

The Ad Hoc Group Fiscal Year 2022 Recommendation

The 361 undersigned members of the Ad Hoc Group for Medical Research, which represents patient groups, scientific societies, research and academic institutions, health professionals, educators, and industry, are grateful to Congress for making meaningful, reliable annual funding support for the National Institutes of Health (NIH) a key national priority. NIH-funded biomedical, behavioral, social, and population-based research not only has improved our understanding of fundamental life and health sciences but also has prepared us to combat unprecedented health threats, including the COVID-19 pandemic, and promoted development of ever-evolving medical advances. We are immensely grateful to the leaders of the Senate and House Labor-HHS Appropriations Subcommittees over the last six years, who have worked together in driving Congress to provide strong bipartisan investments in the agency after over a decade of effectively flat budgets.

For fiscal year (FY) 2022, the Ad Hoc Group recommends a program level of at least \$46.111 billion, a \$3.177 billion increase over the comparable FY 2021 funding level for the NIH, which would allow for the NIH's base budget to keep pace with the biomedical research and development price index (BRDPI) and allow meaningful growth of 5%. Over the years, distinguished leaders and experts in medical research have recommended a sustained funding approach that allows real growth through increases that exceed inflation by 4-6%.^{1,2} For example, Congress has heard testimony in the past from NIH Director Francis Collins, MD, PhD, about how "a stable trajectory of inflation plus 5% for multiple years in a row"³ would optimally support the medical research enterprise in advancing discovery and improving health. This proposed funding level also is consistent with the recent report from the American Academy of Arts and Sciences recommendeding a sustained real growth rate of at least 4% for basic research across the federal government, with commensurate growth in applied research investment trajectories, in order to maintain U.S. reseach and development leadership internationally.⁴ As the world's premier public funder of medical research, the NIH is an important factor in that international leadership. Strong growth above BRDPI for the NIH provides critical support for additional research across the agency's diverse areas of study. conducted nationwide and through the NIH's 27 individual Institutes and Centers.

To achieve this important priority, it will be essential to maximize the nation's commitment to discretionary spending programs and ensure a funding allocation for the Labor-HHS Subcommittee that allows for the necessary investment in NIH and other

¹Loscalzo, J. (2006). The NIH Budget and the Future of Biomedical Research. *N Engl J Med*, 354(16), 1665-1667. <u>https://doi.org/10.1056/NEJMp068050</u>

² Heinig, S. J., Krakower, J. Y., Dickler, H. B., & Korn, D. (2007). Sustaining the Engine of U.S. Biomedical Discovery. *New England Journal of Medicine, 357*(10), 1042-1047. doi:10.1056/nejmsb071774

³ Senate Committee on Appropriations. (2016 April). Hearing on FY2017 Natinoal Institutes of Health Budget Request [Video]. <u>https://www.appropriations.senate.gov/hearings/hearing-on-fy2017-national-institutes-of-healthbudget-request</u>

⁴ Augustine, N., & Lane, N., et al. (2020). (rep.). *The Perils of Complacency America at a Tipping Point in Science & Engineering* (pp. 1–55). Cambridge, MA: American Academy of Arts and Sciences. https://www.amacad.org/publication/perils-of-complacency

agencies that promote the health of our nation. The extraordinarily tight budget caps Congress faced in FY 2021 led to the smallest investment in base growth at the agency in six years. The global COVID-19 pandemic has illustrated the value of the nation's longstanding commitment to NIH, the need to remain vigilant in providing robust support for fundamental research as we do not know when or from where the next threat will come, and the consequences of underinvestment in key public health priorities. We urge Congress to avoid underinvestments that would put the pace of medical research, the career trajectories of students and early-career investigators, and hope for patients and their families at risk. To fully harness novel research tools and partnerships against existing threats and in preparation for the next pandemic, we instead must continue the forward momentum of above-inflation investments in the NIH.

In addition to strong growth in the NIH's base budget, emergency supplemental funding continues to be necessary to support COVID-19-related expenses associated with both pandemic- and non-pandemic research and the research workforce pipeline. NIH-funded research has been critical to combatting the COVID-19 pandemic through the development of diagnostics, treatments, and vaccines. The incredible pace of scientific advancements, particularly the rapid development of the SARS-CoV-2 mRNA vaccines that have received emergency use authorization from the Food and Drug Administration to date, has been possible because of decades of NIH-funded basic research in a variety of areas, ^{5,6,7} supplemented by emergency funding over the last year. Many NIH-funded projects across a wide range of patient priorities, however, were disrupted as a result of the public health emergency, and additional resources are needed to allow pre-pandemic research to recover and to support the next generation of scientists. Therefore, we also urge expeditious approval of emergency funding for NIH to mitigate the impact of the public health emergency on our nation's research enterprise.

