National Institutes of Health
Office of Behavioral and Social Sciences Research

Integration of Behavioral and Social Sciences Research at the National Institutes of Health (NIH)

NIH Council of Councils Working Group Report

Reporting on behalf of the Working Group:
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(CAPT, USPHS)

Outline

- Review the background for this working group
- Review the working group’s process and evaluation activities
- Review the working group’s recommendations
- Open for Council questions and discussion

Congressional Language

"The Committee believes that a more robust and focused NIH commitment to behavioral science research and training would yield significant improvements to the nation's health due to the important connections between behavior and health. Most of the leading public health issues facing our nation— including cancer, addiction, heart disease, mental illness, diabetes, violence, and AIDS—are rooted in individual and social behavior, yet behavioral science is decentralized across NIH's Institutes and Centers, and the NIH commitment to manage and directly fund this important research is limited. The Committee directs the Director to convene a special advisory panel of behavioral scientists and other community experts to complete an assessment providing **recommendations on how to better integrate and realize the benefits to overall health from behavioral research at NIH**. The Committee requests that this assessment be finalized before the end of fiscal year 2021* and that a report be submitted to the Committee at that time."

* Given an extension until the end of FY22

Working Group Members

Co-Chairs:
Paul Kenny, Ph.D.
Christine Hunter, Ph.D.

Members
Ritu Agarwal, Ph.D.
Lourdes Baezconde-Garbanati, Ph.D., MPH
Lisa Barnes, Ph.D.
Karen Glanz, Ph.D., MPH
Penny Gordon-Larsen, Ph.D.
Richard Krugman, M.D.
Marla Perez Lugo, Ph.D.
David Weir, Ph.D.
Rebeca Wong, Ph.D.

NIH Advisors to the Working Group
Kathryn Morris, M.P.H., Designated Federal Official
Farheen Akbar, M.P.H
Kristin Brethel-Haurwitz, Ph.D.
Caitlin Burgdorf, Ph.D.

Charge of the Working Group

- Assess the current status of BSSR in NIH supported research and training and identify existing processes that should continue or be enhanced as well as new opportunities for enhancing processes, coordination and integration of BSSR into research conducted across the Institutes, Centers, and Offices.

- The Working Group will seek input from experts in behavioral and social sciences research and in the function and structure of the NIH research enterprise.

- Prepare a report including recommendations on ways to encourage greater BSSR integration and relevance to the research supported across the NIH, including but not limited to the functions of the Office of Behavioral and Social Sciences Research.

Evaluation/Analyses: Strategic Plans

Reviewed IC plans (n=24), topic-specific NIH-wide strategic plans (n=4; NIH Common Fund, COVID-19 Research, Data Science, NIH Obesity Research), and the NIH-Wide Strategic Plan for Fiscal Years 2021–2025

- 8 strategic plans (28.5%) were identified as having significant BSSR integration
- 8 strategic plans (28.5%) were identified as having moderate BSSR integration
- 12 strategic plans (42.9%) were identified as having nominal BSSR integration

Evaluation/Analyses: Funding

BSSR Grant Funding Overall

- 10 ICs (41.7%) had significant BSSR portfolios (>20% of overall grant funding)
- 3 ICs (12.5%) had moderate levels of BSSR (10-20% of overall grant funding)
- 11 ICs (45.8%) had nominal BSSR funding (<10% of overall grant funding)

