

## KOMP2 Program Makes First Awards

Seven new Common Fund awards have been made in fiscal year 2011 in the KOMP2 program towards the goal of converting the International Knockout Mouse Consortium (IKMC) embryonic stem (ES) cell resource into mice, performing preliminary phenotyping, and cryopreserving germplasm of those mice. These efforts will create a valuable genetic resource for revealing mammalian gene function, providing insight into genes that affect human health and disease.

New awardees and projects, by funding opportunity announcement, are as follows:

### **Knockout Mouse Phenotyping (U54) RFA-RM-10-011:**

- Dr. Kent Lloyd at the University of California Davis will provide comprehensive phenotyping of 166 KOMP mutant mouse lines each year for five years. In addition, this project will assess lung function in a subset of these lines using a well-established challenge test ([1-U54HG006364-01](#)).
- Dr. Robert Braun at Jackson Laboratory will undertake quantitative and qualitative assessment of phenotypes for 166 mouse lines per year across 235 phenotypes per line, using a dual-pipeline strategy to collect essential physiological data. One pipeline is devoted to evaluation of behavior, neurophysiology, vision, sleep and hearing, and a second pipeline captures metabolic, cardiovascular and immune function ([1-U54HG006332-01](#)).
- Dr. Monica Justice at Baylor College of Medicine will carry out broad-based phenotype analysis of 166 IKMC mouse lines per year with the aim of providing data on mouse models in therapeutically relevant areas, including cardiovascular, metabolic, neurological, respiratory and immunological systems ([1-U54HG006348-01](#)).

### **Knockout Mouse Phenotyping Project Database (U54) RFA-RM-10-012:**

- Dr. Paul Flieck at the European Molecular Biology Laboratory will create a Data Coordination Center to collect and store phenotypic data generated by the phenotyping centers, provide access to these data for specialist and non-specialist users via a web portal, and support complex queries and statistical analyses of the data ([1-U54HG006370-01](#)).

### **Knockout Mouse Production and Cryopreservation (U42) RFA-RM-10-013:**

- Dr. Kent Lloyd at the University of California Davis will generate 166 mutant mouse lines from IKMC ES cells each year, conduct preliminary analyses on and cryopreserve germplasm from these mice, and make mice and data readily available to phenotyping centers and to the research community through IKMC repositories. Other goals are to develop and implement production strategies that increase throughput while lowering cost ([1-U42RR033193-01](#)).

- Dr. Leah Donahue at Jackson Laboratory (under grant [1U42RR033367-01](#)) will generate 166 mouse lines per year from IKMC ES cells, test and analyze mice for viability and fertility, and examine reporter gene expression patterns, while also aiming to reduce the cost of providing mice and resources to the phenotyping centers through the use of innovative technologies.
- Dr. Monica Justice at Baylor College of Medicine will generate mice corresponding to 166 mutant genes from ES cells per year, which will be used to characterize the adult and embryonic expression pattern of the each targeted gene and determine if these genes are required for embryonic development and fertility ([1-U42RR033192-01](#)).