EXPLANATORY MATERIALS FOR THE DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION, AND RELATED AGENCIES APPROPRIATIONS BILL, 2024—H.R. 5894
SUMMARY OF ESTIMATES AND APPROPRIATIONS

The following table compares on a summary basis the appropriations, including trust funds for fiscal year 2024, the budget request for fiscal year 2024, and the Committee recommendation for fiscal year 2024 in the accompanying bill.

### 2024 LABOR, HHS, EDUCATION BILL

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<th>2024 Budget</th>
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GENERAL SUMMARY OF THE BILL

For fiscal year 2024, the Committee recommends a total of $147,096,000,000 in current year discretionary funding—the 302(b) allocation—and $195,999,840 in overall programmatic funding, including offsets and adjustments. The fiscal year 2024 recommendation is a decrease of $60,271,000,000 below the fiscal year 2023 enacted level.

The nation remains mired in higher inflation, which many economists believe has been exacerbated by the massive infusion of government spending during and immediately after the COVID pandemic. This bill represents a clear step toward returning to fiscal responsibility, while ensuring that funding for critical and high-priority functions are maintained. The Committee bill promotes a pro-job growth fiscal environment by eliminating duplication and ineffective programs, making strategic funding priority choices, and continuing to rein in out-of-control spending and regulatory burdens imposed by this Administration.

The Committee has prioritized key biomedical research, bio-defense, targeted education, and oversight responsibilities throughout the bill.

The Committee recommendation reflects the challenges inherent in achieving deficit reduction solely through reductions in discretionary spending. Significantly reducing our Federal budget deficit and the national debt will not occur until mandatory savings are achieved.

The Committee recommendation also includes good government, pro-life and pro-family provisions, limits the overreach of the Federal government, and reigns in regulatory bodies.

REDUCTIONS AND TERMINATIONS

In preparing this bill, the Committee scrutinized existing programs and activities to determine which ones could be eliminated in order to reduce unnecessary spending and duplicative, unauthorized programs. As a result, this bill terminates programs and activities which are narrowly targeted toward a small audience, are unauthorized or do not represent a clear Federal role.
### National Institutes of Health (NIH)

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The mission of NIH is to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability. NIH conducts and supports research to understand the basic biology of human health and disease; apply this understanding towards designing new approaches for preventing, diagnosing, and treating disease and disability; and ensure that these approaches are widely available.

The Committee recommendation for the National Institutes of Health (NIH) program level is $44,622,545,000 excluding funding for the Advanced Research Projects Agency for Health (ARPA–H). The Committee provides $42,888,063,000 in discretionary appro-
Appropriations, $1,327,482,000 in Public Health Service Act (PHS Act) section 241 evaluation set aside transfers, and $407,000,000 as authorized in the 21st Century Cures Act (Cures Act) (PL 114–255).

The recommendation includes funding for initiatives established in the Cures Act; $235,000,000 for the All of Us precision medicine initiative and $172,000,000 for the Brain Research through Application of Innovative Neurotechnologies (BRAIN) Initiative.

The Committee includes specific funding allocations for several initiatives and activities detailed in the Institute- and Center-specific sections below.

NATIONAL CANCER INSTITUTE (NCI)

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**Mission.**—NCI leads, conducts, and supports cancer research across the nation to advance scientific knowledge and help all people live longer, healthier lives.

**Access to Affordable Cancer Screening.**—The Committee notes ongoing innovation in non-invasive, at-home, self-sampling, including the development of collection technology for various sample types that are stable at room temperature and can be circulated through the mail, which have the potential to enhance access to cancer screening, particularly for rural and underserved communities. HHS is encouraged to fully leverage emerging opportunities in screening and access through the Cancer Moonshot and related activities.

**Brain Cancer Research.**—The Committee recognizes that certain types of brain cancers are associated with high mortality and morbidity rates. Brain and other nervous system cancers have a five-year survival rate of 33 percent. Certain brain tumors that occur in humans also occur spontaneously and naturally in dogs. These brain cancers in dogs share many of the same molecular underpinnings of their human counterparts. There is potential for developing treatments for brain cancers that will benefit dogs and humans and provide an intermediate step to evaluate human treatments in a more meaningful and related species. The Committee encourages NIH to continue to support research that brings together researchers and clinicians from pediatrics, adult oncology, veterinary medicine, and biomedical engineering to leverage the linkage between brain cancers in dogs and humans and evaluate and develop treatments and safe delivery systems.

**Cancer Survivorship.**—The Committee supports opportunities to strengthen the understanding of the late and long-term effects of cancer and cancer treatment for adults, which will in turn support initiatives to address the health care and quality of life issues facing cancer survivors. The Committee requests that the National Cancer Institute, through the Office of Cancer Survivorship, provide an update in the fiscal year 2025 congressional justification on research focused on cancer survivorship for patients diagnosed with cancer as adults, including an emphasis on long-term retrospective survivorship cohort studies supported by the Institute.
CD38 Diagnostic Research.—Multiple Myeloma (MM) is an incurable cancer of plasma cells. Approximately 36,000 new cases will be detected this year in the U.S. Monoclonal antibodies are an important treatment option for patients with MM. CD38 is a protein that is overexpressed in MM cells. Anti-CD38 monoclonal antibodies are used to treat MM malignancies. They also, however, destroy the body’s CD38+ Natural Killer cells, which are an important first line of defense. The Committee is aware of the CD38 diagnostic approach, which uses in-vitro testing and allows for the prediction of efficacy for the treatment of MM patients with monoclonal antibodies. The Committee urges NCI to continue to support research on the CD38 diagnostic approach and the development of promising trials that can lead to better outcomes for patients with MM.

Childhood Cancer Data Initiative (CCDI).—The Committee includes no less than $50,000,000 for the CCDI, which is the same as the fiscal year 2023 enacted level. Within this total, the Committee includes no less than $750,000, which is the same as the fiscal year 2023 enacted level, for enhancement of the CCDI Molecular Characterization Initiative and other efforts as applicable through continued expansion to focus on ultra-rare tumor types, such as atypical teratoid rhabdoid tumor and other ultra-rare pediatric tumors with limited therapeutic options. The effort should include comprehensive clinical and molecular data for each patient to the extent possible. The dataset should include clinical, radiographic, histopathologic, and molecular information to the extent possible and be stored in a manner that allows for interrogation of patient level data. The data collected will be used to identify risk factors, aid in prognostication and treatment recommendations, and assist with the development of novel therapeutics for these diseases.

Childhood Cancer STAR Act.—The Committee includes no less than $30,000,000, the same as the fiscal year 2023 enacted level, for continued implementation of sections of the Childhood Cancer Survivorship, Treatment, Access, and Research (STAR) Act (PL 115–180).

Chimeric Antigen Receptor T-Cell Therapy.—The Committee is aware of NIH research in Chimeric Antigen Receptor (CAR) T-cell Therapy, which targets specific proteins found in blood cancers, including B-cell leukemias and lymphomas, as well as NCI research to evaluate this approach for solid tumors. This therapy is transforming the treatment of these cancers, and researchers are hopeful that this therapy could be used to treat solid tumors. The Committee notes new breakthroughs in this therapy, including the SNAP-CAR T-cell therapy, which administers the CAR T-cells with one or more antibody adaptors that fuse them to the SNAP-CAR on the therapeutic cells. Early research is promising and suggests this could be a universal therapeutic platform, including against solid tumors. Its advantages over current standard CAR T-cell treatments include a reduction in potential toxicity and in cancer relapse. The Committee encourages NCI to continue to support research to advance the potential for CAR T-cell therapy.

Deadliest Cancers.—The Recalcitrant Cancer Research Act of 2012 focuses on cancers with a five-year survival rate below 50 per-
cent, which account for 44 percent of all U.S. cancer deaths. Given the toll that recalcitrant cancers exact on society and the lack of diagnostic and treatment resources currently available to help patients, the Committee encourages NCI to continue to invest in the most promising research opportunities to advance progress against each of the deadliest cancers (gastric, esophageal, and GE junction; liver, including cholangiocarcinoma; lung, including mesothelioma; ovary; pancreas; and brain, including adult and pediatric brain tumors, and other deadly pediatric cancers). The Committee requests an update on research focused on each of these areas in the fiscal year 2025 congressional justification.

Diffuse Intrinsic Pontine Glioma.—Diffuse Intrinsic Pontine Glioma (DIPG) is a rare but aggressive brain tumor that accounts for nearly 80 percent of pediatric brain stem tumors. Due to its location and highly aggressive nature, its prognosis is nearly always fatal. The committee encourages NCI to continue its research to better understand DIPG and coordinate its research efforts with other Federal agencies, including the Department of Defense, as well as private research foundations and advocacy groups, to improve the detection, treatment, and prevention of DIPG.

Geriatric Oncology.—As our population ages and cancer treatments improve, more patients with cancer are living longer. Adults aged 65 and older currently account for 67 percent of cancer survivors but are projected to account for 73 percent by 2040. Survivorship programs, however, have primarily focused on the late effects of cancer diagnosed at younger ages rather than supporting older adults. In addition, older adults with cancer remain significantly underrepresented in clinical trials, making treatment of these patients challenging for oncologists. The Committee encourages NCI to support opportunities across the geriatric oncology research continuum. Investments in this area will allow clinicians to provide a higher quality of care to this vulnerable and growing cancer patient population.

Glioblastoma Treatment Research.—The Committee recognizes that glioblastoma is the most common, most deadly, and most difficult form of brain cancer to treat in adults. For the thousands of Americans facing this disease, the lack of progress is a devastating reality that trails behind the impressive progress made in research of other forms of cancer. The Committee strongly urges NIH to increase and expand its research on glioblastoma. The Committee requests an update on these efforts in the fiscal year 2024 congressional justification.

Helping Cancer Patients Quit Smoking.—The Committee is concerned that not all cancer patients who smoke and are treated at National Cancer Institute designated cancer centers are being offered tobacco cessation services. Research indicates that smoking cessation can lead to improved cancer treatment outcomes for all cancers. The Committee commends the NCI for identifying this gap and launching the Cancer Center Cessation Initiative with the long-term goal of helping cancer centers and other hospitals build and implement tobacco cessation treatment programs to address tobacco cessation with cancer patients. The Committee is also aware that tobacco use, and lung cancer rates are higher in rural areas.
**Hepatitis B.**—Additionally, the Committee applauds NCI for its collaboration to implement the Strategic Plan for Trans-NIH research to Cure Hepatitis B, given that Hepatitis B is estimated to cause up to 60 percent of liver cancer cases. The Committee encourages NCI to continue to participate in NIH efforts to address the plan's recommendations.

**Human Papillomavirus-Associated Cancers.**—The Committee encourages NCI to continue to support research related to human papillomavirus (HPV) and HPV-associated cancers.

**Improving Native American Cancer Outcomes.**—The Committee continues to be concerned that Native Americans experience overall cancer incidence and mortality rates that are strikingly higher than non-Native populations. The Committee directs NCI to coordinate with National Institute on Minority Health and Health Disparities (NIMHD) as NIMHD establishes the Initiative for Improving Native American Cancer Outcomes.

**Liver Cancer.**—The Committee applauds the NCI for seeking input on how best to address the need to prioritize early detection, screening, and prevention sciences for primary liver cancer. Primary liver cancer has a 5-year survival rate of only 18 percent and is the third most common cause of cancer death in the U.S. The rate of liver cancer mortality continues to increase, as well. The Committee encourages NCI to develop a national agenda for early detection, screening, and prevention of liver cancer. In support of this, NCI is encouraged to convene a summit to ensure input for all stakeholders. The Committee applauds NCI for its Early Detection of Liver Cancer consortia initiatives as a means of fostering progress and collaboration. The Committee urges NCI to continue such programs, as well as use Program Projects, R01s, and U01 Cooperative Agreements, to achieve the goals of its strategic plans and advance progress against liver cancer. The Committee requests an update on these efforts in the fiscal year 2025 congressional justification.

**Maternal and Child Cancer Risks.**—The Committee is concerned about knowledge gaps regarding the risk and impact of exposure to environmental carcinogens associated with common cancers in women and children, particularly in understudied and highly impacted populations. Additional research is needed to understand the windows of exposure and the relationships between multiple exposures to environmental contaminants and intermediate cancer risk to develop effective prevention programs. The Committee encourages NCI to continue to support research to understand the impact of multiple exposures to environmental chemicals, pollutants, and other stressors across a diverse population of pregnant women and children.

**Metastatic Breast Cancer (MBC).**—The Committee is aware that clinical research is of utmost importance to those living with MBC, which is breast cancer that has spread to other organs and become incurable. The Committee encourages a continued emphasis by NCI on research for MBC, to discover better treatments and a cure. The Committee requests an update on NCI’s activities regarding MBC in the fiscal year 2025 congressional justification, including updates on actions NCI is taking to achieve representation of the demographic of the U.S. population in clinical trials.


Pediatric Rare Cancer Therapeutic Development.—Childhood cancers are rare and need specialized treatments, rather than just lower-dose treatments than adults receive. Each type of cancer requires appropriate therapeutic approaches to save a child’s life or significantly improve quality of life and extend a child’s lifespan, yet many types of childhood cancer do not yet have effective curative treatments available. The Committee encourages NIH to examine novel systems for identifying how rare cancers develop and progress, and to continue to support and accelerate development and evaluation of life-saving therapeutics for pediatric cancer patients.

Pediatric Research.—The Committee supports NIH maintaining a robust pediatric research portfolio spanning basic, translational, and clinical research, to adequately support researchers, particularly early career investigators, focused on pediatrics and to ensure pediatric components are included within larger NIH research priorities. The Committee includes $1,500,000 for the National Academies of Science, Engineering, and Medicine to assess the current NIH pediatric research portfolio and structure, including how projects are categorized as pediatrics, how pediatric components have been included or excluded from larger NIH initiatives, structural or process impediments to pediatric applicants, how pediatric research priorities are established, and how pediatric research activity is coordinated across the institutes and centers. The assessment will include recommendations on improving NIH’s overall support of child health research.

