Investments in Biomedical Research and Training by Health Research Alliance Member Organizations

2010 TO 2019 GRANTMAKING REPORT

This report highlights Health Research Alliance contributions to health-related research, training and career development, and diversity, equity, and inclusion.

The Health Research Alliance
An alliance of nonprofit funders whose membership grew from 51 members in 2010 to 84 in 2019 to over 100 in 2022

Awards distributed, 2010 to 2019
HRA members awarded $12 Billion for biomedical research to improve human health

median award size $154,000 per year
median duration 23 months

Sector context
Funding distributed by the nonprofit sector in 2018

37% of all funding in 2018 distributed by HRA members

All funders, combined

In this report
Who We Fund
Awardee demographics: gender and race/ethnicity

What We Fund
Award purpose and research topics

Our Future
HRA actions on inequities and career development

Visit www.healthra.org to learn more about how HRA is maximizing the impact of biomedical research funding.
Who We Fund: Awardee Demographics

Representation of women

HRA recognizes the importance of expanding gender classification as gender terms evolve. However, due to the small number of non-binary respondents (2, or 0.007% of total respondents), the data depicted here is female/male only.

Gender representation varies across RESEARCH TOPICS

Gender ratio of the award recipients in each Broad Research Area, based on all awards from 2010 to 2019.

<table>
<thead>
<tr>
<th>Research Area</th>
<th>Basic Science</th>
<th>Clinical Medicine and Science</th>
<th>Health Services Research</th>
<th>Public Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woman (%)</td>
<td>39%</td>
<td>43%</td>
<td>70%</td>
<td>70%</td>
</tr>
<tr>
<td>Man (%)</td>
<td>61%</td>
<td>57%</td>
<td>30%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Racial/ethnic representation

Underrepresented groups (URG) in this case refers to racial and ethnic groups underrepresented in science.

MORE PROGRESS NEEDED to address inequality in representation of racial and ethnic groups

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-URG</th>
<th>U.S. population 2</th>
<th>HRA-funded</th>
<th>NIH-funded</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>92.9%</td>
<td>13.4%</td>
<td>1.7%</td>
<td>2.6%</td>
</tr>
<tr>
<td>2019</td>
<td>90.4%</td>
<td>86.6%</td>
<td>98.3%</td>
<td>97.4%</td>
</tr>
</tbody>
</table>

1. “Broad Research Areas” is a categorization scheme developed by the National Health and Medical Research Council (NHMRC, Australia) and used by HRA Analyzer.
2. US census
3. National Institutes of Health
What We Fund: Award Purpose and Research Topics

**Award Purpose**

HRA members strengthen future research by funding **CAREER DEVELOPMENT**

These awards fund high quality research while supporting the next generation of innovative biomedical researchers.

**Career Development**

Defined as supporting researchers who have earned their advanced degree (PhD, MD), completed training, and are at an early career stage.

**Training**

Defined as supporting future researchers, those still in school or completing training, for careers in biomedical sciences.

**34% of all HRA funding dollars support career development and training initiatives**

Compared with less than 10% at the National Institutes of Health.

**Research Topics**

HRA member funding is efficiently focused on **KEY HEALTH TOPICS**

Award dollars are targeting biomedical research on leading causes of death in the U.S.

**Spending according to Health Research Classification System**

**By dollars awarded**

- **Career Development**: 16%
- **Research**: 62%
- **Training**: 18%
- **Other**: 4%

**By number of awards**

- **Career Development**: 42%
- **Research**: 38%
- **Training**: 18%
- **Other**: 2%

**Broad Research Areas, by dollars awarded**

- **33%**: Cancer
- **54%**: Cardiovascular
- **6%**: Metabolic/endocrine
- **7%**: Neurological
- **7%**: Generic health
- **3%**: Immune system
- **4%**: Infection
- **3%**: Mental health
- **5%**: Stroke
- **3%**: Oral/gastrointestinal

**Broad Research Areas, by number of awards**

- **66%**: Cancer
- **6%**: Cardiovascular
- **7%**: Metabolic/endocrine
- **7%**: Neurological
- **7%**: Generic health
- **6%**: Immune system
- **6%**: Infection
- **6%**: Mental health
- **5%**: Stroke
- **3%**: Oral/gastrointestinal

**Leading causes of death in the U.S., 2019**

1. **Cancer**
2. **Heart disease**
3. **Accidents**
4. **Respiratory diseases**
5. **Stroke**
6. **Alzheimer's disease**
7. **Diabetes**
8. **Kidney disease**
9. **Influenza/pneumonia**
10. **Suicide**

1. Source: Centres for Disease Control and Prevention
2. Unintentional injuries
3. Chronic lower respiratory diseases
4. Cerebrovascular diseases
5. Nephritis, nephrotic syndrome, and nephrosis
Recognizing that diversity of scientific teams is imperative because it leads to more innovative and creative ideas, HRA created the Diversity, Equity, and Inclusion Community to provide a collaborative space for members to identify barriers to researchers’ full participation in the scientific workforce. Goals of the DEI Community are to provide learning opportunities, develop resources, and identify tools to amplify members’ efforts to measurably advance diversity, equity, and inclusion in their grant programs and processes. Recent actions include conducting an inventory of HRA member programs and strategies to increase diversity and equity, a summary of and recommendations for collecting demographic data with the aim of measuring progress, and a major focus on identifying and implementing strategies to reduce bias in peer review.

A clear priority for HRA members is the support of scientists early in their careers, from undergraduates to assistant professors. This is a critical period in career development and the right support can significantly advance both the scientific careers of these Early Career Investigators (ECIs) and the pace of scientific discovery. The Research Workforce and Early Career Development Community works to identify successful funding mechanisms as well as promote and evaluate mentorship practices to ensure the success of ECIs. Financial support in tandem with mentorship and training will help sustain the scientific workforce and advance scientific progress.

This report provides data summaries describing HRA grant spending from 2010 to 2019 based on a database, HRA Analyzer, which tracks HRA member organizations’ awards. Compliance with data reporting varies year to year, with 77% of member organizations entering some data over this time period. 50% of organizations submitted data consistently. The completion rate for gender information within the reported data was 60% and completion rate for race/ethnicity information was 46%. Therefore, this report should be understood as only a summary of available data and not a complete picture.

HRA Analyzer is a tool that enables us to provide a clearer picture of the nonprofit biomedical research funding landscape and to evaluate HRA strategic goals for the future. HRA Analyzer is a customized version of Digital Science’s web-based database known as Dimensions.

Most HRA Analyzer data is either self-reported by awardees or determined by staff at the funding organizations. Some data, including machine learning-based research and disease classifications, is provided by Dimensions.

This report is based on data from 2010 to 2019. To read about the impact of COVID-19 on HRA grantmaking in 2020-2021, see Health Research Alliance Covid-19 Member Survey Results.