

News Release

Sept. 18, 2013

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For Immediate Release

Mayo Clinic Receives \$8.8 Million Federal Grant for Metabolomics Center

ROCHESTER, Minn. — Mayo Clinic is one of six new federally-funded Comprehensive Metabolomics (met-ah-bol-OH-mics) centers to support medical research on metabolomics — the study, at the cellular level, of how molecules are metabolized in the body.

The award from the National Institutes of Health (NIH) is for \$8.8 million over five years. "It is certainly an honor to be selected as one of the six national centers which will serve as resources for universities and other research institutions. This offers a tremendous opportunity for Mayo Clinic to be a national leader in this emerging research area," says <u>K. Sreekumaran Nair, M.D., Ph.D.</u>, Mayo Clinic endocrinologist and principal investigator on the grant, as well as head of <u>Mayo's Comprehensive</u> Metabolomics Core facility.

Metabolomics seeks to understand metabolites — the byproducts of cellular metabolism. These molecules are important because they offer a fingerprint for researchers of the activity going on in the cells of various tissues. They can help understand how disease develops and spreads and they can help identify biomarkers, signs within the body that indicate the beginning of a problem or how well a patient may be responding to treatment for a condition. Metabolomic analysis depends on measuring thousands of small molecules in fluids, such as blood, urine, spinal fluid or fluid inside of cells.

The award announcement says the purpose of the centers is to "facilitate institutional development of pioneering research, metabolomics training and outreach programs in this emerging area."

Under the grant, the Mayo Clinic center will offer mass spectrometry and nuclear magnetic resonance spectroscopy for metabolic analysis and will offer training courses both to investigators at Mayo and other institutions. The center also will advise on study design and application of stable isotopes, especially based on mass spectrometry.

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Other Mayo Clinic co-investigators on the grant are <u>Adrian Vella, M.D.</u>, <u>Michael Joyner, M.D.</u>, <u>Michael Jensen, M.D.</u>, <u>Petras Dzeja, Ph.D.</u>, and Slobodan Macura, Ph.D. Technical staff at the center are led by G. Charles Ford and Mai Persson. The grant (U24DK100469) is coordinated by the National Institute of Diabetes and Digestive and Kidney Diseases, but originates from the NIH Director's Common Fund.

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About Mayo Clinic

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