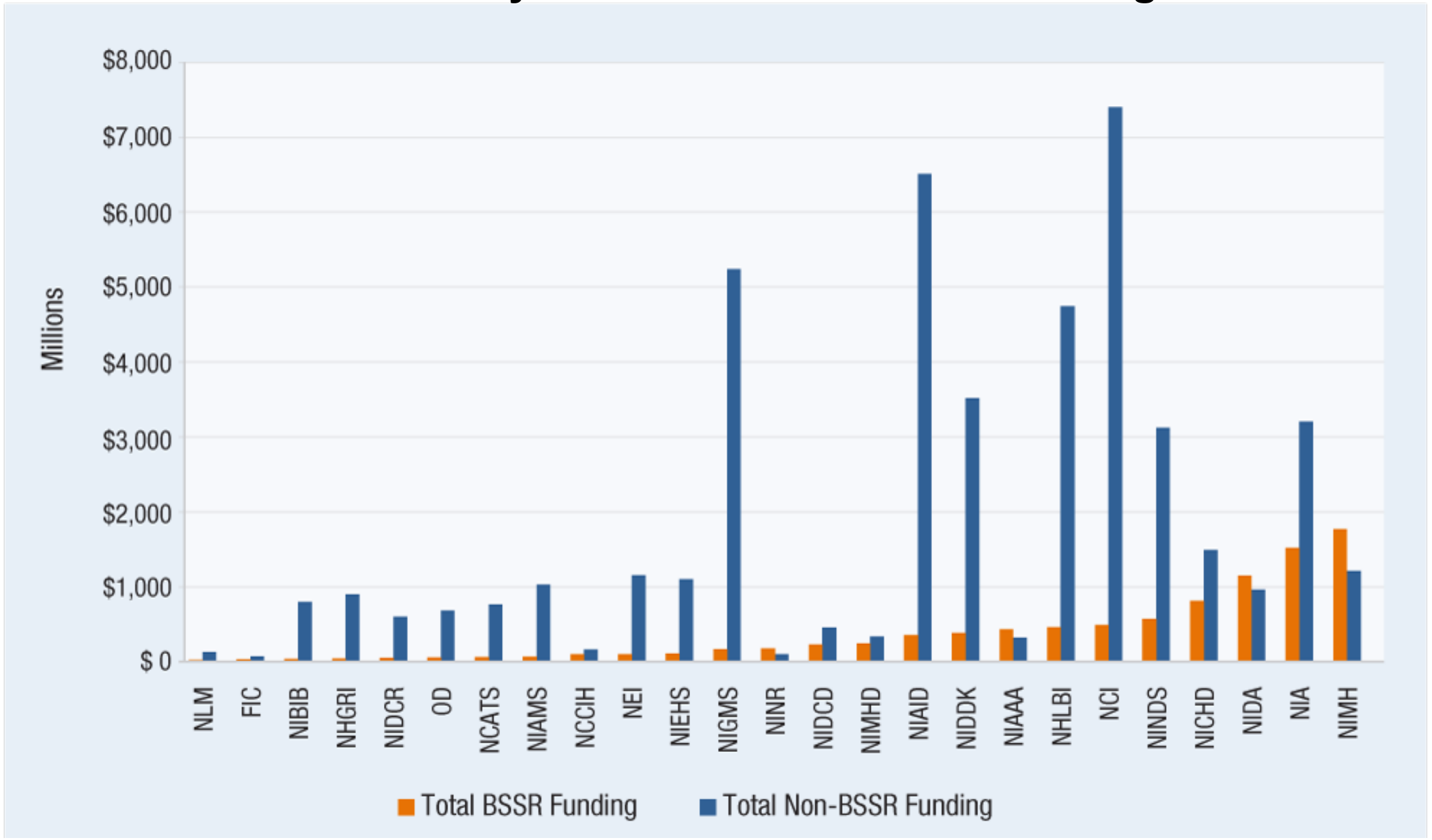
Resource and Center Grants (P50, P30, and R24)

