we want everyone in New Jersey to recognize the significance of their work and share in their pride. The Patent Awards Ceremony is the Council's way of showing our appreciation and recognition of these talented individuals and the organizations that support them."

2012 EDISON PATENT AWARD WINNING PATENTS AND INVENTORS

Alcatel-Lucent Bell Labs and inventors Carl Nuzman and Gerhard Kramer (now at the Technical University in Munich) will receive a patent award in the telecommunications category for "Simultaneous Estimation of Multiple Channel Coefficients Using a Common Probing Sequence" (U.S. Patent 8,218,419), an invention that is a pilot-based training scheme that significantly expedites cross-talk estimation for vectored DSL systems using joint estimation over group tones. Vectoring DSL systems will allow service providers to provide premium broadband services much sooner and at a much lower cost than would be possible using optical fiber alone.

Applied Communication Sciences and inventors Thomas Chapuran, Matthew Goodman, Nicholas Peters, and Robert Runser will receive a patent award in the emerging technology category for "Distributable Quantum Relay Architecture" (U.S. Patent 8,103,172), an invention that enables the use of widely distributed quantum relay or repeater stations along a fiber communications link or network to significantly increase the distance over which quantum communications can be established in a practical network.

Avaya and inventors Birgit Geppert and Frank Roessler will receive a patent award in the information technology category for "Telecommunications Endpoint for Managing Multi-Conferencing" (U.S. Patent 7,995,733), an invention that allows teleconferencing users to simultaneously manage multiple conference calls, move participants from one conference call to another and subdivide or join multiple conference calls together.

Bristol-Myers Squibb and inventors Divyakant Desai and Bing Li will receive a patent award in the pharmaceutical category for "Coated Tablet Formulation and Method" (U.S. Patent 7,951,400), an invention that relates to the formulation development of saxagliptin and its fixed dose combinations with metformin, which together offer an advance in the treatment of Type 2 diabetes.

ExxonMobil Research and Engineering Company (EMRE) and sole inventor James M. Brown were selected for a patent award in the industrial process category for "Method for Analyzing an Unknown Material as a Blend of Known Materials Calculated so as to Match Certain Analytical Data and Predicting Properties of the Unknown Based on the Calculated Blend" (U.S. Patent 6,662,116). This work patents a novel method for rapidly and accurately assessing the important chemical properties of crudes from different reservoirs using spectroscopic techniques and predictive algorithms. The method is useful in deciding how best to refine the crude.



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Honeywell Performance Materials and Technologies and inventor Scott Hacker will be recognized in the materials technology category for “Maleated Polypropylenes and Processed for the Preparation Thereof” (U.S. Patent 7,256,236), an invention that discloses methods for advantageously producing maleated polypropylenes having a relatively high percentage of bound maleic anhydride, based on the total amount present in the grafting reaction product.

Immunomedics and inventors Chien-Hsing Chang, Ph.D., David M. Goldenberg, Sc.D., M.D., William J. McBride, Ph.D., Edmund A. Rossi, Ph.D., will receive a patent award in the biotechnology category for “Stably Tethered Structures of Defined Compositions with Multiple Functions of Binding Sites” (U.S. Patent 7,521,056). Termed the Dock-and-Lock™ method (DNL™), this is a protein engineering platform technology for the rapid and facile creation of a wide variety of active biological agents designed for biotechnological and biomedical applications.

Merck Research Laboratories and inventors Karel M. Jos Brands, Joseph Payack, and Phillip Pye will be recognized with a patent award in the pharmaceutical process category for “Process for the Synthesis of (2R, 2-alpha-R)-4-Benzyl-2-[-1-(3,5-bis(trifluoromethyl)phenyl)ethoxy]-1,4-oxazine-3-one” (U.S. Patent 6,469,164). This invention is a novel synthetic organic chemistry methodology for the synthesis of the title compound which is a key intermediate in an economically beneficial and environmentally benign process for the manufacture of aprepitant, the active ingredient in Emend®.

New Jersey Institute of Technology’s “No Clog Shunt Using a Compact Fluid Drag Path” (U.S. Patent 8,088,091) invented by Professors Reginald Farrow and Gordon Thomas and former graduate student Sheng Liu, will receive a patent award in the medical device category. This implantable device enables wireless monitoring of both the extremely slow flow of the cerebrospinal fluid as well as tiny changes in the pressure in a shunt that drains fluid out of the brain. Existing shunts give no information about the patients’ health, but are used by patients suffering from severe excess pressure in the brain due to hydrocephalus or brain injury.

Rutgers, The State University of New Jersey will be recognized in the agriculture category for “Male Asparagus Hybrid Plant ‘NJ953’” (U.S. Patent PP21,170), invented by Chee-kok Chin, Stephen Garrison and John Kinelski. This asparagus is an all-male hybrid that can be grown in both warm and cool climates, is highly resistant to rust and tolerant to Fusarium crown and root rot, and also has very good spear quality.

Siemens Corporation, Corporate Research & Technology and sole inventor Leo Grady, Ph.D (who has since taken a position outside the organization), will receive a patent award in the medical imaging category for “System and Method for Multi-Label Image Segmentation” (U.S. Patent 7,460,709), which introduces a new algorithm for localizing and extracting objects of interest from image data such that the objects could be measured, quantified or used for further processing such as 3D visualization which allows for maximization of medical and scientific knowledge gained from the images.

TE Connectivity SubCom and inventors Robert Gleason (posthumously), Craig Murphy, Seymour Shapiro, William Wright, and Chung-Shin Ma will be recognized in the enabling technology category for “Undersea Communications Cable Having Centrally Located, Plastic Buffer Tube” (U.S. Patent 6,349,161), an invention that describes the design of an undersea fiber-optic cable that can use the newer



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and higher performance optical fibers without an increase in background attenuation caused by micro-bends.

University of Medicine & Dentistry of New Jersey will be recognized in the medical diagnostic category, along with inventors Linda Brzustowicz, Neda Gharani, and James Millonig, for “Compositions and Methods of Diagnosing Autism” (U.S. Patent 7,629,123). This patent’s research has, in part, lead to the launch of the ARISK™ Autism Risk Assessment Test by establishing an association between ENGRAILED HOMEBOX 2 transcription factor (EN2) and susceptibility for autism and related disorders.

About the Research & Development Council of New Jersey

The Research & Development Council of New Jersey is dedicated to cultivating an environment that supports the advancement of research and development throughout New Jersey. The Council is composed of senior representatives from industry, academia and government. Many R&D Council members represent today’s Fortune 500 companies. More information on the Council and the Edison Patent Awards can be found at: www.rdnj.org.