



**AMERICAN
PSYCHOLOGICAL
ASSOCIATION**

May 24, 2024

National Institute of Allergy and Infectious Disease
National Institutes of Health
5601 Fishers Lane, MSC 9806
Bethesda, MD 20892-9806

Re: Request for Information (RFI): Inviting Comments and Suggestions on NIAID's Strategic Plan
Notice Number: [NOT-AI-24-032](#)

Submitted Electronically via Email: NIAIDStrategicPlanRFI@niaid.nih.gov

To Whom it May Concern:

The American Psychological Association (APA) appreciates the opportunity to provide input to the *National Institute of Allergy and Infectious Diseases (NIAID) Request for Information: Inviting Comments and Suggestions on NIAID's Strategic Plan*. The APA is the nation's largest scientific and professional nonprofit organization representing the discipline and profession of psychology, as well as over 157,000 members and affiliates who are clinicians, researchers, educators, consultants, and students in psychological science.

APA welcomes NIAID Director Jeanne Marrazzo's recent acknowledgement that because of NIAID's past concentration "on the 'bugs,' the institute has not focused on the whole person. APA shares the director's view that support for people with HIV (and other infectious diseases), "require[s] mental health care as well as targeted treatment." Similarly, the association shares the view that an inclusive, "whole-person approach to research," requires NIAID to support research that "consider[s] how people really live." The association offers the following comments on NIAID's draft strategic plan.

Update NIAID's Mission Statement

Foremost, APA urges the Institute to amend the NIAID mission statement to reflect a support of behavioral, social, and psychological research. APA understands that the institute uses the term "biomedical" as shorthand when discussing its broad portfolio but urges NIAID to amend its current mission statement to read: "NIAID conducts and supports biomedical **and behavioral** research." The change will align NIAID's mission with that of the National Institutes of Health (NIH)-wide Strategic Plan's (2021) Objective (1) - Advancing biomedical and behavioral sciences, which emphasizes the agency's support for the "broad range of foundational scientific research, ...[including] basic behavioral, and social research."¹

¹ *NIH-Wide Strategic Plan for Fiscal Years 2021–2025* <https://www.nih.gov/about-nih/nih-wide-strategic-plan>

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A revised NIAID mission statement would also incorporate the guidance of the NIH Council of Council report, ***Integration of Behavioral and Social Sciences Research at the National Institutes of Health (NIH)***. The report seeks to ensure that behavioral and social sciences research is more consistently included and linked to the institutes and centers. The use of "biomedical and behavioral" research in NIAID's strategic plan will help social and behavioral scientists interested in participating in NIAID-mission research to recognize the institute's efforts to reach the broadest scientific community to conduct NIAID-related research.

Advance and Apply Foundational Research on Human Behavior

APA wholeheartedly agrees with Dr. Marrazzo on the need to foster inclusivity at NIH and beyond, including the research supported by the Institute. Further, as noted in the just released *Blueprint for the Use of Social and Behavioral Science to Advance Evidence-Based Policymaking* by the Subcommittee on Social and Behavioral Sciences of the Committee on Science of the National Science and Technology Council within the White House, "human behavior is a key component of every major national and global challenge we face," including infectious and chronic diseases.² Recognizing this fact, APA urges NIAID to add a separate and distinct priority to advance and apply foundational research on human behavior in its strategic plan. The institute's successful leverage of behavioral and social science can enhance NIAID's program and other efforts to achieve their intended outcomes.

Integrate Social and Behavioral Science Research into NIAID

APA applauds NIAID's recognition of the importance of social and behavioral sciences (SBS) in enhancing research conducted on HIV, asthma, and STDs. The association also supports the mission of the Institute's Behavioral and Social Sciences Project Team (BSSPT) with the mission to enhance the integration of SBS in research supported by the Institute to better address the HIV epidemic. BSSPT's contributions "to enhancing the integration of behavioral and social sciences into biomedical HIV clinical research, including non-vaccine prevention, clinical trials of HIV vaccines, therapeutics, and cure research, to better address the HIV epidemic"³ are recognized. This mission should be expanded beyond research on HIV. In addition to the contributions BSSR have made to the understanding of HIV prevention and treatment since the beginning of the epidemic, there are other research topics within the Institute's mission in which psychological, social, behavioral, and population research can contribute to NIAID's research priorities and objectives and thus should be funded and supported by NIAID.