- BSSR is 10% of the overall NIH portfolio

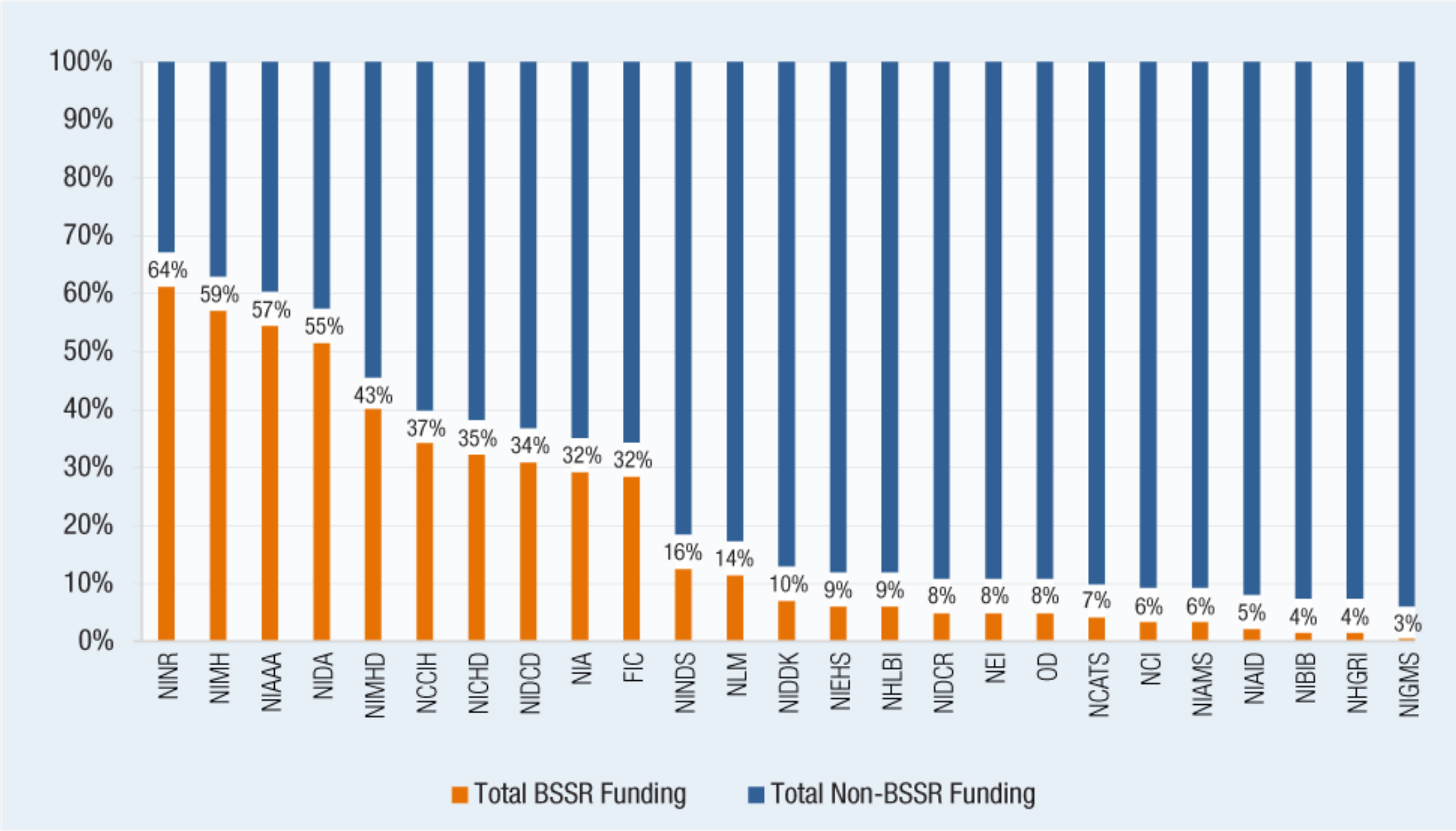
Training Grants

- Relatively low numbers of Fs and Ts compared with the overall NIH portfolio
- Range over 10 years was 248-425 grants annually

