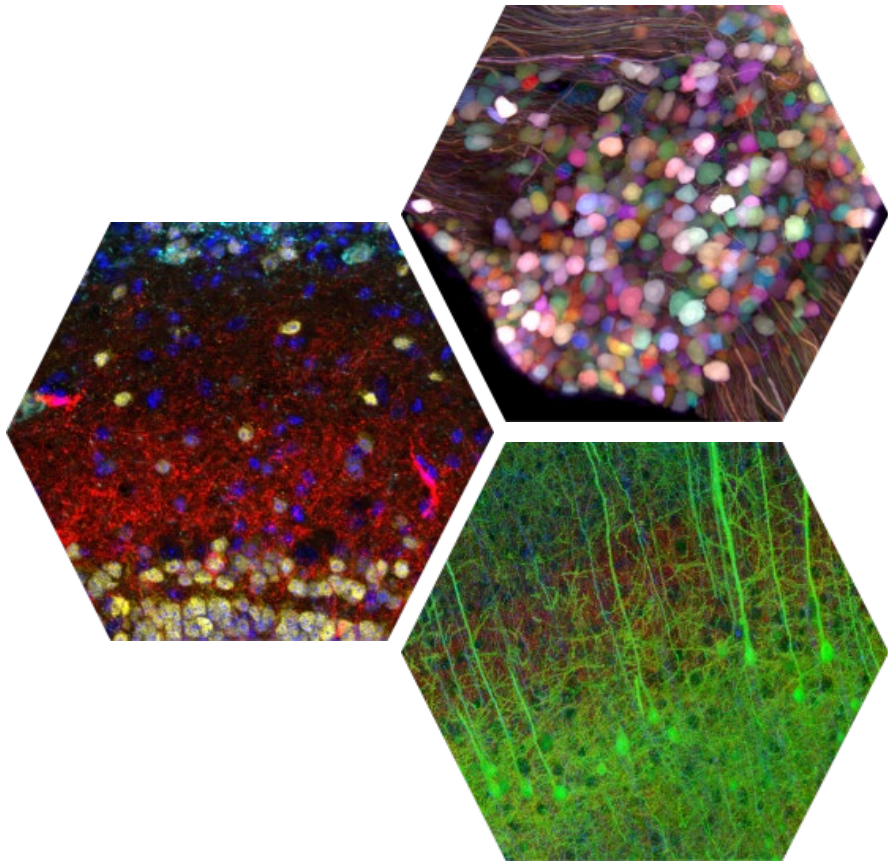

NIH The BRAIN Initiative®

BRAIN Initiative Demographics FY14-FY22

Devon C. Crawford, Ph.D.

Crystal L. Lantz, Ph.D.

Creating an Inclusive Research Community

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Transdisciplinary research

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Career stage

- Researchers at different career stages

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- Individual applications and partnerships that enhance geographic and regional heterogeneity

Institution "type"

- Engagement from different types of institutions and organizations (e.g., research-intensive, undergraduate focused, minority-serving, community-based)

The BRAIN Initiative® Promoting Scientific Excellence by Enhancing Diversity, Equity, Inclusion, and Accessibility

Benefits of a diverse scientific workforce

fostering scientific innovation

enhancing global competitiveness

contributing to robust learning environments

improving the quality of the research

advancing the likelihood that underserved populations participate in, and benefit from research, and enhancing public trust

Workforce development

- **D-SPAN F99/K00 Award:** NIH Blueprint/BRAIN Diversity Specialized Predoctoral to Postdoctoral Advancement in Neuroscience
- **BRAIN K99/R00 Award:** NIH BRAIN Initiative Advanced Postdoctoral Career Transition Award to Promote Diversity
- **BRAIN Diversity Supplements:** NIH BRAIN Initiative Research Supplements to Promote Diversity

Capacity building & dissemination

- **RFA-MH-21-180 (U24):** Reagent Resources for Brain Cell Type-Specific Access and Manipulation to Broaden Distribution of Enabling Technologies for Neuroscience
  - ➢ *Supports the establishment of facilities at minority-serving institutions (MSIs) and Institutional Development Award (IDeA)-eligible institutions for scaled production and distribution of neurotechnology resources.*

Inclusive research environments

- **Plan for Enhancing Diverse Perspectives (PEDP)**
  - ➢ *New requirement in most BRAIN FOAs that applicants must include a summary of strategies to advance the scientific and technical merit of the proposed project through expanded inclusivity.*

https://neuroscienceblueprint.nih.gov/about/diversity-and-scientific-excellence
https://grants.nih.gov/grants/guide/rfa-files/RFA-MH-21-180.html
https://braininitiative.nih.gov/about/plan-enhancing-diverse-perspectives-pedp

Novel approach for BRAIN grant applications

Require applicants to most BRAIN Initiative NFOs to submit a ***Plan for Enhancing Diverse Perspectives*** (PEDP) as part of the application.

- In the **research strategy**, applicants should integrate strategies to advance the scientific and technical merit of the proposed project through the inclusion of diverse perspectives ***and*** submit a **1-page summary** of these plans in the form of a PEDP.

- The plan will be part of the **scored application** and will be considered when funding decisions are made.

https://braininitiative.nih.gov/about/plan-enhancing-diverse-perspectives-pedp

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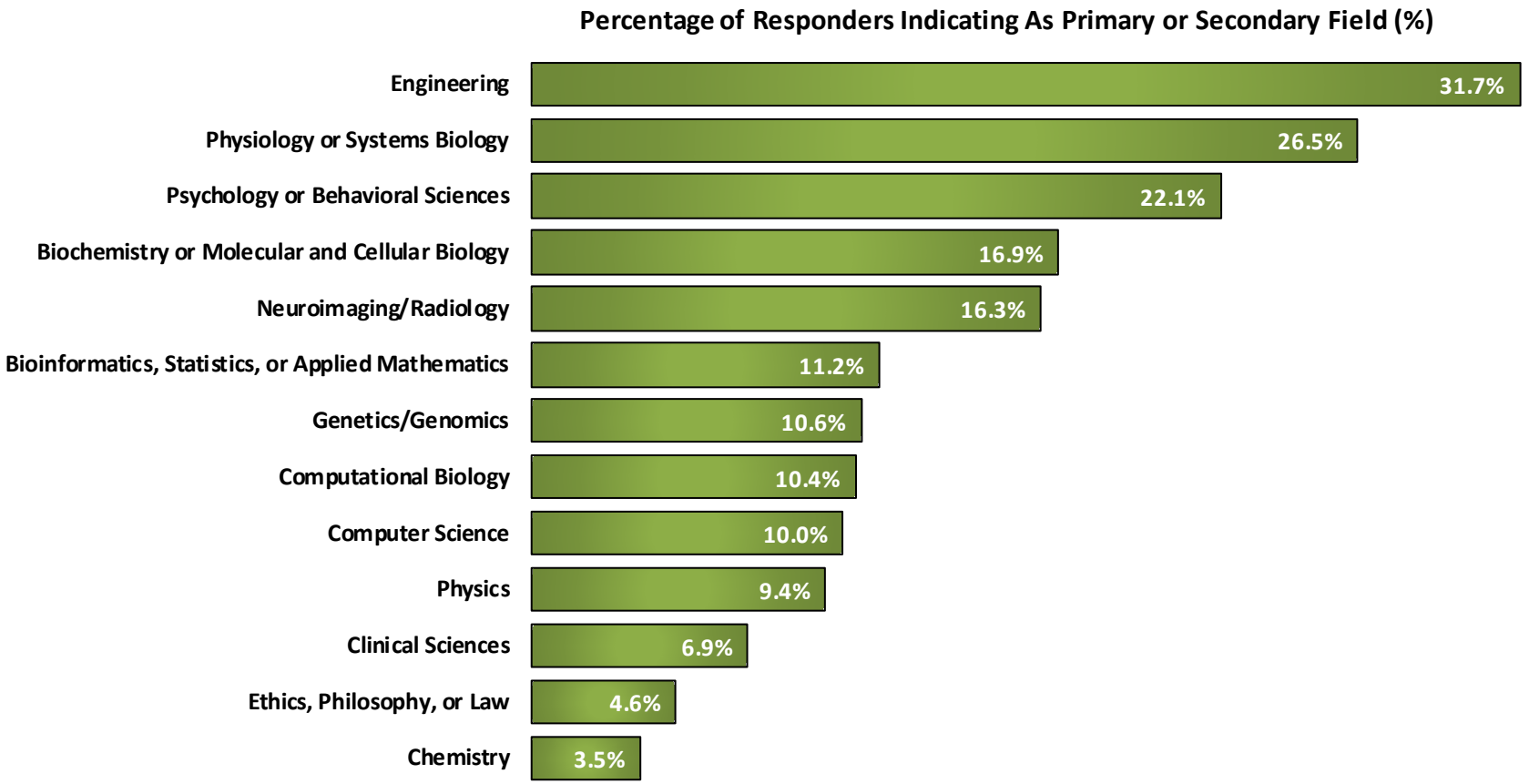
Transdisciplinary Expertise

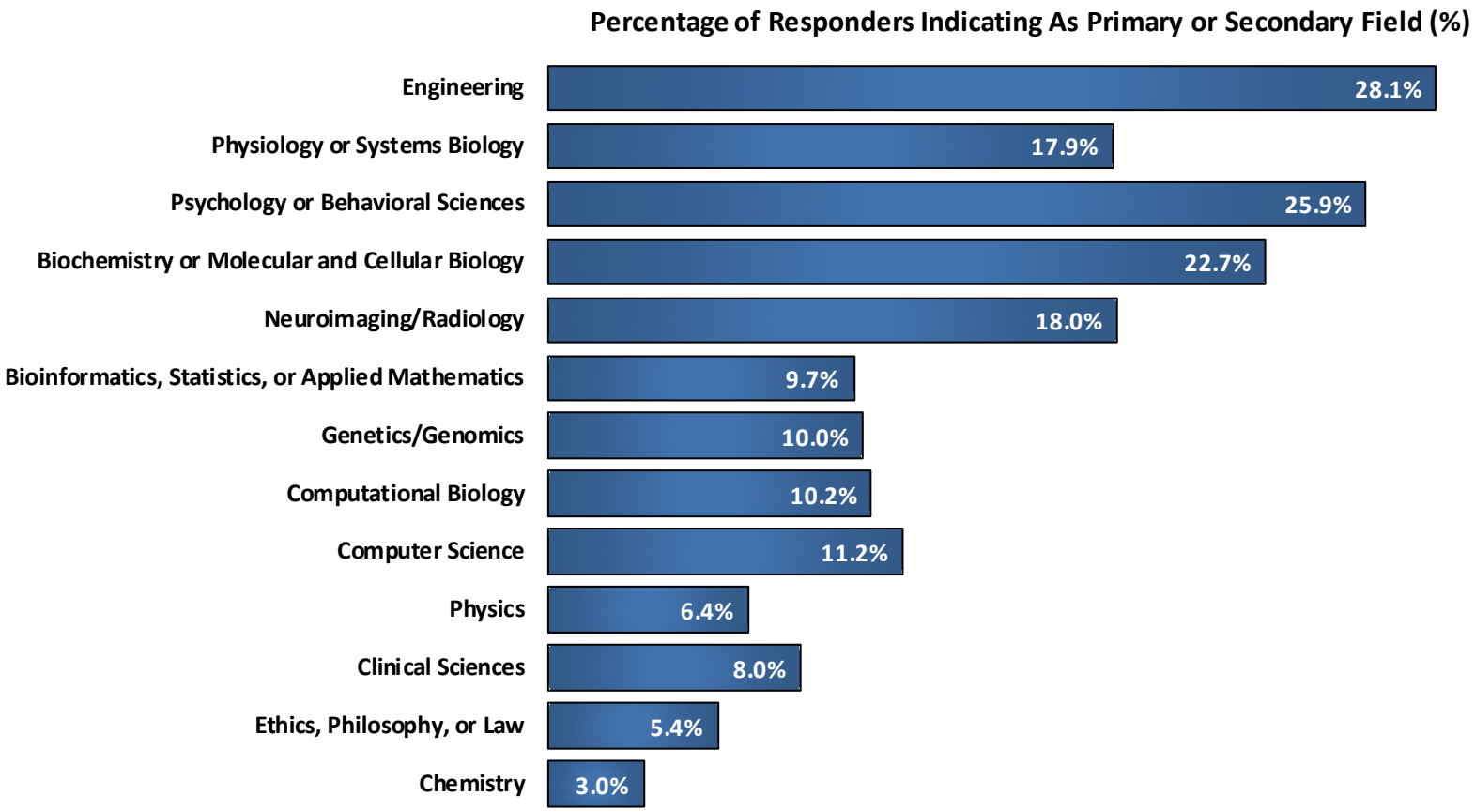
Research Expertise of Registrants Who Are BRAIN-Funded Scientists



