For the purpose of informing interested faculty, please be aware of the following opportunity. Please note that the other recipients of this announcement could be potential collaborators on this opportunity.

RFA-HL-11-005: Cross Organ Mechanism-Associated Phenotypes for Genetic Analyses of Heart, Lung, Blood, and Sleep Diseases (MAPGen for HLBS) Research Centers (U01)

The National Heart, Lung, and Blood Institute (NHLBI), National Institutes of Health, is soliciting applications to participate in the MAPGen consortium. MAPGen will be a cooperative consortium of up to 8 Research Centers, one MAPGen Knowledge Base and Coordinating Center (MAPGenKB), and the NHLBI. This consortium seeks to utilize evolving knowledge of cellular and molecular networks to define common mechanism-associated traits across organ systems. The ultimate goal is to re-define disease at the level of pathogenetic mechanisms and phenotype individuals based on pathobiology, rather than clinical presentation. This approach will provide the basis for the development of mechanism-based strategies for prevention, diagnosis and treatment in individual patients. This opportunity encourages applications for research centers and runs in parallel with a separate opportunity that solicits applications for the MAPGen Knowledge Base and Coordination Center (MAPGenKB) (see HL-11-004).

The following are examples of research topics responsive to this opportunity. These are only examples; applicants should not feel limited to the subjects mentioned and are encouraged to submit other topics pertinent to the objectives of this opportunity.

- Identify mechanism(s) and/or biomarkers for differential effects of Toll-like receptor type 2 mutations on susceptibility for development of asthma and type I diabetes (e.g. identification of a common susceptibility pathway prior to CD4 differentiation, effects on T regulatory cells, or differential effects on Th1-Th2 differentiation)
- Identify intermediate phenotypes/biomarkers underlying the link between obesity and metabolic syndrome (e.g., identification of biomarkers mediating the effect of PPARγ on fat disposition, energy intake and appetite regulation, insulin sensitivity/resistance, atherosclerosis and/or sleep disorders).
- Study effects of the renin-angiotensin system on the regulation of inflammatory cytokines in hypertension and dementia. Identify mechanism(s) involved in the reduction of cognitive decline by centrally acting ACE inhibitors.
• Identify and characterize differences in oxidative pathway responses that correlate with disease susceptibility to smoking across organ systems.

• Identify and characterize cellular and molecular mechanisms that link pulmonary fibrosis and hypertension and identify intermediate phenotypes or biomarkers of disease.

• Study molecular and cellular pathobiology of interaction between cellular and fluid coagulation components of blood with vasculature in the development of DVT and vascular abnormalities of diabetes.

• Identify molecular links between metabolic diseases or syndromes and sleep disorders in order to define phenotypes or biomarkers that can be used for diagnosis, prognosis or to predict treatment response.

For detailed information about this opportunity please see the full solicitation (RFA-HL-11-005). To find more opportunities from this agency, please see here.

It is anticipated that $25M will be available to support 6 – 8 Research Centers and 1 MAPGenKB. Cost sharing is not required. Please see the full solicitation for complete award information.

Deadline for Proposal to OR-Sponsored Programs: 8/25/2010
(Please see the solicitation for complete application & submission information.)

Please contact Sponsored Programs (4-2402) with questions regarding proposal submission requirements.

Deadline for Proposal Submission to Agency: 9/1/2010

If you have any questions regarding this announcement please contact:

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