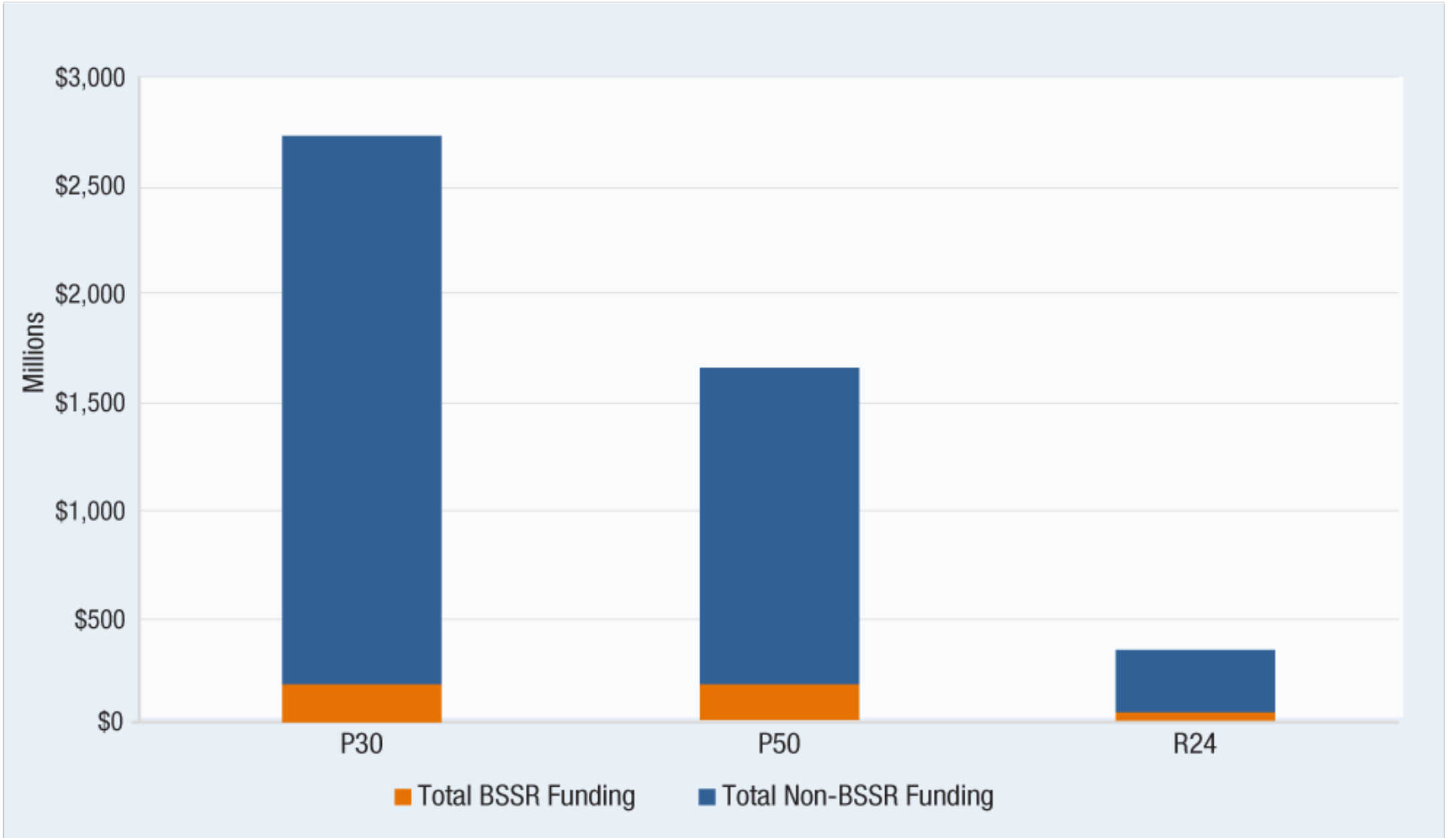
Funding for Competing Awards FYs 2010–2020, Broken Down by BSSR and Non-BSSR Funding



