Update on HRHR Outreach and Anonymized Review Pilot

May 20, 2021





NIH National Institutes of Health Office of Strategic Coordination - The Common Fund





- A Working Group to the Advisory Committee to the Director was tasked with evaluating the HRHR program.
- The Working Group found that the HRHR program is effective, but that the applicant pool does not reflect the full diversity of the workforce.
- The Working Group provided recommendations to improve applicant diversity, including **enhancing outreach** and **piloting anonymized review** the two topics of this presentation.



Began in 2019, planned 2020 efforts largely derailed due to COVID-19

- Annual Biomedical Research Conference for Minority Students (ABRCMS)
- Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)
- Harold Amos Medical Faculty Development Program
- Network of Minority Health Research Investigators (NMRI) Meeting
- AAMC Minority Faculty Program
- Meeting of the American Psychological Society
- OBSSR dissemination
- NIH IDeA Regional Conferences / National Conference
- Targeted emails to F32 & T32 PIs, officials at MSI and IDeA state institutions
- NIH Regional Seminars
- "Open Mike" blog

Expanding Outreach



- 2019 efforts did not result in a significant increase in applicant demographics in 2020 applicant pool
- Pandemic disrupted 2020 efforts
- Will continue to reach out to the community and monitor demographics over time
- Additional outreach suggestions welcome

Anonymized review pilot



- To help address the issue of perceived bias, implementing the recommendation of piloting anonymized review
- Pilot being performed with the Transformative Research Award initiative
- Unlike the other HRHR initiatives, which are person-focused, the TRA initiative is more project-focused lends itself to anonymization
- By statute, all standard review criteria, including Investigator and Environment, must be considered, so cannot maintain anonymity for entire review
- Working closely with CSR

TRA Anonymized Review Pilot



- Applicants were instructed in the FOAs on how to anonymize the Specific Aims pages and Research Strategy Sections.
- All other application components were prepared as before.
- Adapted the pre-existing three-phase review process for TRA applications.
- Editorial Board 25 scientists with diverse scientific backgrounds who were asked to rely on their broad scientific perspective rather than their topic expertise in assessing applications.
- Technical Reviewers 244 reviewers selected for having topic expertise in the application(s) they reviewed.

TRA anonymized review process



Process evaluation of anonymized review



- Contracted with the Science and Technology Policy Institute (STPI) to conduct a process evaluation of the anonymized review
- STPI has been evaluating the process as close to "real time" as possible
- Salient preliminary findings are presented (through Phase II)
- Will continue pilot for two more years, will monitor relevant data all three years



60% response rate

Did knowing an anonymized review process would be used have an impact on your decision to apply?

Of the respondents, **25% said Yes.** Reasons include: supports funding the project not people; may be less biased regarding institution prestige and applicant demographics; avoids "rich getting richer" phenomenon.

Were the instructions in the FOA adequate for anonymizing the application?

Of the respondents, **82% said Yes**. Suggestions to improve include providing additional examples.

From Editorial Board survey for Phase I



44% response rate

Was anonymity maintained?

Yes, 0% of the respondents indicated they were able to identify and participating individual or institution.

Was the information provided in the anonymized Specific Aims page sufficient to address transformative potential?

Somewhat, 42% said they could not assess *some* applications because they had access only to the Specific Aims page.

Yes, 92% said they were "somewhat" or "very confident" about their assessments.





67% response rate

Was anonymity maintained?

Mostly yes, 81% of the respondents stated they could not identify individual or institution. Of those that felt they could, based on specialized research topic, methodologies, or internet search. Correctness of guesses not confirmed.

Were the anonymized Specific Aims page and Research Strategy sufficient to assess transformative potential?

Mostly yes, 83% said they could assess significance and innovation and whether approach was logical and compelling.

64% said they were able to assess feasibility. (For TRAs, no preliminary data or detailed experimental plan are required.)