N = 520 Respondents to 2022 BRAIN Initiative Investigators Meeting Registration

Transdisciplinary Expertise

Research Expertise of Registrants Who Are Trainees



N = 722 Respondents to 2022 BRAIN Initiative Investigators Meeting Registration

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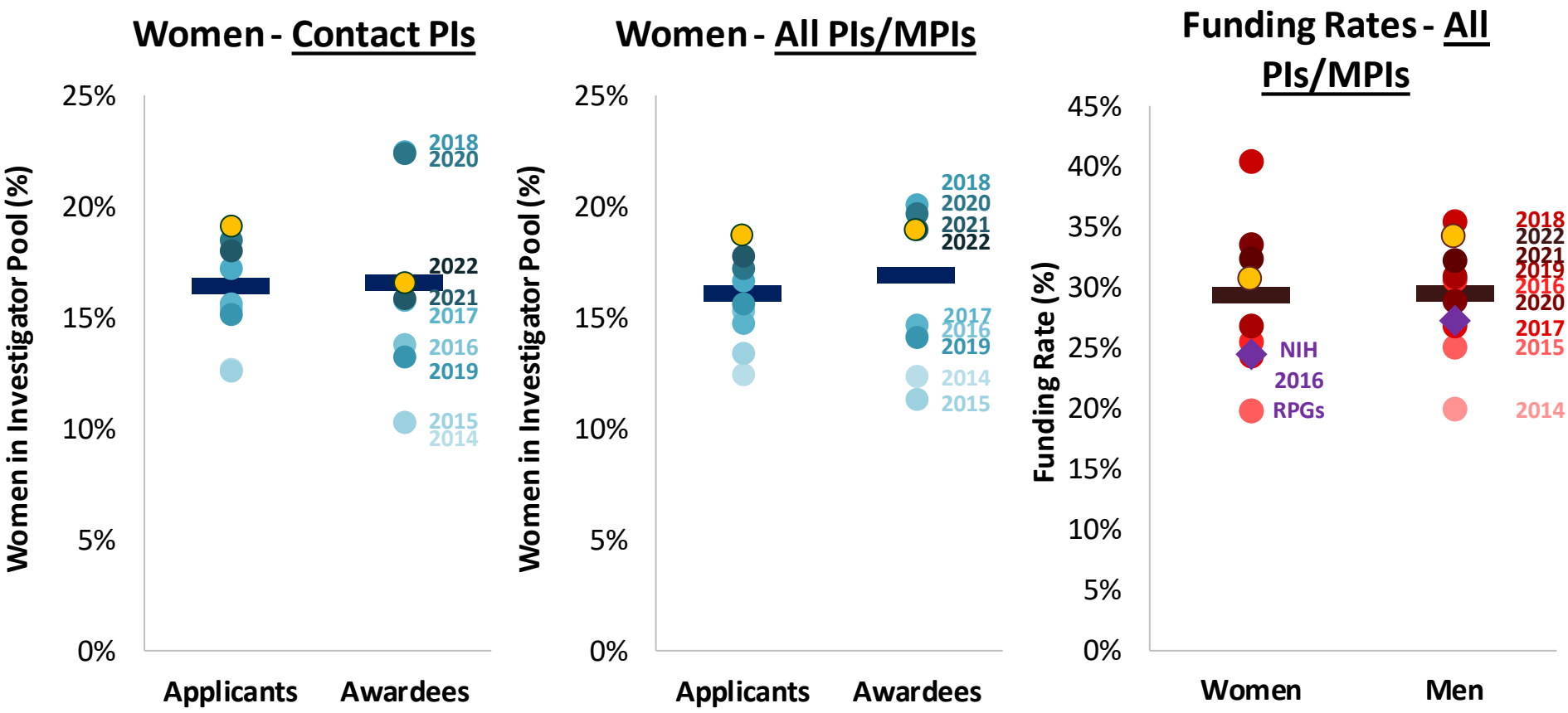
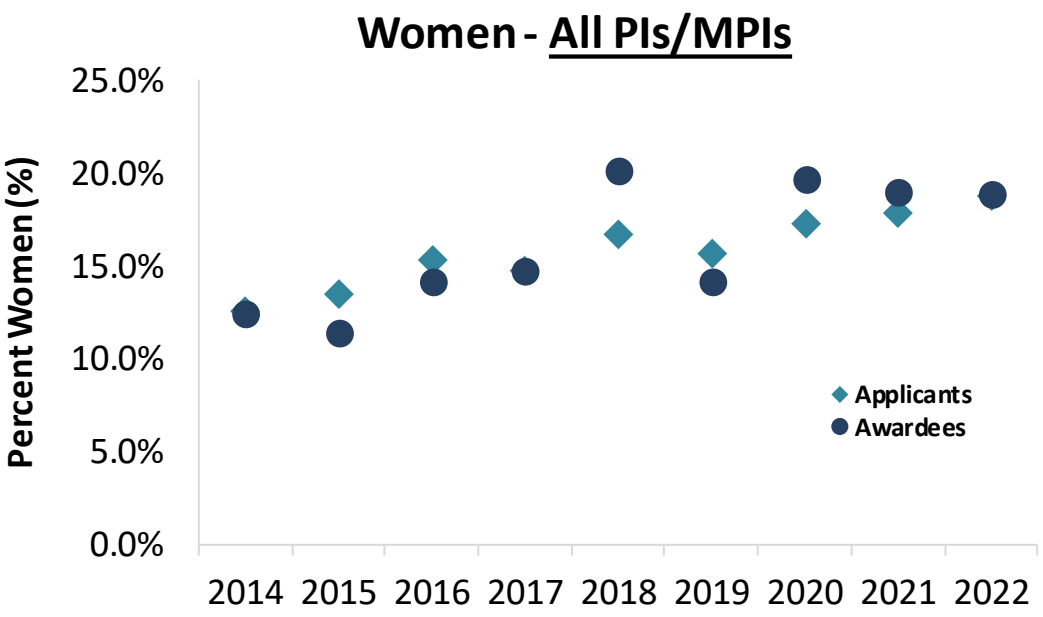
Individuals from Diverse Backgrounds

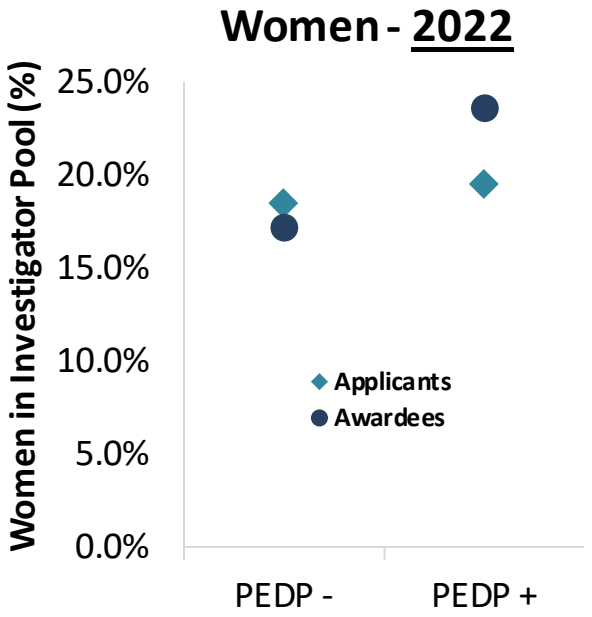
Gender of BRAIN Initiative Investigators



Unknown = 5-8% Overall

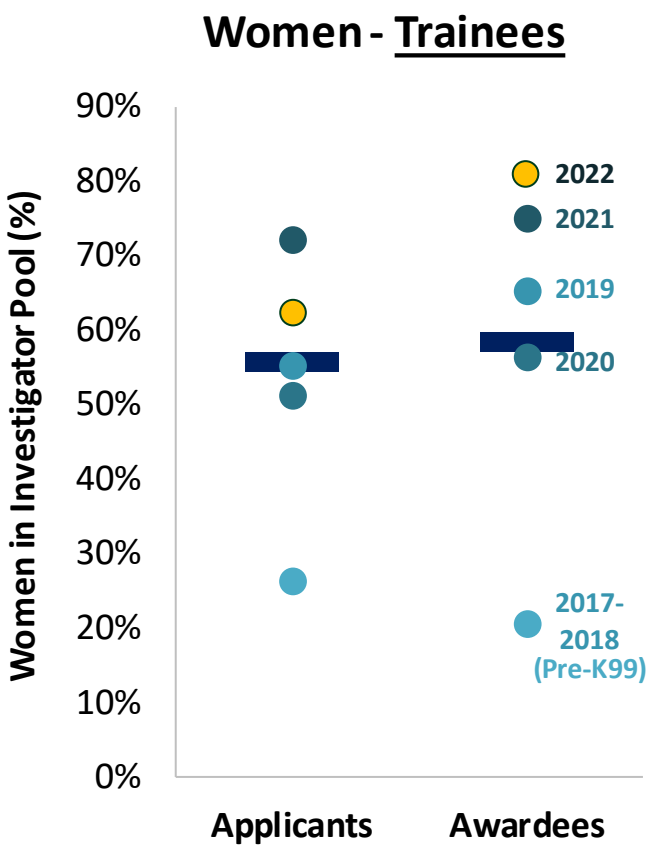
Gender of BRAIN Initiative Investigators