Prostate Cancer.—The Committee remains concerned that men with advanced prostate cancer lack treatment options, as well as adequate diagnostic and imaging methodologies that are common in other hormone-driven cancers with a similar disease burden to prostate cancer. To ensure Federal resources are leveraged as much as possible, the Committee encourages NCI to coordinate its research efforts with other Federal agencies, including the Department of Defense, as well as private research foundations and advocacy organizations.

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE (NHLBI)

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Mission.—NHLBI provides global leadership for a research, training, and education program to promote the prevention and treatment of heart, lung, blood and sleep disorders and enhance the health of all individuals so that they can live longer and more fulfilling lives.

Awareness of Sickle Cell Trait.—The Committee supports efforts to provide Americans with screening for sickle cell trait. The Committee encourages NIH to further its clinical research in Sickle Cell Disease (SCD) and Sickle Cell Trait, which includes promising approaches to eradicate the disease, save lives, and dramatically reduce the substantial health care complications and costs associated with SCD for children and adults. NIH is encouraged to consider
programs to evaluate the effectiveness of screening technologies for infants and children with sickle cell trait and disease and to develop different innovative technologies and medicines to treat and cure SCD.

**Chronic Lung Disease.**—The burden of chronic lung diseases continues to rise, and the Committee is supportive of efforts to accelerate progress in addressing these challenges for the approximately 15 million Americans diagnosed with chronic obstructive pulmonary disease and other airway diseases such as non-cystic fibrosis bronchiectasis. The Committee encourages NHLBI to support critical research on these conditions including: (1) development of complex tissue and cellular systems to mimic the disease process in the lung to help identify molecular pathways of disease; (2) research to promote earlier diagnosis; (3) clinical research of early disease to identify appropriate targets to modulate disease progression before irreversible tissue damage has occurred; and, (4) proof-of-concept clinical trials including translational and experimental medicine studies. NHLBI is directed to provide an update in the fiscal year 2025 congressional justification on the current and planned activities in these areas.

**Chronic Obstructive Pulmonary Disease National Action Plan.**—The Committee notes NHLBI’s leadership in crafting the Chronic Obstructive Pulmonary Disease National Action Plan. NHLBI is encouraged to continue this important work by supporting additional research activities and collaborating with other Public Health Service agencies to facilitate implementation of the plan’s recommendations.

**Diversifying Pathways to and Participation in Clinical Pulmonary Research.**—The Committee encourages NHLBI to continue to address the under-representation of minorities in clinical and basic NIH pulmonary research by convening the nation’s most productive pulmonary research academic research programs in regions with a dearth of high-trained researchers and local clinical partners. Through such efforts, NHLBI is encouraged to explore avenues for recruiting more minority individuals into NHLBI clinical research trials and minority high-school through college-aged students into leadership positions running NIH-funded clinical and basic research programs.

**Endotoxemic Septic Shock.**—The Committee encourages NIH to convene a stakeholder workshop to discuss research needs to inform the development of diagnostic criteria for characterizing endotoxemic septic shock in recognition of clinical advances in knowledge and emerging medical technologies to assess and treat this condition.

**Pulmonary Fibrosis.**—The Committee commends NHLBI for hosting a Pulmonary Fibrosis Stakeholders Summit in November 2022 to develop a blueprint for pulmonary fibrosis-related research priorities over the next five years and requests an update on the plan’s implementation in the fiscal year 2025 congressional justification. The plan’s priorities include a focus on early disease detection and improved diagnosis and innovative clinical trial designs. The Committee urges NHLBI to support the development of advanced research models more predictive of clinical trial success and the integration of these models into preclinical studies to facili-
tate faster drug development. The Committee supports more research into pulmonary fibrosis and coordination to address this deadly disease.

Sleep Health and Circadian and Sleep Disorders.—The Committee is supportive of the NHLBI and other institutes and centers for their ongoing commitment to sleep and circadian research and notes the opportunities for further progress in specific sleep disorders. The National Center for Sleep Disorders Research is encouraged to advance the blueprint for ongoing and emerging activities outlined through the recent NIH Sleep Research Plan and to include an update in the fiscal year 2025 congressional justification on efforts to facilitate further progress.

Valvular Heart Disease Research.—The Committee recommendation provides $20,000,000 for research into the cause of and risk factors for valvular heart disease, which is the same as the fiscal year 2023 enacted level. The Committee recognizes that many Americans have heart valve defects or disease, but do not always present with symptoms. Not all of those with this condition experience significant or life-threatening problems because of their heart valve defects or disease; however, about 25,000 people die each year in the U.S. from this disease, primarily due to underdiagnosis and undertreatment. The Committee commends the NHLBI for its work advancing treatments for people with valvular heart disease. It encourages the agency to expand these initiatives to include research that advances technological imaging and precision medicine to generate data on individuals with valvular disease, identifies individuals who are at high risk of sudden cardiac death due to valvular disease, develops prediction models for high-risk patients, and enables interventions and treatment plans to keep these patients healthy throughout their lives.

NATIONAL INSTITUTE OF DENTAL AND CRANIOFACIAL RESEARCH (NIDCR)

Appropriation, fiscal year 2023 ......................................................... $520,163,000
Budget request, fiscal year 2024 ....................................................... 520,138,000
Committee Recommendation ............................................................. 520,163,000
Change from enacted level ............................................................... – – –
Change from budget request ............................................................ +25,000

Mission.—The mission of NIDCR is to advance fundamental knowledge about dental, oral, and craniofacial health and disease and translate these findings into prevention, early detection, and treatment strategies that improve overall health for all individuals and communities across the lifespan.

NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES (NIDDK)

Appropriation, fiscal year 2023 ......................................................... $2,300,721,000
Budget request, fiscal year 2024 ....................................................... 2,303,098,000
Committee Recommendation ............................................................. 2,300,721,000
Change from enacted level ............................................................... – – –
Change from budget request ............................................................ −2,377,000

Mission.—The NIDDK mission is to conduct and support medical research and research training and disseminate science-based information on diabetes and other endocrine and metabolic diseases; digestive diseases, nutritional disorders, and obesity; and kidney,
urologic, and hematologic diseases, to improve people’s health and quality of life.

**Chronic Kidney Disease (CKD).**—The Committee notes that NIH funding for kidney disease research has lagged far behind that of NIH overall. The Committee applauds recent changes to clinical practice in the diagnosis of kidney disease and concurs with recommendations for new markers for estimating kidney function. NIDDK should prioritize research into endogenous filtration markers, activities that spur the adoption of new equations for estimating glomerular filtration rate. Finally, the Committee encourages NIDDK to expand investment in research that bridges existing deficits in CKD management and treatments to reduce incidence and progression, increases the number of CKD clinical trials, improves the delivery of evidenced-base care in under-represented populations, and improves patients’ quality of life. The Committee requests an update on these priorities in the fiscal year 2025 budget justification.

**Kidney Transplant Disparities.**—The Committee appreciates NIH’s response in the fiscal year 2024 congressional justification for an update on the kidney disease research program on disparities in the prevention, diagnosis, and treatment of kidney diseases. The Committee affirms the importance of reducing health disparities in kidney transplant care and commends NIDDK for launching new studies to address disparities in kidney transplant care. The Committee notes that kidney transplant care provides higher quality of life and lower health care costs for most people with kidney failure, yet there exists a dearth of funded opportunities across the Federal government to study clinical intervention, implementation, and management strategies that improve access and outcomes in kidney transplant care, such as efforts to improve organ allocation and matching kidney donors and recipients, organ preservation and reconditioning and management of patients with a functioning kidney transplant.

**Lower Urinary Tract Symptoms.**—Lower urinary tract symptoms (LUTS) describe symptoms related to the storage and voiding of urine. Associated conditions associated include overactive bladder, stress urinary incontinence, and neurogenic and non-neurogenic voiding dysfunction. The effectiveness of treatment for these conditions depends on patient characteristics and symptoms. An established repository of patient genotypes and phenotypes for LUTS does not exist, but knowledge in this area would enable the identification of symptom clusters to advance LUTS treatment. The Committee therefore encourages NIDDK to hold a workshop and encourage research that will lead to the development of a LUTS Precision Medicine Project focused on the characterization of LUTS clusters and their association to treatment responsiveness, identification of markers for phenotype clusters, development of functional and physiologic assessment measures specific to individual phenotype profiles to objectively correlate symptoms and treatment outcomes. The Committee requests in the fiscal year 2025 congressional justification an update on research activities to advance LUTS prevention and treatment.

**Urinary Incontinence.**—The Committee requests that NIDDK provide in the fiscal year 2025 congressional justification an update
on research on urinary incontinence in women, the gaps in understanding of how and why this condition manifests in women, and the potential research needed to fill these gaps.

NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE (NINDS)

Appropriation, fiscal year 2023 ......................................................... $2,813,925,000
Budget request, fiscal year 2024 ....................................................... 2,825,418,000
Committee Recommendation ............................................................. 2,674,925,000
  Change from enacted level ......................................................... −139,000,000
  Change from budget request ...................................................... −150,493,000

Mission. — The NINDS mission is to seek fundamental knowledge about the brain and nervous system and use that knowledge to reduce the burden of neurological disease.

The Committee recommendation includes $2,588,925,000 in discretionary appropriations and $86,000,000 made available in the Cures Act.

Alzheimer's Disease and Alzheimer's Disease-Related Dementias (AD/ADRD).—The Committee recommendation includes no less than the fiscal year 2023 enacted level across NIH for continued research into AD/ADRD.

BRAIN Initiative. — The Committee includes $86,000,000 as authorized in the Cures Act. The Committee requests that NIH brief the Committee on the progress and achievements of key projects in the BRAIN Initiative, as well as its mid-term objectives and associated outcomes, within 90 days of enactment of this Act.

Brain Aneurysms. — The Committee requests an update in the fiscal year 2025 congressional justification detailing the last five years of NINDS’s expenditures and programs on research and related activities pertaining to brain aneurysms.

Dystonia. — The Committee encourages NINDS to collaborate with stakeholders on the implementation of the recommendations from the NINDS workshop, “Defining Emergent Opportunities in Dystonia Research,” held in 2018.

Early Detection of Brain Aneurysms. — The Committee is concerned that an estimated 1 in 50 Americans has a brain aneurysm, and an estimated 30,000 Americans suffer a brain aneurysm rupture each year, with little or no warning. Ruptured brain aneurysms are fatal in about 50 percent of cases. Despite the widespread prevalence of this condition and the high cost it imposes on the country, the Federal government only spends approximately $2.08 per year on brain aneurysm research for each person with the condition. The Committee urges NIH to expand research into the prevention and early detection of brain aneurysms.

Emergency Care Research. — The Committee recognizes that more than 130 million Americans seek lifesaving care in an emergency department each year and that emergency physicians treat all types of injury and illness. Emergency departments serve a critical role in the health care system, including as the first line of response in natural disasters and public health emergencies such as the COVID pandemic, and they shed light on health disparities in communities throughout the U.S. The Committee strongly supports the trans-NIH Office of Emergency Care Research (OECR) and its success to foster basic, translational, and clinical research and re-
search training for the emergency setting. The Committee urges NINDS to continue to work closely with OECR to advance these research projects, including developing and implementing specific translational research projects related to emergency medical conditions.

*Multiple Sclerosis (MS).*—The Committee encourages NINDS to prioritize studies that develop the medical understanding of the progression of MS and advance research on prevention strategies, treatments, and cures for MS.

*Neuroarts.*—The Committee notes NIH’s contribution to the burgeoning field of neuroarts, which shows great promise in advancing health and wellbeing. The Committee requests an update in the fiscal year 2025 congressional justification that includes (1) a summary of what has been learned about the impact of various art modalities (including music) on brain function; and (2) an analysis of the knowledge gaps in understanding the impact of various art modalities, including music, on brain function.

*Parkinson’s Disease.*—The Committee commends NINDS for taking critical steps in identifying priority research recommendations to advance research on Parkinson’s disease, which impacts between 500,000 and 1,500,000 Americans and is the second most prevalent neurodegenerative disease in the United States. The Committee recognizes that NINDS is prioritizing public health concerns with severe gaps in unmet medical needs and supports the research recommendations set forth by the NINDS planning strategy to bring us closer to better treatments and a cure for Parkinson’s disease.

*Postural Orthostatic Tachycardia Syndrome (POTS).*—The Committee requests in the fiscal year 2025 congressional justification an update on NIH’s work to establish a new multi-institute Notice of Special Interest to spur new research on POTS, as strongly encouraged in explanatory statement accompanying the fiscal year 2023 appropriations act (PL 117–328). The Committee appreciates that NIH added Postural Orthostatic Tachycardia Syndrome to its Research, Condition, and Disease Categories.

*Preventative and Early Treatment Brain Health Research.*—The Committee encourages NIH to give greater attention to the study of the silent phase, or preclinical stage, of neurological disorders. This stage consists of the events that happen in the brain before the first symptoms occur. Learning what happens during this phase will guide the development of improved methods for identifying early disease biomarkers and novel interventions for treating neurological disease before it becomes disabling, ultimately impacting the trajectory of diseases like Alzheimer’s Disease, Parkinson’s disease, multiple sclerosis, stroke, and epilepsy. Research indicates that significant brain damage has already occurred by the time symptoms occur, and that early, pre-symptomatic intervention can improve patients’ outcomes. Such discoveries could reduce the strain that neurological diseases pose on our healthcare delivery system, including the Medicare and Medicaid programs.

*Ribonucleic Acid (RNA) Molecules and Neurological Disorders.*—The Committee is encouraged by recent findings that have implicated RNA molecules in neurological disorders including schizophrenia, bipolar disorder, and Alzheimer’s disease, and bacterial and viral infections that have long been suspected of triggering
such diseases. Many of these RNAs additionally depend on personal attributes, making them promising candidates for developing personalized diagnostics, prognostics, and new therapies. The Committee recognizes that more research in this area could lead to new and important biological discoveries and improve the understanding of the conditions affecting many older Americans. The Committee urges NINDS to support analytical and experimental research on the roles of RNA molecules in neurological disorders.

