

December 2, 2020

Francis Collins, MD, PhD Director, National Institutes of Health 9000 Rockville Pike Bethesda, MD 20892

Re: NOT-OD-21-018 Request for Information (RFI): Inviting Comments and Suggestions on the NIH-Wide Strategic Plan for COVID-19 Research

Dear Dr. Collins

The Endocrine Society appreciates the opportunity to respond to the Request for Information inviting feedback on the NIH-Wide Strategic Plan for COVID-19 Research. Founded in 1916, the Endocrine Society is the world's oldest, largest, and most active organization dedicated to research on hormones and the clinical treatment of patients with endocrine diseases. Our members include leading experts on endocrine-related comorbidities for COVID-19, as well as the use of hormone-based therapies such as glucocorticoids, testosterone, and triiodothyronine. We welcome the Strategic Plan for COVID-19 Research and support NIH's approach to continually updated the Plan to reflect new challenges presented by COVID-19. In our comments, we identify research priorities that NIH should include in future iterations of the Strategic Plan

## Priority 1. Improve Fundamental Knowledge of SARS-CoV-2 and COVID-19

We appreciate the plan's emphasis on the importance of learning more about the long-term effects of COVID-19. The NIH will be called upon in the coming years to achieve a broader understanding of longterm consequences for recovering patients, paying attention to maternal and infant health, child development, and acute and chronic pediatric manifestations of COVID-19, including multisystem inflammatory syndrome in children.

We also welcome the prioritization of research on the impact of comorbidities such as diabetes, cancer, cardiovascular disease, kidney and digestive diseases on COVID-19 and related outcomes. Understanding the fundamental relationship between comorbidities and the virus are critical to a complete understanding of COVID-19, and endocrine researchers will continue to lead and contribute to studies examining the relationship between SARS-CoV-2, its endocrine-relatined comorbidities, and outcomes, including later complications. In this context, we urge NIH to also explore how COVID-19 can potentially influence the emergence of new-onset endocrine pathology.

We note that the SARS-CoV-2 virus has complex impacts on various body systems and signaling networks. We encourage the NIH to support research that explores how the virus impacts communication between different organ systems and the potential long-term effects of disrupted signaling processes caused by the virus.

**Priority 3: Advance the Treatment of COVID-19** 



We are in strong support of the prioritization of research advancing COVID-19 treatments. As novel treatments and vaccines are implemented, we expect to be contributors in advancing knowledge of adverse events, particularly those related to the endocrine system and their effects on endocrine-related co-morbidities. We are also supportive of research and implementation of COVID-19 co-therapies for patients who experience endocrine-related co-morbidities during their course of illness and recovery.

Treatment-related research objectives supported by NIH should reflect scientific goals related to disease specific interactions with SARS-CoV-2, development of risk stratifying algorithms for triage and a targeted personalized treatment. In addition, the potential implications of endocrine related therapies (e.g., glucocorticoids, testosterone, triiodothyronine) on COVID19 outcomes deserve rigorous, mechanistic investigation.

## Priority 5. Prevent and Redress Poor COVID-19 Outcomes in Health Disparity and Vulnerable Populations

We applaud the focus on the social determinants of health in the strategic plan and reiterate that a indepth understanding of SARS-CoV-2 and COVID-19 requires addressing the significant disparities in disease progression and outcomes, especially those linked to minority pediatric and adult populations with existing and de novo endocrine-related comorbidities. We also support the emphasis in the strategic plan on environmental factors that contribute to COVID-19 incidence and severity; we suggest that environmental factors such as endocrine-disrupting chemicals be considered explicitly in objective 5.1, given the impacts of differential environmental exposures on underserved, under-resourced, and rural populations.

We maintain that pregnant women, the developing fetus and children are particularly vulnerable to this disease and certain complications, yet remain disadvantaged given the limited research on the virus' effects on these populations. Furthermore, the safety and efficacy of current pharmacotherapies for COVID-19 including corticosteroids, as well as their response to Sars-CoV2 vaccines under development, remain unproven in these populations. In recent years NIH has rightly emphasized inclusion in clinical research especially with respect to pregnant and lactating women, accounting for sex as a biological variable, and age across the lifespan. We call on NIH to rigorously apply these inclusion policies to basic research on COVID-19 as well as studies of treatments and therapeutics so that we can minimize disparities and ensure that therapeutic options are based on a strong foundation of research that includes all populations who are at risk for the disease.

Finally, we also support NIH's ongoing parallel efforts, outside the scope of this guidance, to support researchers focused on disease areas other than COVID19 in the face of substantial barriers to continuing this other important work. Thank you for considering our comments. If we can be of further assistance, please contact Joe Laakso, PhD, Director of Science Policy at <a href="mailto:jlaakso@endocrine.org">jlaakso@endocrine.org</a>.

Sincerely,

Gary D. Hammer, MD, PhD President, Endocrine Society