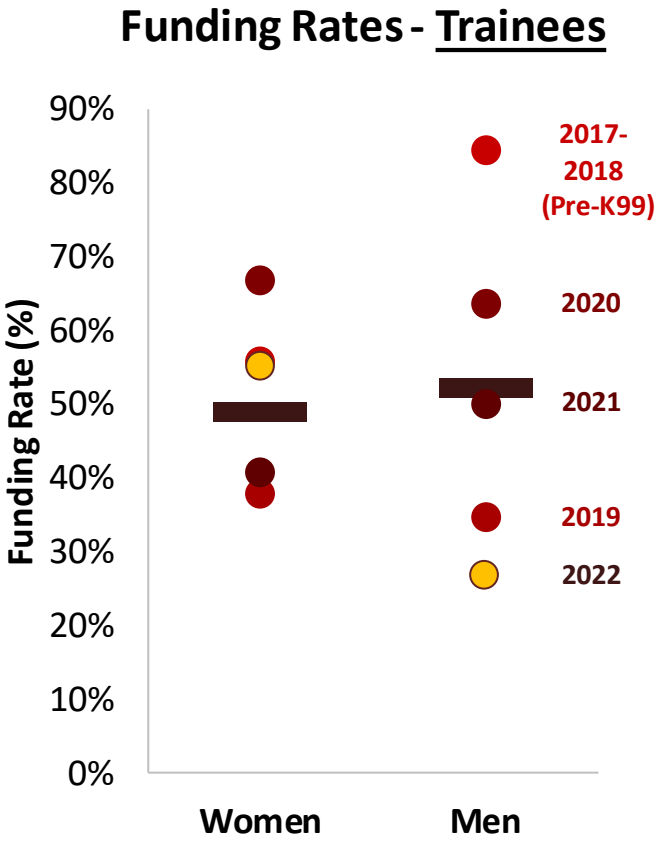




Individuals from Diverse Backgrounds

Gender of BRAIN Initiative Trainees

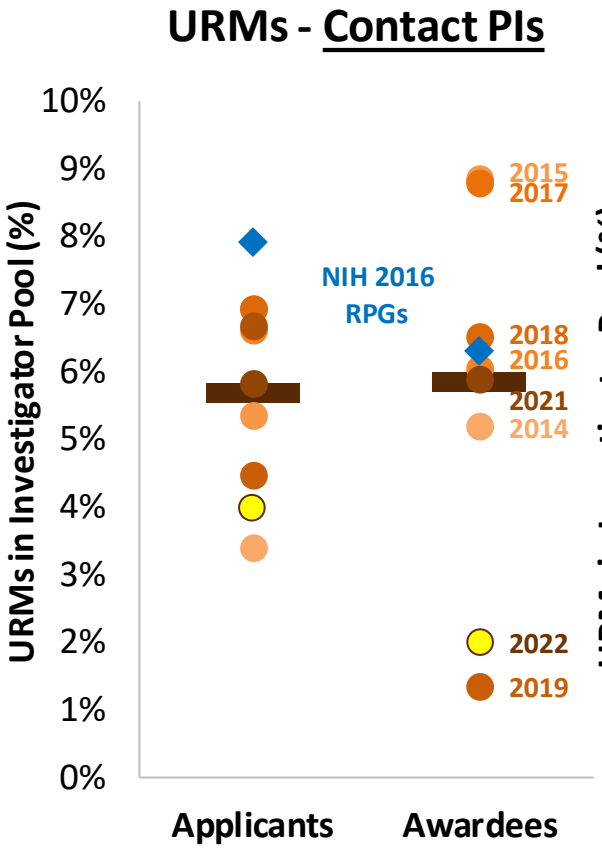


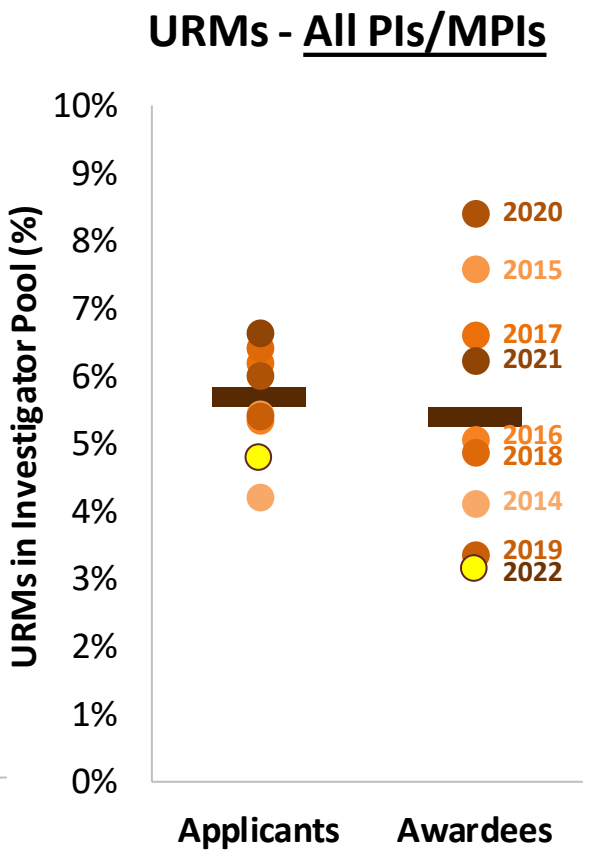


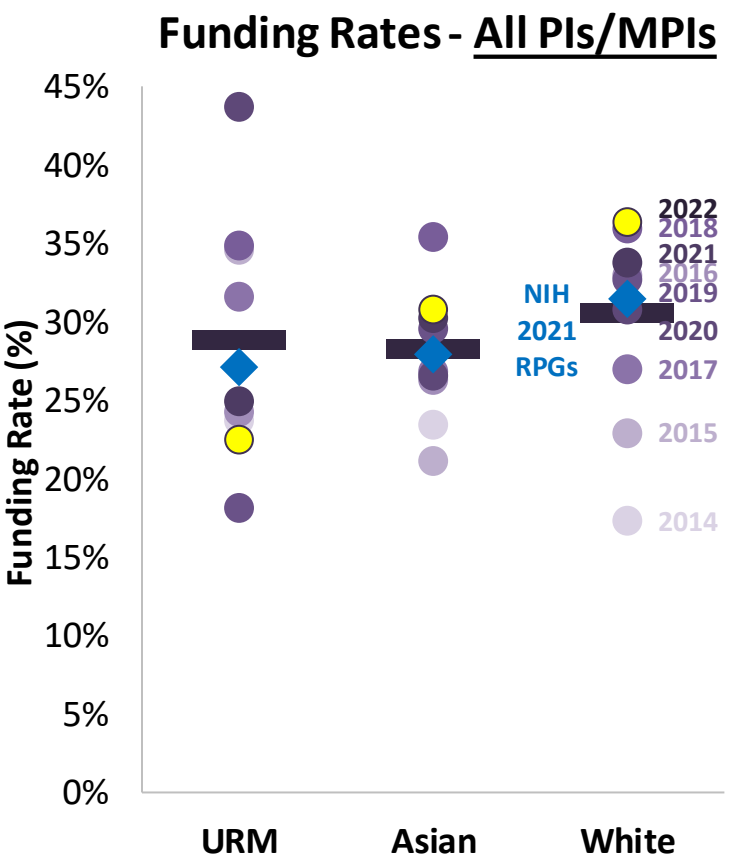
Unknown = 5-12% Overall

Individuals from Diverse Backgrounds

Race/Ethnicity of BRAIN Initiative Investigators



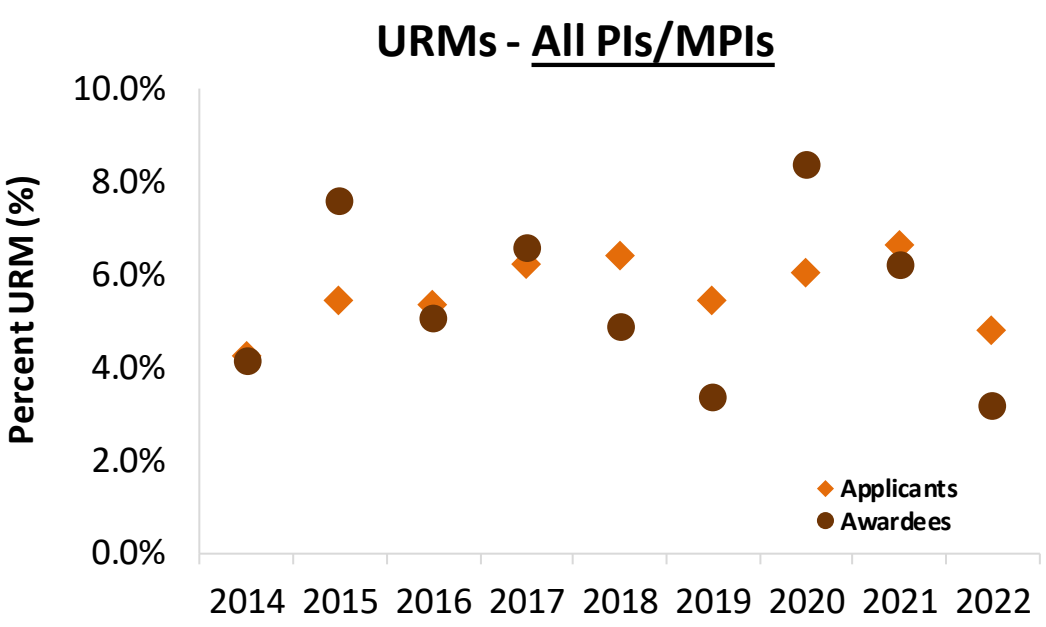


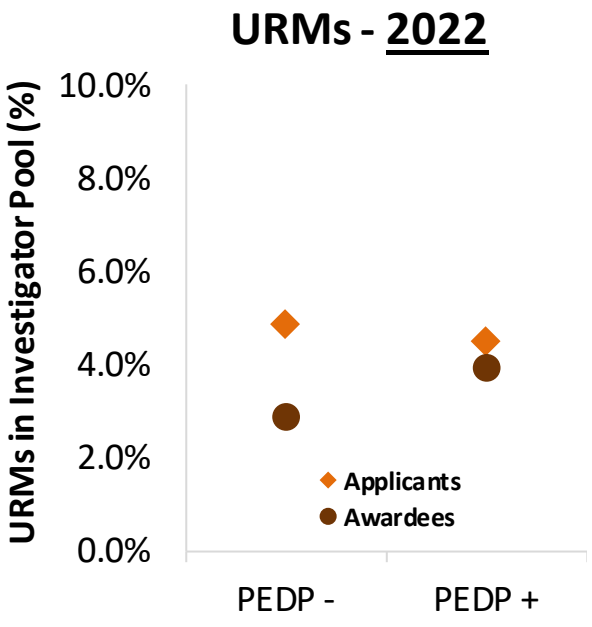


Unknown = 13-17% Overall

Individuals from Diverse Backgrounds

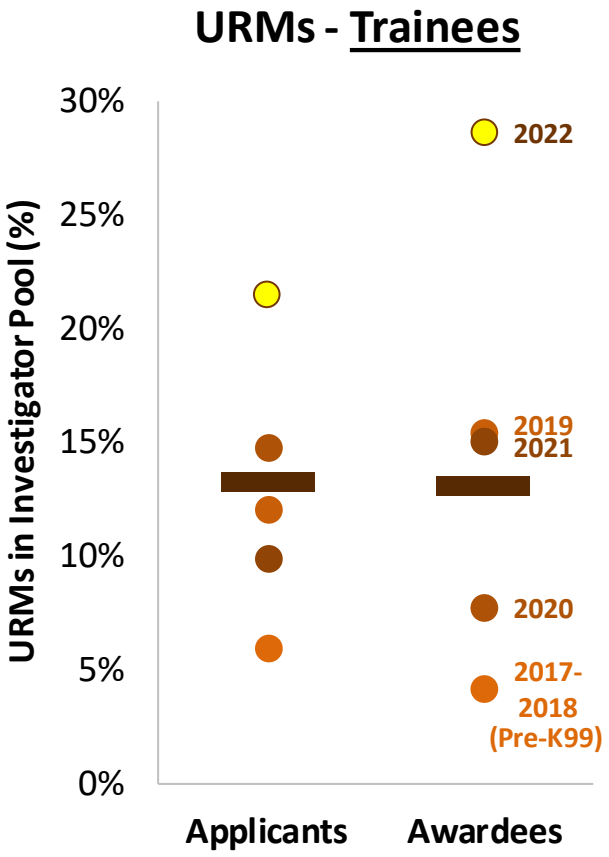
Race/Ethnicity of BRAIN Initiative Investigators