Special Emphasis Panel.—The Committee encourages NIH to establish a Special Emphasis Panel (SEP) for Lyme and other tickborne diseases, similar to the SEP established for myalgic encephalomyelitis/chronic fatigue syndrome. Current Lyme applications are sent to various committees which do not always have specialized knowledge of the complexities of Lyme disease. Establishing a SEP would allow for the review of applications to include the study of the potential causes, diagnosis, pathogenesis, clinical manifestations, epidemiology, and treatments of chronic Lyme disease. The review would be done by panelists selected from different specialties and different perspectives to examine a broad range of the science—an aspect not always available in the current review process for Lyme—considering its complex, multi-systemic nature and how the Lyme pathogen can suppress and evade the human immune system. Panelists with appropriate expertise can be recruited each cycle for the science pertaining to received applications. The Committee requests an update on such panel and NIH Lyme research in the fiscal year 2025 congressional justification.

Spinal Muscular Atrophy.—The Committee remains committed to continued NIH research into spinal muscular atrophy (SMA), a neuromuscular disease that causes degenerative nerve damage and results in severe muscle loss and impaired motor function. Past SMA research at NIH, particularly through NINDS, has led to disease-modifying SMA treatments and greater knowledge of the nervous system, which has benefited other neurological and neuromuscular disorders. While current SMA treatments slow or stop future degeneration, they do not cure SMA. Individuals with SMA, particularly adults, face significant challenges in muscle weakness and fatigue due to degeneration that occurred prior to treatment. Individuals treated prior to clinical symptoms onset may also display unmet needs, such as bulbar impairment and gait abnormalities. The Committee urges NIH to address the significant unmet need that exists across all ages and disease stages of SMA by supporting new SMA research into the role and function of survival motor neuron (SMN) protein, investigation into non-SMN pathways and targets capable of modifying disease, and research into how to best combine SMN-enhancing and non-SMN approaches for optimal therapeutic outcomes.

Opioid, Stimulant, and Pain Management Research.—The Committee includes no less than the fiscal year 2023 enacted level within NINDS for the Helping to End Addiction Long-Term (HEAL) Initiative, which is a trans-NIH effort to accelerate scientific discovery related to prevention and treatment of opioid use disorder and improving pain management.
Undiagnosed Diseases Network.—The Committee recommendation includes $18,000,000 for the Undiagnosed Diseases Network, the same as the fiscal year 2023 enacted level.

NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES (NIAID)

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Mission.—The NIAID mission is to conduct and support basic and applied research to better understand, treat, and ultimately prevent infectious, immunologic, and allergic diseases.

Antifungal Research.—Fungal pathogens that cause Valley Fever and fungal pathogens that are multi-drug resistant pose a threat to public health. The Committee strongly urges NIAID to increase funding for the research and development of novel anti-fungal therapies and vaccines, including for multi-drug resistant pathogens, to minimize their impact on public health. The Committee requests an update on this effort in the fiscal year 2025 congressional justification.

Antimicrobial Resistance.—The Committee includes $565,000,000 to support antimicrobial resistance research, the same as the fiscal year 2023 enacted level. Additionally, the Committee supports research to develop a fundamental understanding of microbial community invasion, which could lead to tools to reduce establishment of antibiotic-resistant microorganisms. This research includes obtaining a deeper understanding of the basis for stability and invasion of microbial communities, especially with the use of model communities, by applying metagenomics, genetics, and small molecule analysis to study the nature of robustness and emergent properties of microbial communities.

Celiac Disease.—The Committee supports research to improve the quality of life for patients with celiac disease, including efforts to find the cause of the disease and efforts to find a cure. The Committee commends NIH for issuing a Notice of Special Interest to spur additional research on the study of celiac disease. The Committee urges NIH to support focused research on the study of celiac disease; to better coordinate existing research; and, to focus new research efforts toward causation, diagnosis, management, treatment, and ultimately, a cure of this disease. The Committee thanks NIH for establishing a Research, Condition, Disease Categorization for celiac disease.

Consortium for Food Allergy Research.—The Committee recognizes the serious issue of food allergies which affect approximately eight percent of children and ten percent of adults in the U.S. The Committee commends the ongoing work of NIAID in supporting a total of 17 clinical sites for this critical research, including seven sites as part of the Consortium for Food Allergy Research (CoFAR). The Committee includes $12,100,000, the same as the fiscal year 2023 enacted level, for CoFAR to maintain its clinical research network of centers of excellence in food allergy clinical care and expertise in food allergy research.
**Highly Pathogenic Zoonotic Viruses.**—The Committee supports investments in research on highly pathogenic zoonotic viruses with pandemic potential, including filoviruses, flaviviruses, paramyxoviruses, and bunyaviruses. The Committee notes that research on high consequence zoonotic viruses requires high-containment BSL–4 labs. High-containment biosafety level 4 (BSL–4) labs enable researchers to investigate these types of pathogens, and develop rapid and reliable diagnostics, novel antiviral therapeutics, and vaccines, without endangering the staff or population. Additional investments in BSL–4 infrastructure for research in highly pathogenic zoonotic viruses is critical. The Committee encourages NIH to continue making funding available for all BSL–4 laboratories and not limited to National Biocontainment Laboratories.

**Internal Audits.**—NIH shall conduct an audit of all research that involves any of the following: virus manipulation, passaging of a virus, genetically modified animals that are derived from virus manipulation, or making any mutations to a virus. As part of this audit, NIH shall review all sub-grantee compliance with policies and procedures for any grant involving the aforementioned activities or any grant outside the U.S. In addition, the NIH shall review all research conducted intramurally or extramurally in a Biosafety Level 3 or 4 laboratory related to an enhanced potential pandemic pathogen. The NIH shall complete these audits within one year of enactment of this Act and brief the Committees on audit findings.

**Lyme and Tick-Borne Disease Research.**—The infectious etiology of chronic diseases and syndromes, including infections from Borrelia burgdorferi, Bartonella henselae, West Nile virus, and many other infectious agents, have been known or suspected for several decades, but research which could reduce chronic diseases and syndromes and lessen the severity of symptoms, has been neglected. Such research could have important implications for the treatment of severe mental health and psychological symptoms of chronic diseases and disabilities, including for people with chronic Lyme disease. The Committee notes that in 2019, NIH released its NIH Strategic Plan for Tick-Borne Disease Research, establishing a framework for addressing the problem of Tick-Borne Diseases (TBDs). The Committee includes not less than $125,000,000 for NIH research into TBDs. NIH is encouraged to support research to better understand the causes of TBDs, to support research on tick-borne tularemia and other newly emerging tick-borne pathogens, and to support the development of reliable diagnostics and therapies to address this growing health concern that affects more than 476,000 Americans annually. The Committee notes that additional research could significantly reduce chronic diseases and syndromes, as well as lessen the severity of symptoms.

**National Swine Resource and Research Center.**—The Committee recognizes the biomedical advances made utilizing swine models of human health and disease, and therefore supports the creation of an additional National Swine Resource and Research Center. Such a center would support innovative basic and translational research on human diseases. The Committee notes the value of considering universities with an established center for biomedical swine research as well as patented lines of swine breeds that can be maintained at human sizes for several years for such a center.
Regional Biocontainment Laboratories.—Congress appreciates NIH’s use of cooperative agreements to fund the Regional Biocontainment Laboratories (RBLs). The Committee continues to provide $52,000,000 to the 12 RBLs to support core and shared resources for biosafety lab 3 (BSL–3) containment enabling them to develop and maintain the research resources, facilities and personnel needed to meet national, regional, and local biodefense and emerging infectious diseases research needs in the event of a bioterrorism or infectious disease emergency. The Committee encourages NIAID to use a funding mechanism that allows the 12 RBLs to apply to use the funding for: (1) conducting research on biodefense, emerging infectious disease agents, and other infectious disease threats to global public health; (2) training researchers, including in biosafety level 3 practices; (3) maintaining a workforce skilled in BSL–3 research; (4) establishing best practices for the safe, effective, and efficient conduct of research in such facilities, and (5) ongoing support for operations, facilities, and equipment purchase costs. The minimum funding award for such mechanism shall be not less than $3,000,000.

Potential Pandemic Pathogens.—HHS shall conduct a review of all NIH-funded research involving potential pandemic pathogens referred to an institutional biosafety committee and/or a dual use research of concern committee. Such review shall be conducted by the HHS Potential Pandemic Pathogen Care and Oversight review committee. Within one year of enactment of this Act, a report should be submitted to the Committees on Appropriations of the House of Representatives and the Senate, the Committee on Energy and Commerce of the House of Representatives, and the Committee on Health, Education, Labor, and Pensions of the Senate and made available online summarizing the findings of the panel. In addition, the NIH shall list on the agency’s website by year each grant submitted for further review pursuant to the HHS Framework for Guiding Funding Decisions about Proposed Research Involving Enhanced Potential Pandemic Pathogens.

Universal Influenza Vaccine.—The Committee includes no less than $270,000,000, the same as the fiscal year 2023 level, to support basic, translational, and clinical research to develop a universal influenza vaccine that provides robust, long-lasting protection against multiple subtypes of flu, rather than a select few. A universal vaccine would end the need for updating and administering the seasonal flu vaccine each year and could offer protection against emerging flu strains. The Committee requests an update on these efforts within 120 days of enactment of this Act.

NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES (NIGMS)

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The Committee recommendation includes $1,827,197,000 in discretionary appropriations and $1,327,482,000 in PHS Act section 241 evaluation set-aside transfers.
Mission. — NIGMS supports basic research that increases our understanding of biological processes and lays the foundation for advances in disease diagnosis, treatment, and prevention.

Institutional Development Awards (IDeA). — The Committee provides $435,956,000 for IDeA, $10,000,000 above the fiscal year 2023 enacted level. The Committee opposes any effort to change eligibility for the IDeA program to a system that would be based on States’ populations. The IDeA program increases our nation’s biomedical research capability by improving research capacity in States that have historically had lower levels of NIH biomedical research funding. IDeA funds merit-based, peer-reviewed research that meets NIH research objectives. NIH IDeA is comprised of several initiatives: Centers of Biomedical Research Excellence, IDeA Networks of Biomedical Research Excellence, IDeA Clinical and Translational Research programs, IDeA Co-funding, and the IDeA Regional Entrepreneurship Development program. The IDeA program aims to strengthen an institution’s ability to support biomedical research, enhance the competitiveness of investigators in securing research funding, and enable clinical and translational research that addresses the needs of medically underserved communities.

EUNICE KENNEDY SHRIVER NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT (NICHD)

Appropriation, fiscal year 2023 ......................................................... $1,749,078,000
Budget request, fiscal year 2024 ....................................................... 1,747,784,000
Committee Recommendation ............................................................. 1,749,078,000
Change from enacted level ......................................................... – – –
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Mission. — NICHD’s mission is to lead research and training to understand human development, improve reproductive health, enhance the lives of children and adolescents, and optimize abilities for all.

Cerebral Palsy. — The Committee encourages NIH to continue to prioritize and invest in research on cerebral palsy (CP) including the establishment of a Cerebral Palsy Notice of Special Interest to significantly strengthen and accelerate CP research priorities across the lifespan. The Committee encourages NIH to focus on basic and translational discoveries, as well as implementation, observational, and clinical studies aimed at early detection and intervention, comparative effectiveness, and functional outcomes.

Cross-Sex Hormone Research. — The Committee does not include funding for any research involving studying the effects of or administering cross-sex hormones in children for research related to gender dysphoria.

Docosahexaenoic acid (DHA) Supplements for Mothers. — The rising incidence of preterm birth rates in the U.S., particularly in low income, rural, and minority communities, remains a significant public health concern. Preterm births often result in a significant health impact to the child, including carrying the highest rates of mortality and long-term development challenges. The Committee encourages NICHD to include in its fiscal year 2025 congressional justification an update on the use of supplemental DHA and other dietary supplements to reduce the incidence of preterm births.
Endometriosis Research.—The Committee urges NICHD to continue expanding basic, clinical, and translational research into the mechanics of endometriosis, identify early diagnostic markers, and develop new treatment methods. The Committee further encourages NIH to devote more resources to support targeted research of endocrine disrupting chemicals in endometriosis, the relationship of endometriosis and cancer, prenatal and epigenetic influences on the risk for endometriosis, and the role of the human microbiome to develop new and innovative treatment methods.

Impact of Technology and Digital Media Use Among Infants, Children, and Teens.—The Committee remains concerned about the impacts of technology use and media consumption on infant, children, and adolescent development. The Committee supports research into the cognitive, physical, and mental health impacts of young people’s use of technologies as well as long-term developmental effects on children’s social, communication, and creative skills. The Committee also encourages NIH to study potential correlations between increased use of digital media and technologies and suicidal thoughts and ideation among children. The Committee encourages NIH to consider different forms of digital media and technologies including mobile devices, smart phones, tablets, computers, and virtual reality tools, as well as social media content, video games, and television programming.

Intellectual and Developmental Disabilities Research.—The Committee recognizes the need to ensure continued support for intellectual and developmental disabilities research given the increase in developmental disabilities among children in the United States. Furthermore, the Committee urges NICHD to examine the participation of NIH IDeA State institutions in intellectual and developmental disabilities research programs and encourages NICHD to foster increased participation from institutions throughout the United States.

Learning Disabilities Research.—The Committee is increasingly concerned with the decline in achievement for students with disabilities, particularly in light of the COVID pandemic, which led to significant loss of in-person instruction for many students. The Committee recognizes the need for continued research and improved interventions. The Committee recognizes the importance of NICHD’s funding of Learning Disabilities Research Centers and Learning Disabilities Innovation Hubs, which are a major source of Federal funding available to researchers interested in exploring child development and learning disabilities to conduct randomized control trials and explore the relationships between different variables at work. While learning disabilities affect an individual’s education and academic achievement, clinical research using the latest technology and advances in neuroscience is essential for understanding these disabilities, given that they are brain-based. To continue robust research into language, reading development, learning disabilities, and disorders that adversely affect the development of listening, speaking, reading, writing, and mathematics abilities, the Committee urges NICHD to increase its investment in its Learning Disabilities Research Centers and Learning Disabilities Innovation Hubs.
Male Reproductive Health.—The Committee urges NICHD to continue to support research on male mechanisms of infertility. There is a gap in the knowledge of how to diagnose and treat male infertility, often resulting in women undergoing unnecessary treatments due to undiagnosed or untreated male partner infertility.

