

National Aeronautics and  
Space Administration



# 2024 NASA SCIENCE

The NASA Science Mission  
Directorate's ROSES 2021  
Research and Analysis  
Yearbook: An Online Resource  
for Programmatic and Self-  
Reported Demographic Data

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# What is the ROSES 2021 Research and Analysis Yearbook?

An annual report of statistics regarding the review process and awards made

An online, living resource: <https://science.nasa.gov/roses2021yearbook/>

Concentrates on ROSES 2021, with aggregated data from the previous five ROSES years provided as context

Updates will be added as new analyses are completed

- Effects of Dual Anonymous Peer Review (DAPR)
- Future Investigators in NASA Earth and Space Science and Technology (FINESST) Student PIs
- Reviewer demographics

# Initial Yearbook Contents (1)

SMD Directorate and Division level analyses

PI and science team demographics for submitted and selected proposals

- Demographic Survey Response Data
  - Gender
  - Race
  - Ethnicity
  - Disability Status
  - Career Stage from final degree year
  - Selection Rates by PI demographic categories
  - Intersectional Analyses (Directorate only)
  - ROSES 2021 science team composition

# Initial Yearbook Contents (2)

## Submitting Institutional Categorization

- Carnegie Classification of Research Activity
- Minority-Serving Institutions (MSIs)
- Institution Type (educational, non-profit, NASA center, etc.)

## Other

- Unique PI cohort
- New PI
- Time from proposal submission to award notification

## Selection Documents

# Suppression Guidelines for Self-Reported Demographic Data

Required suppression for public presentation of demographic survey data includes:

1. Percentages less than 1% (including null values) are shown as <1%, and all other percentages are rounded to the nearest full digit.
2. If there are 10 or less unique people in a cell, the result will be reported as either <11 or NR (Not Reportable).
3. Total selections and submissions by year cannot be reported. The total number of proposals submitted across all SMD Divisions for all years can be shown.
4. Selection rates (selections/submissions) are not computed when the total submissions (the denominator) for a particular group is less than 50; or number of unique people selected is 10 or less.