In sum, the NIH plays an instrumental role in funding basic, translational, and clinical research nationwide, and facilitating the translation of this knowledge into better health for patients. The agency has proven its value, yet again, during the pandemic, and has demonstrated an indisputable, outsized return on the nation's past long-term research investments. In addition to promoting the population's health, medical research supported by NIH serves as a major economic engine for the nation, with its multiplicative effect in local economies by generating over 475,000 jobs and \$81 billion in new economic activity in FY 2019.⁸

We must ensure robust funding for NIH in FY 2022 to continue making scientific advances and providing hope for millions of people. Continuing this longstanding bipartisan commitment will be key both in battling against infectious diseases like the novel coronavirus, which can damage lives and our economy in the future, and also against all of the other diseases, conditions, and maladies that afflict the people of our country, where the NIH has been at the forefront in driving progress.

⁵ Ball, P. (2020). The Lightning-Fast Quest for COVID Vaccines — and What It Means for Other Diseases. *Nature*, 589, 16-18. <u>https://www.nature.com/articles/d41586-020-03626-1</u>

⁶ Garde, D. and Saltzman, J. (2020, November 10) The Story of mRNA: How a Once-dismissed Idea Bbecame a Leading Technology in the Covid Vaccine Race." STAT. <u>https://www.statnews.com/2020/11/10/the-story-of-mrna-how-a-once-dismissed-idea-became-a-leading-technology-in-the-covid-vaccine-race/</u>

 ⁷ Neergaard, L. (2020, December 7). Years of research laid groundwork for speedy COVID-19 vaccines. Associated Press. <u>https://www.pbs.org/newshour/health/years-of-research-laid-groundwork-for-speedy-covid-19-vaccines</u>
⁸ United for Medical Research. (2020 February). NIH's Role In Sustaining The U.S. Economy.

https://www.unitedformedicalresearch.org/wp-content/uploads/2019/04/NIHs-Role-in-Sustaining-the-US-Economy-FY19-FINAL-2.13.2020.pdf

361 Signatories as of 02.05.21

AAWR: Association for Women in Radiology Academic Consortium for Integrative Medicine & Health Academic Pediatric Association Academy for Eating Disorders Academy for Radiology & Biomedical Imaging Research ACT for NIH Alliance for Academic Internal Medicine (AAIM) Alliance for Aging Research Alpha-1 Foundation ALS Association Alzheimer's Association and Alzheimer's Impact Movement Alzheimer's Foundation of America American Academy of Allergy, Asthma & Immunology American Academy of Hospice and Palliative Medicine American Academy of Neurology American Academy of Pediatrics American Academy of Physical Medicine & Rehabilitation American Academy of Sleep Medicine American Association for Cancer Research American Association for Dental Research American Association of Chairs of Departments of Psychiatry American Association of Colleges of Nursing American Association of Colleges of Osteopathic Medicine American Association of Colleges of Pharmacy American Association of Directors of Psychiatric Residency Training American Association of Immunologists American Association of Neurological Surgeons American Association of Neuromuscular & Electrodiagnostic Medicine American Association of Physicists in Medicine American Association on Intellectual and Developmental Disabilities (AAIDD) American Brain Coalition American Cancer Society Cancer Action Network (ACS CAN) American College of Academic Addiction Medicine American College of Cardiology American College of Clinical Pharmacology® American College of Neuropsychopharmacology American College of Nuclear Medicine American College of Obstetricians and Gynecologists American College of Physicians American College of Radiology American College of Rheumatology American Council on Education American Gastroenterological Association American Geriatrics Society American Headache Society American Heart Association (AHA) American Institute for Cancer Research American Institute for Medical and Biological Engineering American Institute of Ultrasound in Medicine