Maternal Health.—The Committee includes no less than $43,400,000 for the Implementing a Maternal Health and Pregnancy Outcomes Vision for Everyone Initiative, the same as the fiscal year 2023 enacted level, to come entirely from amounts provided under this heading.

Population Research.—The Committee commends NICHD for fulfilling its statutory authority by supporting a robust population research portfolio that includes population representative longitudinal surveys, research centers and networks, training programs, and grant mechanisms. Over the decades, these investments have yielded numerous scientific advances regarding the causes and consequences of population change on human and child development, maternal health, and the health and well being of individuals across the life course. The Committee congratulates NICHD for supporting initiatives that facilitate collaborations and resource sharing between the Population Dynamics Research Centers and outside institutions and for funding the innovative Data Sharing for Demographic Research data repository, which makes high-quality demographic data widely available to the scientific research community.

NATIONAL EYE INSTITUTE (NEI)

Appropriation, fiscal year 2023 ......................................................... $896,549,000
Budget request, fiscal year 2024 ....................................................... 896,136,000
Committee Recommendation ............................................................. 896,549,000
Change from enacted level ......................................................... – – –
Change from budget request ...................................................... +413,000

Mission.—The mission of the National Eye Institute is to eliminate vision loss and improve quality of life through vision research.

Blepharospasm Research.—The Committee notes the National Eye Institute’s continued support for research blepharospasm, a form of dystonia, and it encourages continued collaborative efforts among stakeholders and other NIH institutes or centers.

Usher Syndrome.—The Committee encourages NEI to support research on Usher syndrome. The Committee requests an update in the fiscal year 2025 congressional justification on efforts to accelerate viable human treatment options for people with Usher Syndrome, as well as other developments in this field of research.

NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES (NIEHS)

Appropriation, fiscal year 2023 ......................................................... $913,979,000
Budget request, fiscal year 2024 ....................................................... 938,807,000
Committee Recommendation ............................................................. 913,979,000
Change from enacted level ......................................................... – – –
Change from budget request ...................................................... −24,828,000

Mission.—NIEHS’s mission is to discover how the environment affects people in order to promote healthier lives.

Harmful Algal Blooms Research.—The Committee recognizes the value of the NIEHS mission and the jointly-funded Oceans and Human Health program between NIEHS and the National Science
Foundation (NSF) as a means to increase scientific knowledge about short-term and long-term human health effects potentially associated with acute and chronic exposures to toxins produced by harmful algal blooms (HABs). The Committee recognizes the increasing relevance of this scientific research to communities directly affected by HABs, including Florida, where in 2021, a bloom tested at 860 parts-per-billion microcystin, more than 100 times the Environmental Protection Agency’s (EPA) standard. The Committee urges NIEHS to continue investing in this research area using its competitive, peer-reviewed grantmaking processes. In particular, the Committee notes growing scientific interest in further investigating respiratory irritation or illness associated with inhalation of aerosolized HAB toxins and with neurotoxic shellfish poisoning arising from ingestion of contaminated seafood, as well as developing new preventative, diagnostic, and therapeutic strategies to combat the harmful health effects of airborne, ingested, and dermal exposure to HAB toxins. The Committee commends NIEHS for collaborating with agencies such as NSF, National Oceanic and Atmospheric Administration, EPA, and CDC, to advance such research and translate research findings for clinical and public health benefits.

NATIONAL INSTITUTE ON AGING (NIA)

Appropriation, fiscal year 2023 ......................................................... $4,407,623,000
Budget request, fiscal year 2024 ....................................................... 4,412,090,000
Committee Recommendation ............................................................. 4,407,623,000
Change from enacted level ......................................................... – – –
Change from budget request ...................................................... 4,467,000

Mission.—NIA’s mission is to understand the nature of aging and the aging process, and diseases and conditions associated with growing older, in order to extend the healthy, active years of life.

Alzheimer’s Disease and Alzheimer’s Disease-Related Dementias (AD/ADRD).—The Committee recommends no less than the fiscal year 2023 enacted level for AD/ADRD research across NIH.

Geroscience Research.—Recent advances in geroscience suggest it may be possible to prevent or treat a wide range of adult-onset health concerns, including functional declines such as frailty and lost resilience, and overt diseases such as Alzheimer’s Disease, cancer, cardiovascular diseases and many others. This could be achieved by slowing or reversing certain genetic, molecular, and cellular hallmarks of aging discovered through research on the basic biology of aging. The Committee strongly urges NIA to prioritize funding for geroscience research. The Committee also understands that the enormous promise of this field is limited by a shortage of investigators with expertise in the biology of aging and the clinical translation of basic research findings. Therefore, NIA should increase support for early career investigators, especially postdoctoral researchers and junior faculty, to help attract, retain, and develop top talent in the field of geroscience. Finally, the Committee encourages NIA to increase funding for basic and translational research in aging, to provide more options and test more treatments as quickly as possible.

Microglia Dysfunction.—The Committee has previously directed NIA to collaborate with NINDS and NASEM to pinpoint research
priorities for preventing and treating Alzheimer’s Disease (AD) and Alzheimer’s Disease Related Dementias (AD/ADRD), including identifying barriers to advancing large-scale precision medicine approaches in this space. In order to more rapidly develop high-impact precision therapies for the maximum number of AD patients, research and clinical development centered on the most frequently occurring, genetically influenced subsets of AD is ideal. Of the approximately 6.5 million Americans over age 65 with AD, more than half have genetic risk variants linked to glial cell function, which makes them a key target for precision therapeutics. Therefore, the Committee encourages development of research initiatives focused on mitigating immune dysfunction as well as other equally promising targets with precision inspired therapeutics for AD/ADRD and encourages NIA and NINDS to provide a joint report to the Committee within 120 days of enactment of this Act on its progress in advancing these efforts, and to make such report available on the agency’s website.

NATIONAL INSTITUTE OF ARTHRITIS AND MUSCULOSKELETAL AND SKIN DISEASES (NIAMS)

Mission.—NIAMS’s mission is to support research into the causes, treatment, and prevention of arthritis and musculoskeletal and skin diseases; the training of basic and clinical scientists to carry out this research; and the dissemination of information on research progress in these diseases.

Alopecia Areata.—The Committees continues to note the importance of research into autoimmune skin conditions such as alopecia areata. NIAMS research has uncovered genetic factors that are associated with alopecia areata, many of which have been implicated in other autoimmune diseases. The Committee encourages NIAMS to explore collaborative opportunities with key stakeholders to advance critical research projects into causes and treatments.

Atopic Dermatitis.—The Committee applauds NIAMS for its leadership sustaining recent progress and facilitating timely advancements in atopic dermatitis research. The Committee encourages NIAMS to continue to support emerging opportunities for this portfolio across all forms of eczema and to collaborate with community stakeholders and other institutes and centers, such as NIAID, to drive further scientific advancement.

NATIONAL INSTITUTE ON DEAFNESS AND OTHER COMMUNICATION DISORDERS (NIDCD)

Mission.—NIDCD conducts and supports biomedical and behavioral research and research training in the normal and disordered processes of hearing, balance, taste, smell, voice, speech, and lan-
language. NIDCD also conducts and supports research and research training related to disease prevention and health promotion; addresses special biomedical and behavioral problems associated with people who have communication impairments or disorders; and supports efforts to create devices which substitute for lost and impaired sensory and communication function.

**Spasmodic Dysphonia.**—The Committee notes the research NIDCD continues to facilitate on spasmodic dysphonia and collaborative efforts with relevant institutes, centers, and stakeholders. The Committee continues to encourage sustained collaboration with key stakeholders and agencies.

**NATIONAL INSTITUTE OF NURSING RESEARCH (NINR)**

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**Mission.**—The mission of NINR is to lead nursing research to solve pressing health challenges and inform practice and policy for health optimization.

**NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM (NIAAA)**

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**Mission.**—NIAAA's mission is to generate and disseminate fundamental knowledge about the adverse effects of alcohol on health and well-being, and apply that knowledge to improve diagnosis, prevention, and treatment of alcohol-related problems, including alcohol use disorder, across the lifespan.

**NATIONAL INSTITUTE ON DRUG ABUSE (NIDA)**

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**Mission.**—NIDA's mission is to advance science on the causes and consequences of drug use and addiction and to apply that knowledge to improve individual and public health.

**Future Thinking.**—The Committee is concerned by alarming trends in addiction in the U.S. The number of alcohol-related deaths doubled from 1999 to 2017, the age-adjusted rate of deaths involving synthetic opioids other than methadone increased 1,040 percent from 2013 to 2019, and the use of psychostimulants increased 317 percent. One trait that is evident in every form of addiction is the excessive discounting of the future by the addicted person who will value the immediate over benefits of the future. Episodic Future Thinking is a promising intervention that helps individuals who are predisposed to addiction consider the positive consequences of remaining sober through a mental simulation of positive events that might occur in the future. The Committee en-
courages NIDA to support transdisciplinary research that incorporates neuroscience, behavioral research, neuroeconomics, brain imaging, decision-science, engineering, and computer science to deploy Episodic Future Thinking intervention strategies across a range of addictions.

Harm Reduction.—The Committee does not support research into harm reduction practices or policies; no funds are provided for any research related to harm reduction.

Marijuana Research.—The Committee is concerned that development of a drug-impairment standard for marijuana remains unlikely in the near-term and encourages NIH to continue supporting a full range of research on the health effects of marijuana and its components, including research to understand how marijuana policies affect public health issues such as drug-impaired driving. The Committee is aware that most of the Federal research has been limited to a single strain of marijuana and encourages NIH to support research that encompasses the diversity, quality, and potency of commonly available cannabinoid strains. Additionally, the Committee continues to support the development of an objective standard to measure marijuana impairment and a related objective field sobriety test to ensure highway safety. The Committee requests a report on NIH’s efforts to study marijuana, including expanding researcher access to different marijuana strains, within 120 days of enactment of this Act.

Methamphetamines and Other Stimulants.—The Committee is concerned that, according to predicted provisional data released by the Centers for Disease Control and Prevention, more than 27,500 overdose deaths involved cocaine and more than 34,000 involved drugs in the category that includes methamphetamine during the 12-month period ending November 2022, an increase of 38 percent and 43 percent, respectively, in just two years. This sharp increase has led some to refer to the stimulant overdoses as the “fourth wave” of the current drug addiction crisis in America, following the rise of opioid-related deaths involving prescription opioids, heroin, and fentanyl-related substances. No Food and Drug Administration (FDA) approved medications are available for treating methamphetamine, cocaine, and other stimulant use disorders. The Committee continues to support NIDA’s efforts to address the opioid crisis and supports NIDA’s efforts to combat the growing problem of methamphetamine and other stimulant use disorders and related deaths.

Additionally, the Committee recognizes that NIDA is prioritizing research and development of treatments to rapidly reverse cocaine toxicity and reduce mortality rates. The Committee encourages NIDA to continue prioritization of additional research and development to advance a life-saving treatment for overdoses caused by cocaine.

Opioid, Stimulant, and Pain Research.—The Committee continues to be concerned about the high mortality rate due to the opioid overdose epidemic and appreciates the important role that research plays in the various Federal initiatives aimed at this crisis. The Committee is also aware of the most recent provisional data from the Centers for Disease Control and Prevention that shows opioid overdose fatalities were predicted to exceed 109,000 in
2022, with the primary driver being the increased overdose deaths involving synthetic opioids, primarily illicitly manufactured fentanyl. More research is needed to find new and better agents to prevent or reverse the effects caused by this class of chemicals and to provide improved access to treatments for those with addiction to these drugs. To combat this crisis the Committee includes no less than the fiscal year 2023 enacted level for NIDA’s share of the Helping to End Addiction Long-term Initiative. As we continue to address the opioid overdose epidemic and other drug related concerns, it is also important to continue research on criminal justice environments. A significant number of individuals with substance use disorders reside in carceral environments where there are substantial barriers to treatment access. In addition, supporting the development of medications for opioid use disorder and overdose is a priority for NIDA’s research agenda. The Committee has continued language that expands the allowable use of these funds to include research related to stimulant use and addiction.

Pain Management and Addiction.—The Committee urges NIDA to continue and expand efforts to educate physicians and other medical professionals on safe prescribing for pain and managing patients who abuse prescription opioids, as well as best practices for incorporating substance misuse and addiction screening and treatment into their clinical practices.

Post-Acute Withdrawal Syndrome.—Post-acute withdrawal syndrome (PAWS), also known as protracted withdrawal syndrome, can cause symptoms including depression, anhedonia, insomnia, hostility, and cognitive difficulties among people in recovery from substance use disorder. The Committee encourages NIDA to fund research to better understand PAWS, including its neurological bases, and potential treatments. The Committee also encourages NIDA to research drug-specific PAWS symptoms (including withdrawal symptoms related to alcohol, marijuana, opioids, and stimulants), as well as how it presents in polysubstance use.

Raising Awareness and Engaging the Medical Community in Drug Abuse and Addiction Prevention and Treatment.—Education is a critical component of efforts to curb drug use and addiction, and it must target all of society, including healthcare providers, patients, and families. Medical professionals must be in the forefront of efforts to curb the opioid crisis. The Committee continues to be pleased with the NIDAMED initiative, targeting physicians-in-training, including medical students and resident physicians in primary care specialties such as internal medicine, family medicine, emergency medicine, and pediatrics. NIDA is encouraged to continue efforts in this area, providing physicians and other medical professionals with the tools and skills needed to incorporate substance use and misuse screening and treatment into their clinical practices.

NATIONAL INSTITUTE OF MENTAL HEALTH (NIMH)

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The Committee recommendation includes $2,112,843,000 in discretionary appropriations and makes $86,000,000 available from Cures Act.

**Mission.**—NIMH’s mission is to transform the understanding and treatment of mental illnesses through basic and clinical research, paving the way for prevention, recovery, and cures.

**BRAIN Initiative.**—The Committee includes $86,000,000 for NIMH in support of the BRAIN Initiative as authorized by the Cures Act.