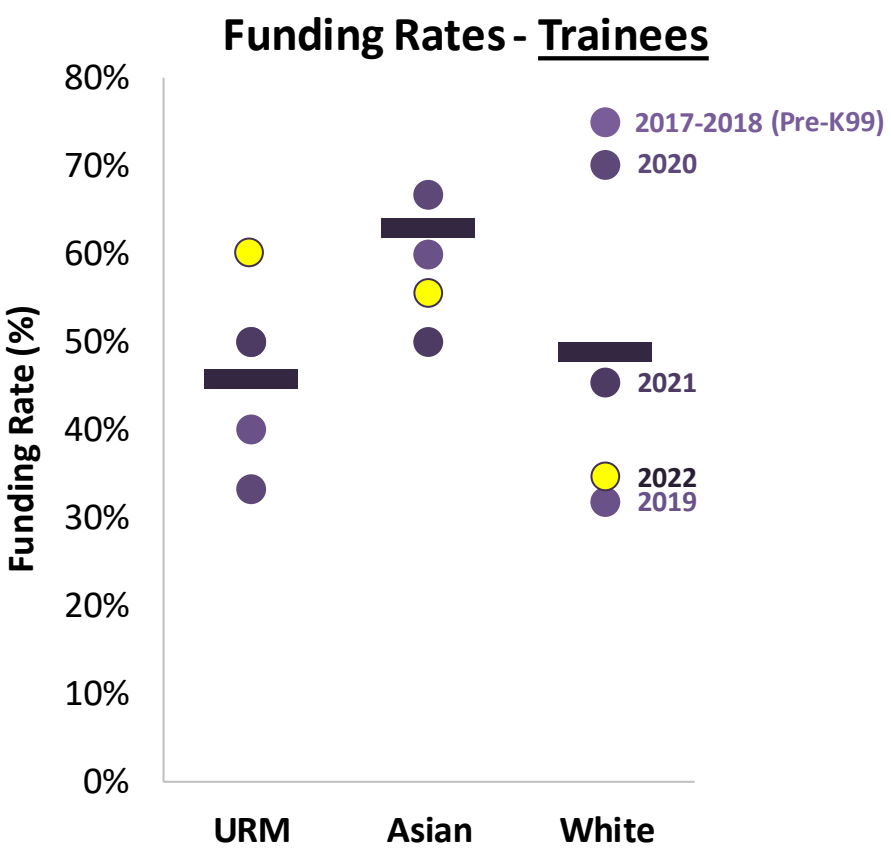




Individuals from Diverse Backgrounds

Race/Ethnicity of BRAIN Initiative Trainees





Unknown = 7-16% Overall

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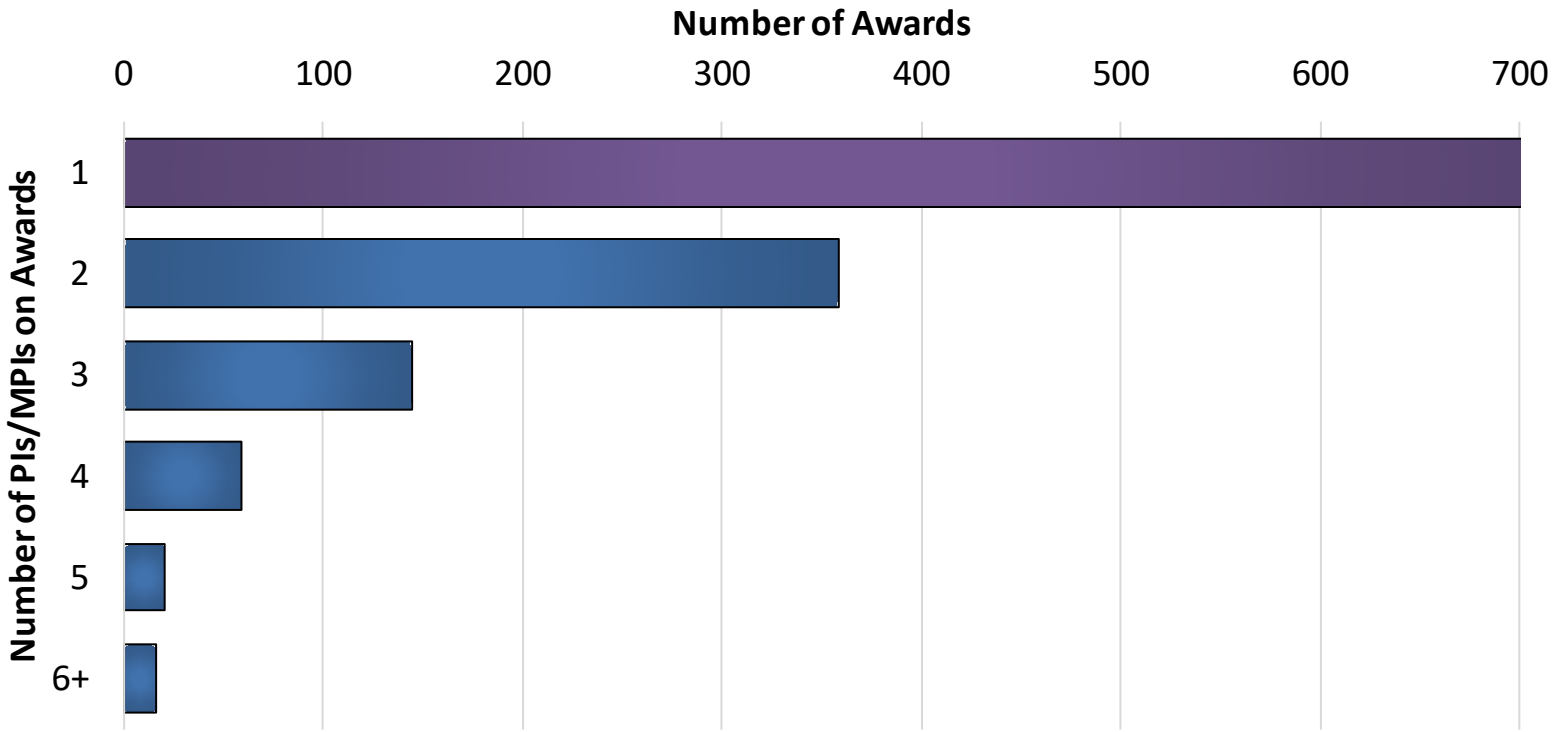
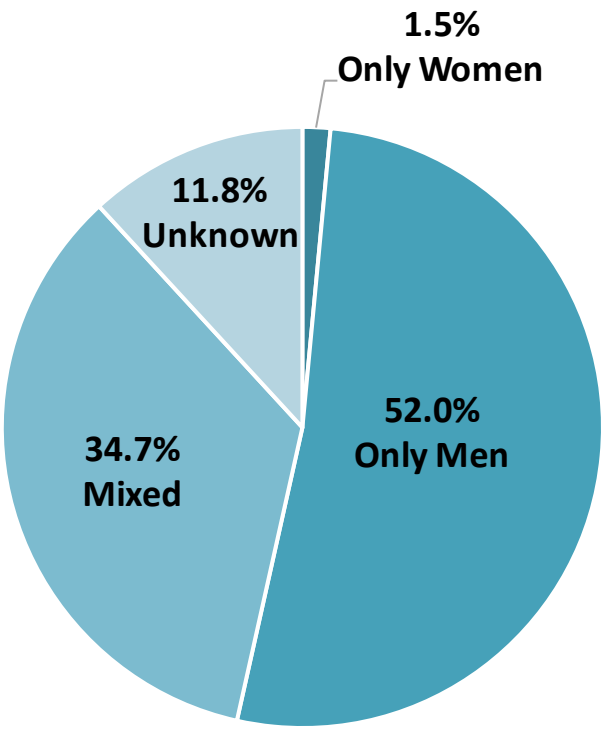
Team Science

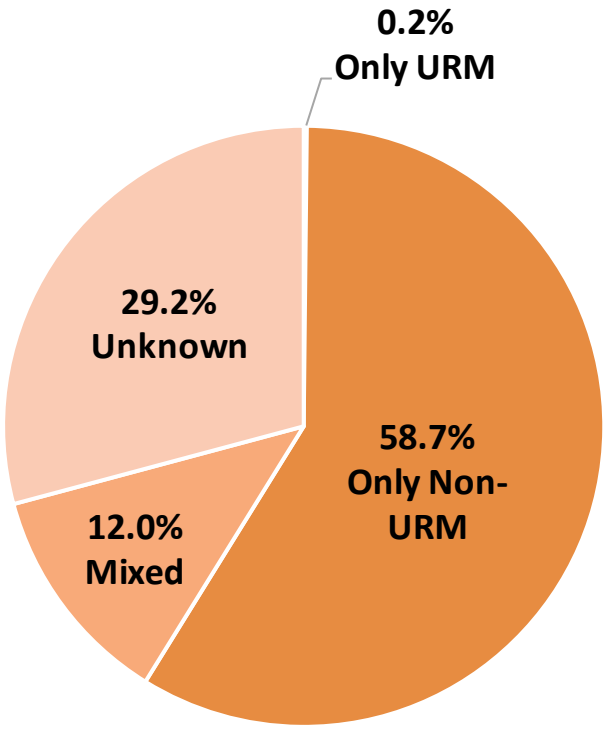
- Diversity among persons represented on multi-investigator project teams

46% of BRAIN Awards Have Multiple PIs



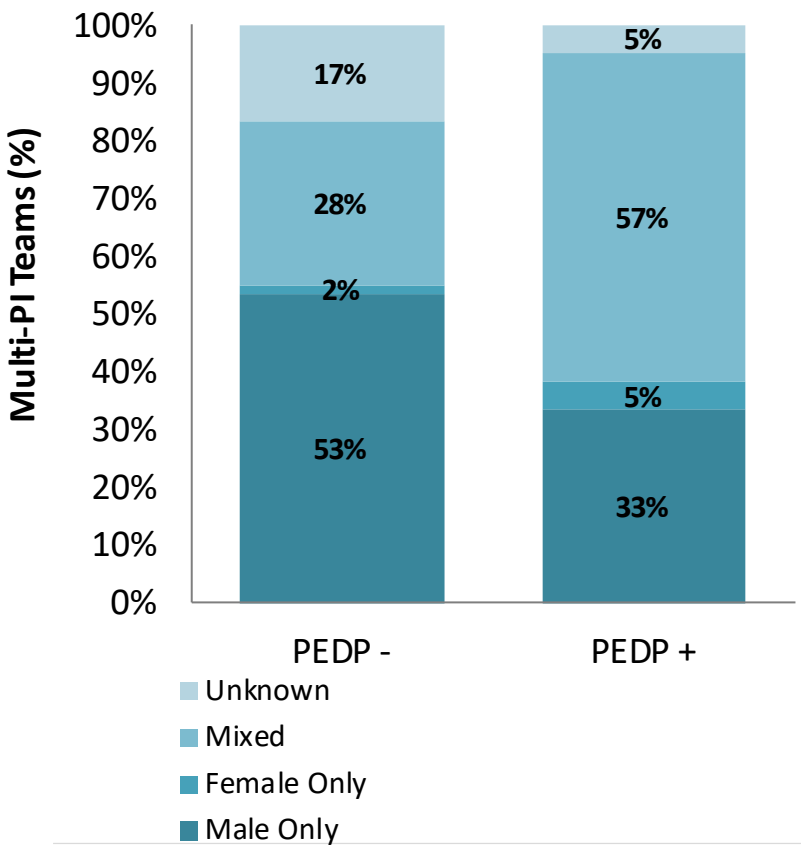
Most Multi-PI Teams are Male and Non-URM



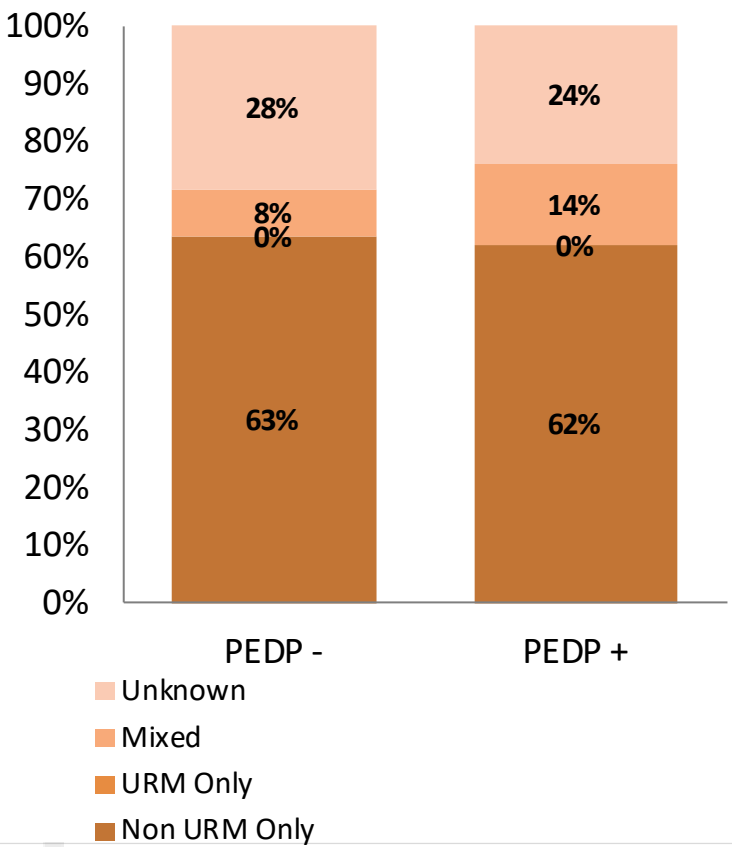


More Mixed Multi-PI Teams with PEDPs

Gender – MPI Composition



Race/ Ethnicity – MPI Composition



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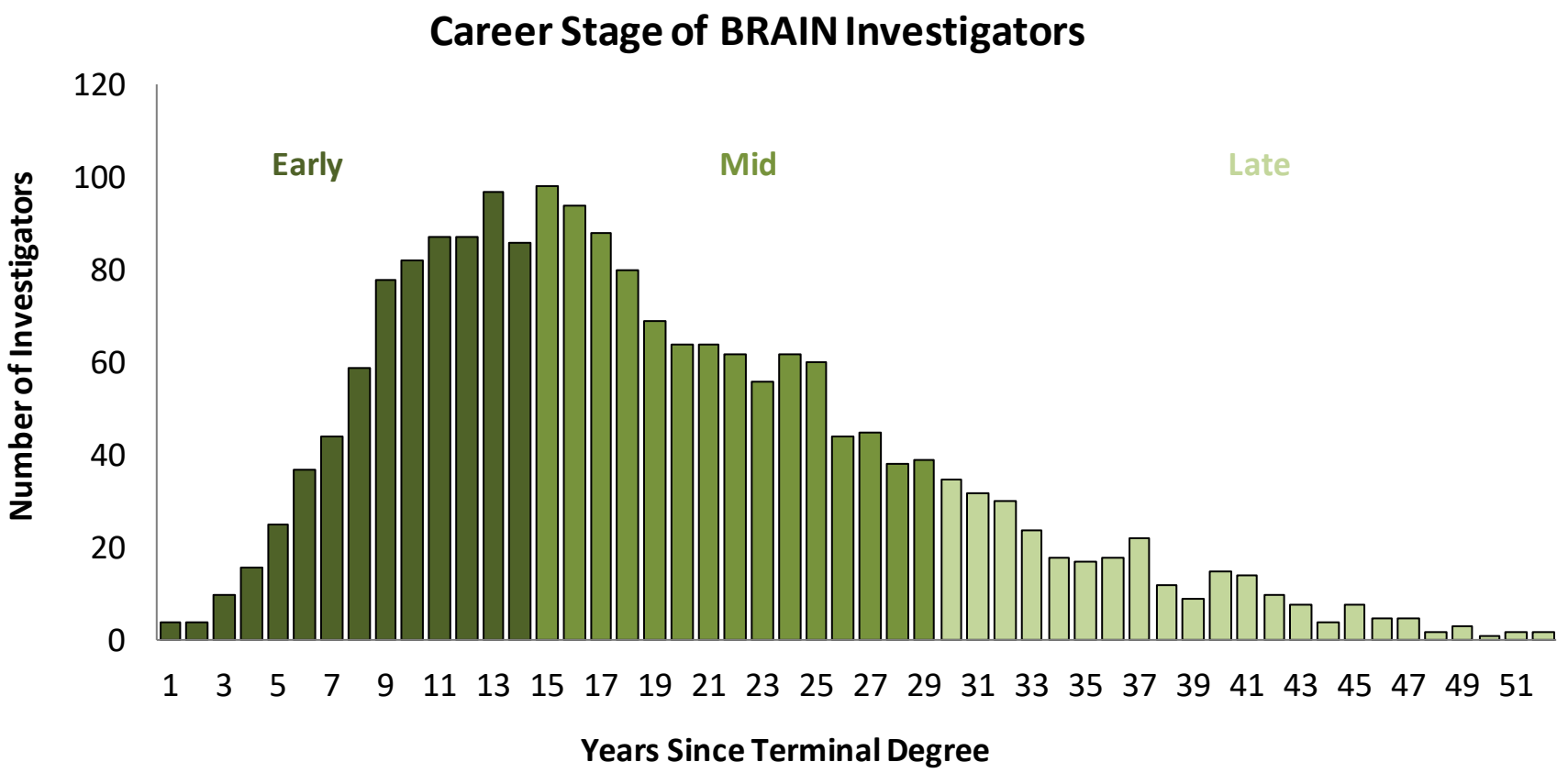
Career Stage of BRAIN Initiative Investigators



