



**NATHAN SHOCK CENTERS  
OF EXCELLENCE IN THE  
BASIC BIOLOGY OF AGING**

## **Resources Available through The Jackson Laboratory Nathan Shock Center**

### **Animal & Phenotyping Core Resources**

The Jackson Laboratory's Nathan Shock Center (JAX NSC) has available a large repository of tissue samples from cross-sectional studies, and, blood samples from longitudinal studies harvested from Collaborative Cross and Diversity Outbred (J:DO) mouse models at approximately 6, 12 and 18 months of age. Tissue samples include heart, liver, kidney, muscle, spleen, fat pad.

For study information and a list of available samples please visit: <http://agingmice.jax.org/animal>

Questions related to samples and Material Transfer Agreements, please contact Ron Korstanje, ([ron.korstanje@jax.org](mailto:ron.korstanje@jax.org))

### **Data & Statistical Core Resources**

The Statistical Core provides data analysis support for ongoing studies conducted within the JAX Nathan Shock Center (NSC) including the development of new analysis methods and software necessary to support these projects. This core also disseminates JAX NSC data in conjunction with the [Mouse Phenome Database](#) and through the development of web services and interfaces to provide access to large-scale data resources. In addition, the core also provides experimental design and analysis support to the aging research community.

For available data and tool resources, please visit <http://agingmice.jax.org/data>

All inquiries and questions related to study design or analysis, please contact Gary Churchill ([gary.churchill@jax.org](mailto:gary.churchill@jax.org))

### **Research Developmental Core Resources**

The Research Development Core seeks to expand the research focus on aging, health-span and age-related diseases at JAX through a robust core by actively supporting and mentoring both new and established investigators in the field of aging research. Investigators are directly supported through pilot project funding. JAX NSC investigators serve as mentors to promote career development for new investigators in the field of aging biology by providing support for organizing and hosting aging-related courses, seminars, and workshops at our Bar Harbor (Maine) and Farmington (Connecticut) campuses, and collaborating institutes. Pilot projects are solicited once a year in a general announcement (deadline October 1) and in specific topic-related announcements throughout the year.

For all inquiries related to pilot project awards and the application process, please contact Ron Korstanje ([ron.korstanje@jax.org](mailto:ron.korstanje@jax.org))



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### **Translational Core Resources**

The Translational Core of the Jackson Laboratory Nathan Shock Center (JAX NSC) develops and provides resources for the other NSCs and the aging community to aid in comparative and translational aging research. We are developing a pipeline that allows for efficient screening and prioritization of candidate genes identified in human studies, first in *C.elegans* then using mouse models.

WORMHOLE, a novel ortholog prediction meta-tool that applies machine learning to integrate 17 distinct ortholog prediction algorithms to identify novel least diverged orthologs (LDOs) between 6 eukaryotic species—humans, mice, zebrafish, fruit flies, nematodes, and budding yeast.

<http://wormhole.jax.org/>.