**Reducing Mental Health Disparities in Youth.**—The Committee notes with alarm new CDC data on depression and trauma among adolescents and acknowledges the NIMH strategic framework for addressing mental health among underserved and underrepresented youth, including those in rural communities, by 2031. The Committee recognizes ongoing collaborative work with NICHD and NIMHD to execute this framework through research, workforce development, and stakeholder engagement.

**Suicide Prevention.**—The Committee encourages NIMH to continue to prioritize suicide prevention research, as well as the application of novel measurement techniques, statistical analysis, digital initiatives and information systems. The Committee also encourages NIMH to promote greater collaboration with other NIH institutes and centers supporting research in areas that can contribute to suicide prevention, including NIA, NICHD, NHGRI, NIAAA, NIDA, and NINDS.

**NATIONAL HUMAN GENOME RESEARCH INSTITUTE (NHGRI)**

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<td>Change from budget request</td>
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**Mission.**—NHGRI’s mission is to accelerate scientific and medical breakthroughs that improve human health by driving cutting-edge research, developing new technologies, and studying the impact of genomics on society.

**Genomic Clinical Data Technology.**—The committee encourages NIH to support development of technology that would allow biomedical researchers to manage and analyze genomic clinical data for research, independent of bioinformaticians in an environment for users without coding skillsets. The committee urges support of public-private collaboration and small businesses. The technology should be developed with translational researchers such as from pediatric institutions that represent end users.

**Pharmacogenomic Research.**—A person’s genome influences the person’s response to medications, including how effective the medication will be, how quickly the medication will be metabolized, and whether the person is likely to experience side effects from a particular drug. Unfortunately, most people begin treatments without this vital information. The Committee recognizes that additional research is needed to support the advancement of pharmacogenomics.

**Proteomics.**—The Committee recognizes the promise of research into the proteome in the study of biological systems. The ability to
analyze protein patterns and their changes over time has potential to provide valuable insights into a person's real-time state of health including identifying existing disease, understanding the biological drivers of that disease, predicting near-term health events, and guiding effective therapeutic interventions. The Committee encourages NHGRI to utilize existing resources to engage with academia and domestic industry partners to expand its research into this cutting-edge field.

NATIONAL INSTITUTE OF BIOMEDICAL IMAGING AND BIOENGINEERING (NIBIB)

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**Mission.**—The NIBIB mission is to improve health by leading the development and accelerating the application of biomedical technologies.

**Alzheimer's Disease Early Detection Technologies.**—The Committee recognizes that early detection of Alzheimer’s disease is critical for effective interventions to stop its progression. Prior efforts have focused on neuroimaging and biomarkers in body fluids—indirect assessments that can identify the disease only after it has progressed. The Committee understands that new technologies may allow the diagnosis of disease at its earliest stages. As such, the Committee encourages NIBIB, in collaboration with NIA and NINDS, to support the development of novel technologies to discover the earliest biological events leading to Alzheimer's disease and related dementias.

**Diagnostic Technology Development.**—The Committee is pleased with the success of the Rapid Acceleration of Diagnostics Tech program in accelerating the innovation and commercialization of COVID diagnostic technologies. The Committee commends NIBIB’s initial efforts to apply the innovation funnel model beyond COVID testing to address other critical unmet needs in diagnostic testing and encourages NIBIB to continue these efforts in fiscal year 2024 in consultation with other institutes and centers, including but not limited to NHLBI, NIAID, NICHD, NCI, NINDS, and NIMH.

**Microfluidics and Nanofluidics.**—The Committee encourages continued efforts by NIBIB regarding microfluidics and nanofluidics, particularly in IDeA States.

NATIONAL CENTER FOR COMPLEMENTARY AND INTEGRATIVE HEALTH (NCCIH)

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<th>Appropriation, fiscal year 2023</th>
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**Mission.**—The mission of NCCIH is to define, through rigorous scientific investigation, the fundamental science, usefulness and safety of complementary and integrative health approaches and their roles in improving health and health care.
NATIONAL INSTITUTE ON MINORITY HEALTH AND HEALTH DISPARITIES (NIMHD)

Appropriation, fiscal year 2023 $524,395,000
Budget request, fiscal year 2024 525,138,000
Committee Recommendation 524,395,000
Change from enacted level — — —
Change from budget request 743,000

Mission.—NIMHD’s mission is to lead scientific research to improve minority health and reduce health disparities.

Alopecia Areata Health Disparities.—The Committee continues to note the disproportionate effect of alopecia areata. The Committee requests an update on collaborative efforts between NIAMS and other relevant NIH institutes and centers, including NIMHD, and stakeholders in identifying key research areas of concern.

Improving Native American Cancer Outcomes.—The Committee continues to be concerned that Native Americans experience overall cancer incidence and mortality rates that are strikingly higher than non-Native populations. The Committee includes $10,000,000 for the creation of an Initiative for Improving Native American Cancer Outcomes to support efforts including research, education, outreach, and clinical access related to cancer in Native American populations. The Committee further directs NIMHD to work with NCI to locate this Initiative at an NCI-designated cancer center demonstrating partnerships with Indian Tribes, Tribal organizations, and urban Indian organizations to improve the screening, diagnosis, and treatment of cancers among Native Americans, particularly those living in rural communities.

Native Hawaiian/Pacific Islander Health Research Office.—The Committee continues to support the establishment of a Native Hawaiian/Pacific Islander Health Research Office (NHPIHRO). The Committee provides $5,000,000 for the NHPIHRO, with a focus on both addressing Native Hawaiian and Pacific Islander (NHPI) health disparities as well as supporting the pathway and research of NHPI investigators. The NHPIHRO should develop partnerships with academic institutions with a proven track record of working closely with NHPI communities and NHPI-serving organizations and located in States with significant NHPI populations to support the development of future researchers from these same communities.

Research Endowment Program.—The Committee notes the recent passage of the John Lewis NIMHD Research Endowment Revitalization Act (PL 117–104), which aimed to reinvigorate the NIMHD Research Endowment Program. The Committee includes $12,000,000 for the Research Endowment Program, the same as the fiscal year 2023 enacted level. The Committee further notes that the statutory goal of the program is to assist eligible institutions in achieving a research endowment that is comparable to the mean endowment of health professions schools in its health professions discipline. The Committee requests an update in the fiscal year 2025 congressional justification regarding implementation plans, such update should also address engagement with key stakeholders.
JOHN E. FOGARTY INTERNATIONAL CENTER (FIC)

Appropriation, fiscal year 2023 ......................................................... $95,162,000
Budget request, fiscal year 2024 ....................................................... 95,130,000
Committee Recommendation ............................................................. 95,162,000
Change from enacted level ......................................................... – – –
Change from budget request ...................................................... +32,000

Mission.—FIC’s mission is to support and facilitate global health research conducted by U.S. and international investigators, building partnerships between health research institutions in the U.S. and abroad, and training the next generation of scientists to address global health needs.

Obstetric Fistula Research.—The Committee notes that an estimated 500,000 women and girls worldwide live with obstetric fistula, with tens of thousands of cases occurring annually. Skilled health personnel at birth, emergency obstetric, and newborn care can ensure obstetric fistula is prevented. The Committee is concerned that fistula repairs were widely halted or slowed down due to COVID, as they were deemed non-urgent and unsafe during the pandemic. This may result in an increased backlog of fistula cases. The Committee requests an update in the fiscal year 2025 congressional justification regarding the annual funding level for this training over the past 5 years, including the types of grants awarded.

NATIONAL LIBRARY OF MEDICINE (NLM)

Appropriation, fiscal year 2023 ......................................................... $497,548,000
Budget request, fiscal year 2024 ....................................................... 495,314,000
Committee Recommendation ............................................................. 497,548,000
Change from enacted level ......................................................... – – –
Change from budget request ...................................................... +2,234,000

Mission.—As a leader in computational health and the world's largest medical library, NLM collects, organizes, preserves, and disseminates data and information important to biomedicine and health; serves as a national information resource for medical education, research, and health service activities; enhances access to biomedical literature through electronic services; serves the public by providing electronic access to reliable health information for consumers; supports and directs the Network of the National Library of Medicine; provides grants for research in biomedical communications, medical library development, and training health information specialists; conducts and supports research and research training in biomedical informatics, computational health, computational biology, and data science; supports development, maintenance, and dissemination of health data standards that promote interoperability among clinical and research information systems; and manages and maintains information resources for genomics, molecular biology, clinical trials, medical images, environmental health, public health, and health services research.

NATIONAL CENTER FOR ADVANCING TRANSLATIONAL SCIENCES (NCATS)

Appropriation, fiscal year 2023 ......................................................... $923,323,000
Budget request, fiscal year 2024 ....................................................... 923,323,000
Committee Recommendation ............................................................. 923,323,000
Change from enacted level ......................................................... – – –
Change from budget request ...................................................... – – –
Mission.—NCATS was established to transform the translational process so that new treatments and cures for disease can be delivered to patients faster.

Clinical and Translational Science Awards (CTSA) Program.—The Committee includes $629,560,000 for the CTSA Program, the same as the fiscal year 2023 enacted level.

CTSA Partnerships.—The Committee is aware that certain populations are underrepresented in clinical research. The Committee encourages NCATS to prioritize the engagement of underrepresented and diverse investigators, including by engaging minority-serving institutions and historically black colleges and universities, within the CTSA program.

Cures Acceleration Network (CAN).—The Committee includes not less than $75,000,000 for the CAN, a $5,000,000 increase from the fiscal year 2023 enacted level.

National COVID Cohort Collaborative (N3C).—The Committee continues to support NCATS N3C’s open-science privacy-preserved data-sharing platform to accelerate biomedical research and discovery. Supported by the CTSA program, N3C combines electronic health record data with imaging, mortality, viral genome sequences, Medicare and Medicaid data to answer key research questions about COVID. The Committee encourages NCATS to expand use of its virtual data research infrastructure to accelerate research and cures through re-use of NCATS repositories, other NIH repositories including clinical trial data, and readily available real-world data including Federal agency data such as claims data.

Rare Disease Research.—The Committee encourages NCATS to leverage the investments made in NCATS rare disease research to accelerate the development of new treatments for the 95 percent of rare diseases with no approved treatment, to strengthen the innovation of diagnostics to shorten the average 6.3 years-long diagnostic odyssey, and to lower the nearly $1 trillion annual economic burden of rare diseases. The Committee strongly encourages NCATS to increase funding for rare disease research to help grow the newly created Division of Rare Diseases Research Innovation.

OFFICE OF THE DIRECTOR (OD)

Appropriation, fiscal year 2023 ......................................................... $2,642,914,000
Budget request, fiscal year 2024 ....................................................... 2,890,779,000
Committee Recommendation ............................................................. 2,069,459,000
Change from enacted level .........................................................
Change from budget request ......................................................

Mission.—The OD is responsible for the research, mission, policies, and administration of the agency. The OD leads and supports NIH-wide initiatives in partnership with NIH institutes and centers and their constituents. OD guides the development and management of intramural and extramural research and research training policy, the review of program quality and effectiveness, the coordination of selected NIH-wide program activities, and the administration of centralized support activities essential to the operations of NIH.

21st Century Cures Act.—The Committee includes $407,000,000 provided by the Cures Act. This includes $235,000,000 for the Precision Medicine Initiative within the Office of the Director and
$172,000,000 for the BRAIN Initiative split equally between the National Institute of Mental Health and the National Institute of Neurological Disorders and Stroke.

Within OD, the Committee includes specific amounts for the following activities:

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<tr>
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<td>Office of the Director:</td>
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<tr>
<td>ACT for ALS</td>
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<tr>
<td>Biomedical Research Facilities</td>
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<tr>
<td>Common Fund</td>
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<tr>
<td>Replication Experiments and Fraud Detection (non-add)</td>
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<tr>
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<td>Gabriella Miller Kids First Research</td>
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<td>INCLUDE</td>
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<tr>
<td>Office of Research on Women’s Health</td>
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<td>Scientific Management Review Board</td>
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The items below include issues and programs specific to the Office of the Director as well as those that involve multiple institutes and centers.

**Adolescent Mental Health Research Using Non-Human Primates.**—The Committee recognizes the role that research with non-human primates (NHPs) has had in biomedical research, including understanding the biological processes that cause diseases, which is necessary for the development and safety and efficacy testing of all new therapeutics before clinical trials. It also has informed the understanding of mental health disorders, because NHPs undergo a similar brain “remodeling” during adolescence. Understanding these biological changes provides valuable insights into mental health risks and the healthy development of adolescent brains. The Committee encourages NIH to fund meritorious research proposals to study the mental health risks of adolescents, including studies that utilize NHPs.

**Advancing Cell-Based Therapies.**—The Committee recognizes that cell-based therapies hold promise for a broad range of conditions, including neurological conditions, musculoskeletal conditions, cancer, radiation damage, cardiovascular disease, diabetes, wound healing, and immunological disease. The Committee encourages NIH to support research, development, and specific activities related to manufacturing of somatic (adult) cell-based therapies for patients with serious or life-threatening conditions. The Committee encourages NIH to support clinical trials and pre-clinical research exploring the use of somatic cell-based therapies for serious or life-threatening conditions; support development, characterization, optimization, and scaling of manufacturing of cell-based therapies; support sharing of best practices and lessons learned; support workforce development activities; and support collaborative evidence development, including continued NIH collaboration with FDA and HRSA to enhance transparency regarding outcomes from cellular therapies from somatic cells that are FDA-approved or being administered under FDA Investigational New Drug or Investigational Device Exemption protocols by ensuring Responsible Parties and award recipients comply with requirements to submit results to ap-
propriate databases such as the Stem Cell Therapeutics Outcomes Database and ClinicalTrials.gov.

Amyotrophic Lateral Sclerosis (ALS) Research, Treatment, and Expanded Access.—The Committee believes it is critically important that NIH continue to increase its investment in ALS research and grow the research workforce, in order to find new treatments and a cure for the disease. Increasing support for ALS research will benefit people living with ALS now and those diagnosed in the future. The Committee continues to strongly encourage NIH to increase support for research, including the Transforming Research Award program for ALS, that will lead to measurable changes in the lives of people with ALS.

