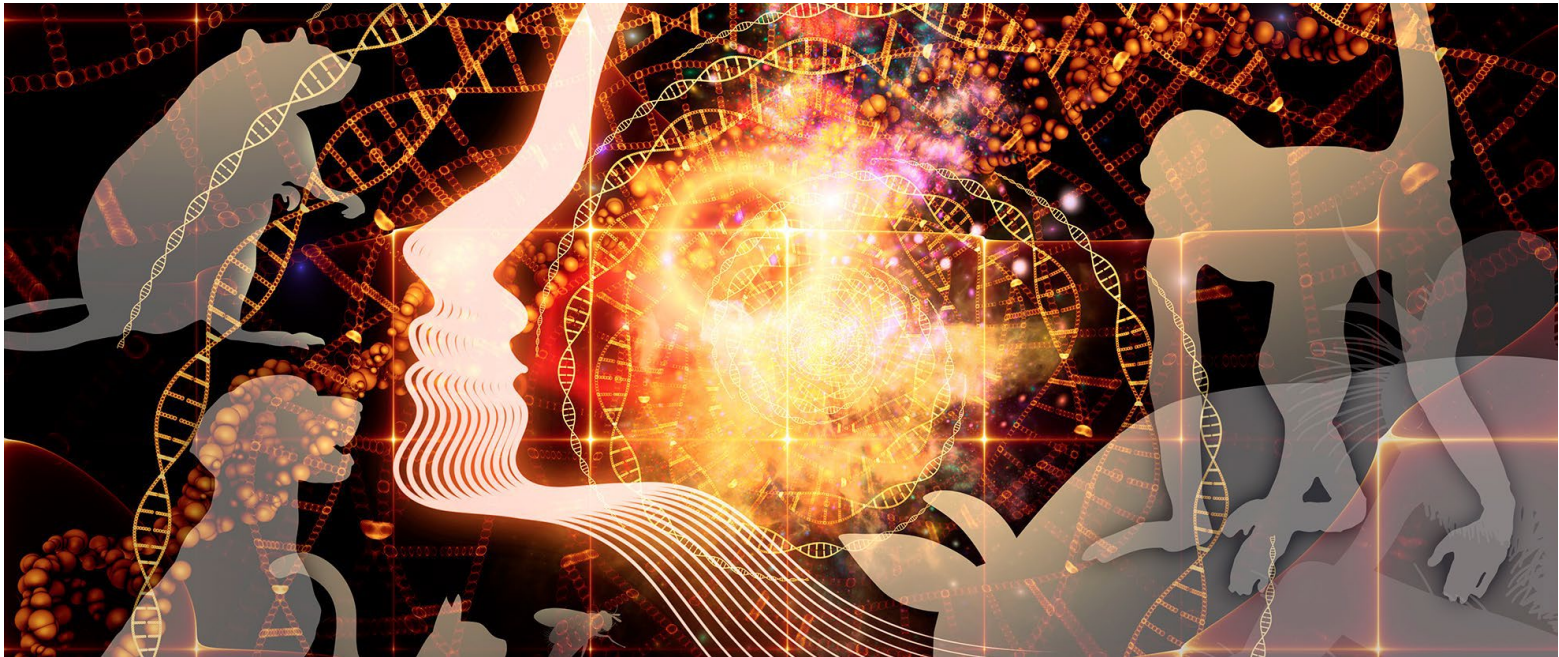


Concept Clearance – Reissue

Development of Animal Models and Related Biological Materials for Research (R21)



Background

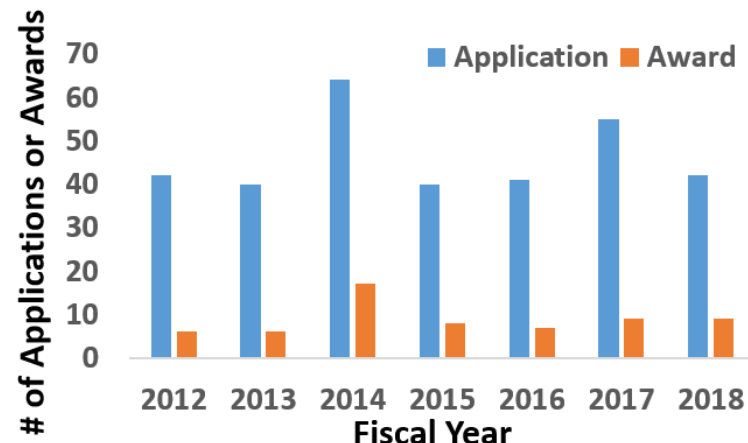
NIH Exploratory/Developmental Research Grant Award (R21)

- The R21 grant mechanism is intended to encourage exploratory/developmental research by providing support for the early and conceptual stages of project development
- The project period is up to two years
- The combined budget for direct costs for the two-year project period may not exceed \$275,000. No more than \$200,000 may be requested in any single year
- The R21 can not be renewed