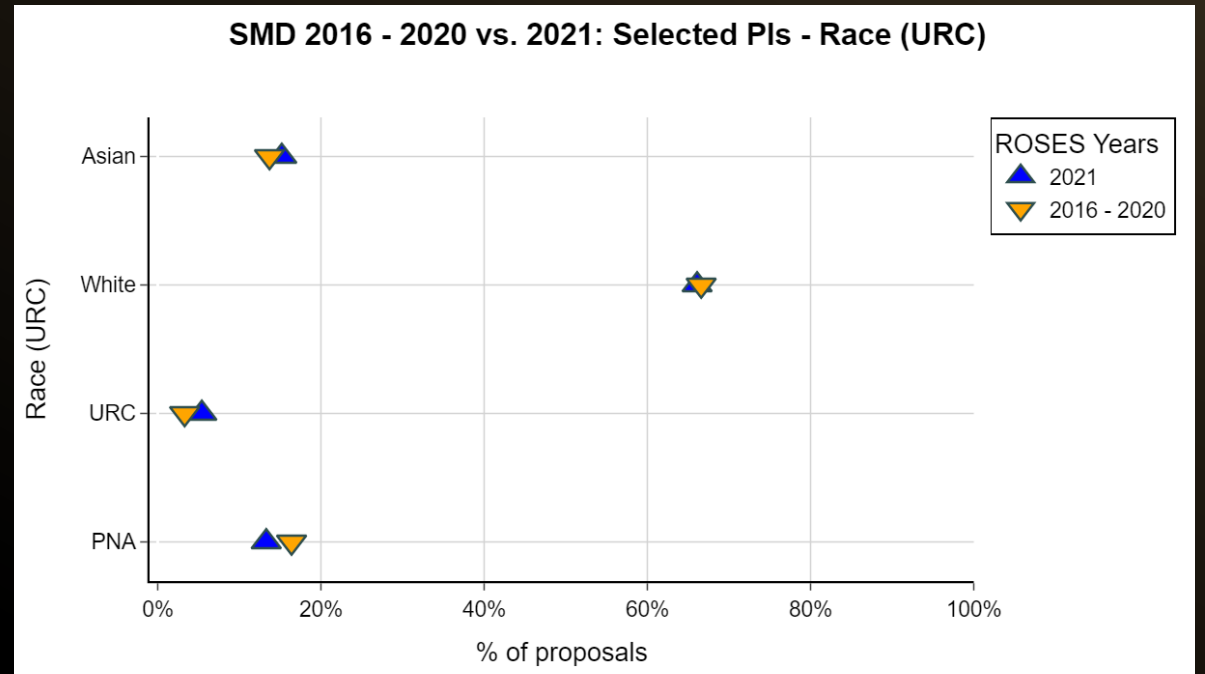
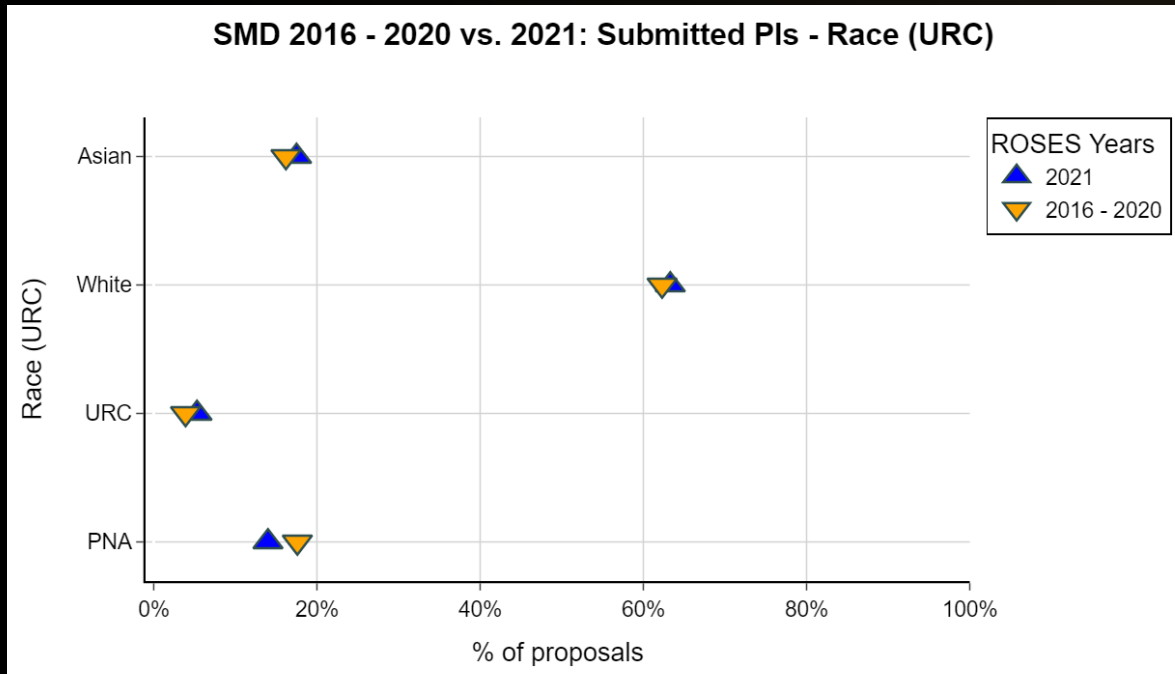
# Effects of the Suppression Guidelines on Yearbook Contents

The number of proposals for each Division and for each ROSES year cannot be shared

Some demographic survey response categories cannot be shared:

1. The non-binary gender response
2. Individual Disability responses are merged
  - a. Hearing Impairment
  - b. Visual Impairment
  - c. Mobility/Orthopedic Impairment
  - d. Other Impairment
3. Five race response categories are presented with suppression and separately as a merged category called Underrepresented community (URC)
  - a. American Indian or Alaskan Native
  - b. Black or African American
  - c. Native Hawaiian or Other Pacific Islander
  - d. Other
  - e. Multiracial: more than one race selected (includes White)

# SMD PI Race (URC): Yearbook Plots



Under-Represented Community (URC) includes American Indian & Alaska Native, Black, Native Hawaiian & Other Pacific Islander, Multiracial, and Other. | PNA: Prefer not to answer | ROSES 2016-2020 proposal data are aggregated.

# SMD PI Race (URC): Yearbook Tables

## SMD Submitted PIs – Race (URC)

Race (URC)	SMD 2016 - 2020	SMD 2021
Asian	16%	18%
White	62%	63%
URC	4%	5%
PNA	18%	14%