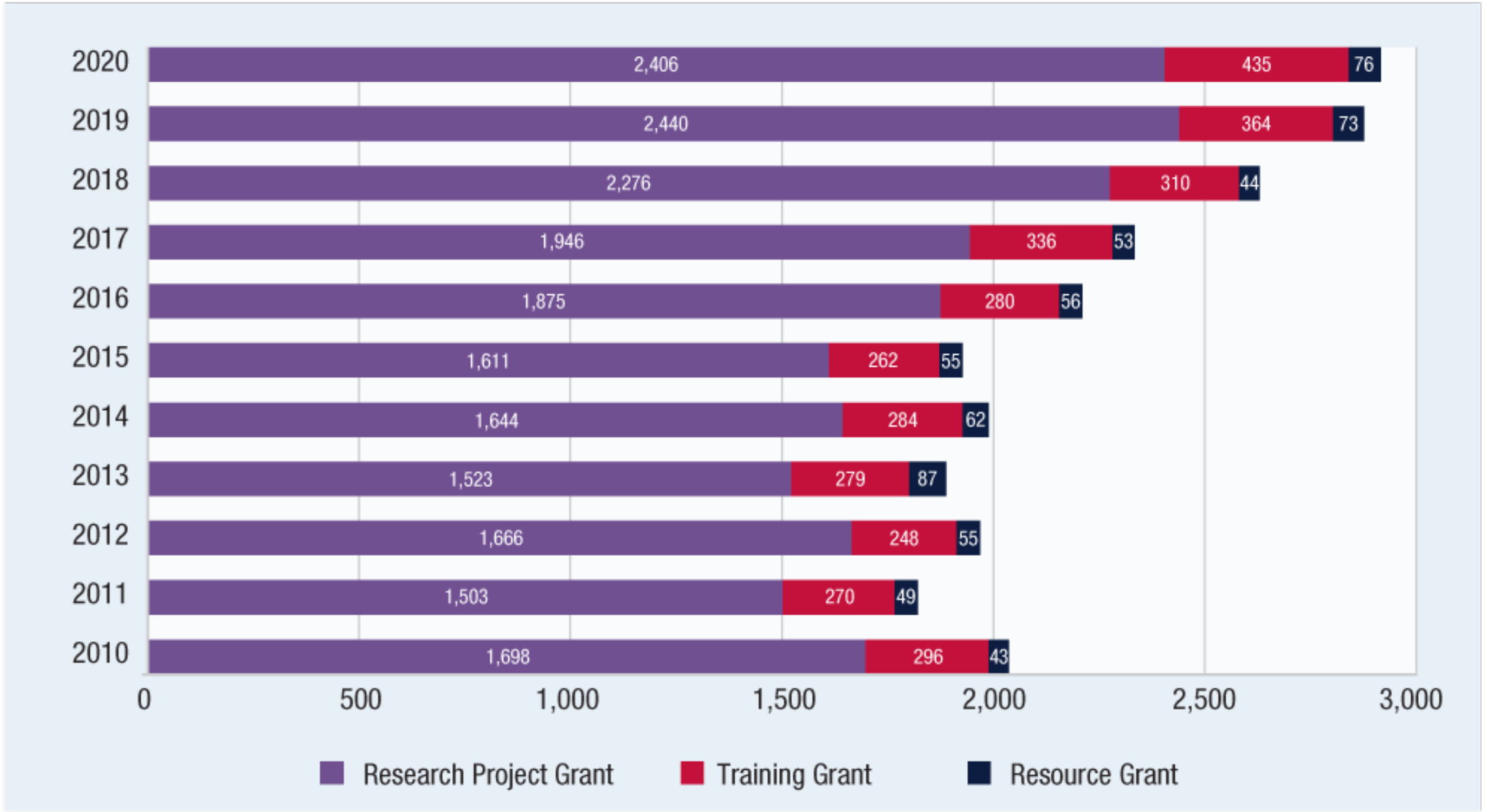
Percentage of BSSR in IC Funding Portfolios as a Percent of Overall Funding, FYs 2010–2020



NIH BSSR vs. Non-BSSR Funding FY 2012–2021 (P30, P50, and R24)



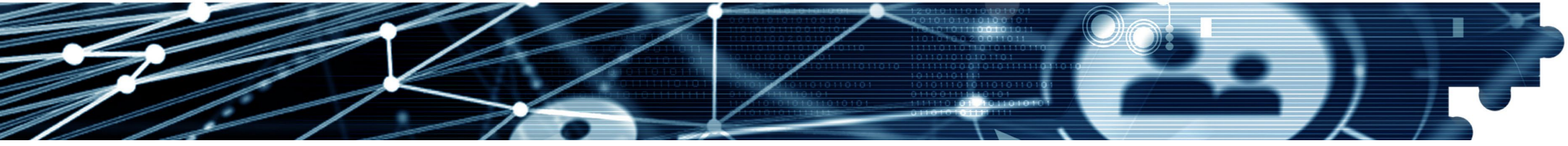
Number of BSSR Research, Training, and Resource Grants FYs 2010–2020



Evaluation/Analyses: NIH Survey

- Administered through the IC planning and evaluation leads and the IC-designated representatives to the BSSR Coordinating Committee
- The survey focused on BSSR activities in the past three fiscal years (FYs 2019–2021)
  - Research or Training Workshops and FOAs
  - NIH-Wide Research or Training Initiatives
  - Internal and External IC Collaboration on BSSR Initiatives
  - BSSR-Relevant Scientific Communication
  - IC BSSR Staff: Number of Staff and Models of Staffing