Background

Animal Models R21 Program's goals are:

- Meet demand for animal models that are more predictable and accessible for biomedical research
- Address need for technology advancements in genomics, gene editing and informatics for developing animal models
- Align with ORIP's mission: *"ORIP awards grants to support research resources, such as animal models of human diseases...."*
- Focus on ORIP's Strategic Plan: *"development and enhancement of models of human disease as well as expansion and accessibility of these models... ORIP seeks to provide better models of human disease conditions of interest to multiple NIH ICs"*



Purpose

- Animal Models R21 Program encourages highly innovative research to:
 - *Develop and characterize animal models and related technologies and biological materials for human disease*
 - *Improve diagnosis and control of diseases that might interfere with animal use for biomedical research*
- As part of ORIP's trans-NIH emphasis, proposed animal models, technologies and biological materials must be directly relevant to the research interests of multiple NIH Institutes and Centers that focus on particular disease or body systems

Progress and Impacts (FY12-FY18)

- Approximately 50% of ORIP R21 awardees have received funding (i.e., R21, R01, other) post-R21 award from 12 Institutes, Centers, and Offices
- Most ORIP R21 applications and awards are on model development, with the primary model being mouse followed by fly
- Success rate is approximately 19%

Concept Clearance

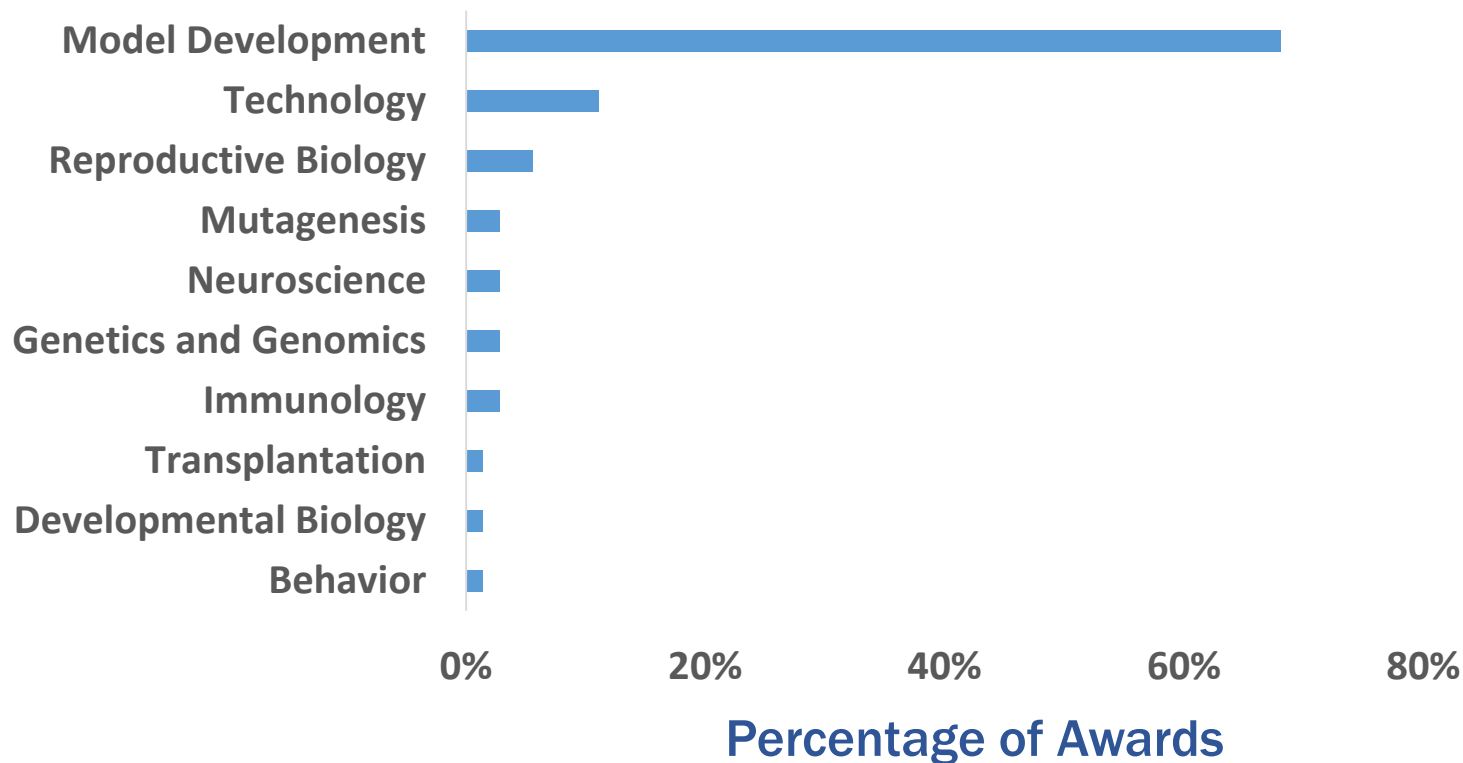
Continue supporting the “Development of Animal Models and Related Biological Materials for Research (R21)” program