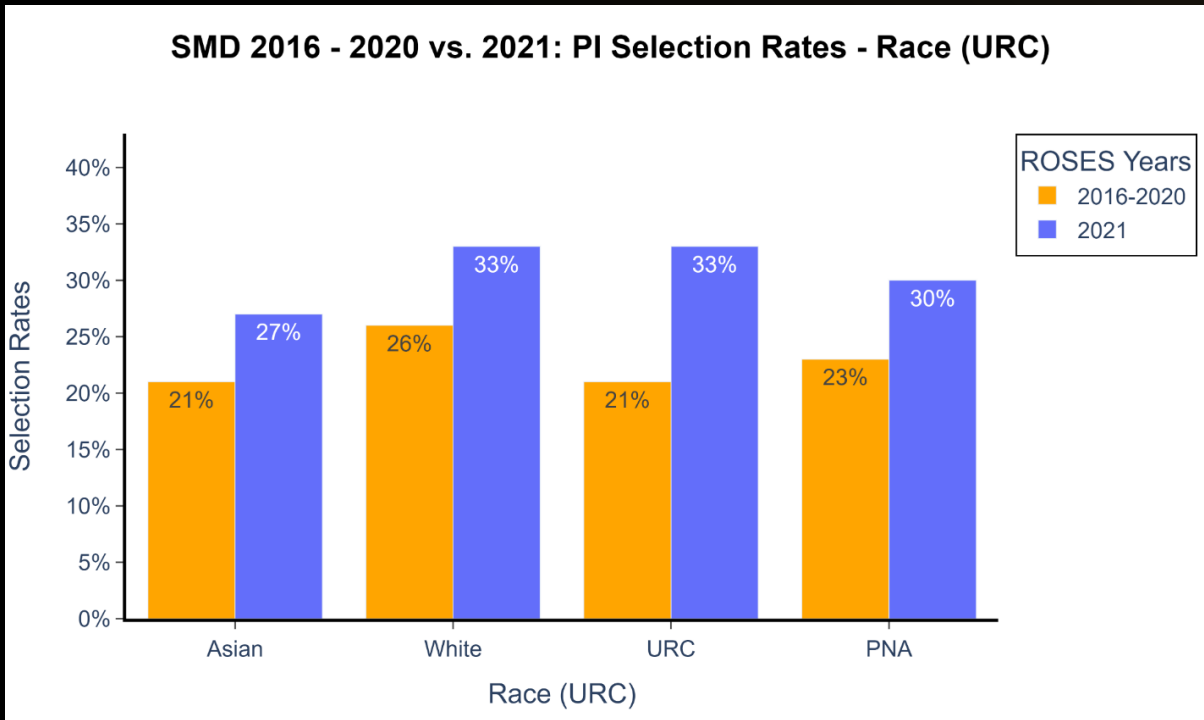
## SMD Selected PIs – Race (URC)

Race (URC)	SMD 2016 - 2020	SMD 2021
Asian	14%	15%
White	67%	66%
URC	3%	5%
PNA	16%	13%

Under-Represented Community (URC) includes American Indian & Alaska Native, Black, Native Hawaiian & Other Pacific Islander, Multiracial, and Other. | PNA: Prefer not to answer | ROSES 2016-2020 proposal data are aggregated.



# SMD PI Race (URC): Yearbook Selection Rate



**SMD PI Selection Rate – Race (URC)**

Race (URC)	SMD 2016-2020	SMD 2016-2020 Response/All Races (URC)	SMD 2021	SMD 2021 Response/All Races (URC)
Asian	21%	0.84	27%	0.84
White	26%	1.04	33%	1.03
URC	21%	0.84	33%	1.03
PNA	23%	0.92	30%	0.94
All Races (URC)	25%	1	32%	1

Selection Rate = # of selected proposals with PIs from a demographic response group / # of submitted proposals with PIs from the same demographic response group

Under-Represented Community (URC) includes American Indian & Alaska Native, Black, Native Hawaiian & Other Pacific Islander, Multiracial, and Other. | NR: Not Reportable | PNA: Prefer not to answer | ROSES 2016-2020 proposal data are aggregated.

# SMD PI Race and Gender: Yearbook Tables

## SMD Submitted PIs: Race (URC) & Gender

Dropped N (2016 - 2021): 21%

Race (URC)	2016-2020		2021	
	Female	Male	Female	Male
Asian	24%	76%	27%	73%
White	26%	74%	28%	72%
URC	35%	65%	38%	62%

## SMD Selected PIs: Race (URC) & Gender

Dropped N (2016 - 2021): 19%

Race (URC)	2016-2020		2021	
	Female	Male	Female	Male
Asian	28%	72%	31%	69%
White	27%	73%	28%	72%
URC	36%	64%	43%	57%

Dropped N includes Prefer Not to Answer (PNA) race and gender responses, and Non M/F gender responses. | Under-Represented Community (URC) includes American Indian & Alaska Native, Black, Native Hawaiian & Other Pacific Islander, Multiracial, and Other. | ROSES 2016-2020 proposal data are aggregated.

We would like your feedback on this session: Please email [Malayna.Nesbitt@nasa.gov](mailto:Malayna.Nesbitt@nasa.gov) with any comments you have or follow the QR code below



Thank you!

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<https://science.nasa.gov/roses2021yearbook/>