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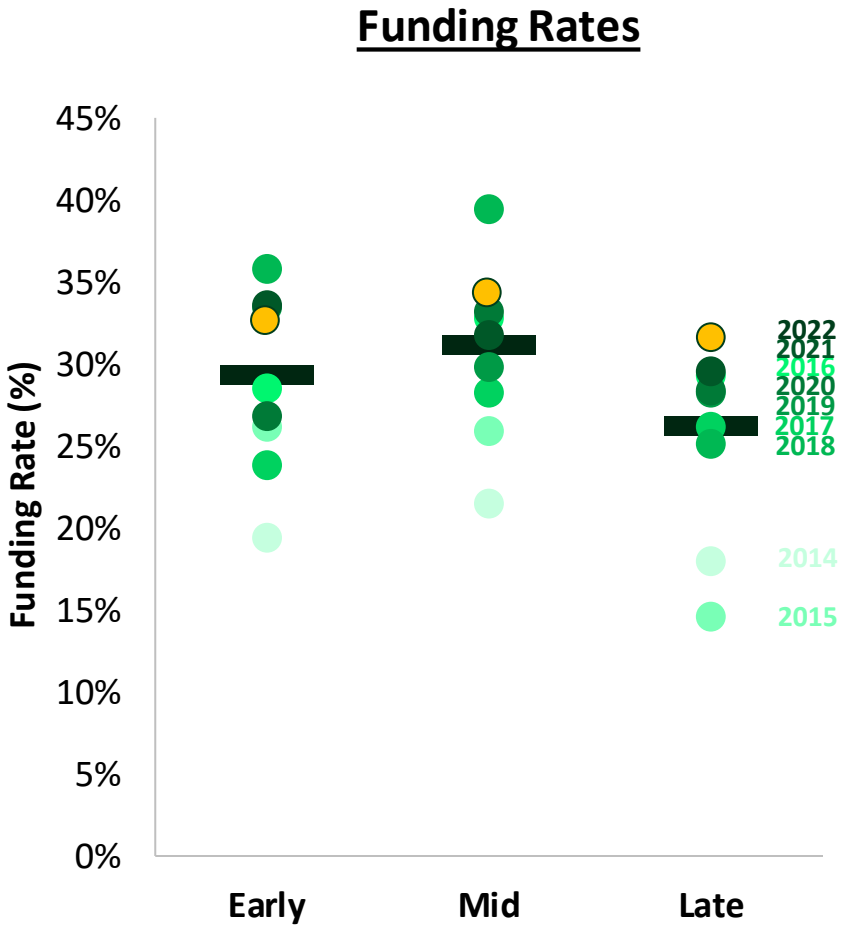

Early Career
- 0-14 years since terminal degree

Mid Career
- 15-29 years since terminal degree

Late Career
- 30+ years since terminal degree

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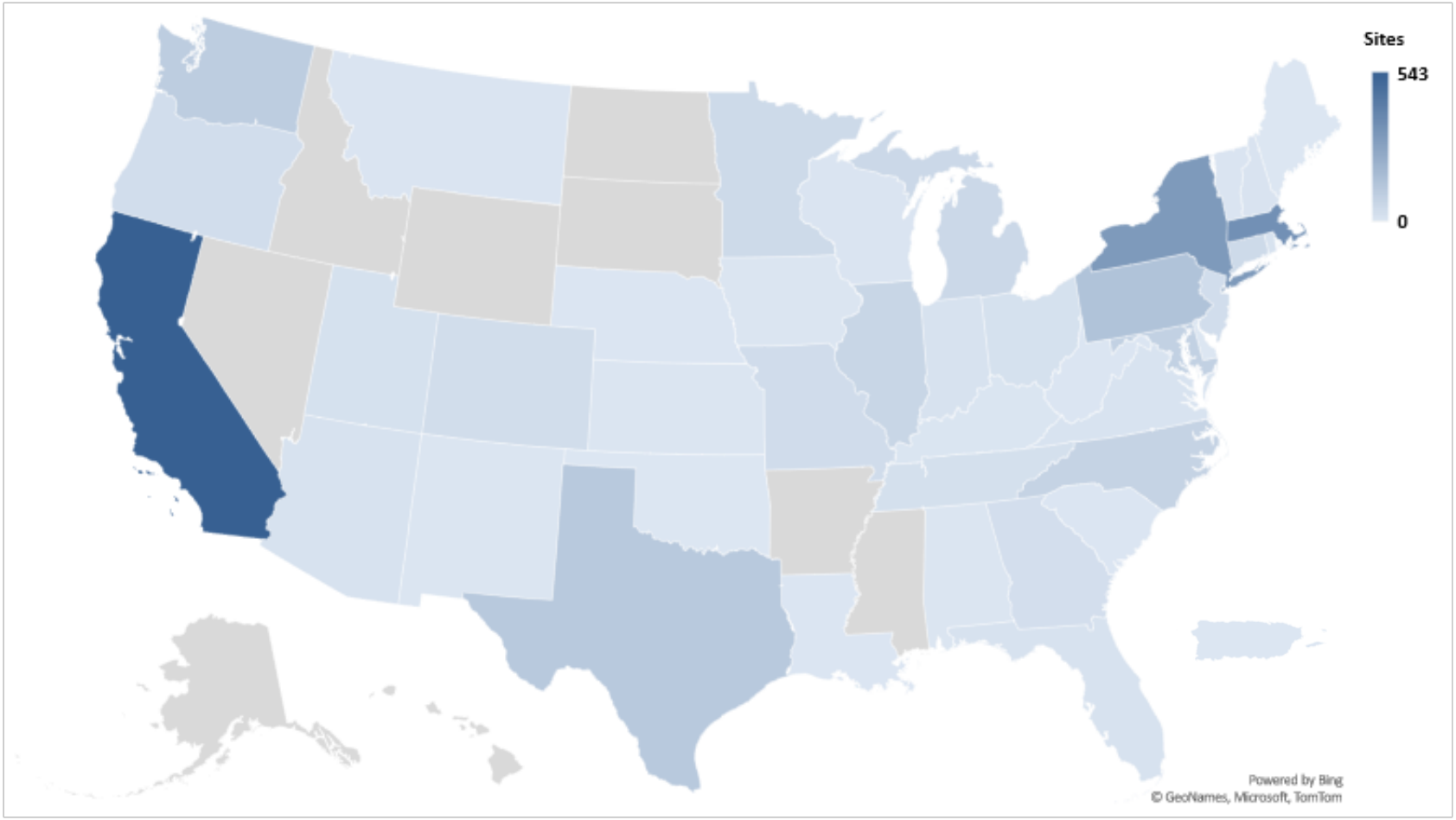
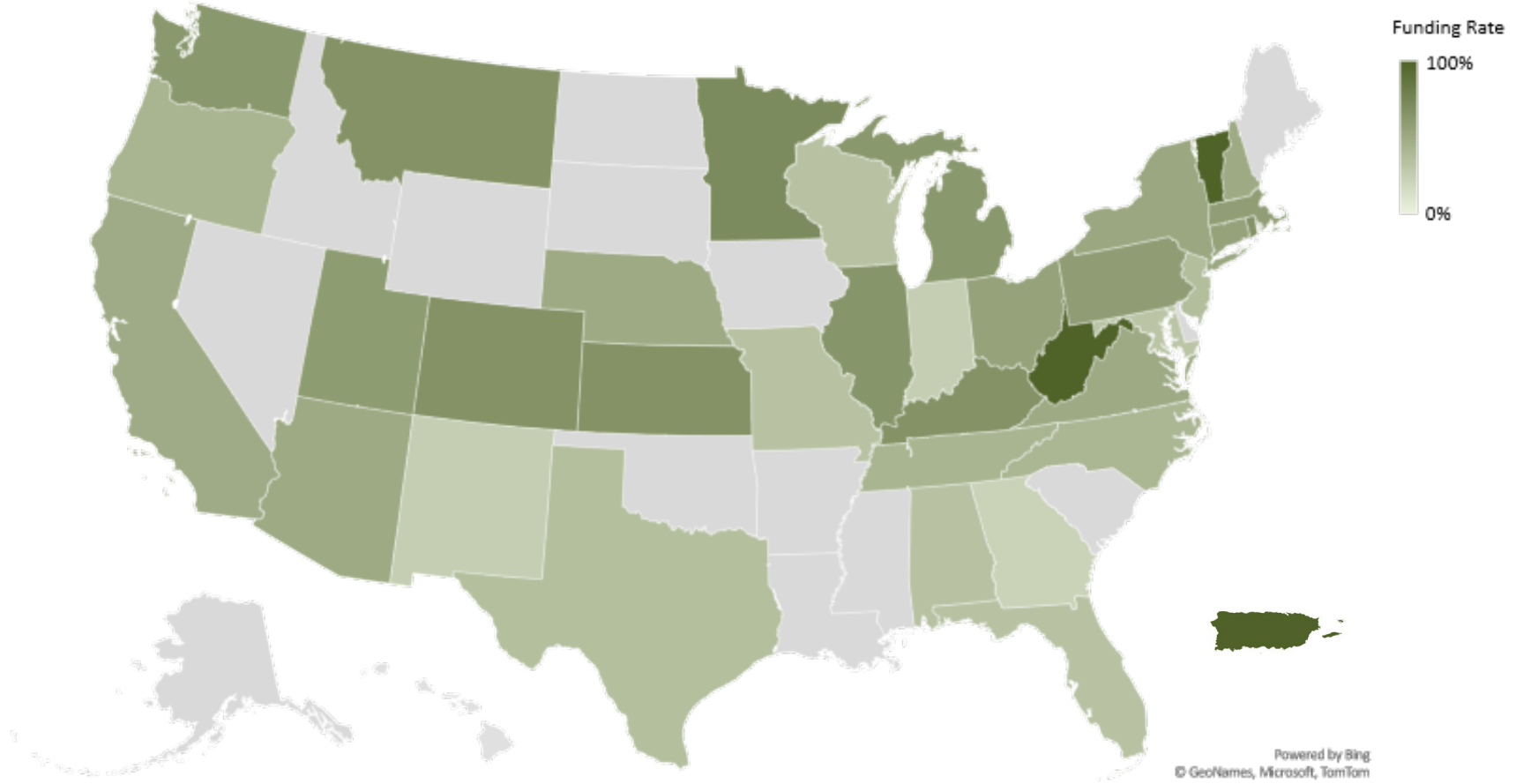
Geographic Distribution

Awarded BRAIN Initiative U.S. Performance Sites



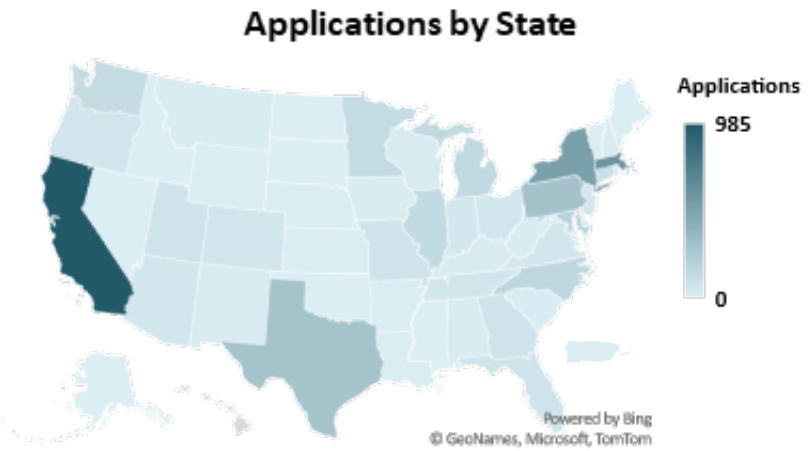
Geographic Distribution

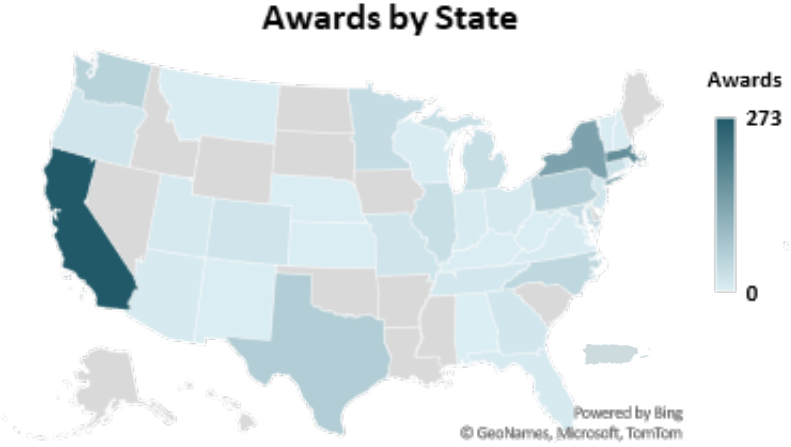
U.S. BRAIN Initiative Institutional Funding Rates by State

