

National Institutes of Health (NIH) Funding: FY1996-FY2022

Updated June 29, 2021

Congressional Research Service
<https://crsreports.congress.gov>

R43341



R43341

June 29, 2021

Kavya Sekar
Analyst in Health Policy

National Institutes of Health (NIH) Funding: FY1996-FY2022

This report details the National Institutes of Health (NIH) budget and appropriations process with a focus on FY2020, FY2021, and FY2022. Coronavirus supplemental funding for NIH is discussed in a dedicated section of the report but is generally not included in the budgetary figures elsewhere in the report. The report also provides an overview of funding trends in regular appropriations to the agency from FY1996 to FY2022. **Appendix A** includes funding tables by account and program-specific funding levels for FY2020, FY2021, and FY2022. **Appendix B** provides a list of acronyms and abbreviations used in the report.

NIH is the primary federal agency charged with conducting and supporting medical, health, and behavioral research, and it is made up of 27 Institutes and Centers and the Office of the Director (OD). About 80% of the NIH budget funds extramural research through grants, contracts, and other awards. About 10% of NIH funding goes to intramural researchers at NIH-operated facilities. Almost all of NIH's funding is provided in the annual Departments of Labor, Health and Human Services, and Education, and Related Agencies (LHHS) Appropriations Act. NIH also receives smaller amounts of funding from Interior/Environmental (INT) appropriations and a mandatory budget authority for type 1 diabetes research.

The FY2021 NIH program level of \$42.936 billion represents a \$1.251 billion increase (+3.0%) above the FY2020-enacted program level. The FY2021-enacted total for NIH is also \$3.802 billion (+9.7%) above the FY2021 budget request and \$715 million (+1.7%) above the program level proposed by the House-passed LHHS and INT bills. In FY2021, all Institute and Center (IC) accounts received an increase above FY2020 funding levels, except for the Buildings and Facilities account (see **Table A-1**). The Biden Administration's FY2022 budget request proposes an FY2022 program level of \$51.953 billion—a \$9.017 billion increase (+21.0%) from the FY2021 program level. It also proposes the creation of a new Advanced Research Projects Agency for Health (ARPA-H) within NIH.

NIH has seen periods of high and low funding growth during the period covered by this report, as illustrated in **Figure 1**. Between FY1996 and FY1998, funding for NIH grew from \$11.928 billion to \$13.675 billion (nominal dollars). Over the next five years, Congress and the President doubled the NIH budget to \$27.167 billion in FY2003. In each of FY1999 through FY2003, NIH received annual funding increases of 14% to 16%. From FY2003 to FY2015, NIH funding increased more gradually in nominal dollars. In some years (FY2006, FY2011, and FY2013), funding for the agency decreased in nominal dollars. From FY2016 through FY2020, NIH has seen funding increases of over 5% each year. The largest increase was from FY2017 to FY2018, where the program level increased by \$3.010 billion (+8.8%), making this the largest single-year nominal dollar increase since FY2003. The proposed funding increase in the FY2022 budget request would be over twice this amount.

When looking at NIH funding adjusted for inflation (in projected constant FY2022 dollars using the Biomedical Research and Development Price Index; BRDPI), the purchasing power of NIH funding peaked in FY2003—the last year of the five-year doubling period—and then declined fairly steadily for more than a decade until back-to-back funding increases were provided in each of FY2016 through FY2021. The FY2021 program level is 3.3% below the peak FY2003 program level. The FY2022 budget request would provide a program level that is 14.4% above the peak FY2003 program level.

Contents

NIH Funding: FY1996-FY2022	1
Funding Sources.....	2
Coronavirus Supplemental Appropriations (FY2020 and FY2021)	3
FY2021 Proposed and Enacted Funding	5
FY2022 Budget and Appropriations.....	7
Trends	8

Figures

Figure 1. National Institutes of Health (NIH) Funding, FY1996-FY2022.....	10
---	----

Tables

Table 1. NIH Funding, FY1996-FY2022.....	11
Table A-1. National Institutes of Health Funding.....	13
Table A-2. Specified NIH Funding Levels in FY2021 Explanatory Statement.....	15
Table A-3. Specified NIH Funding Levels in FY2022 Budget Request	17

Appendixes

Appendix A. NIH Funding Details	13
Appendix B. Acronyms and Abbreviations	18

Contacts

Author Information	19
--------------------------	----

NIH Funding: FY1996-FY2022

This report provides a historical overview of federal funding provided to the National Institutes of Health (NIH) between FY1996 and FY2022. It also provides a brief explanation of the discretionary spending funding sources for NIH associated with the annual appropriations process (via the Labor, HHS, and Education and Interior/Environment Appropriations Acts) and the mandatory funding for special program on type 1 diabetes research.¹

NIH is the primary federal agency for medical, health, and behavioral research. It is the largest of the eight health-related agencies that make up the Public Health Service (PHS) within the Department of Health and Human Services (HHS).² NIH consists of the Office of the Director (OD) and 27 Institutes and Centers (ICs) that focus on aspects of health, human development, and biomedical science. The OD sets overall policy for NIH and coordinates the programs and activities of all NIH components, particularly in areas of research that involve multiple institutes.