- See the report for full details and coding scheme



Additional Evaluation/Analyses

IC Advisory Council membership

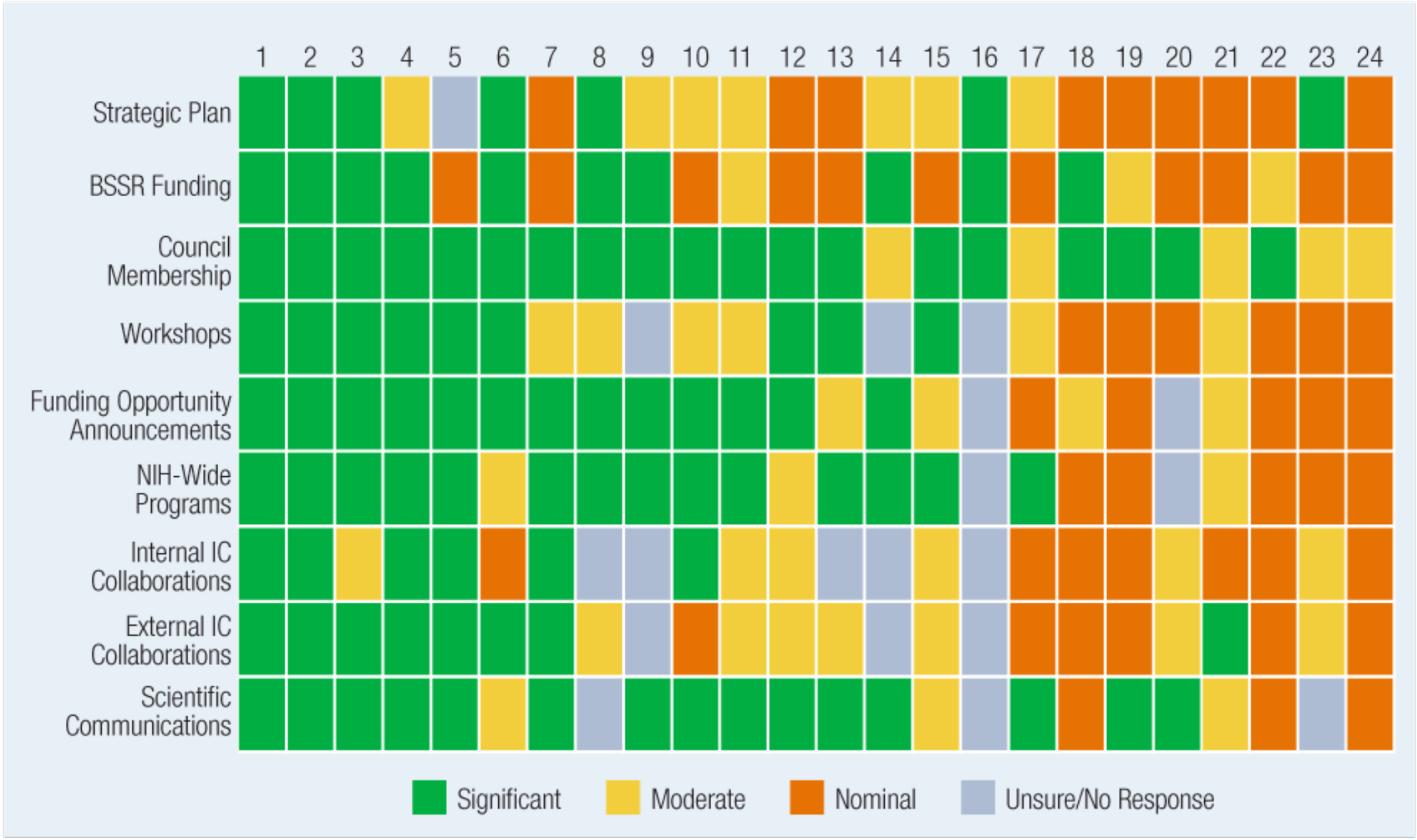
- Assessed membership as of December 2021 with two levels of BSSR expert review

Qualitative Analyses*:

- Center for Scientific Review (CSR): reviewed ongoing evaluation and pilot programs
- OBSSR's mission, scope, strategic priorities, initiatives, and other activities
- Research policy development and implementation

