



On behalf of the National Institutes of Health (NIH), I am transmitting the Congressional Justification of the NIH request for the fiscal year (FY) 2020 budget. This request for a \$34.4 billion total program level seeks to recognize the need for fiscal austerity, while advancing NIH's mission to seek fundamental knowledge about the nature and behavior of living systems and to apply that knowledge to enhance health, lengthen life, and reduce illness and disability. Importantly, this budget provides the support to transform inspiration into innovation by providing new insights into how biological systems function and how that understanding can be brought forward to catalyze medical advances.

The NIH FY 2020 budget will ensure that NIH continues to prioritize transformational tools and technologies, clinical breakthroughs, and pushing the next frontier of biomedical research. NIH-funded researchers are at the leading edge of creating faster, more accurate diagnostics and hope for treatments for currently intractable diseases and conditions. Gene-editing, 3D tissue printing, single cell biology, and neurotechnologies are just a few areas of science in which innovative discoveries are underscoring the promise of biomedical research.

In order to advance the NIH mission, the FY 2020 budget prioritizes the continued support of basic research and its translation into clinical practice. By unlocking the secrets of how living systems function, NIH can then apply that knowledge to the development of novel treatments and cures. This type of research provides vital clues for important topics, such as how genetic risk factors contribute to Alzheimer's disease and how the microbiome interacts with the immune system in the development of cancer. Basic research also plays a substantial role in the continued development of a lifesaving universal influenza vaccine. Lastly, fundamental research serves as the foundation for the NIH Helping to End Addiction Long-term (HEAL) Initiative, which aims to curb the opioid epidemic and provide non-addictive alternatives for individuals who suffer from chronic pain.

Finally, the FY 2020 budget allows NIH to continue to catalyze the next generation of biomedical research advances. NIH has the ability, more than ever before, to advance scientific discovery by harnessing the incredible power that large biomedical datasets hold. An example of this is the historic NIH *All of Us* Research Program, which aims to capitalize on recent advances in genomics, environmental science, and big data analytics to develop precision medicine treatment options for one million or more patients across all population groups in this country. The Next Generation Research Initiative also provides NIH with an opportunity to address the challenges of tomorrow's scientific workforce. As such, NIH plans to prioritize meritorious applications from early stage investigators and develop evidenced-based strategies to support mission-specific workforce issues.

The FY 2020 budget provides resources for NIH, and the researchers around the country it supports, to continue to develop, maintain, and renew scientific resources that will enhance our ability to prevent and ultimately cure disease. I look forward to discussing the FY 2020 budget request.

Francis S. Collins, M.D., Ph.D.

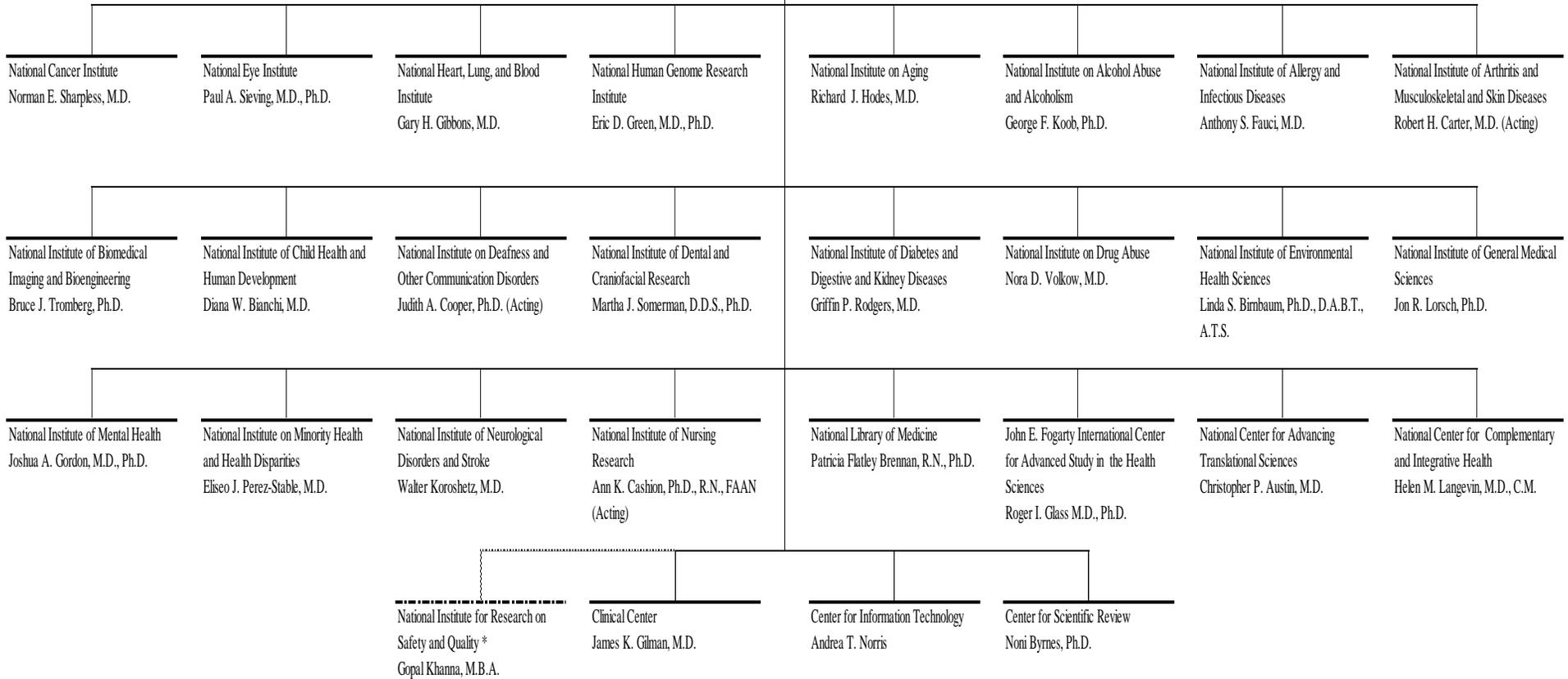
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# Organization Chart

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\* The FY 2020 Budget proposes to consolidate the Agency for Healthcare Research and Quality into NIH as the National Institute for Research on Safety and Quality