Behavioral and social sciences research (BSSR) is essential to informing a public health response as recently underscored by the COVID-19 pandemic and documented in **the Integration of Behavioral and Social Sciences Research at the National Institutes of Health (NIH), NIH Council of Councils Working Group Report (Integration Report)**.⁴ The congressionally mandated report responds to the House of Representatives Department of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Bill (House Report 116-450): 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."⁵

² Blueprint for the Use of Social and Behavioral Science to Advance Evidence-Based Policymaking. <https://www.whitehouse.gov/wp-content/uploads/2024/05/Blueprint-for-the-Use-of-Social-and-Behavioral-Science-to-Advance-Evidence-Based-Policymaking.pdf>

³ Behavioral and Social Sciences <https://www.niaid.nih.gov/research/behavioral-and-social-sciences>

⁴ Integration of Behavioral and Social Sciences Research at the National Institutes of Health (NIH) report of the NIH Council of Councils Working Group Report, https://obssr.od.nih.gov/sites/obssr/files/inline-files/BSSR_IntegrationWorkingGroupReport_508.pdf

⁵ Integration of Behavioral and Social Sciences Research at the National Institutes of Health (NIH) report of the NIH Council of Councils Working Group Report, https://obssr.od.nih.gov/sites/obssr/files/inline-files/BSSR_IntegrationWorkingGroupReport_508.pdf

APA strongly encourages the Institute to integrate behavioral and social science considerations into all the priorities outlined in its proposed strategic plan. Despite recognition of the value of multidisciplinary teams and the importance of SBS to effectively research and address epidemics, NIAID has neglected to support basic psychological, social, behavioral, and population research in much of the institute's mission areas, when it comes to research it funds. Currently, the BSSR community sees the Institute strictly as a home to research focused on the biomedical aspects of allergies and infectious diseases. To attract research proposals from the BSSR community, the association encourages NIAID to work with the Office of Behavioral and Social Sciences Research (OBSSR) and NIAID's BSSR staff to identify opportunities to increase the application of BSSR in the research and training initiatives supported as the institute continues to develop its strategic plan.

As noted in the Integration Report, the "COVID-19 pandemic clearly illustrated that BSSR is essential to informing a public health response."⁶ Population-level social and behavioral strategies to communicate risk and encourage behavioral change to mitigate transmission risk were rapidly implemented. Still, there remains an urgent need for research to improve the understanding of how well these strategies affected the whole person, including the impact on the different communities. The report emphasizes that beyond the COVID-19 pandemic, "the influence of BSSR on health is wide-ranging," including the substantial contributions it can make to "the more effective, efficient, equitable, and ethical conduct of science from,"⁷ including "informing recruitment and retention practices to addressing ethics and health equity in research, enhancing science messaging and trust in science, and improving approaches to accelerate translation from fundamental discovery to efficacy/effectiveness research and on to dissemination and implementation research."⁸

The Integration Report's examination of 24 institute and centers (ICs) strategic plans for integration of "behavior" and "social" science identified 12 ICs as having nominal BSSR integration. Unfortunately, NIAID was included in this group. The report also found BSSR funding within an IC is "a major indicator of the integration of these areas of science into the IC's mission." Accordingly, further assessment of each IC's funding for BSSR as a portion of the IC research funding predictably found that NIAID provided nominal BSSR funding (less than 10 percent of its overall grant funding). Only 5% of NIAID's funding supports BSSR.