*Recommendations were based on expert input and working group discussion

Heatmap of Integration Assessment by Deidentified IC



Summary of Working Group Recommendations

- Greater inclusion and integration in IC and NIH-wide Strategic Plans
- Evaluate and monitor the distribution of BSSR staff across NIH
- Bring IC Advisory Council BSSR representation into alignment with the policy
- Ongoing monitoring to ensure review panels adequately reflect BSSR knowledge and expertise
- ICs with nominal BSSR portfolios should work with the OBSSR to identify opportunities to increase the application of BSSR in their research and training initiatives
- Increase centers, resource grants, and trial networks that include BSSR capacity and focus
- Increase resources allocated to the OBSSR for staff and initiatives
- Engage BSSR expertise throughout the development and implementation of new research policies and practices

Strategic Planning

As strategic plans are revised or new strategic plans are developed, the NIH should ensure BSSR is more consistently included and linked to the IC mission and priorities.

- The absence of BSSR sends a message that it may be of lesser importance
- Lack of inclusion limits the internal and external focus on BSSR in initiatives and funding
- 12 strategic plans (42.9%) were identified as having nominal BSSR integration

- NIH leadership should support and encourage the ICs and NIH-wide groups to work with the OBSSR and/or BSSR staff within their ICs when they develop their next strategic plans to help identify important BSSR goals that are relevant to each IC mission.

BSSR Staffing

The NIH should evaluate and monitor the distribution of BSSR staff in the agency and identify strategies to address gaps in the number and diversity of BSSR staff

- BSSR cannot be well integrated and maximally contribute to the broader NIH research mission unless there is consistent representation of BSSR expertise
- Several ICs have limited or no program staff with BSSR as their primary expertise
- ICs with dedicated work units and/or staff had more BSSR integration
- ICs using a distributed portfolio model had less BSSR integration

IC Advisory Council Membership

The NIH should bring IC Advisory Council representation into alignment with the policy requiring a minimum of two members on each Council with behavioral or public health expertise.

- Five IC Advisory Councils (21% of those assessed) had only one member with primary expertise in behavioral science or public health
- A lack of high-level advisory representation will hamper an IC's ability to develop, consider, and advance BSSR-relevant initiatives and grant funding

Peer Review

The NIH should continue to evaluate and monitor the composition of scientific review panels to ensure they adequately reflect BSSR knowledge and expertise and then rapidly address any systematic gaps and biases.

- BSSR applications are predominantly reviewed in BSSR-focused study sections
- For BSSR to be well integrated into the broader biomedical research enterprise, NIH needs to assure there is adequate BSSR expertise on study sections whose primary focus might not be BSSR but where BSSR factors, outcomes, and methods are included or should be included

Grant Funding and Resources

The NIH should direct ICs with nominal BSSR in their portfolios to work with the OBSSR to identify opportunities to increase the application of BSSR in their research and training initiatives.

- BSSR funding at ICs varies from more than 50% of their portfolios to less than 5%
    - In 11 ICs (12 with the OD), BSSR represents less than 10% of total funding
- More BSSR should be encouraged for the ICs with more nominal levels of funding

The NIH should identify gaps and address opportunities to increase centers, resource grants, and trial networks that include BSSR capacity and focus.

- BSSR accounts for only 10% of all center resource and center grant funding
- Without dedicated resources and support, BSSR is at a relative disadvantage

OBSSR Resources

The NIH should increase resources allocated to the OBSSR for staff and initiatives.

- OBSSR is well positioned to support BSSR integration across the NIH
- OBSSR has had good success addressing crosscutting scientific, training, and methodology gaps
- Increased resources would build on their success and accelerate the pace of integration
- OBSSR could lead or facilitate the development of high priority and cross-cutting initiatives and resource initiatives
    - Several examples were identified in the report

NIH Research Policies/Practices

The NIH should engage BSSR expertise early and throughout the development and implementation of new research policies and practices.

- Involve BSSR experts and consider BSSR methods, measures, and practices as a part of research policy development and implementation
- Will ensure the BSSR can adhere to the policies without disruption to scientific progress

Crosscutting Considerations

- **Enhance Approaches to Measurement of NIH Funding**
- **Enhance the Diversity of the NIH and Extramural Research Workforce**
- **Foster Team Science and Multidisciplinary Integration**
- **Enhance the Conduct of Science**

Conclusion

- Council Questions/Discussion
- Council to vote on accepting the Working Group's report