NIH activities cover a wide range of basic, clinical, and translational research, focused on particular diseases, areas of human health and development, or more fundamental aspects of biology and behavior. Its mission also includes research training and health information collection and dissemination.³ More than 80% of the NIH budget funds extramural research (i.e., external) through grants, contracts, and other awards. This funding supports research performed by more than 300,000 individuals who work at over 2,500 hospitals, medical schools, universities, and other research institutions around the country.⁴ About 10% of the agency's budget supports intramural research (i.e., internal) conducted by nearly 6,000 NIH physicians and scientists, most of whom are located on the NIH campus in Bethesda, Maryland.⁵

Supplemental Funding for NIH

In FY2021 and prior years, NIH received supplemental appropriations provided as an emergency requirement. Given that this report examines trends in regular annual appropriations to NIH enacted by Congress and the President for the normal operations of the agency, amounts provided to NIH pursuant to an emergency requirement are generally excluded from this report. In some years, supplemental funding to NIH was substantial, such as the over \$10 billion in appropriations provided in the American Recovery and Reinvestment Act of 2009 (ARRA; P.L. 111-5), which was a 33% increase to the regular FY2009 appropriations NIH received. NIH has also received supplemental appropriations during several infectious disease emergencies, such as for the Ebola and Zika outbreaks. Given current interest, a summary of the FY2020 and FY2021 amounts for the COVID-19 pandemic is provided in "Coronavirus Supplemental Appropriations."

¹ "Mandatory spending" is controlled by authorization acts; "discretionary spending" is controlled by appropriations acts. For further information, see CRS Report R44582, *Overview of Funding Mechanisms in the Federal Budget Process, and Selected Examples*.

² The Public Health Service also includes the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), the Agency for Healthcare Research and Quality (AHRQ), the Health Resources and Services Administration (HRSA), the Substance Abuse and Mental Health Services Administration (SAMHSA), the Indian Health Service (IHS), and the Agency for Toxic Substances and Disease Registry (ATSDR).

³ For further information on The National Institutes of Health (NIH), see CRS Report R41705, *The National Institutes of Health (NIH): Background and Congressional Issues*.

⁴ NIH, "What We Do- Budget," March 3, 2020, at <https://www.nih.gov/about-nih/what-we-do/budget>.

⁵ Ibid.

Funding Sources

The vast majority of NIH funding comes from annual discretionary appropriations bills. NIH additionally receives some mandatory funding and some funding due to unique transfer or budgetary rules, as explained below. The total funding available for NIH activities, taking account of add-ons and PHS tap transfers, is referred to as the NIH “program level.”

Discretionary budget authority: NIH’s discretionary budget authority comes primarily from annual Labor, HHS, and Education (LHHS) Appropriations Acts, with an additional smaller amount for the Superfund Research Program and related activities from the Interior/Environment (INT) Appropriations Act.⁶

PHS Evaluation Set-Aside: Through LHHS appropriations, some funding is subject to the PHS Evaluation Set-Aside or the “PHS Evaluation Tap” transfer authority.⁷ Authorized by Section 241 of the Public Health Service Act, the evaluation tap allows the Secretary of HHS, with the approval of appropriators, to redistribute a portion of eligible PHS agency appropriations across HHS for program evaluation and implementation purposes. The PHS section limits the set-aside to not less than 0.2% and not more than 1% of eligible program appropriations. However, LHHS Appropriations Acts have commonly established a higher maximum percentage for the set-aside and have appropriated specific amounts of “tap” funding to selected HHS programs—in the context of NIH, these appropriations have been made to National Institute of General Medical Sciences in recent years.⁸ Since FY2010, and including in FY2021, this higher maximum set-aside level has been 2.5% of eligible appropriations.⁹ Readers should note that totals in this report and NIH source documents include amounts “transferred in” pursuant to PHS tap but do not include any amounts “transferred out” under this same authority.

Nonrecurring expenses fund (NEF): The NEF permits HHS to transfer unobligated balances of expired discretionary funds from FY2008 and subsequent years into the NEF account. Statute authorizes use of the funds for capital acquisitions, including information technology (IT) and facilities infrastructure (42 U.S.C. §3514a), and can direct the funds to certain accounts through appropriations acts. As shown in **Table A-1**, Congress directed specific amounts from the NEF to the NIH Building and Facilities account in FY2020 and FY2021.