At the same time, APA agrees with the report that "although inclusion of BSSR in a strategic plan is not always sufficient to support integration of BSSR in the IC research agenda, the absence of BSSR in strategic plans sends a message that it may be of lesser importance." The lack of BSSR in strategic plans "may limit the internal and external focus on addressing BSSR gaps and the integration of behavioral and social factors in the IC research initiatives and funding."⁹

⁶ Riley, W. T., Borja, S. E., Hooper, M. W., Lei, M., Spotts, E. L., Phillips, J. W. R., . . . Perez-Stable, E. (2020). National Institutes of Health social and behavioral research in response to the SARS-CoV-2 Pandemic. *Translational Behavioral Medicine*, 10(4),857-861. <https://doi.org/10.1093/tbm/ibaa075>

⁷ Fortunato, S., Bergstrom, C. T., Börner, K., Evans, J. A., Helbing, D., Milojević, S., . . . Barabási, A.-L. (2018). Science of science. *Science*, 359(6379):eaao0185. <https://doi.org/10.1126/science.aao0185>

⁸ Integration of Behavioral and Social Sciences Research at the National Institutes of Health (NIH) report of the NIH Council of Councils Working Group Report, https://obssr.od.nih.gov/sites/obssr/files/inline-files/BSSR_IntegrationWorkingGroupReport_508.pdf

⁹ Integration of Behavioral and Social Sciences Research at the National Institutes of Health (NIH) report of the NIH Council of Councils Working Group Report, https://obssr.od.nih.gov/sites/obssr/files/inline-files/BSSR_IntegrationWorkingGroupReport_508.pdf

Priority 5: Support innovative research efforts to prepare for and respond to nationally or internationally significant biological incidents affecting public health.

APA recommends research priorities be included in the following areas:

Behavior Change Research to Inform Public Health Policy

The COVID-19 pandemic, a massive global health crisis, required large-scale behavior change thus requiring insights from the behavioral and social sciences to align human behavior with public health policy. Social and behavioral scientists provided insights on such topics as threat perception, emotion and risk perception, social context, science communication, individual and collective interests, leadership, and stress and coping. These are all areas of research that may be relevant to future public health crises and pandemics.^{10 11}

Collaborations between infectious disease experts and social and behavioral scientists can lead to more effective strategies for prevention, communication, and community engagement. Accordingly, APA encourages NIAID to support foundational behavioral, social, population, and psychological research related to infectious disease and public policy; structural factors that hinder testing (e.g., mistrust of science and racism); and misinformation and facilitating vaccination uptake.¹² There are many open questions regarding the harmful consequences of misinformation on health and well-being, including an understanding of which interventions are effective for specific types of information. To answer this and related questions, increased basic and translational research into the psychology of health misinformation, including ways to counter it, is needed.¹³

The public health response to future infectious disease outbreaks and or pandemics “can be improved with more precise parameters for modeling the impacts of social and behavioral changes, including the economic impact on mortality and morbidity related to the acute public health crisis.”¹⁴

More Effective Contact Tracing

COVID-19 highlighted the power of contact tracing and its ability to break the chain of transmission. If individuals who are at risk of getting sick and passing an infectious disease can be identified, public health officials can institute policies to slow the spread. Contact tracing is a key strategy for slowing infectious diseases. Its success depends on how well people can remember their recent contacts and report them.¹⁵ Yet, there are associated challenges with gathering information from memory. Contact tracing’s ability to prevent further

¹⁰ Bavel, J. J. V., Baicker, K., Boggio, P. S., Capraro, V., Cichocka, A., Cikara, M., Crockett, M. J., Crum, A. J., Douglas, K. M., Druckman, J. N., Drury, J., Dube, O., Ellemers, N., Finkel, E. J., Fowler, J. H., Gelfand, M., Han, S., Haslam, S. A., Jetten, J., . . . Willer, R. (2020). Using social and behavioural science to support COVID-19 pandemic response. *Nature Human Behaviour*, 4(5), 460–471.