In addition, the Committee includes $75,000,000, the same as the fiscal year 2023 enacted level, to support expanded access grants as authorized in the ACT for ALS (PL 117–79). The Committee continues to direct NIH to handle this funding as separate from, not competitive with, funding for other research on ALS. The Committee encourages NINDS and OD to continue to strengthen the expanded access grant application process as discussed in the joint explanatory statement which accompanied the fiscal year 2023 consolidated appropriations Act (PL 117–328).

Furthermore, after the review and award of meritorious applications under Section 2, the Committee recommends NIH apply any unused funds to programs authorized under ACT for ALS including Section 3 public-private research partnership and Section 5 Rare Neurodegenerative Disease Grant Program at FDA, as well as the NIH ALS Strategic Priorities.

Animal Models.—The Committee recognizes the enormous value and benefit animals models have brought to biomedical research. While the Committee supports research into viable alternatives to animal models, such alternatives are not currently available for all forms of research. The Committee continues to support research into biomedical advancements with animal models until viable alternatives are available.

Autism Spectrum Disorder (ASD).—The Committee strongly encourages NIH to support greater investment in research related to autism, particularly in areas outlined in the Interagency Autism Coordinating Committee (IACC) Strategic Plan for ASD. The Committee requests NIMH partner with OD to provide an update in the fiscal year 2025 congressional justification on how each institute on the IACC will address the IACC’s budget recommendations. Progress has been made in understanding autism, but there is more to do to improve outcomes and access to services for people with autism throughout their lifetime. Research has shown that autistic individuals have higher rates of some co-occurring physical and mental health conditions, which can affect quality of life and increase use of medical services and costs. There are also unaddressed racial, ethnic, and socioeconomic health challenges that autistic individuals and their families experience. The Committee encourages NIMH to collaborate with NIMHD to support research on such health disparities associated with autism spectrum disorder, and to collaborate with other Institutes, including NIA, NIEHS and NINDS, to support research on understanding the im-
pact of social and environmental factors leading to such co-occurring health conditions.

In addition, recent reports indicate that an estimated 1-in-36 eight-year-old children in the U.S. is diagnosed with an ASD. While early intervention affords the best opportunity to support healthy development, many children with an autism diagnosis lack access to quality care and interventions. The Committee is encouraged by the growing evidence that early intervention can lead to improved child developmental outcomes, improved skills and knowledge, and reduced stress. The Committee encourages NIH to continue to prioritize research, including implementation research to improve developmental and behavioral outcomes for children with ASD.

Autoimmune and Immune-Mediated Diseases.—The Committee recognizes the important role the new Office of Autoimmune Disease Research within the Office of Women’s Health will play in coordinating and fostering collaborative research across institutes and centers. As the office develops a strategic research plan, the Committee strongly encourages it to seek input from external stakeholders, particularly patient advocacy organizations that represent people affected by autoimmune and immune-mediated diseases.

Biomedical Research Facilities.—The Committee includes $80,000,000, the same as the fiscal year 2023 enacted level, for grants to public and nonprofit entities to expand, remodel, renovate, or alter existing research facilities or construct new research facilities as authorized under Section 404I of the Public Health Service Act.

Clinical Research Workforce.—The Committee supports efforts to increase participation of diverse populations in clinical trials and recognizes the importance of a research workforce that reflects the participants. The Committee encourages NIH to support efforts to diversify the clinical research workforce, as doing so may support an increase in the diversity of patients participating in clinical trials and a better understanding of health disparities among these groups.

Clinical Trials.—The Committee understands the importance of including sufficient representation of underrepresented populations across the lifespan in clinical studies. There is a significant need to better understand how best to diagnose, treat, and manage diseases and conditions and how certain diseases and conditions disproportionately impact these populations. Therefore, the Committee continues to encourage NIH to ensure all grant applicants seeking support for clinical research projects address inclusion of participants and justify the proposed sample in the context of the scientific goals during peer review.

Common Data Elements.—The Committee recognizes the continued need to develop Common Data Elements (CDEs) in disease areas where they currently do not exist, particularly in complex autoimmune and immune-mediated conditions. The Committee encourages the Office of Data Science Strategy (ODSS) to collaborate with the institutes and centers that oversee research on these conditions to prepare a roadmap and timeline for developing CDEs for these conditions. The Committee also encourages ODSS to engage
outside stakeholders, including professional societies and patient organizations, in this effort.

Common Fund.—The Committee includes $722,401,000 for the Common Fund. The Committee notes with concern use of the Common Fund has strayed from its intended purpose of high-risk high-reward research. The Common Fund should be used to support programs that lead to innovative, biomedical advances. The Committee requests a detailed spend plan for anticipated resources within 120 days of enactment of this Act, as well as the process by which the Division of Program Coordination, Planning, and Strategic Initiatives, including its 14 suboffices, determine the Common Fund’s strategic initiatives and grant selection opportunities.

Congenital Cytomegalovirus (cCMV).—cCMV is the most common viral infection infants are born with in the United States and the leading non-genetic cause of hearing loss. cCMV can cause stillbirth or miscarriage, visual impairment, developmental delays, and other health complications. The Committee encourages NIH to support research on the development of lower-cost and high-sensitivity prenatal (fetal) diagnosis and newborn screening technologies; the design, evaluation, and acceleration of clinical trials for vaccines; strategies to prevent CMV-related stillbirth and miscarriages; cCMV disparities research, effectiveness studies of risk reduction measures during pregnancy; treatment trials for those who are pregnant to reduce transmission and fetal disease; and intervention trials to assist those infants born with CMV. The Committee directs NIH to submit to the Committee an update in the fiscal year 2025 congressional justification on this research.

Cybersecurity.—The Committee includes $265,000,000, the same as the fiscal year 2023 enacted level for cybersecurity.

Diet and Chronic Disease Research.—The Committee recognizes the importance of ongoing activities to better understand the impact of food and diet on the development of mucosal immunity and the relevance of this topic to Crohn’s disease and ulcerative colitis and to other digestive and autoimmune or immune-mediated diseases. The Committee encourages NIH to convene a scientific workshop on this topic, supported by multiple institutes, centers, or Offices, including the Office of Nutrition Research, and to include in the fiscal year 2025 congressional justification an update on this topic.

Diversity, Equity, Inclusion and Accessibility Staff Report.—NIH recently released its Fiscal Years 2023–2027 NIH Wide Strategic Plan for Diversity, Equity, Inclusion, and Accessibility (DEIA), which articulates NIH’s commitment to embracing, strengthening, and integrating DEIA across all agency activities. NIH shall include in the fiscal year 2025 congressional justification all full-time and part-time employees dedicated to DEIA activities across NIH and broken out by each of its 27 institutes and centers. NIH shall brief the Committees on Appropriations of the House of Representatives and the Senate, the Committee on Energy and Commerce of the House of Representatives, and the Committee on Health, Education, Labor, and Pensions of the Senate on efforts to support the strategic plan.

Dog and Cat Research.—The Department of Veterans’ Affairs has developed and implemented effective programs to continue the re-
sponsible use of dogs and cats in research. The Committee directs NIH to submit, not later than 180 days after enactment of this Act, a report on the types of studies conducted in intramural and extramural research that require the use of cats and dogs, and efforts to reduce such research use, which could include an assessment of research alternatives, including benefits and limitations of such alternatives, cost estimates, and areas with further need for innovative alternatives. Such report should be made available online on the agency’s website.

Duchenne and Becker Muscular Dystrophy.—The Committee supports the research conducted by the Wellstone Muscular Dystrophy Research Network Centers of Excellence program established in 2003. The Committee requests NIH to provide in the fiscal year 2025 congressional justification information on the key scientific accomplishments of the centers to date and their current activities. The NIH also should use this information to update the agency’s website content regarding the program.

Eating Disorders.—The Committee commends NIH for supporting multi-Institute research on the chronic, serious, and fatal mental illness of eating disorders impacting 30,000,000 Americans during their lifetime. More than 70 percent of people with eating disorders have comorbid mental health conditions including anxiety disorders, mood disorders, and trauma-related symptoms. Up to 50 percent of individuals with eating disorders use alcohol or illicit drugs at a rate five times higher than the general population. The Committee remains concerned about the lack of research surrounding binge-eating disorder, the most common eating disorder in the U.S. and encourages NIH to increase eating disorder research across all sub-types to better reflect the U.S. population, including historically underrepresented populations. The Committee requests an update in the fiscal year 2025 congressional justification on steps NIH is taking to diversify research across all eating disorder sub-types and an update on efforts to prevent, diagnose, and treat eating disorders.

Ehlers-Danlos Syndrome.—The Committee encourages NIH to support research and activities with respect to Ehlers-Danlos Syndrome and related connective tissue disorders.

Equipping NIH Research and the Centers for AIDS Research Programs to Target HIV/AIDS Hotspots.—The Committee directs the National Institutes of Health Office of AIDS Research to coordinate NIH-wide resources on areas with the highest HIV prevalence, including by utilizing the Centers for AIDS Research to develop targeted interventions that better protect those communities from HIV transmission and its consequences.

Encouraging Innovation and Experimentation.—The Committee recognizes that there are many ideas for how NIH could improve its operations and funding models—such as lotteries as to funding mid-range proposals, funding the person rather than the project, and more—yet there is not enough evidence to determine which flexibilities may produce the best results. The Committee urges NIH to study how best to create or empower a team that would engage in NIH-wide experimentation with new ideas such as peer review, funding models, with the goal to improve NIH’s operations and drive forward biomedical progress. The NIH should provide an
update on this effort within 90 days of enactment of this Act and make such information available on the agency's website.

Environmental Influences on Child Health Outcomes.—The Committee does not include dedicated funding for this program.

Firearm Injury and Mortality Prevention Research.—The Committee does not include funding for this activity.

Foreign Influence.—All Principal Investigators and other senior or key personnel seeking or receiving NIH research and development funding shall report any sources of foreign research support, including the funding amount, the identity of the funding source, the location of the funding source, and the time and effort committed, including supporting documentation.

Fragile X Research.—The Committee notes the importance of expanding the base of researchers and clinicians who are familiar with and trained in the Fragile X-associated disorders and promoting collaboration between basic scientists and clinicians, so that researchers can better understand phenotypes, document variations in how the disorder presents itself, identify potential biomarkers and outcome measures, and develop new interventions. The Committee commends NIH for recognizing the ethical, legal, and social issues in premutation screening and testing. It encourages NIH to look at existing pilot studies that are exploring innovative ways to screen newborns, study Fragile X across the lifespan, and to coordinate efforts and research with the CDC, as it considers screening solutions for FMR1-related conditions.

Funding Replication Experiments and Fraud Detection.—The Committee recognizes that many biomedical research studies have turned out to be irreproducible or even outright fraudulent. The recent Reproducibility Project in Cancer Biology showed that cancer biology studies in top journals often failed to be replicable (with replication effects that were 85 percent smaller than the original study), and a prominent line of Alzheimer's studies was recently found to be based on an allegedly fraudulent study funded by NIH in the early 2000s. Given the importance of detecting both reproducibility and fraud, the Committee provides $50,000,000 to establish a program out of the Common Fund at the Office of the Director to fund replication experiments on significant lines of research, as well as attempts to proactively look for signs of academic fraud. The Committee directs NIH to brief the Committee within 180 days of enactment of this Act on the establishment, staffing, and plans for this effort in fiscal years 2024 and 2025.

Gabriella Miller Kids First Pediatric Research Program.—The Committee includes $12,600,000 to support pediatric research as authorized by the Gabriella Miller Kids First Research Act (PL 113–94), which is the same as the fiscal year 2023 enacted level.

Harassment Policies.—The Committee directs NIH to submit the report requested under this heading in the explanatory statement accompanying the Consolidated Appropriations Act, 2021 (PL 116–260) to the Committees on Appropriations of the House of Representatives and the Senate, the Committee on Energy and Commerce of the House of Representatives, and the Committee on Health, Education, Labor, and Pensions of the Senate within 3 business days of enactment of this Act.
Hepatitis B Virus (HBV) Research.—The Committee applauds NIAID for leading the effort to update the Strategic Plan for Trans-NIH Research to Cure Hepatitis B, in support of finding a cure for the disease. The Committee urges NIAID to expand the use of Program Projects, R01 and U01 Cooperative Research Agreements, as was done to discover cures for Hepatitis C, as well as cooperative research programs modeled after the Marin Delaney Collaborations. The Committee also applauds the success of the Point of Care Technologies Research Network and Rapid Acceleration of Diagnostics programs and urges the continued use of these programs for developing point of care tests for HBV, Hepatitis D Virus, and the cancers caused by these viruses. The Committee notes that research to enhance the human immune system to control and cure Hepatitis B is promising, and that continued use of animal models such as the Eastern Woodchuck is a research tool that needs to be continued. Similarly, the Committee applauds NIDDK for its efforts to create common resource services and materials for the research community and urges an expansion of clinical networks, data bank development, and precision medicine approaches. The Committee encourages the development of additional experimental animal and cell culture models to advance research for cures against the widest possible set of therapeutic targets and additional research on understanding the virology and immunology of people with low levels of Hepatitis B surface antigen—a protein on the surface of HBV—as this category of people are more responsive to therapy. The Committee is aware of the view in the scientific community that finding a cure for Hepatitis B, as has been done for Hepatitis C, is within reach. Therefore, the Committee urges NIH to issue and fund targeted calls for research, based on the needs in the updated Strategic Plan.

INCLUDE Down Syndrome Research Initiative.—The Committee includes no less than $90,000,000, the same as the fiscal year 2023 enacted level, within OD for the INCLUDE Initiative. With the Committee’s support, NIH launched the INCLUDE Initiative in June 2018. The Committee remains pleased with a focus on large cohort studies across the lifespan, novel clinical trials, and multi-year, NIH-wide research driving important advances in understanding immune system dysregulation, Alzheimer’s Disease, and leukemia that is contributing to improvements in the health outcomes and quality of life of individuals with Down syndrome as well as millions of typical individuals. The Committee requests that NIH provide an updated plan within 60 days of enactment of this Act that includes a timeline and description of potential grant opportunities and deadlines for expected funding opportunities so that young investigators and new research institutions may be further encouraged to explore research in this space. This plan should also incorporate and increase pipeline research initiatives specific to Down syndrome and be made available on the agency’s website.