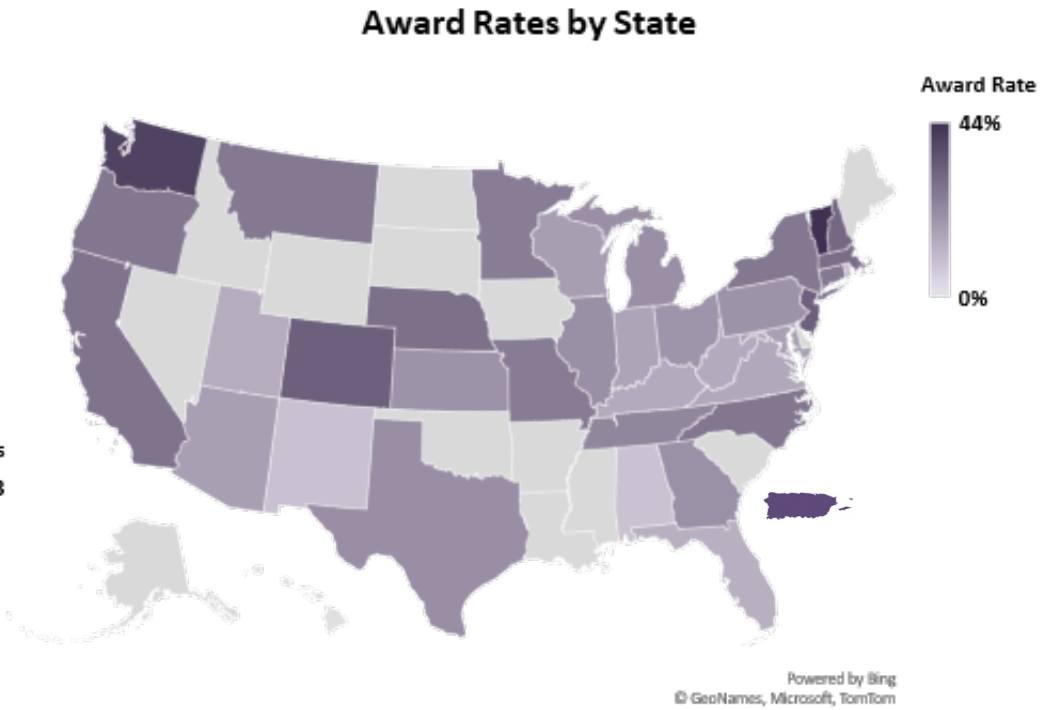


Geographic Distribution

U.S. BRAIN Initiative Award Rates by State





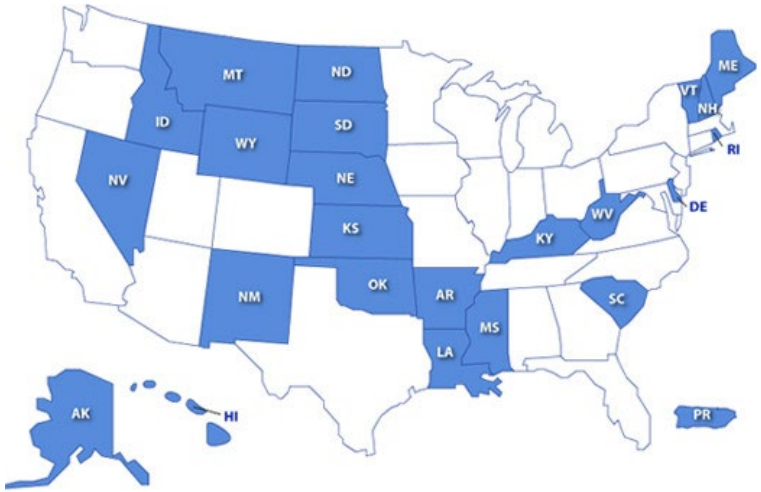


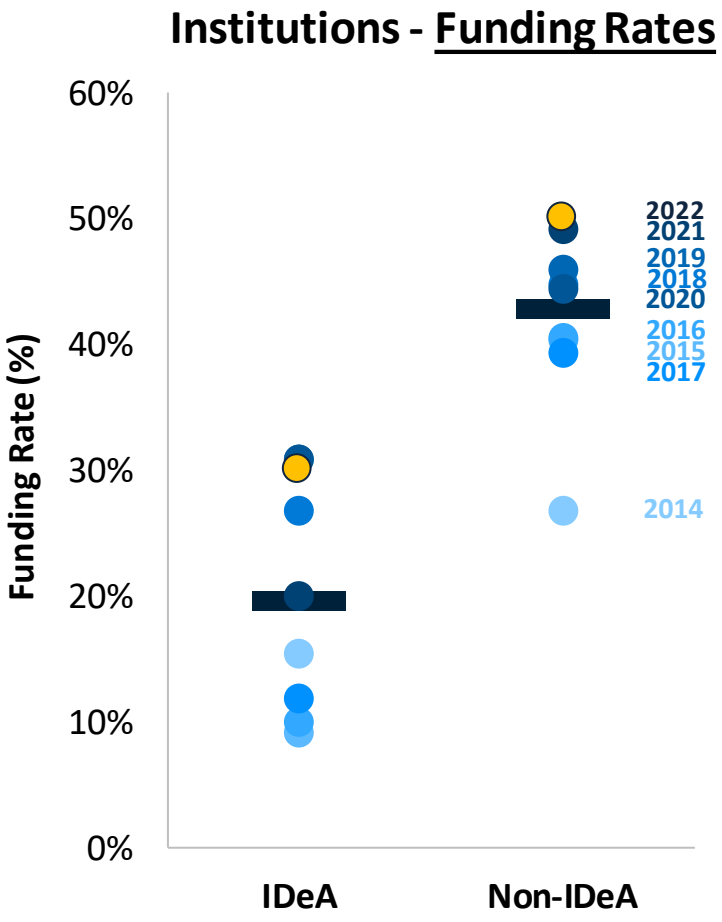
Geographic Distribution

BRAIN Initiative Institutions in U.S. IDeA States

IDeA States

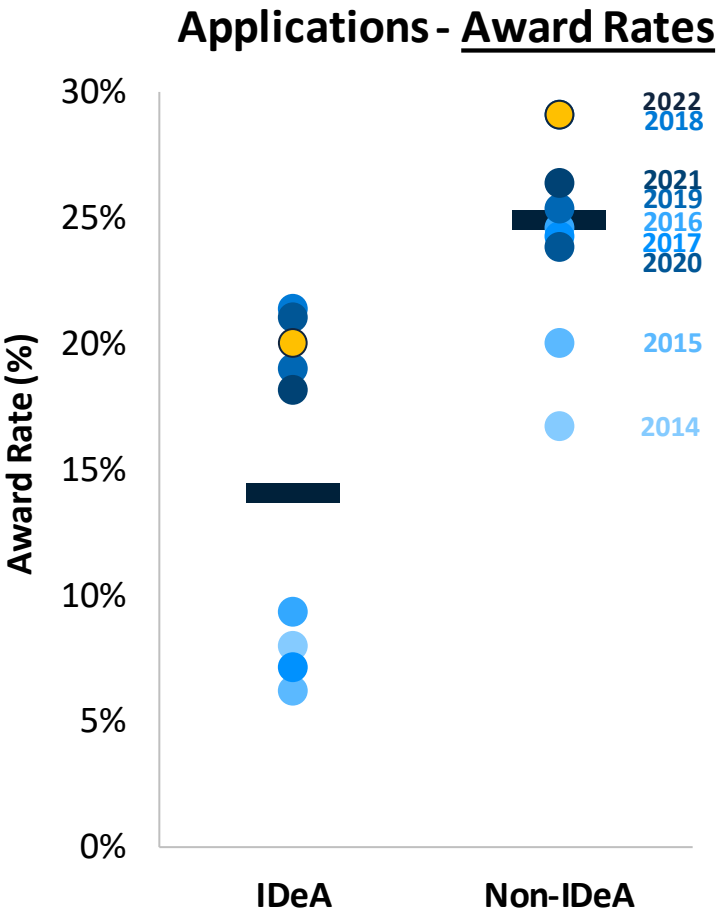
- States and territories that have historically received low levels of support from NIH

