

January 3, 2020

National Institute of Mental Health
Office of Science Policy, Planning, and Communications
6001 Executive Boulevard, Room 6200, MSC 9663
Bethesda, MD 20892-9663

Dear Dr. Gordon:

We write on behalf of the Federation of Associations in Behavioral and Brain Sciences (FABBS) and the Coalition for the Advancement and Application of Psychological Science (CAAPS). Our two organizations represent several dozen scientific societies in the behavioral and brain sciences.

Our community is grateful for the opportunity to respond to the NIMH 2020 Strategic Plan draft. We appreciate the careful thought and hard work devoted to updating the plan. We welcome the attention to behavioral sciences, including the example under *Suicide Prevention* that highlights the value of screening to identify individuals at risk to help prevent suicidal behavior. Moreover, we were glad to see the specific focus on Mental Health Equity listed under *Challenges and Opportunities*, and the foci on Environmental Influences and Prevention under *Cross-Cutting Research Themes*. A notable feature of the strategic plan is that it explicitly recognizes the importance of these poorly-understood areas that are so central to preventing psychopathology and promoting mental health. Further, FABBS and CAAPS strongly support the focus on understanding the healthy brain, how it functions and develops, as well as the value of examining the beginnings of behavior patterns and tracking change across the lifespan.

We believe the plan can be strengthened even further in ways that will allow NIMH to more effectively achieve its critical mission. The language in some places continues to prioritize certain disciplines over others in ways that may lead researchers not to recognize the potential role they can play in advancing the goals of NIMH.

- *Computational Psychiatry* – This term is overly narrow and wide of the mark as it suggests computational work is specific to psychiatry. In fact, psychologists and cognitive neuroscientists have been central to many of the advances in computational work. By way of example, although a recent NIMH-funded [study](#) on the possibility of language patterns predicting psychosis was promoted as computational psychiatry, the authors are psychologists, and the work was made possible by substantial prior work on the psychology of language and cognition. We offer Precision Mental Health as a more accurate and inclusive term. Furthermore, the scope of computational psychiatry is limited to data driven approaches to classification and prediction, thus failing to include the use of computational models to understand basic cognitive and motivational processes implicated in psychopathology.
- *Genetics* - As currently written, this section falls short of capturing the interactive nature of gene expression. The community applauded the inclusion of

development and the environment in RDOC. We encourage NIMH to be consistent in recognizing the role of behavioral and environmental factors in the etiology of mental illness, in interaction with biological factors.

The proposed goals and objectives focus heavily on biological factors, especially at the molecular and circuit level, at the expense of psychosocial factors. To be clear, we fully support detailing the many important ways that biological factors are central to understanding psychopathology in the plan; our concern is with highlighting biological factors to such an extent that psychosocial, cultural, and environmental factors appear almost as an add-on or after thought.

- Goal 1 - We encourage NIMH to maintain the existing language in the 2015 strategic plan for this goal. We have concerns about the addition of 'Brain', which narrows the scope of this goal, seeming to dismiss numerous other sorts of mechanisms. Consider, for example, that manipulations of the social environment can dramatically change brain structure. Elucidating mechanisms at many levels of analysis, including cognitive, social, and societal, and their interactions with biological levels, is important; the most effective theories typically connect these aspects mechanistically rather than isolating one level. Furthermore, we recommend reworking the objectives and descriptive text to better reflect attention to behavior. Specifically, Goal 1 aims to "answer fundamental questions about the biological and other contributors to..." and "seek to understand how the interplay of molecular, cellular, circuit-level, genetic, and environmental factors influence the development of mental illnesses" - the message is that biological is what matters and the rest is in the "other" category.
- Goal 2 - While we support inclusion of 'lifespan' in the revision of Goal 2, we also recommend including health or wellness (e.g., in 'Examine Mental Health and Illness Trajectories Across the Lifespan'). NIMH has supported remarkable work and made significant progress in what we know about genes, circuits, and pharmacology. We have had less success in understanding how the abnormalities in these circuits give rise to the experiences that trouble people and lead to a need for care. For example, despite advances in imaging, observations of abnormal circuit activity do not explain the phenomenon that causes clinical distress and disability. While there is mention of subjective experience in the document, the mechanisms that link circuit activity to experience are underemphasized. These mechanisms are potential treatment targets. The emphasis in the strategic plan is largely on circuit activity. We encourage NIMH to focus attention on the need --and opportunity-- to develop behavioral-level explanations of how abnormal circuit activity gives rise to altered subjective experience.
- Goal 3 - We are pleased to see the continued attention to prevention. However, the current language in this goal lacks sufficient mention of behavioral interventions for mental illness, or even interactions between these and biological etiological factors or drugs. Treatment development for the severely mentally ill

has been limited due to the lack of models of how psychotic symptoms arise at a cognitive level, per our point for Goal 2. Intervening on a singular aspect is rarely the most effective way to change the behavioral aspects of the system.

- Goal 4 - As noted, we were pleased to see culture, equity, and the environment highlighted in the introduction as overriding principles. However, the plan needs more concrete language to advance work in these areas. “Objective 4.3: Develop innovative service delivery models to dramatically improve the outcomes of mental health services received in diverse communities and populations” is an important step in this direction, but is not sufficient. We need to go beyond just adapting existing interventions, which were typically developed without consideration of diverse cultural context and values. The current report says: “researchers may need to adapt evidence-based models to account for moderators known to impact intervention effectiveness in subgroups”; this comment is valuable but does not go far enough. To make real advances, researchers need to prioritize community partnerships and the voice of underrepresented groups in research design. It would be a great step forward if the strategic plan recognized the value of community members, providers, and populations with lived experience being involved in the design stage to more directly understand and address their needs, what would be feasible for their context, and what outcomes they care about most. Cultural adaptation is a critical component of addressing health inequities, but it is incomplete.

The NIMH plays a leadership role in setting the national research and treatment agenda. It is essential to use inclusive terminology and attend to biopsychosocial interactions throughout the plan. The plan’s language matters a great deal and has the potential to expand the diversity of who applies for funding. We routinely hear researchers lament the narrow focus of NIMH and their reluctance to seek NIMH support if their research does not include brain imaging. We know that this perception is not accurate and try to counter it. Inclusive language would help to communicate that rigorous scientists should think of NIMH as a ‘home’ for their work and accordingly contribute to scientific advancement. Unfortunately, this draft strategic plan continues to overlook basic behavioral and treatment research, limiting funding for the very sorts of investigator-initiated behavioral science and clinical trials that have led to enormous advances in our ability to understand and successfully treat mental disorders with safe and cost-efficient psychosocial approaches.

In summary, we appreciate many advances in this proposed plan. Nonetheless, the current draft does not adequately incorporate psychological sciences nor cognitive and social-affective neuroscience. A fuller integration can best serve the mission of NIMH given the well-supported value of considering both biological and behavioral aspects of mental health and illness, and how they interact.

Many thanks for the opportunity to provide feedback,

Federation of Associations in Behavioral & Brain Sciences

Juliane Baron, Executive Director, and Board Members Robert J. DeRubeis, Frances Gabbay, Nora S. Newcombe, Jeffrey M. Zacks

Coalition for the Advancement and Application of Psychological Science Executive Committee: Bethany Teachman, Mitch Prinstein, Dean McKay