Internal Audits.—NIH shall conduct an audit of all research that involves any of the following: virus manipulation, passaging of a virus, genetically modified animals that are derived from virus manipulation, or making any mutations to a virus. As part of this audit, NIH shall review all sub-grantee compliance with policies and procedures for any grant involving the aforementioned activi-
ties or any grant outside the U.S. In addition, the NIH shall review all research conducted intramurally or extramurally in a Biosafety Level 3 or 4 laboratory related to an enhanced potential pandemic pathogen. The NIH shall complete these audits within one year of enactment of this Act and brief the Committees on their findings.

Long COVID Research.—The Committee notes with disappointment the work undertaken with supplemental funds for long COVID research has resulted in limited demonstrated value despite the sizeable investment. The lack of urgency, financial transparency, and scientific results is alarming. Remaining funds should be reallocated to the establishment of a network of Long COVID Centers of Excellence. Such centers would gather, develop, and disseminate data on evidence-based treatment; educate and train providers on best practices; conduct outreach to affected populations and community organizations; and coordinate access to care. In making awards, NIH should prioritize geographically diverse entities with experience working with Long-COVID patient populations on research and clinical care and that are able to coordinate data sharing and identify evidence-based treatments.

Mitochondrial Disease Research.—The Committee is aware of NIH's efforts to advance mitochondrial disorders research and translate research advances to therapies for mitochondrial disorders and their secondary diseases, such as Alzheimer's disease, Parkinson's disease, and cancer. The first treatment for a primary mitochondrial disease, Friedreich's Ataxia, was recently approved by the FDA. The Committee is aware of evidence implicating the impairment of mitochondrial function resulting from infection with COVID in the causation of so-called “long COVID” disease. Accordingly, the Committee encourages NIH to expand its funding of primary mitochondrial disease research, accelerate its outreach and collaboration with the FDA related to research that may lead to future mitochondrial disease-related drug approval, and ensure that the role of mitochondrial impairment is fully explored in the agency's research portfolio.

Mucopolysaccharidoses and Mucolipidosis.—The Committee recognizes the severity of Mucopolysaccharidoses and Mucolipidosis diseases and the need for additional research to improve life expectancy and quality of life for patients. The Committee supports research into this area.

National Laboratories.—The Committee supports collaborations between the NIH and the Department of Energy (DOE), including the National Laboratories, to strategically leverage NIH's research needs in cancer research, brain mapping, drug development that requires DOE's high frequency imaging, supercomputing, instrumentation, materials, modeling simulation, and data science. Increased and more effective coordination could be instrumental in the development of the nation's health, security, biomedical technologies, and in the development of more strategic enabling technologies. The Committee requests an update in the fiscal year 2025 congressional justification on NIH's collaborations with DOE.

Neurofibromatosis (NF) Research and Treatment.—The Committee supports efforts to increase funding and resources for NF research and treatment at multiple institutes, including NCI, NINDS, NIDCD, NHLBI, NICHD, NIMH, NCATS, and NEI.
dren and adults with NF are at elevated risk of developing many forms of cancer, deafness, blindness, developmental delays, and autism. The Committee encourages NCI to increase its NF research portfolio in fundamental laboratory science, patient-directed research, and clinical trials focused on NF-associated benign and malignant cancers. The Committee also encourages NCI to continue to support clinical trials and preclinical research. Because NF can cause blindness, pain, and hearing loss, the Committee urges NINDS to continue to support fundamental basic science research on NF relevant to restoring normal nerve function. Based on emerging findings from numerous researchers worldwide demonstrating that children with NF have a higher chance of developing autism, learning disabilities, motor delays, and attention deficits, the Committee encourages NINDS, NIMH, and NICHD to increase support for laboratory-based and patient-directed research investigations in these areas. Since NF2 accounts for some genetic forms of deafness, the Committee encourages NIDCD to expand its investment in NF2-related research. NF1 can cause vision loss due to optic gliomas. The Committee encourages NEI to expand its investment in NF1-focused research on optic gliomas and vision restoration.

Office of Equity, Diversity, and Inclusion.—The Committee does not include funding for this activity.

Office of Nutrition Research.—The Committee does not include additional funding as proposed in the budget request.

Office of Research on Women’s Health.—The Committee includes $55,000,000 for the Office of Research on Women’s Health.

Office of the Chief Officer for Scientific Workforce Diversity.—The Committee does not include funding for this activity.

Oligodendroglioma.—There are approximately 12,000 people living with an oligodendroglioma brain tumor in the U.S. today. Oligodendrogliomas occur most often in young adults between the ages of 35 and 44 but can occur at any age. Treatment options include surgery, chemotherapy, radiation, and clinical trials. The 5-year survival rate is 74 percent, with many factors affecting overall prognosis, such as tumor grade and type, traits of the cancer, patient’s age and health when diagnosed, and response to treatment. The Committee encourages NIH to continue to support research on oligodendroglioma and requests an update on oligodendroglioma research efforts in the fiscal year 2025 congressional justification.

Opportunities for Academic Biomedical Research.—The Committee urges the NIH to invest in new opportunities for biomedical researchers, including physician scientists. The percentage of physicians who opt for academic career paths in biomedical research has declined in recent years, and the Committee is concerned that this troubling trend may inhibit innovation that would otherwise promise the next generation of discovery. Interventions are critically needed to replenish the ranks of researchers with clinical training. More specifically, the Committee encourages NIH to prioritize research-oriented career development grants, training Medical Doctor postdoctoral trainees, streamlining the peer review process, and empowering researchers to independently pursue new fields of research, including high-risk/high-reward projects. These efforts will strengthen the future of the United States’ biomedical
research workforce, so that it maintains its global competitive edge in biomedical research.

Osteopathic Medical Schools.—Osteopathic medical schools educate 25 percent of all medical students and more research involving doctors of osteopathic medicine is needed to enhance primary care and improve healthcare for rural and underserved populations. The Committee urges NIH, in conjunction with national stakeholders, to consider how to best incorporate colleges of osteopathic medicine into research activities and involvement of their researchers on NIH National Advisory Councils and study sections to have better representation of the osteopathic medicine field.

Pediatric Acute-Onset Neuropsychiatric Syndrome (PANS) and Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcus.—The Committee supports research and education related to the devastating diseases of Pediatric Acute-Onset Neuropsychiatric Syndrome and Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcus (PANDAS). The Committee is concerned that although the NIH supports research on PANS and PANDAS, significantly more needs to be done to fully understand causes, diagnosis, and treatment of these devastating disorders. Research and physician education are essential to early identification and intervention, thereby reducing the risk of chronic illness and associated costs to families, school systems, health care systems, and insurers. The Committee encourages NIH to increase prioritization of research in this area, and report to the Committee in the fiscal year 2025 congressional justification on the progress being made on the understanding of the causes, diagnostic criteria, and treatment of these conditions.

Peripheral Neuropathy.—The Committee supports research for peripheral neuropathy, a condition that affects 30 million Americans and can cause considerable pain and disability in those diagnosed with the disease. The Committee encourages NIH to develop a coordinated approach to better understand the causes of and find potential new treatments for peripheral neuropathy. Among other things, research could focus on developing a natural history database, collecting serial blood biomarkers, and creating a tissue bank, and identifying genetic risk factors and other strategies to facilitate the diagnosis and treatment of various types of peripheral neuropathy. The Committee also encourages NIH to support research on idiopathic peripheral neuropathy, which affects 10 million Americans.

Polycystic Ovary Syndrome (PCOS).—PCOS is a common female reproductive endocrine disorder that affects women across the lifespan. Research shows that the prevalence of PCOS reported in health system and insurance records is significantly less than the population prevalence of PCOS, further compounding the under-diagnosis of PCOS. The Committee recognizes the significant health and economic burden of PCOS, which may have reproductive, metabolic, cardiovascular, maternal, and mental health effects. Therefore, the Committee encourages NIH to continue to prioritize PCOS research and continue supporting additional investments in research on cardiometabolic, endocrine, and other comorbidities that impact the health and quality of life of patients with PCOS, such as insulin resistance, hirsutism and dermatologic
conditions, cardiovascular diseases and their risks factors, mental health disorders, stroke, and cancer. The Committee requests that NHLBI include in the fiscal year 2025 congressional justification information on the findings from the 2021 NIH workshop on the cardiovascular risks across the lifespan in PCOS and the recommendations and plans to address the identified gaps.

**Potential Pandemic Pathogens.**—HHS shall conduct a review of all NIH-funded research involving potential pandemic pathogens referred to an institutional biosafety committee and/or a dual use research of concern committee. Such review shall be conducted by the HHS Potential Pandemic Pathogen Care and Oversight review committee. Within one year of enactment of this Act, a report should be submitted to the Committees on Appropriations of the House of Representatives and the Senate, the Committee on Energy and Commerce of the House of Representatives, and the Committee on Health, Education, Labor, and Pensions of the Senate and made available online summarizing the findings of the panel. In addition, the NIH shall list on the agency’s website by year each grant submitted for further review pursuant to the HHS Framework for Guiding Funding Decisions about Proposed Research Involving Enhanced Potential Pandemic Pathogens.

**Preventive and Early-Treatment Brain Health Research.**—The Committee encourages NIH to give greater attention to the study of the preclinical stage of neurological disorders, that is, the events that happen in the brain before the first symptoms of neurological disease. Learning what happens during the preclinical stage may guide the development of improved methods for identifying early disease biomarkers and intervention targets, as well as the development of novel interventions that may prevent or treat neurological disease before it becomes disabling and, ultimately, impact the trajectory of diseases like Alzheimer’s disease, Parkinson’s disease, multiple sclerosis, stroke, and epilepsy. Research indicates that with many neurological disorders changes in the brain begin well before clinical symptoms appear and early, pre-symptomatic intervention can lead to better outcomes.

**Public Relations and Communications Consulting Services.**—The Committee directs each institute or center to provide the total obligations by fiscal year for the past 5 years spent on public relations and communications consulting services from any funding source. Such data shall be made available online in one dataset and downloadable in electronic format from nih.gov. Amounts should be listed by funding source, fiscal year, institute or center, and service.

**Rare Pediatric Genetic Diseases.**—The Committee encourages NIH to work with stakeholders to improve the testing and diagnosis of rare pediatric genetic diseases, so that children suffering from such conditions may have better access to available treatments and improved health outcomes. Further, the Committee encourages NIH to work with stakeholders to promote awareness and research of rare pediatric genetic diseases.

**Reducing Administrative Burden on Researchers.**—The Committee recognizes that according to a national survey by the Federal Demonstration Partnership, Federally-funded researchers report spending 44 percent of their research time on bureaucracy, in-
cluding the time to prepare proposals and budgets, post-grant reporting of time and effort, ethical requirements, and other compliance activities. The Committee directs NIH to form a board on reducing administrative burden on researchers. Such board must have at least 75 percent of representation from non-Federal organizations, including robust participation from the extramural community and at least 25 percent of representation from early-career researchers (including post-docs, non-tenured professors, and graduate fellows). Within one year of enactment of this Act, the Board is directed to provide a report that includes recommendations aiming to reduce the administrative burden on researchers by 25 percent over the next three years. The Committee strongly supports efforts by the NIH for the recommendations to be put into effect as soon as practicable. The Committee requests a briefing on this effort 90 days from the enactment of this Act. The report of recommendations shall be made available to the public on the agency’s website.

Research, Condition, and Disease Categories (RCDC) Table.—The Committee notes the RCDC table provides valuable insight into NIH funding, disease prevalence, and mortality. The Committee understands there can be considerable time lags in the data for mortality and disease prevalence. However, the Committee expects that the most recent data for mortality and disease prevalence should always be available on the website next to funding information. While it is understandable that updates may not be instantaneous, NIH should take steps to ensure information on mortality and disease prevalence is always available for each category listed in the RCDC table while the website is being updated for the most recently available information.

Research in China or Russia.—NIH shall provide a funding table that identifies any NIH-supported activity in the People’s Republic of China or in Russia, including all funding mechanisms and all activities from any subrecipients of such mechanisms, covering the last four fiscal years, including the title of the NIH-supported activity, the amount for each fiscal year, the location, and the names of the recipients or sub-recipients. Such report shall be provided to the Committees on Appropriations of the House of Representatives and the Senate, the Committee on Energy and Commerce of the House of Representatives, and the Committee on Health, Education, Labor, and Pensions of the Senate within 60 days of enactment of this Act.

Scientific Management Review Board.—The Committee recognizes that under the NIH Reform Act of 2006 (PL 109–482), a Scientific Management Review Board was created with the specific mission of reviewing the overall “research portfolio” of NIH, and advising on the “use of organizational authorities,” such as abolishing institutes or centers, creating new ones, and reorganizing existing structures (42 U.S.C. § 281(e)). Yet this Board has not met or issued a report since 2015, despite the obligation to do so every seven years. The Committee directs NIH to reconvene the Board within 90 days of enactment of this Act to fulfill its statutory obligation to provide recommendations to Congress, the Secretary, and the NIH Director on how best to organize biomedical research funding. The Committee includes not less than $5,000,000 from
 amounts provided under Office of the Director for the Scientific Management Review Board.

Sexual and Gender Minority Research Office.—The Committee does not include funding for this activity.

Subaward Reporting.—NIH shall maintain a public database on the agency’s website a list of all subawards by location. Such information shall be publicly accessible without a login, searchable, and offer options to download in electronic format. Information shall be updated not less than once each calendar quarter.

Success Rates and Paylines.—Not later than 60 days after enactment of this Act, the Agency is directed to publicly post and maintain on the agency’s website a listing of all grant success rates and paylines by institute or center, grant mechanism, and fiscal year. Such website information shall be easily accessible and include options to export into an electronic data format. Initial information should include the last ten years, to the extent practicable, and be maintained on the website indefinitely.