<https://doi.org/10.1038/s41562-020-0884-z>

¹¹ Ruggeri, K., Stock, F., Haslam, S. A., Capraro, V., Boggio, P., Ellemers, N., Cichocka, A., Douglas, K. M., Rand, D. G., van der Linden, S., Cikara, M., Finkel, E. J., Druckman, J. N., Wohl, M. J. A., Petty, R. E., Tucker, J. A., Shariff, A., Gelfand, M., Packer, D., . . . Willer, R. (2024). A synthesis of evidence for policy from behavioural science during COVID-19. *Nature*, 625(7993), 134–147. <https://doi.org/10.1038/s41586-023-06840-9>

¹² US Anti-vaxxers aim to spread fear over future coronavirus vaccine. *The Guardian*, May 29, 2020. Available at <https://www.theguardian.com/world/2020/may/29/anti-vaxxers-fight-against-coronavirus>. Accessibility verified July 7, 2020.

¹³ van der Linden, S., Albarracín, D., Fazio, L., Freelon, D., Roozenbeek, J., Swire-Thompson, B., & Van Bavel, J. (2023). Using Psychological Science To Understand And Fight Health Misinformation: An APA Consensus Statement. American Psychological Association (APA). <https://doi.org/10.1037/e506432023-001>

¹⁴ Riley, W. T., Borja, S. E., Hooper, M. W., Lei, M., Spotts, E. L., Phillips, J. W. R., . . . Perez-Stable, E. (2020). National Institutes of Health social and behavioral research in response to the SARS-CoV-2 Pandemic. *Translational Behavioral Medicine*, 10(4), 857–861. <https://doi.org/10.1093/tbm/ibaa075>

¹⁵ Ünal, B., & Benjamin, A. S. (2023). Improving contact tracing with directed recall. *Journal of Applied Research in Memory and Cognition*. Advance online publication. <https://doi.org/10.1037/mac0000127>

transmission of disease is only as effective as the quality of information provided. “Historically, the challenges associated with gathering reliable information from memory have been vastly underestimated by those charged with gathering it.” Additional research is needed to address these challenges. Cognitive psychology and knowledge about memory can inform how to develop more effective contact tracing.¹⁶

Intervention Research to Address Vaccine Hesitancy

COVID-19 vaccines provided a way out of the pandemic. Yet, vaccine hesitancy and refusal have been associated with vaccine-preventable outbreaks. It is a growing trend and problematic globally. Convincing individuals who are vaccine hesitant is difficult but critical to containing any pandemic or infectious disease outbreak. There remains an urgent need to develop equitable and accessible interventions to address vaccine hesitancy at the population level.¹⁷ The development of safe and effective vaccines against infectious disease will not be enough unless there is a high vaccine uptake. Additional attention and targeted approaches are needed to address the vaccine hesitancy among minoritized populations. For vaccines to be effective and achieve their full public health potential, the public needs to be vaccinated.¹⁸

Mental Health Consequences of Infectious Disease

The cumulative research linking stress to negative health outcomes is robust. Compared to older adults, research reports that the mental health impact of the COVID-19 pandemic has been greater in 18- to 24-year-olds. This includes greater loneliness and reduced positive mood, “both of which were associated with greater mental health difficulties.” The unprecedented increase in psychological morbidity and loneliness may have also contributed to the increased risk of infection in young adults.¹⁹ Research is needed to address the role of political and public health decisions by policy makers, combined with the economic, social, and emotional circumstances of young adults. APA recommends the inclusion of an additional research priority that examines the role of social networks, culture, and the social determinants of health on the access to and uptake of prevention and treatment of infectious disease.