American Liver Foundation American Lung Association American Massage Therapy Association American Neurological Association American Pediatric Society American Physiological Society American Psychological Association AMERICAN ROENTGEN RAY SOCIETY American Society for Biochemistry and Molecular Biology American Society for Gastrointestinal Endoscopy American Society for Investigative Pathology American Society for Microbiology American Society for Nutrition American Society for Pharmacology and Experimental Therapeutics American Society for Radiation Oncology American Society for Reproductive Medicine American Society for Transplantation and Cellular Therapy American Society for Virology American Society of Anesthesiologists American Society of Emergency Radiology American Society of Hematology American Society of Human Genetics American Society of Nephrology American Society of Neuroradiology American Society of Pediatric Nephrology American Society of Radiologic Technologists (ASRT) American Society of Transplantation (AST) American Surgical Association American Thoracic Society American Urogynecologic Society American Urological Association American Veterinary Medical Association (AVMA) Anxiety and Depression Association of America Associated Medical Schools of New York Association for Clinical and Translational Science Association for Clinical Oncology Association for Prevention Teaching and Research Association for Psychological Science Association for Research in Vision and Ophthalmology (ARVO) Association of Academic Health Centers Association of Academic Health Sciences Libraries (AAHSL) Association of Academic Physiatrists Association of American Cancer Institutes Association of American Medical Colleges Association of American Universities Association of American Veterinary Medical Colleges Association of Anatomy, Cell Biology and Neurobiology Chairs (AACBNC) Association of Bioethics Program Directors Association of Black Cardiologists Association of Chairs of Departments of Physiology

Association of Independent Research Institutes Association of Medical and Graduate Departments of Biochemistry (AMGDB) Association of Medical School Pediatric Department Chairs Association of Minority Health Professions Schools, Inc. Association of Pathology Chairs Association of Population Centers Association of Psychologists in Academic Health Centers Association of Public & Land-Grant Universities Association of Schools and Colleges of Optometry (ASCO) Association of Schools and Programs of Public Health Association of University Professors of Ophthalmology Association of University Radiologists Atrium Health Autism Speaks AVAC **Biomedical Engineering Society Biophysical Society Boston University** Bridge the Gap- Syngap Education and Research Foundation Brown University Caltech Carle Illinois College of Medicine Case Western Reserve University School of Medicine CDH International Cedars-Sinai Child Neurology Foundation Children's Healthcare of Atlanta Children's Hospital Los Angeles Children's Hospital Association Children's Hospital of Philadelphia Children's Mercy Research Institute, Kansas City, MO ChristianaCare Christopher & Dana Reeve Foundation Cincinnati Children's Hospital Medical Center **Clinical Research Forum** Coalition for Clinical and Translational Science Coalition for the Life Sciences College on Problems of Drug Dependence Columbia University COMBINEDBrain **Conference of Boston Teaching Hospitals Congress of Neurological Surgeons** Consortium of Social Science Associations **Cooley's Anemia Foundation Coriell Institute for Medical Research Cornell University** Council of Graduate Schools Council of University Directors of Clinical Psychology Council on Social Work Education Cure Alzheimer's Fund

CURE Epilepsy **Cystic Fibrosis Foundation** Dana-Farber Cancer Institute Dartmouth-Hitchcock Health **Deadliest Cancers Coalition** Debbie's Dream Foundation: Curing Stomach Cancer Dementia Society of America **Depression and Bipolar Support Alliance Digestive Disease National Coalition** Dravet Syndrome Foundation Drexel University **Duke Health** Duke University **Dystonia Medical Research Foundation** East Carolina University ECAN Esophageal Cancer Action Network, Inc. Emory University Empowering Epilepsy Endocrine Society **Epilepsy Foundation** Eye Bank Association of America Federation of American Societies for Experimental Biology Federation of Association in Behavioral and Brain Sciences (FABBS) **Fight Colorectal Cancer** Florida State University Foundation for Sarcoidosis Research Fox Chase Cancer Center Fred Hutchinson Cancer Research Center Friends of NICHD Friends of NIDA Friends of NIMH GBS|CIDP Foundation International Global Health Technologies Coalition **Global Liver Institute** GO2 Foundation for Lung Cancer Harvard University Henry Ford Health System Hepatitis B Foundation **HIV Medicine Association** I AM ALS Indiana University Infectious Diseases Society of America International Essential Tremor Foundation International Foundation for CDKL5 Research International Foundation for Gastrointestinal Disorders International Myeloma Foundation International Society for Magnetic Resonance in Medicine International Society for Stem Cell Research Interstitial Cystitis Association JDRF