***Previously PA-16-141**



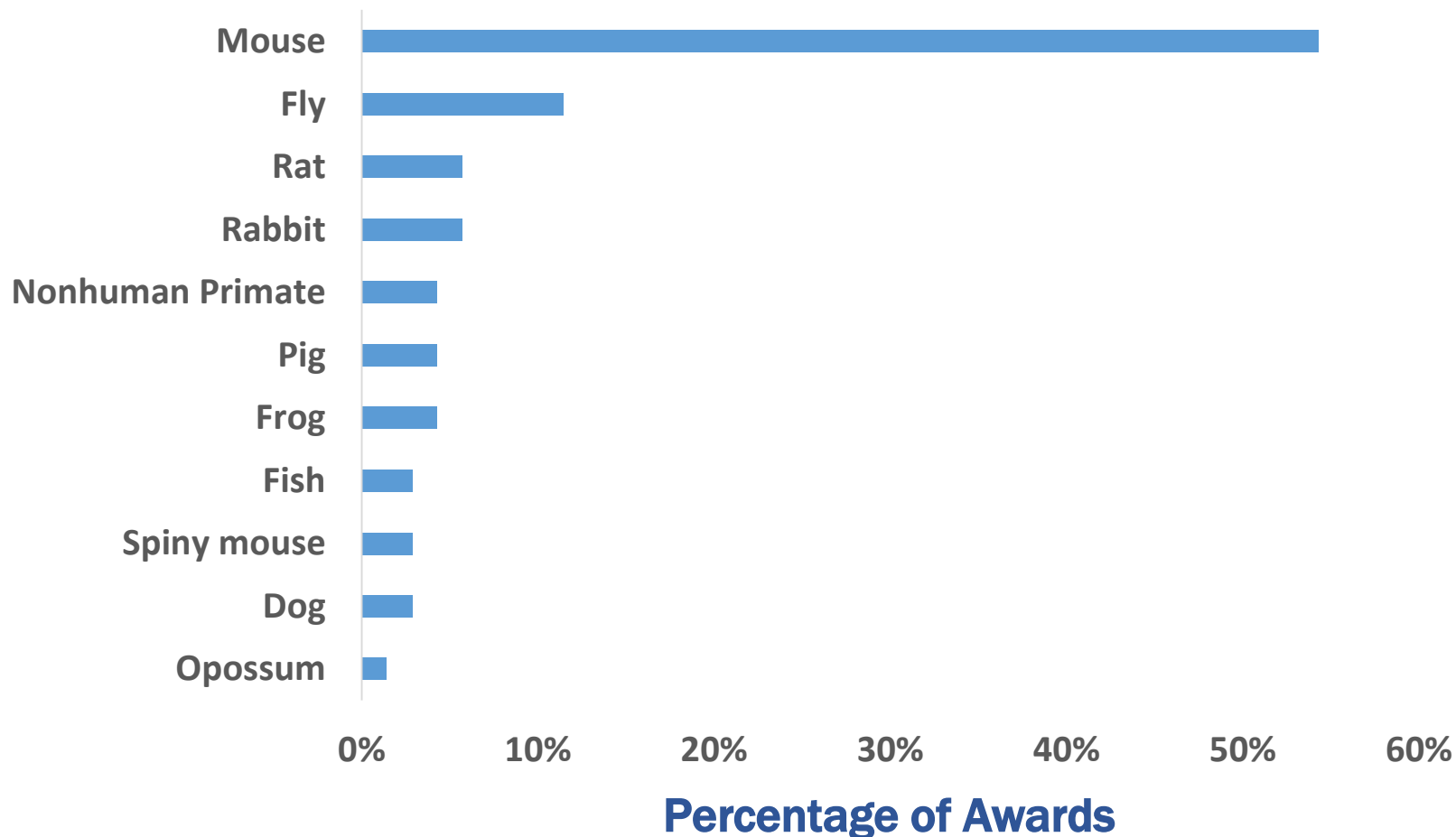
Portfolio Analysis of R21 from 2012-2018

Predominant Research Topic of R21 Grants is Model Development



*Topics defined by PCC code

Majority of Grants Use Mouse Models



Awardees Receive a Variety of Research Grants from Many ICs Post ORIP R21

Approximately 50% of awardees (58 PIs) received other research awards after the R21 award

	AG	AI	AR	CA	DE	DK	GM	HD	HG	HL	MH	NS	OD	Total
P30		1		1										2
R01				1	1	2	3	2		5	1	1		16
R03											1			1
R13														0
R15							1							1
R21	1	2		1				1						5
R33				1										1
R35							2							2
R37								1						1
U24									1					1
U42													1	1
U54												1		1
Total	1	3	0	4	1	2	6	4	1	5	2	2	1	32