

# NIMH Biobehavioral Research Awards for Innovative New Scientists (BRAINS)

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## What is the goal of the program?

To support the research and career development of outstanding early stage investigators so that they can develop high risk/high payoff research programs that address the highest priorities for NIMH.

At this 5 year mark we evaluate the success of the program in order to advise future efforts to freshen the investigator pool at NIH and to foster groundbreaking new scientific research.

## How do we achieve that goal?

- R01, 5 years of funding, budget up to \$1.6M
- Unique eligibility requirements
- Require extensive info on career trajectory
- Participation of an external advisory committee
- Directly address the NIMH Strategic Plan

## How are we doing?

Since the program began in 2009 there have been 46 BRAINS grants awarded.

- Who are our grantees?
- What was their history?
- Are they addressing research priorities?
- Has their career advanced?

**Data Sources:**  
Rockey, S. (2014, April 29). A Look at Programs Targeting New Scientists: <http://nexus.od.nih.gov/all/2014/04/29/a-look-at-programs-targeting-new-scientists/>  
NIH Data Book: <http://report.nih.gov/NIHDataBook/Charts/Default.aspx?showm=Y&chartid=172&catId=15>  
NIH Query View Report> IMPAC II> PubMed= era.nih.gov

## Investigator Info

FY09-FY15

BRAINS 34% Female Awardees > NIH R01 Grants 27% Female Awardees

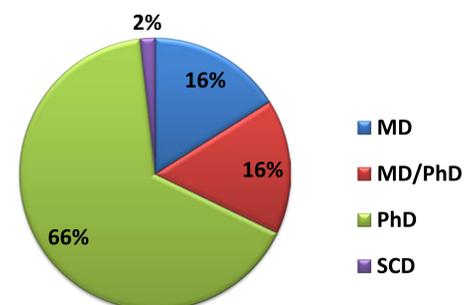
The BRAINS program awarded a higher proportion of female investigators than the Parent R01 mechanism did.



Age of NIH FY2013 Early Stage Investigators, New Investigators, and NIH New Scientist Programs

Type of Classification	Number of Awardees	Average Age	Median Age
Early Stage Investigators	785	39.2	39
New Investigators	1439	43.0	42
New Scientist Programs	Number of Awardees	Average Age	Median Age
Outstanding New Environmental Scientist (ONES) in 2011	<11	36.9	37
Biobehavioral Research Award for Innovative New Scientist (BRAINS)	<11	36.4	36
NIH Director's New Innovator Award Program	45	37.4	37
NIH Pathway to Independence Award (R00)	153	36.2	36

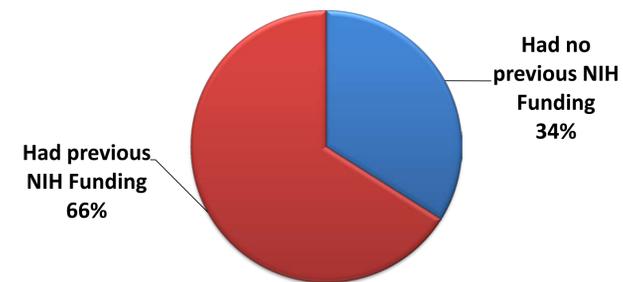
BRAINS 32% Physician-Scientists > NIH 30% Physician-Scientists



FY09-FY15

## Building on our investment

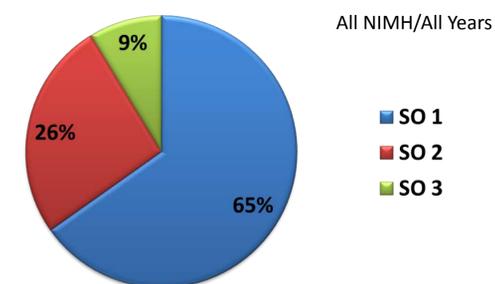
FY09-FY15



What specific types of previous NIH funding?

- 38% Ks- Career Development Awards
- 14% Fs- Fellowships
- 13% R21s- Exploratory/Developmental Grants
- And others

## How projects aligned with the Strategic Plan



- SO1- Promote discovery in the brain and behavioral sciences to fuel research on the causes of mental disorders.
- SO2- Chart mental illness trajectories to determine when, where, and how to intervene.
- SO3- Develop new and better interventions that incorporate the diverse needs and circumstances of people with mental illnesses.

## Funding after the BRAINS award

FY of BRAINS Award	Received Subsequent NIH Grant	Percent
2009	5/7	71%
2010	9/12	75%
2011	5/9	56%
2013	3/10	30%

A large percentage of BRAINS awardees have already received additional NIH funding to advance their research.

## Other measures of success

- Publications
- Academic promotion
- Invited talks
- Trainees in their laboratory
- NIH committee service
- Scientific collaborations
- Awards/honors

We know

We want to know



## Future questions to consider

- What is the right comparison group and appropriate metrics?
- Would we be able to reach this target group of investigators by extending our regular R01 pay line for ESIs?
- High risk/High reward- What is the cost/benefit threshold that is acceptable for NIH?
- What is dubbed "innovative" research varies by discipline- how do we cover all scientific areas?
- Person vs project based awards- where does NIH bet their money?