⁶ The Hazardous Substance Basic Research and Training Program (Superfund Research Program) funds research on the health effects of exposures to hazardous substances and related solutions at the National Institute of Environmental Health Sciences. It is authorized by 311(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §9660(a)) and Section 126(g) of the Superfund Amendments and Reauthorization Act of 1986.

⁷ For more information on the PHS Evaluation Tap, or PHS Evaluation Set-Aside, see discussion in CRS Report R44916, *Public Health Service Agencies: Overview and Funding (FY2016-FY2018)*.

⁸ Prior to FY2015, NIH had traditionally been by far the largest net donor of tap funds, rather than a net recipient. The joint explanatory statement accompanying the FY2015 omnibus explained this shift as being intended to ensure that tap transfers are a “net benefit to NIH rather than a liability” and noted that this change was in response to a growing concern at the loss of NIH funds to the tap. Joint Explanatory Statement, Proceedings and Debates of the 113th Congress, Second Session, *Congressional Record*, vol. 160, no. 151, Book II, December 11, 2014, p. H9832.

⁹ See Section 204 of Division H, Title II of P.L. 116-260 for the FY2021 maximum set-aside level. The last time that an appropriations act set the PHS tap percentage at a level other than 2.5% was in FY2009, when it was 2.4% (see P.L. 111-8). The FY2020 omnibus also retained a change to this provision, first included in the FY2014 omnibus, allowing tap transfers to be used for the “evaluation and the implementation” of programs funded in the HHS title of the LHHS Appropriations Act. Prior to FY2014, such provisions had restricted tap funds to the “evaluation of the implementation” of programs authorized under the Public Health Service Act.

21st Century Cures Act Innovation Account: NIH also receives funding through LHHS appropriations, subject to different budget enforcement rules than the rest of the NIH funding in the act—appropriations to the NIH Innovation Account created by The 21st Century Cures Act (“the Cures Act,” P.L. 114-255) to fund programs authorized by the act.¹⁰ For appropriated amounts to the account—up the limit authorized for each fiscal year—the amounts are subtracted from any cost estimate for enforcing discretionary spending limits (i.e., the budget caps). In effect, appropriations to the NIH Innovation Account as authorized by the Cures Act are not subject to discretionary spending limits.¹¹ The NIH Director may transfer these amounts from the NIH Innovation Account to other NIH accounts, but only for the purposes specified in the Cures Act. If the NIH Director determines that the funds for any of the four Innovation Projects are not necessary, the amounts may be transferred back to the NIH Innovation Account. All amounts authorized by the Cures Act have been fully appropriated to the Innovation Account from FY2017 to FY2021, including \$404 million for FY2021. Under the FY2022 budget request, the full amount authorized by the Cures Act (\$496 million) would be appropriated.

Mandatory Type I Diabetes Funding: In addition, NIH has received mandatory funding of \$150 million annually that is provided in Public Health Service Act (PHSA) Section 330B, for a special program on type 1 diabetes research, most recently extended through FY2023 by the Consolidated Appropriations Act, 2021 (P.L. 116-260 ; Division BB, Title III).

Coronavirus Supplemental Appropriations (FY2020 and FY2021)

NIH has also received FY2020 and FY2021 emergency supplemental appropriations to several IC accounts and as transfers from the Public Health and Social Services Emergency Fund (PHSSEF) account as provided by four coronavirus supplemental appropriations acts:¹²

- Division A of the Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020 (P.L. 116-123), enacted on March 6, 2020.
- Division B of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act, P.L. 116-136), enacted on March 27, 2020.
- Division B of the Paycheck Protection Program and Health Care Enhancement Act (PPPHEA, P.L. 116-139), enacted on April 24, 2020.
- Division M of Consolidated Appropriations Act, 2021 (P.L. 116-260), enacted on December 27, 2020.

NIH received a total of \$3.031 billion to NIH IC accounts, along with directed transfers from the PHSSEF account to NIH accounts totaling not less than \$1.806 billion. Accounting for transfers, NIH is to receive a total of at least \$4.837 billion (see text box below for information on American Rescue Plan Act funding). All appropriations to NIH accounts are available until September 30, 2024, and all transfers from the PHSSEF are available until expended. This funding was primarily provided in three categories:

Broadly Available Funding. In the first (P.L. 116-123) and third measure (CARES Act; P.L. 116-136), funding was made available to several NIH IC accounts “to prevent, prepare for and

¹⁰ See section on 21st Century Cures Act in CRS Report R41705, *The National Institutes of Health (NIH): Background and Congressional Issues*.