Individual and Public Engagement with Interventions and Adherence to Health Behaviors

We know that changing individuals’ behavior is key to tackling today’s most pressing societal challenges. Many of today’s societal challenges, such as the successful navigation of the COVID-19 call for substantial changes in behavior. Research on the importance of choice when it comes to interventions is another area of research relevant to mitigating the impact of infectious disease. Choice architecture interventions (nudge-based interventions) are designed to gently encourage people toward socially and personally desirable behavior through the design of choice environments. The research also found that it facilitates behavior change across a wide range of behavioral domains, population segments, and geographical locations.²⁰

¹⁶ Garry, M., Hope, L., Zajac, R., Verrall, A. J., & Robertson, J. M. (2021). Contact tracing: A memory task with consequences for public health. *Perspectives on Psychological Science*, 16(1), 175–187. <https://doi.org/10.1177/1745691620978205>

¹⁷ Knight, H., Jia, R., Ayling, K., Bradbury, K., Baker, K., Chalder, T., Morling, J. R., Durrant, L., Avery, T., Ball, J. K., Barker, C., Bennett, R., McKeever, T., & Vedhara, K. (2021). Understanding and addressing vaccine hesitancy in the context of COVID-19: Development of a digital intervention. *Public Health*, 201, 98–107. <https://doi.org/10.1016/j.puhe.2021.10.006>

¹⁸ Knight, H., Jia, R., Ayling, K., Bradbury, K., Baker, K., Chalder, T., Morling, J. R., Durrant, L., Avery, T., Ball, J. K., Barker, C., Bennett, R., McKeever, T., & Vedhara, K. (2021). Understanding and addressing vaccine hesitancy in the context of COVID-19: Development of a digital intervention. *Public Health*, 201, 98–107. <https://doi.org/10.1016/j.puhe.2021.10.006>

¹⁹ Jia, R., Ayling, K., Chalder, T., Massey, A., Broadbent, E., Morling, J. R., Coupland, C., & Vedhara, K. (2020). Young people, mental health and COVID-19 infection: The canaries we put in the coal mine. *Public Health*, 189, 158–161. <https://doi.org/10.1016/j.puhe.2020.10.018>

²⁰ Lee, C. S., Lim, K. K., & Kim, H. K. (2024). Nudging Public Health Behaviors to Prevent COVID-19: A Systematic Review. *Health Communication*, 1–12. <https://doi.org/10.1080/10410236.2024.2317567>

Social Network Research

Relationships play a significant role in the adoption of infection preventive behaviors. Research is needed as to when and how to use these relationships when designing infectious diseases control programs. Successful smoking cessation, physical activity, and weight loss programs have been associated with aspects of social networks. Additional research is needed to examine a broad range of structural and functional social networks aspects and their independent effect on infection prevention behavior.²¹

Cross-Cutting Themes and Priorities

Diversity, Equity, Inclusion, And Accessibility (DEIA)

APA applauds NIAID's commitment to reducing health disparities through the research it supports and its efforts to attract underrepresented minorities to careers in biomedical research. As an association with a longstanding history of devoting attention to and advancing diversity, equity, inclusion and accessibility (DEIA) related issues, APA strongly believes these factors are critical to advancing biomedical, behavioral, and psychological research supported by NIAID. Scientific talent is undoubtedly well represented across all groups, but unfortunately, the opportunity to participate is not.

Through the association's work on its equity, diversity, and inclusion framework, APA recognizes that advancing DEIA has tended to fall into the following broad categories: leadership and infrastructure; access, equity, and success; organizational climate; and core work of the institution.^{22 23 24 25 26} We know that minoritized individuals face systemic barriers that have negatively impacted their opportunities, representation, and ability to thrive. To advance DEIA goals that accommodate culture change and the creation of environments of inclusive excellence will require ongoing leadership, resources and commitment to "ensure that these values become part of an intentionally maintained organizational culture."²⁷

The association recommends NIAID increase and strengthen its focus on scientific workforce diversity targeting early career scientists, including social and behavioral scientists. Providing increased funding opportunities and mentoring programs targeting underrepresented scientists could go a long way to helping the institute to increase and retain these scientists.