Term Limits.—Congress’ decision to limit ARPA–H managers to a maximum of two 3-year appointments (4 years for the ARPA–H Director) is a break from NIH’s longstanding practice of allowing its top officials to effectively serve as long as they wish. The Committee believes that a healthy degree of turnover in leadership is critical for sustaining the vitality of NIH. It also provides the opportunity for leading scientists across the nation to leave their positions for a set period of time and come to NIH to provide effective leadership to critical elements of the nation’s biomedical enterprise. The Committee supports the recommendations outlined in the 2003 Institute of Medicine report Enhancing the Vitality of the National Institutes of Health: Organizational Change to Meet New Challenges. Specifically, the Committee supports Recommendation 10, to set term limits for Institute or Center Director appointments to two 5-year terms. The Committee believes regular replacement of IC Directors following a maximum of two terms would be an overall benefit to medical research by ensuring the periodic introduction of fresh perspectives. The Committee provides $500,000 for this effort and directs NIH to begin the planning process for implementing this policy, and to report to the Committees within 180 days of enactment of this Act on these efforts.

Ultra-rare Diseases.—Developing a therapy for conditions occurring in very small populations involves overcoming unique regulatory and research hurdles due to their small patient populations. The Committee encourages NIH to host a public workshop convening rare disease expert stakeholders including scientists, Federal agency representatives, including the Food and Drug Administration, patient advocates, clinicians, diagnostic developers, and other regulators. The workshop should address current efforts on research and treatment efforts for rare diseases, including focusing on commonalities across diseases and therapeutic platforms, the outcome of which would also be applicable for rare diseases with small patient populations.

Von Hippel-Lindau (VHL) disease.—The Committee recognizes that finding a treatment and cure for von Hippel-Lindau disease, in which the VHL tumor suppressor gene is damaged or nonexistent, is key for treating and curing VHL and many other forms of cancer.
of cancer. The role of the VHL gene is central in how cells sense and adapt to oxygen and nutrient availability and how this mechanism leads to abnormal cell or cancer growth. As a result, nearly a dozen medications currently used to treat various forms of cancer are the direct result of research in VHL biology. The Committee encourages NIH to continue to support intramural and extramural research on VHL disease and biology, seeking both pharmacological and gene therapy treatments for VHL and other cancer patients. The Committee requests an update on VHL research efforts in the fiscal year 2025 congressional justification.

Youth Evidence Review.—NIH shall conduct a comprehensive evidence review of all published research regarding the social and medical gender transition of minors. As part of this evidence review, NIH shall consider the mental health impacts and physical implications of such social and medical intervention on minors, both in the short- and long-term. NIH shall complete this evidence review within 180 days of enactment of this Act and brief the Committees on Appropriations of the House of Representatives and the Senate, the Committee on Energy and Commerce of the House of Representatives, and the Committee on Health, Education, Labor, and Pensions of the Senate on findings. Until such review is complete, all existing guidelines with respect to this treatment shall be withdrawn.

BUILDINGS AND FACILITIES

Appropriation, fiscal year 2023 ............................................... $350,000,000
Budget request, fiscal year 2024 .............................................. 350,000,000
Committee Recommendation ..................................................... 350,000,000
Change from enacted level .................................................. –
Change from budget request ................................................ –

Mission.—This account provides for the design, construction, improvement, major repair, and demolition of clinical, laboratory, and office buildings and supporting facilities essential to the mission of the NIH. The funds in this appropriation support the buildings on the main NIH campus in Bethesda, Maryland; the Animal Center in Poolesville, Maryland; the National Institute of Environmental Health Sciences facility in Research Triangle Park, North Carolina; the National Institute of Allergy and Infectious Diseases in Hamilton, Montana; and other smaller facilities throughout the U.S.

Once again, the Committee rejects the Administration’s request for NIH to transfer up to 1 percent of its research funding to this account. Funding provided for research should not be unilaterally transferred without a sound explanation and robust justification of need. NIH again provides woefully little explanation as to why such an extraordinary authority is necessary. The Committee commends the agency for continuing to develop a sound capital planning process and for keeping the Committee informed on such activities. These efforts have been supported by the Committee with modifications to section 216 of this Act which permit NIH to use up to $100,000,000 of research funding for alterations and repairs. The Committee directs NIH to continue to provide quarterly updates of its efforts to develop best practices and its maintenance and construction plans for projects whose cost exceeds $5,000,000, including any changes to those plans and the original baseline esti-
mates for individual projects. NIH is directed to provide a detailed briefing on the proposed Center for Pediatric and Adult Diseases, including how the size and activities in the Center compare to the footprint and activities in the existing facilities that would be demolished to make way for it. Finally, the Committee also directs NIH to describe in its fiscal year 2025 congressional justification how the projects requested in its budget tie to its capital planning process, including the Research Facilities Advisory Committee’s role in determining which projects are selected for inclusion in the budget.

NIH INNOVATION ACCOUNT

This account supports NIH programs authorized in the Cures Act.

ADVANCED RESEARCH PROJECTS AGENCY FOR HEALTH (ARPA–H)

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Mission.—The Advanced Research Projects Agency for Health fosters the development of novel, breakthrough, and broadly applicable capabilities and technologies to accelerate transformative innovation in biomedical science and medicine in a manner that cannot be readily accomplished through traditional Federal biomedical research and development programs or commercial activity.

Geroscience Research.—Geroscience research is a revolutionary way to approach health and aligns with the mission of ARPA–H to identify and invest in high-risk, high-reward research projects that have the potential to transform healthcare and improve public health. By uncovering new insights into the underlying causes of age-related diseases, geroscience research could lead to treatments and therapies that offer the possibility of improving people’s “healthspan,” so they remain healthier longer, and address the growing burden of age-related diseases on society. The Committee urges ARPA–H to prioritize two areas of research that could advance the field dramatically: biomarkers and epigenetic reprogramming. Discovering and validating biomarkers for aging would significantly improve the efficacy of interventions, and epigenetic reprogramming of cellular age could slow down or reverse the aging process and thereby prevent or delay age-related diseases.

Health Sciences Futures.—While there are more than 100 coronavirus vaccines in various stages of clinical development around the world, all of them are needle-based, most need multiple doses to be effective, and all need refrigeration. There is a need for next-generation COVID vaccines as well as platform technologies such as nanovaccines that can be used in plug-and-play formats to rapidly design multiplex vaccines against different pathogens or variants. There is a need to advance new and improved COVID vaccines by integrating multiple patent-protected nanovaccine platform technologies that have shown unique competitive advantages against respiratory infections and processes for rapid manufacture
of the novel vaccines and countermeasures through investing in public-private partnerships and consortia.

*Nanovaccine Research.*—The Committee recognizes the major importance of investing in nanovaccine research at U.S. universities to improve upon existing COVID vaccines, such as through room temperature-stable nanovaccines that can be rapidly designed, tested, and deployed. The Committee urges the agency to prioritize funding to a consortium of academic researchers working on such nanovaccines.

*Rare Cancers.*—The Committee is aware of the significant challenges faced by patients with rare and difficult-to-treat cancers. While many forms of cancer are now able to be successfully treated, extending life for most patients by many years, some forms of cancer continue to show five-year survival rates in the single digits, and many have had no new therapeutics available for decades. It is the Committee’s hope that the investments made in ARPA–H can begin to change outcomes for these patients especially.

To this end, the Committee is aware of the significant research investment that has been undertaken by the NCI in both foundational research that is applicable to all cancer types, as well as targeted research through collaborations on specific cancer types. One such collaboration is investigating treatments for a brain cancer known as glioblastoma which is a fast-growing and aggressive type of brain tumor. Many researchers believe such brain cancers could be successfully treated by developing novel effective agents that can cross the blood-brain-barrier, and NCI has invested in the Glioblastoma Therapeutics Network which seeks to rapidly launch clinical trials that speed access to promising qualified treatments to patients.

Investment in therapeutic interventions is vital to drive the development of novel treatments and personalized approaches for difficult-to-treat cancers such as glioblastoma. Accordingly, the Committee directs ARPA–H to make a significant investment of no less than $100,000,000 to support pre-clinical and clinical trials, including the evaluation of immune-based therapies, targeted therapies, and combination treatments, to geographically diverse cancer medical facilities that treat cancers which have a 5 to 10 percent survival rate over the period of 5 years following an initial diagnosis, and with respect to which therapeutics have made no statistical change over the preceding 3 decades in the proportion of patients experiencing long-term (greater than 5 years) survival.
## COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2023 AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2024

(Amounts in thousands)

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### NATIONAL INSTITUTES OF HEALTH

- **National Cancer Institute (NCI)**  
  NIH Innovation Account, CURES Act: (216,000)  
  **Subtotal, NCI, program level**: 7,320,159  
- **National Heart, Lung, and Blood Institute (NHLBI)**  
  3,982,345  
- **National Institute of Dental and Craniofacial Research (NIDCR)**  
  520,163  
- **National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)**  
  2,300,721  
- **National Institute of Neurological Disorders and Stroke (NINDS)**  
  NIH Innovation Account, CURES Act: (225,000)  
  **Subtotal, NINDS, program level**: 2,813,925  
- **National Institute of Allergy and Infectious Diseases (NIAID)**  
  6,562,279  
- **National Institute of General Medical Sciences (NIGMS)**  
  Evaluation Tap Funding: (1,412,482)  
  **Subtotal, NIGMS, program level**: 3,239,679

Bill VS Enacted:  
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- (-716,000)  
- (-216,000)  
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### COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2023
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2024

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**Subtotal, NIMH, program level** | 2,337,843       | 2,541,653       | 2,198,843 | -139,000                  | -342,810                 |

<p>| National Human Genome Research Institute (NHGRI) | 663,200         | 660,510         | 663,200 | ---                       | +2,690                   |
| National Institute of Biomedical Imaging and Bioengineering (NIBIB) | 440,627         | 440,625         | 440,627 | ---                       | +2                       |
| National Center for Complementary and Integrative Health (NCCIH) | 170,384         | 170,277         | 170,384 | ---                       | +107                     |
| National Institute on Minority Health and Health Disparities (NIMHD) | 524,395         | 525,138         | 524,395 | ---                       | -743                     |
| John E. Fogarty International Center (IFIC) | 95,162          | 95,130          | 95,162 | ---                       | +32                      |</p>
<table>
<thead>
<tr>
<th>National Library of Medicine (NLM)</th>
<th>497,548</th>
<th>495,314</th>
<th>497,548</th>
<th>-</th>
<th>+2,234</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Center for Advancing Translational Sciences (NCATS)</td>
<td>923,323</td>
<td>923,323</td>
<td>923,323</td>
<td>-</td>
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</tr>
<tr>
<td>Office of the Director</td>
<td>2,642,914</td>
<td>2,890,779</td>
<td>2,069,459</td>
<td>-573,455</td>
<td>-621,320</td>
</tr>
<tr>
<td>Common Fund</td>
<td>(722,401)</td>
<td>(722,401)</td>
<td>(722,401)</td>
<td>-</td>
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</tr>
<tr>
<td>Gabriella Miller Kids First Research Act</td>
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<td>12,600</td>
<td>12,600</td>
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<tr>
<td>Subtotal, Office of the Director</td>
<td>2,655,514</td>
<td>2,903,379</td>
<td>2,082,059</td>
<td>-573,455</td>
<td>-621,320</td>
</tr>
<tr>
<td>NIH Innovation Account, CURES Act</td>
<td>(419,000)</td>
<td>(235,000)</td>
<td>(235,000)</td>
<td>(-184,000)</td>
<td>---</td>
</tr>
<tr>
<td>Buildings and Facilities</td>
<td>350,000</td>
<td>350,000</td>
<td>350,000</td>
<td>-</td>
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</tr>
<tr>
<td>Advanced Research Projects Agency for Health (ARPA-H)</td>
<td>1,500,000</td>
<td>2,500,000</td>
<td>500,000</td>
<td>-1,000,000</td>
<td>-2,000,000</td>
</tr>
<tr>
<td><strong>Total, National Institutes of Health (NIH)</strong></td>
<td>46,461,518</td>
<td>46,414,980</td>
<td>43,388,063</td>
<td>-3,073,455</td>
<td>-5,026,917</td>
</tr>
<tr>
<td><strong>Total, National Institutes of Health (NIH)</strong> (with CURES Act funding)</td>
<td>47,546,518</td>
<td>48,821,980</td>
<td>43,795,063</td>
<td>-3,751,455</td>
<td>-5,026,917</td>
</tr>
<tr>
<td>(Evaluation Tap Funding)</td>
<td>(1,412,482)</td>
<td>(1,948,109)</td>
<td>(1,327,482)</td>
<td>(-85,000)</td>
<td>(-620,627)</td>
</tr>
<tr>
<td><strong>Total, National Institutes of Health program level (with CURES and Evaluation Tap Funding)</strong></td>
<td>46,134,036</td>
<td>46,873,871</td>
<td>42,467,581</td>
<td>-4,408,295</td>
<td>-5,606,540</td>
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<tr>
<td><strong>Total, NIH program level (excluding ARPA-H)</strong></td>
<td>47,459,000</td>
<td>46,270,089</td>
<td>44,622,545</td>
<td>-2,636,455</td>
<td>-3,647,544</td>
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</tbody>
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**COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2023 AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2024 (Amounts in thousands)**

<table>
<thead>
<tr>
<th>FY 2023 Enacted</th>
<th>FY 2024 Request</th>
<th>Bill vs. Enacted</th>
<th>Bill vs. Request</th>
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<tr>
<td>497,548</td>
<td>495,314</td>
<td>-573,455</td>
<td>-621,320</td>
</tr>
<tr>
<td>923,323</td>
<td>923,323</td>
<td>-</td>
<td>---</td>
</tr>
<tr>
<td>2,642,914</td>
<td>2,890,779</td>
<td>-201,000</td>
<td>-270,000</td>
</tr>
<tr>
<td>(722,401)</td>
<td>(722,401)</td>
<td>-</td>
<td>---</td>
</tr>
<tr>
<td>12,600</td>
<td>12,600</td>
<td>-</td>
<td>---</td>
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<td>2,903,379</td>
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<tr>
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<td>(235,000)</td>
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<td>---</td>
</tr>
<tr>
<td>350,000</td>
<td>350,000</td>
<td>-</td>
<td>---</td>
</tr>
<tr>
<td>1,500,000</td>
<td>2,500,000</td>
<td>-1,000,000</td>
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</tr>
<tr>
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<td>-2,636,455</td>
<td>-3,647,544</td>
</tr>
</tbody>
</table>