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NEWS RELEASE

EPA Funds New Bioinformatic Centers that Combine Biology and Computer Science

Contact: Ann Brown, 919-541-7818, brown.ann@epa.gov

(Washington, D.C. – Nov. 2, 2005) EPA announced today an award of \$9 million to establish two cutting-edge environmental bioinformatics research centers at the University of North Carolina at Chapel Hill and the University of Medicine and Dentistry of New Jersey. The centers represent a major component of EPA's computational toxicology program that is using computer models to study the relationship between environmental contaminants and their potential adverse effects.

The university-based research centers will augment EPA's research at its National Center for Computational Toxicology (NCCT), established in 2004 in Research Triangle Park, N.C. EPA will coordinate efforts with the centers to advance the science of computational toxicology.

"The valuable contributions to environmental bioinformatics that these universities will make with these EPA grants will increase our ability to quickly and effectively assess and protect human health and the environment," said Dr. George M. Gray, assistant administrator for EPA's Office of Research and Development. "Their expertise is exceptional and we anticipate these new research centers will greatly advance bioinformatics in the field of environmental science," he said.

Bioinformatics is the use of computers in biological research to analyze or predict molecular composition and evaluate changes to genes and proteins in an organism. The research conducted by the university centers will focus on how chemicals can adversely affect health and the environment and provide predictive models to screen and test chemicals, as well as improve human health and ecological risk assessments.

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“The multidisciplinary research approach at these two centers will lead to more efficient and effective assessment of the hazards and risk of chemicals to humans and the environment and has the potential to reduce the use of animals in toxicological testing,” said Robert Kavlock, director of EPA’s National Center for Computational Toxicology.

The Research Center for Environmental Bioinformatics and Computational Toxicology at the University of Medicine & Dentistry of New Jersey (UMDNJ) in Piscataway will bring together a team of computational scientists with diverse backgrounds in bioinformatics, chemistry, modeling, and environmental studies from UMDNJ, Rutgers, and Princeton Universities, and the U.S. Food and Drug Administration’s Center for Toxicoinformatics.

The Carolina Environmental Bioinformatics Research Center at the University of North Carolina, Chapel Hill, brings together many researchers and disciplines, combining expertise in biostatistics, computational biology, chemistry, and computer science to advance the field of computational toxicology.

The grant awards for each center will be \$4.5 million for five years. The centers are funded through the EPA’s Science to Achieve Results (STAR) program and managed by the EPA’s National Center for Environmental Research.

For more information, visit the Web site at: www.epa.gov/ncer/2005bioinformatics. To learn more about the EPA’s overall program in computational toxicology, visit: www.epa.gov/comptox.

EPA relies on quality science as the basis for sound policy and decision-making. EPA’s laboratories and research centers, and EPA’s research grantees, are building the scientific foundation needed to support the Agency’s mission to safeguard human health and the environment. For more information, visit www.epa.gov/ord.

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