As noted in the just released *Blueprint for the Use of Social and Behavioral Science to Advance Evidence-Based Policymaking*, "[i]nvesting in leadership and staff positions with specialized training in social and behavioral sciences who are supportive of the generation and translation of evidence will help ensure that relevant evidence from communities, researchers, statisticians, and evaluators is connected to program officers and

²¹ Steijvers LCJ, Brinkhues S, Hoebe CJP, van Tilburg TG, Claessen V, Bouwmeester-Vincken N, et al. (2021) Social networks and infectious diseases prevention behavior: A cross-sectional study in people aged 40 years and older. PLoS ONE 16(5): e0251862. <https://doi.org/10.1371/journal.pone.0251862>

²² American Psychological Association Equity, Diversity, and Inclusion Framework <https://www.apa.org/about/apa/equity-diversityinclusion/framework.pdf>

²³ Henderson, E. (2014). The chief diversity officer's view of the diversity and inclusion journey at Weyerhaeuser. In B. M. Ferdman & B. R. Deane (Eds.), *Diversity at work: The practice of inclusion* (pp. 431–450). Jossey-Bass.

²⁴ Shorter-Gooden, K. (2014). Creating diverse and inclusive colleges and universities. In B. Ferdman & B. Deane (Eds.), *Diversity at work: The practice of inclusion* (pp. 451–481). Jossey-Bass.

²⁵ Smith, D. G. (2009). *Diversity's promise for higher education*. Johns Hopkins Press.

²⁶ Williams, D. A. (2013). *Strategic diversity leadership: Activating change and transformation in higher education*. Stylus.

²⁷ America In STEMM research and organization. National Academies of Sciences, Engineering, and Medicine. 2023. *Advancing Antiracism, Diversity, Equity, and Inclusion in STEMM Organizations: Beyond Broadening Participation*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/26803>.

other decision-makers, in the appropriate form and timeframe to support effective policy development.”²⁸
These individuals should reflect the diversity of America.

Health Disparities

Addressing health disparities requires a comprehensive approach that includes the social determinants of health. Per NIAID’s support for HIV research, the Institute recognizes that understanding how to involve key populations is critical. To this end, APA urges the institute to support more research on effective community engagement models and including them in research design, implementation, and dissemination.

Women’s Health

APA recommends NIAID adopt a population health framework related to its women’s health research. Population health aims to improve the health and well-being of entire populations, including individuals within those populations, and addresses the cultural, economic, systemic, and historical contexts that influence health status, well-being, and functioning across the life span. The number and complexity of health disparities among women is alarming, and it is imperative for research in women’s health to adopt a more inclusive approach encompassing all individuals. This includes elderly persons, women with disabilities, refugees, and immigrants, and racial and ethnic minoritized populations. APA recognizes the importance of advancing the health and well-being of individuals who identify as non-binary, gender diverse, transgender, and gender fluid. This entails evaluating gender identity as a significant variable in both qualitative and quantitative investigations, including randomized controlled trials (RCTs), as well as in the translation and dissemination of findings.²⁹

Thank you again for the opportunity for APA to provide input on an important issue. Please do not hesitate to contact Angela Sharpe, Senior Director, Congressional & Federal Relations (asharpe@apa.org) if you have questions.

Sincerely,



Mitch Prinstein, PhD, ABPP
Chief Science Officer

²⁸ *Blueprint for the Use of Social and Behavioral Science to Advance Evidence-Based Policymaking*. <https://www.whitehouse.gov/wp-content/uploads/2024/05/Blueprint-for-the-Use-of-Social-and-Behavioral-Science-to-Advance-Evidence-Based-Policymaking.pdf>

²⁹ American Psychological Association Comments to the White House Initiative on Women’s Health Research January 22, 2024 https://d3dkdvqff0zqx.cloudfront.net/groups/apaadvocacy/attachments/APA%20WH%20Womens%20Health%20Research_1.22.24.pdf