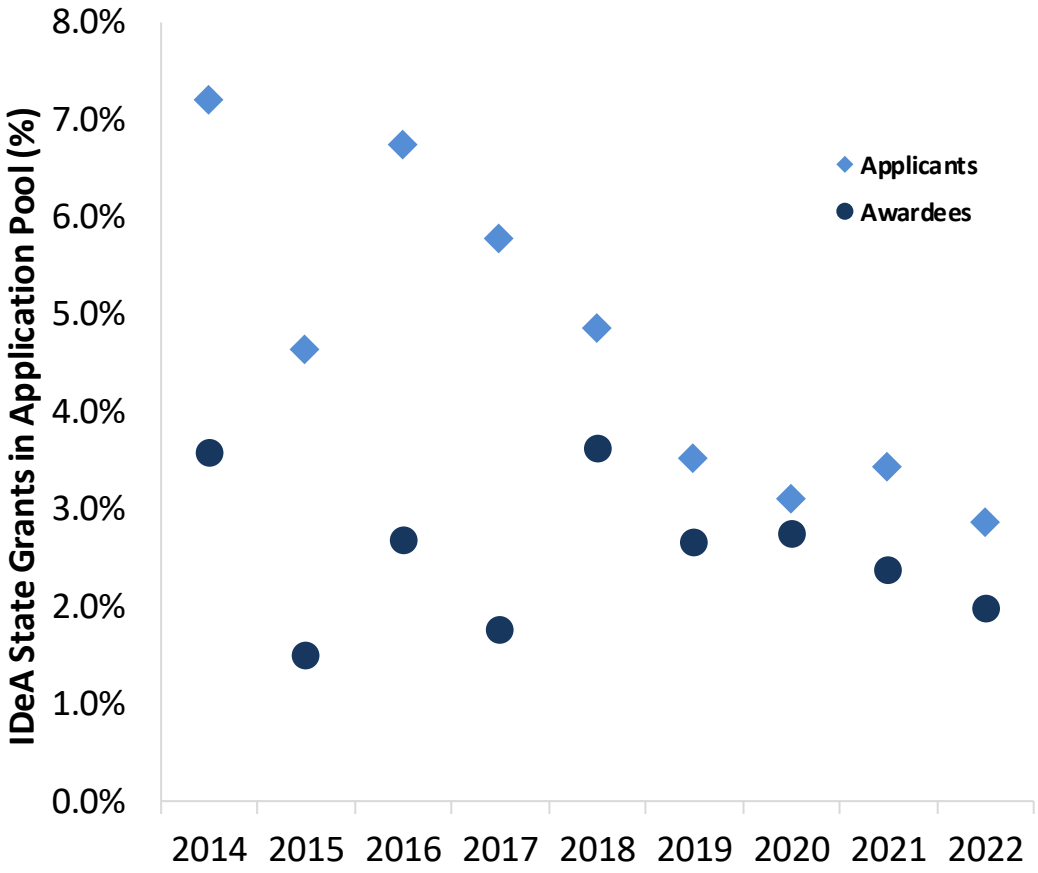




Geographic Distribution

BRAIN Initiative Applications from U.S. IDeA States





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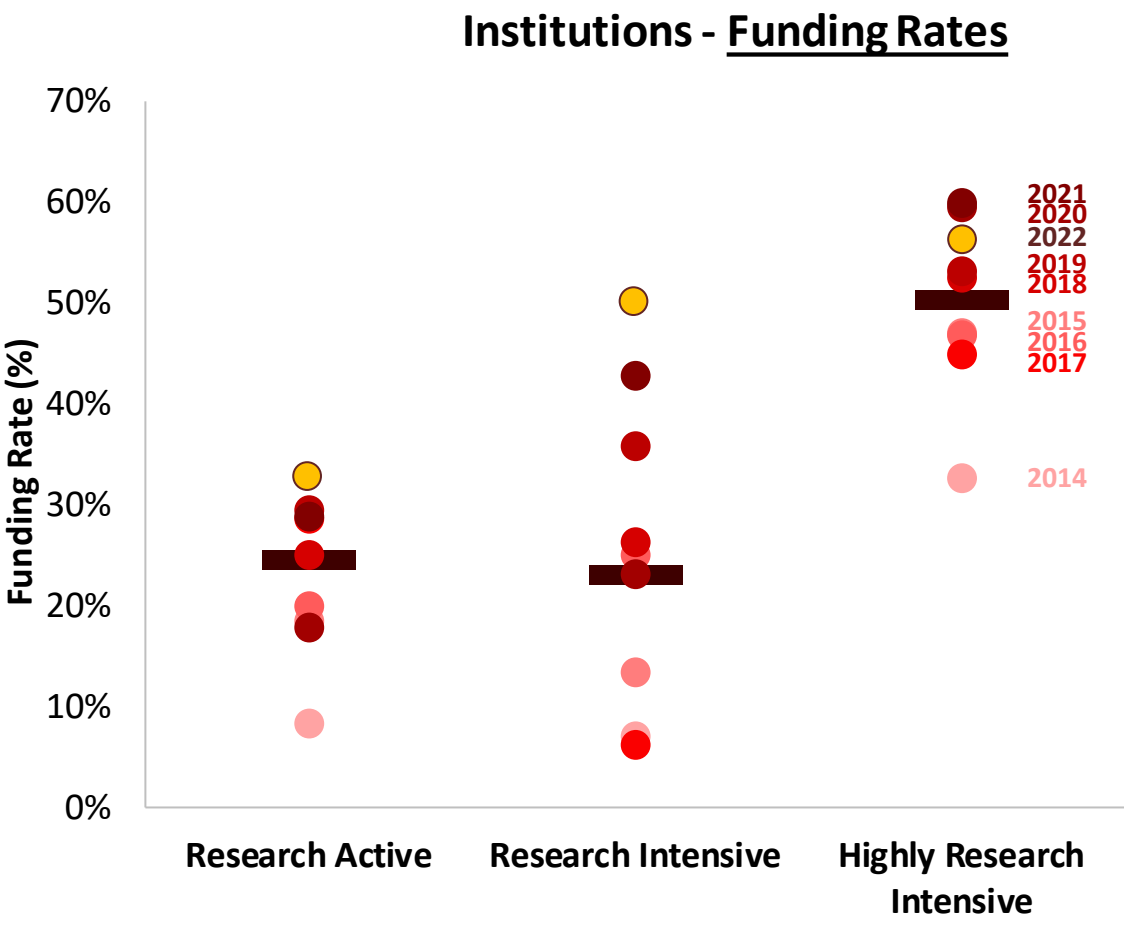
NIH Support of BRAIN Applicant Institutions



Research-Active
- < $7.5M/y NIH RPG funding

Research-Intensive
- $7.5-20M/y NIH RPG funding

Highly Research-Intensive
- > $20M/y NIH RPG funding

Institution "Type"

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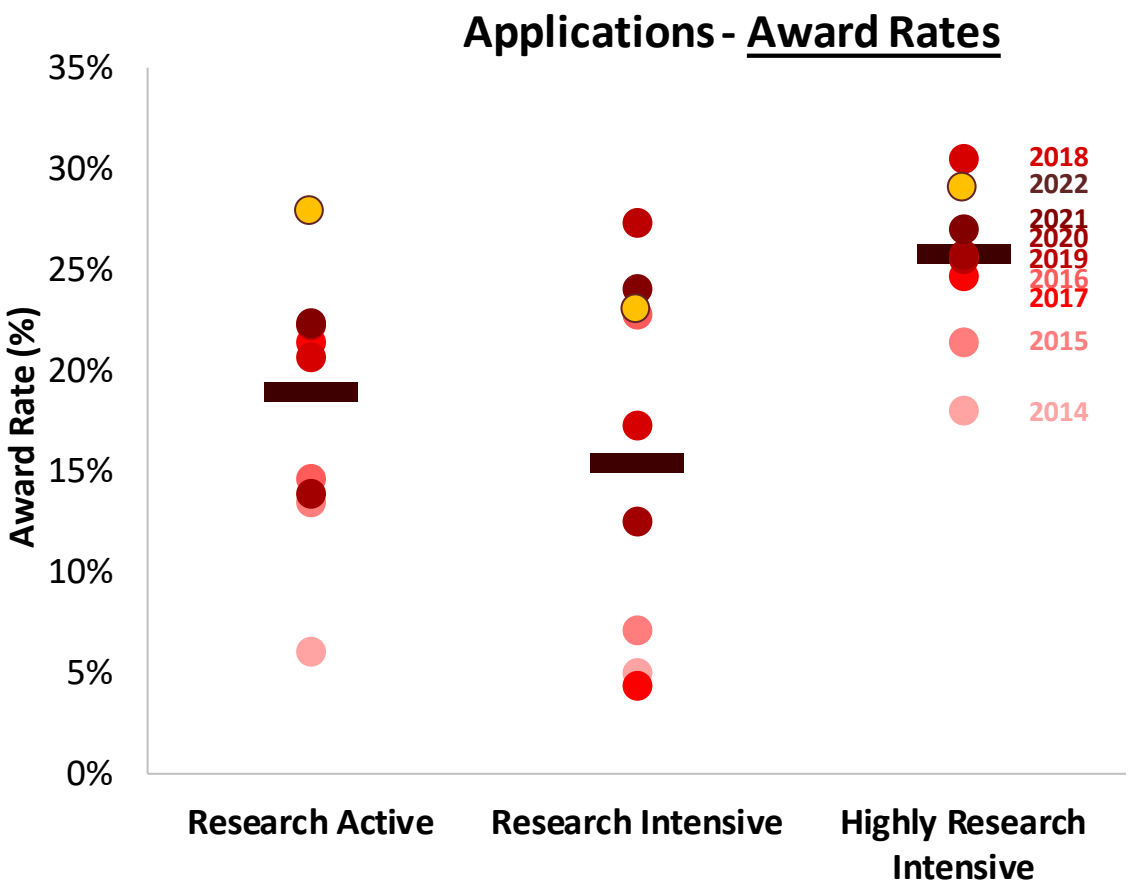

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Research-Intensive

- $7.5-20M/y NIH RPG funding

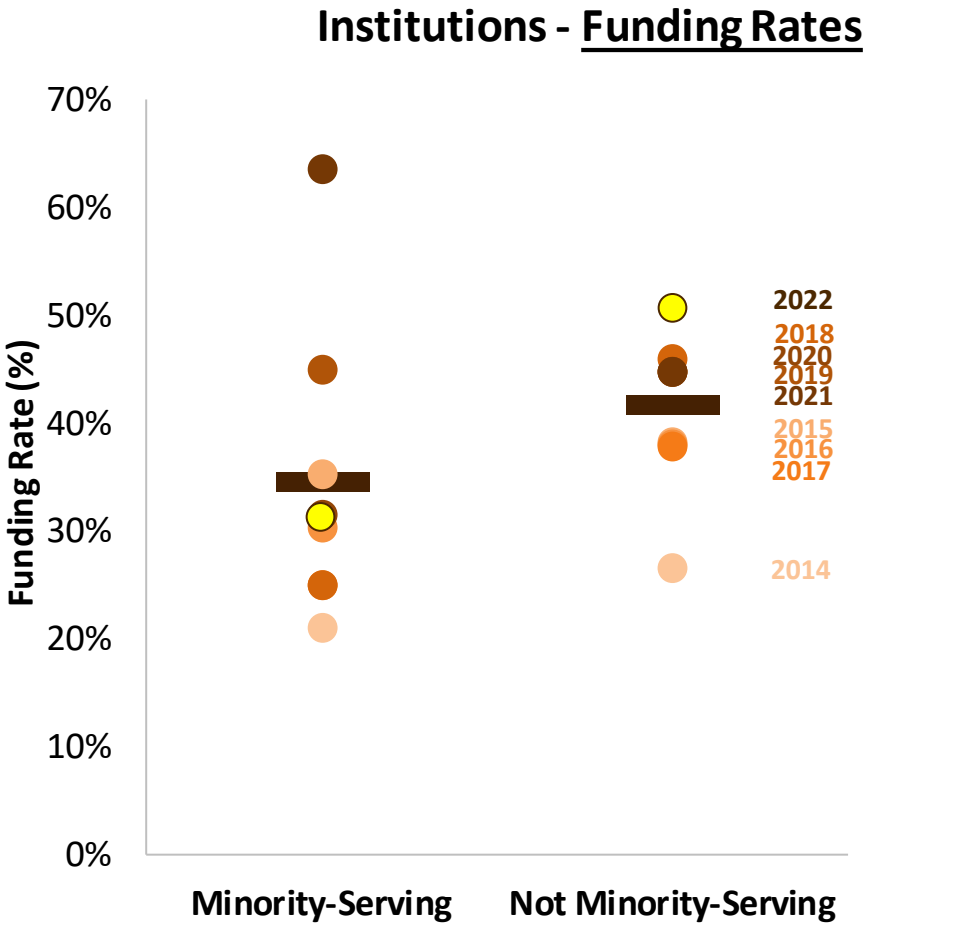
Highly Research-Intensive

- > $20M/y NIH RPG funding

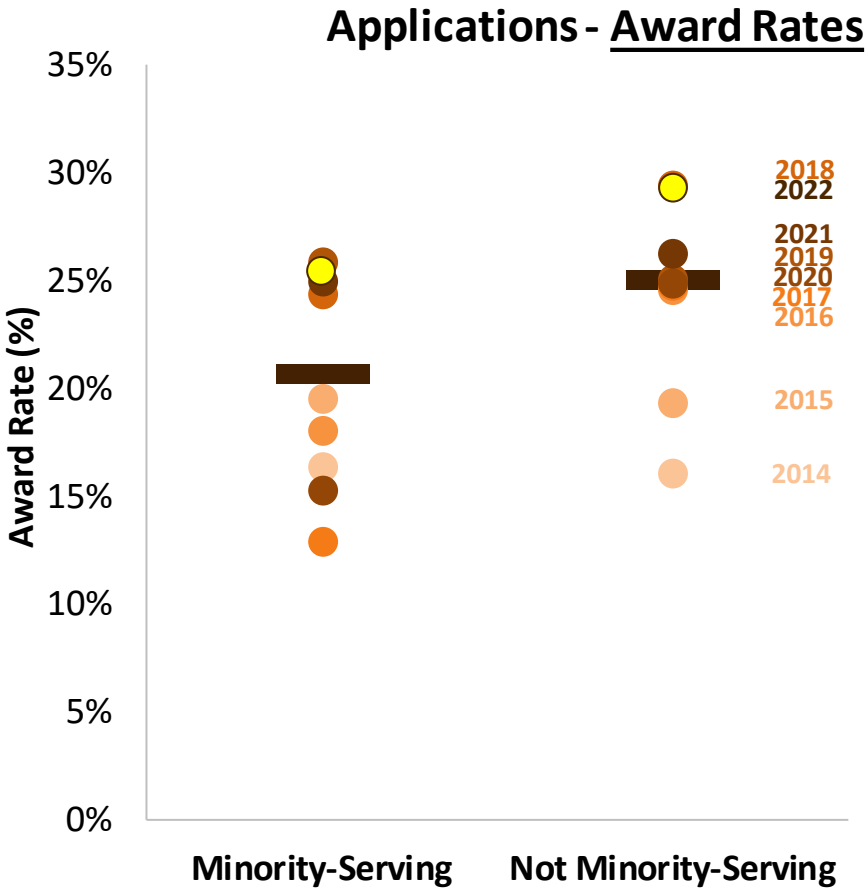
Minority Designation of BRAIN Initiative Institutions

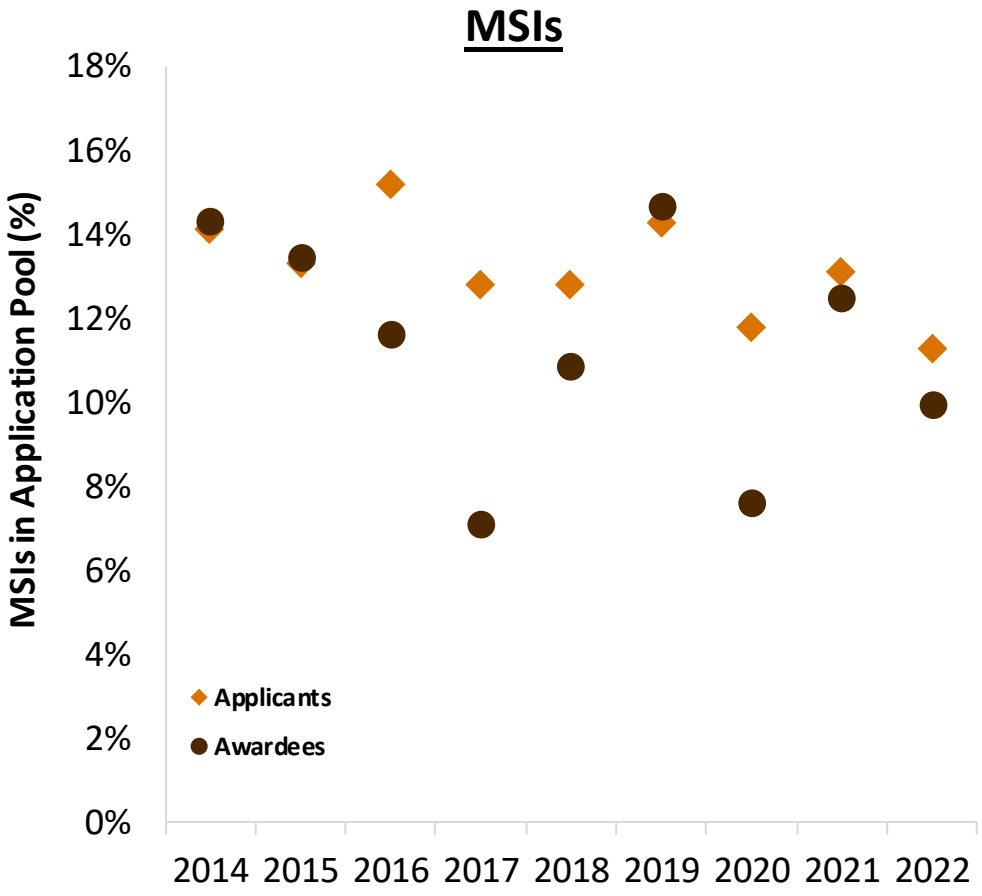
NIH-Designated Minority-Serving Institutions