Applicant diversity



Comparison of 2021 applicants to 2010 – 2020 TRA years

• Demographic diversity increased in FY2021 compared to previous years

Gender: statistically significant lower proportion of male applicants

Race: statistically significant higher proportion of Black/African American applicants

Ethnicity: statistically higher proportion of Hispanic/Latino applicants

- Institutional diversity did not increase as measured by the number of "new" applicant institutions. (However, the representation of IDeA state institutions and underserved institutions did increase.)
- Overall, the trend is encouraging

Acknowledgements



CSR colleagues:

Jim Li (SRO for the TRAs) Ray Jacobson Hope Cummings

Science and Technology Policy Institute evaluation team:

Sally Tinkle (lead) Xueying (Shirley) Han Luke Newell Emma Thrift

Common Fund HRHR Working Group/TRA Project Team

Internal NIH team for evaluating responsiveness to anonymization instructions

Arguello, Alexander (NIMH)	Freund, Michelle (NIDA)	Nuckolls, Glen (NINDS)
Bambrick, Linda (NINDS)	Gnadt, Jim (NINDS)	Panchision, David (NIMH)
Basavappa, Ravi (OD)*	Greenwel, Patricia (NIDDK)	Parisi, Melissa (NICHD)
Bautista, Abraham (NIAAA)*	Greenwell, Tom (NEI)	Pittenger, Steven (NCATS)*
Beckel-Mitchener, Andrea (NIMH)	Guo, Max (NIA)	Ranganathan, Srikanth (CSR)
Bender, Michael (NIGMS)	Jiang, Chao (NIAID)	Reddy, Michael (NIGMS)
Blondel, Olivier (NIDDK)	Johnson, David R. (NIAID)	Shekim, Lana (NIDCD)
Brown, Liliana (NIAID)	Kim, Hye-Sook (NCCIH)	Shum, Lillian (NIDCR)*
Buxton, Denis (NHLBI)	Kirilusha, Anthony (NIAMS)*	Sieber, Beth-Anne (NINDS)
Chen, Wen (NCCIH)	Kohanski, Ronald (NIA)	Silva, Corinne (NIDDK)
Cibotti, Ricardo (NIAMS)	Koshy, Rajen (NIAID)	Singleton, Kentner (NIAID)
Collins, Jennifer (NIEHS)*	Kuo, Lillian (NCI)	Sopko, George (NHLBI)
Croxton, Thomas (NHLBI)	Lapham, Cheryl (NIAID)	Tandon, Pushpa (NCI)
Daschner, Phil (NCI)	Ma, Kan (NIAMS)	Tseng, Hung (NIAMS)
Edwards, Emmeline (NCCIH)*	Miller, Brett (NICHD)*	Tyson, Fred (NIEHS)
Fabian, Miles (NIGMS)	Miller, Daniel (NINDS)*	Webb, Stephanie (NHLBI)*
Ferguson, Stacy (NIAID)	Mo, Annie (NIAID)	Yao, Yong (NIMH)
		Zou, Sige (OD)

(* indicates Common Fund HRHR WG member)

Panchision, David (NIMH)
Parisi, Melissa (NICHD)
Pittenger, Steven (NCATS)*
Ranganathan, Srikanth (CSR)*
Reddy, Michael (NIGMS)
Shekim, Lana (NIDCD)
Shum, Lillian (NIDCR)*
Sieber, Beth-Anne (NINDS)
Silva, Corinne (NIDDK)
Singleton, Kentner (NIAID)
Sopko, George (NHLBI)
Tandon, Pushpa (NCI)
Tseng, Hung (NIAMS)
Tyson, Fred (NIEHS)
Webb, Stephanie (NHLBI)*
Yao, Yong (NIMH)





- We will continue our outreach efforts and monitor impact
- TRA anonymized review process seems to be working reasonably well we will refine FOA instructions, but no major changes anticipated
- STPI expects to complete process evaluation in August (We will post online)
- We plan to continue pilot for two more years and then assess
- We will keep you updated



Questions, comments, or suggestions?