Jeffrey Modell Foundation John & Amy Mewhiney Cancer Foundation Johns Hopkins University **KidneyCAN** Lennox-Gastaut Syndrome (LGS) Foundation Lewis Katz School of Medicine at Temple University Lupus Foundation of America Lymphatic Education & Research Network March of Dimes Mass General Brigham Mayo Clinic Medical College of Wisconsin Medical Image Perception Society Medical Library Association Memorial Sloan Kettering MemorialCare Health System Mesothelioma Applied Research Foundation **METAvivor** Michelson Center for Public Policy Michelson Medical Research Foundation Michigan State University Moffitt Cancer Center Morehouse School of Medicine Muscular Dystrophy Association National Alliance for Eye and Vision Research National Alliance on Mental Illness National Alopecia Areata Foundation National Council for Diversity in the Health Professions National Eczema Association National Fragile X Foundation National Kidney Foundation National Pancreas Foundation National Psoriasis Foundation Nationwide Children's Hospital **NEC Society** NephCure Kidney International New York Medical College New York State Academic Dental Centers NorCal CarciNET Community North American Society for Pediatric Gastroenterology, Hepatology and Nutrition North American Society of Cardiovascular Imaging North American Vascular Biology Organization Northeastern University NYU Langone Health Pancreatic Cancer Action Network PATH Decision Support Software, LLC Patient Services, Inc. Pediatric Policy Council Penn State University Personalized Medicine Coalition

Population Association of America **Project Sleep** Prostate Cancer Foundation Pulmonary Fibrosis Foundation Pulmonary Hypertension Association Radiological Society of North America Rare Epilepsy Network (REN) **Research to Prevent Blindness Research**!America **RESOLVE: The National Infertility Association Restless Legs Syndrome Foundation** Rutgers, The State University of New Jersey Scleroderma Foundation Seattle Children's Shock Society Sjögren's Foundation SLC6A1 Connect Sleep Research Society Society for Academic Emergency Medicine Society for Advanced Body Imaging (SABI) Society for Assisted Reproductive Technology (SART) Society for Birth Defects Research and Prevention Society for Cardiovascular Magnetic Resonance Society for Imaging Informatics in Medicine Society for Male Reproduction and Urology (SMRU) Society for Maternal-Fetal Medicine Society for Neuroscience Society for Pediatric Research Society for Reproductive Endocrinology and Infertility (SREI) Society for Reproductive Investigation Society for Women's Health Research Society of Abdominal Radiology Society of Academic Associations of Anesthesiology and Perioperative Medicine (SAAAPM) Society of Chairs of Academic Radiology Departments Society of General Internal Medicine Society of Gynecologic Oncology Society of Interventional Radiology Foundation Society of Nuclear Medicine and Molecular Imaging Society of Radiologists in Ultrasound Society of Reproductive Biologists Technologists (SRBT) Society of Skeletal Radiology Society of Thoracic Radiology Society of Toxicology Society of University Surgeons Stanford University **Temple University** Texas A&M Health The Academy for Professionalism in Health Care (APHC) The Association of University Professors of Neurology (AUPN) The George Washington University

The Michael J. Fox Foundation for Parkinson's Research The Ohio State University Wexner Medical Center The Society for Pediatric Radiology The Society for Pediatric Radiology Research and Education Foundation The Society for Reproductive Surgeons (SRS) The University of Texas MD Anderson Cancer Center **Thomas Jefferson University Treatment Action Group Triage Cancer Tuberous Sclerosis Alliance** Tufts Medical Center **Tulane University** UC San Diego UC San Francisco UCLA United for Charitable Assistance United for Medical Research United Mitochondrial Disease Foundation University of California System University of Chicago Medical Center University of Cincinnati University of Colorado Anschutz Medical Campus University of Colorado Boulder University of Connecticut University of Delaware University of Florida University of Hawaii - John A. Burns School of Medicine University of Hawai'i System University of Illinois College of Medicine University of Iowa University of Iowa Health Care University of Kansas University of Maryland, Baltimore University of Massachusetts Medical School University of Miami Leonard M. Miller School of Medicine University of Michigan University of Nebraska Medical Center University of New Mexico University of North Carolina at Chapel Hill University of Pennsylvania University of Pittsburgh University of Rochester University of Southern California University of Texas Southwestern Medical Center University of Utah University of Virginia School of Medicine University of Washington University of Wisconsin-Madison School of Medicine and Public Health US Hereditary Angioedema Association USF Health Morsani College of Medicine

UTHealth | The University of Texas Health Science Center at Houston UTHealth | The University of Texas Health Science Center San Antonio UW Medicine Vanderbilt University Vanderbilt University Medical Center Vizient, Inc. Wake Forest School of Medicine Washington State University Washington University in St. Louis West Virginia University World Molecular Imaging Society Yale University