- Predominantly Black Institutions
- Historically Black Colleges & Universities
- Tribal Colleges & Universities
- Hispanic Serving Institutions
- Asian American and Pacific Islander Serving Institutions
- American Indian and Alaska Native Serving Institutions

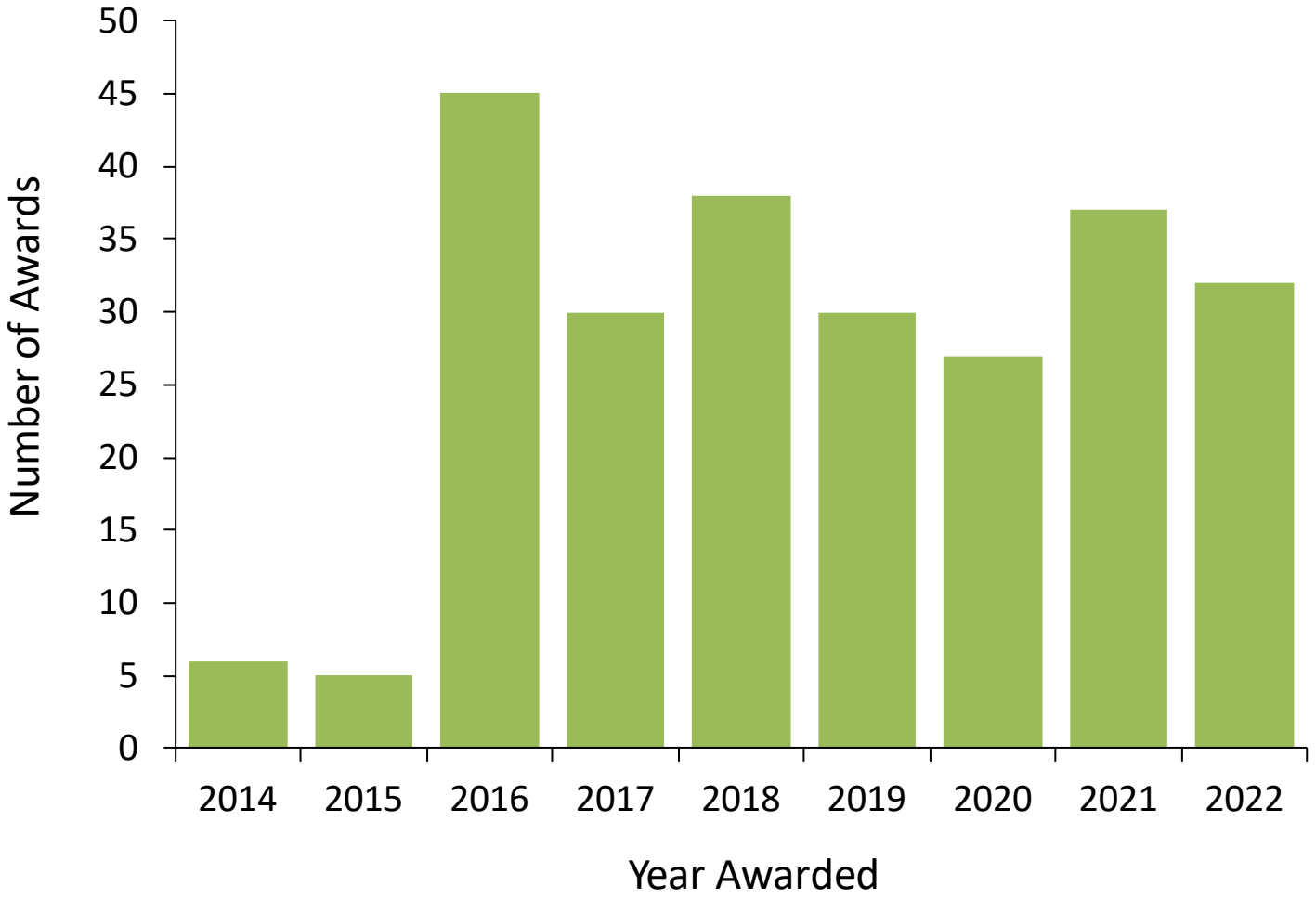


BRAIN Initiative Applications from Minority-Serving Institutions



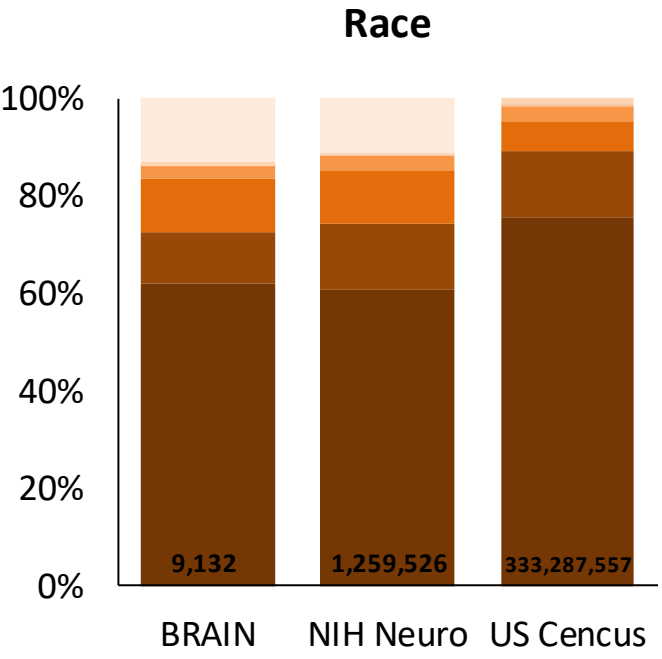


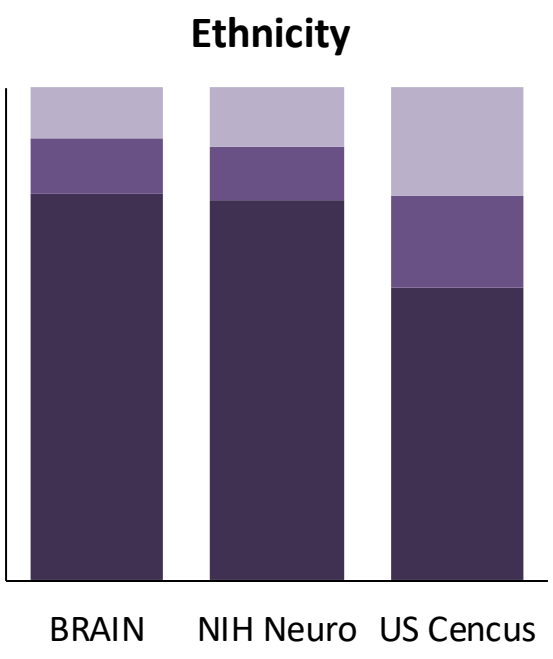
Human Research Participants: Number of BRAIN Awards by Year

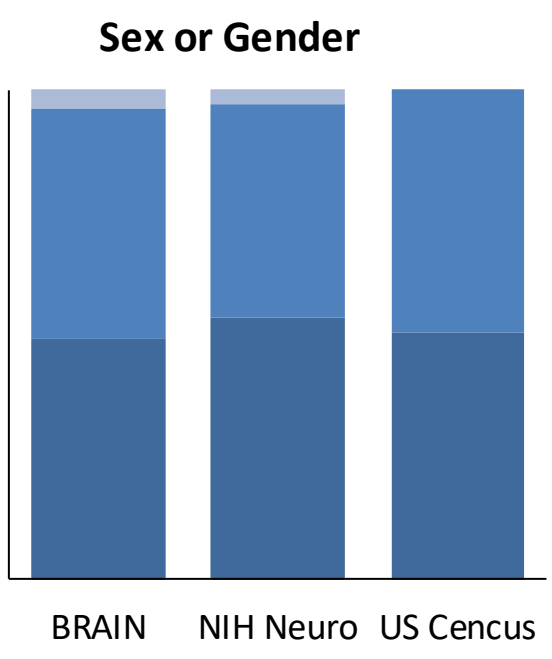


Human Research Participant Enrollment: FY 2022

The BRAIN Initiative®

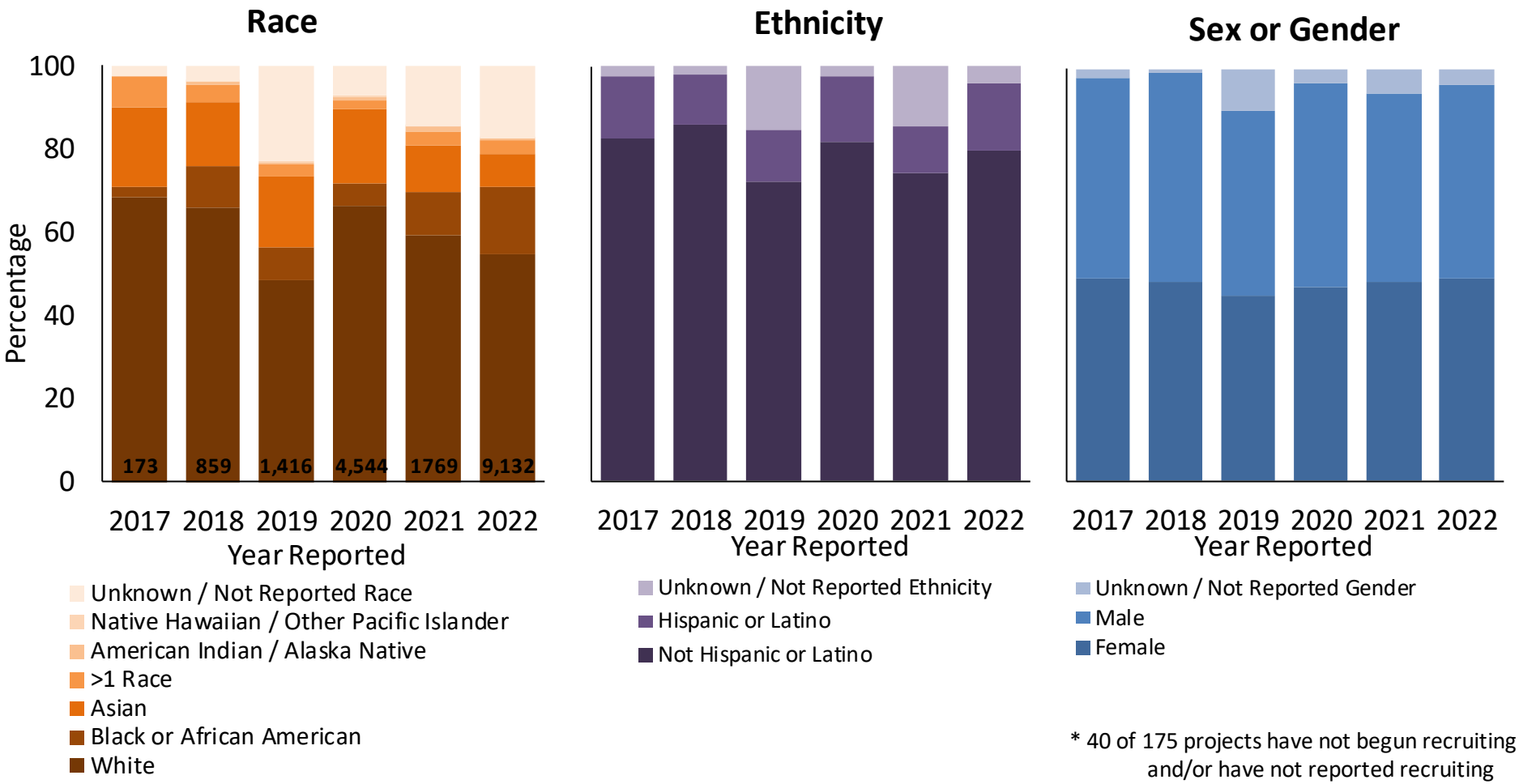






The BRAIN Initiative®

BRAIN Initiative Human Research Participant: Enrollment by year



* 40 of 175 projects have not begun recruiting and/or have not reported recruiting