¹¹ CRS Report R45778, *Exceptions to the Budget Control Act’s Discretionary Spending Limits*.

¹² NIH did not receive supplemental appropriations from the Families First Coronavirus Response Act (FFCRA, P.L. 116-127), enacted on March 18, 2020.

respond to coronavirus, domestically and internationally.” NIH IC accounts that received broadly available funds and their totals include the following:

- **National Institute of Allergy and Infectious Diseases (NIAID):** \$1.542 billion, including \$836 million in the first measure and \$706 million in the CARES Act. Some transfers or set-asides were directed for specific purposes in the NIAID appropriations. The first measure directed a transfer of not less than \$10 million to the National Institute of Environmental Health Sciences (NIEHS) for “worker-based training to prevent and reduce exposure of hospital employees, emergency first responders, and other workers who are at risk of exposure to coronavirus through their work duties.” The third measure set aside not less than \$156 million of the total for “the study of, construction of, demolition of, renovation of, and acquisition of equipment for, vaccine and infectious diseases research facilities of or used by NIH, including the acquisition of real property.”

American Rescue Plan Act of 2021 (ARPA; P.L. 117-2) Appropriations

The ARPA did not provide any appropriations directly to NIH. The law made available \$6.050 billion to the HHS Secretary in mandatory appropriations (i.e., direct appropriations) for research, development, manufacturing, production, and the purchase of vaccines, therapeutics, and ancillary medical products and supplies—available to address COVID-19, SARS-CoV-2 or its variants, and any disease with potential for creating a pandemic (Title II, Section 2303). The HHS Secretary can allocate a portion of these funds to NIH accounts at his discretion.

- **National Heart, Lung, and Blood Institute (NHLBI):** \$103 million in the CARES Act.
- **National Institute of Biomedical Imaging and Bioengineering (NIBIB):** \$60 million in the CARES Act.
- **National Library of Medicine (NLM):** \$10 million in the CARES Act.
- **National Center for Advancing Translational Sciences (NCATS):** \$36 million in the CARES Act.
- **Office of the Director (OD):** \$30 million in the CARES Act.

Diagnostic Testing Research and Development (R&D). In the fourth (Paycheck Protection Program and Health Care Enhancement Act; PPPHCEA, P.L. 116-139) and fifth measure (Division M of P.L. 116-260), NIH received funding for specific purposes related to diagnostic test R&D. This funding was directed to NIH as “not less than” transfers from the PHSSEF account in the fourth measure, and directly to the OD account in the fifth measure. These amounts include the following:

- **National Cancer Institute (NCI):** Transfer of not less than \$306 million from PHSSEF to NCI “to develop, validate, improve, and implement serological testing and associated technologies” in the PPPHCEA.
- **NIBIB:** Transfer of not less than \$500 million from PHSSEF to NIBIB “to accelerate research, development, and implementation of point of care and other rapid testing related to coronavirus” in the PPPHCEA.
- **OD:** Transfer of not less than \$1 billion from PHSSEF to OD “to develop, validate, improve, and implement testing and associated technologies; to accelerate research, development, and implementation of point of care and other rapid testing; and for partnerships with governmental and non-governmental entities” in the PPPHCEA. In the fifth measure, not less than \$100 million of the

\$1.250 billion total provided to the OD account is for “the Rapid Acceleration of Diagnostics.”

NIH’s Rapid Acceleration of Diagnostics (RADx) initiative is a prize competition for diagnostics development. As communicated to CRS, the \$1.500 billion total for NIBIB and OD in the fourth measure was used to support RADx initially, with additional funds in the fifth measure as specified above.¹³

Long-Term Studies of COVID-19. The fifth measure directed \$1.150 billion of the total \$1.250 billion provided to the OD account “for research and clinical trials related to long-term studies of COVID-19.” The fifth measure also allows the total \$1.250 billion appropriation to OD to be transferred to other IC accounts (in addition to other HHS transfer authorities in the law).

FY2021 Proposed and Enacted Funding

Former President Trump’s FY2021 initial budget request (February 10, 2020) proposed that NIH be provided a total program level of \$38.694 billion, a decrease of \$2.991 billion (-7.2%) from FY2020 program levels.¹⁴ Subsequently, on March 17, 2020, the Office of Management and Budget submitted an amendment to President Trump’s original request that would increase funding for the National Institute of Allergy and Infectious Disease (NIAID) by \$440 million relative to the original request.¹⁵ The purpose of this additional requested funding was “to ensure [NIAID] has the resources beginning October 1, 2020, to continue critical basic and applied research on coronaviruses and other infectious diseases.” The amended NIH FY2021 request would have provided a program level of \$39.133 billion, a decrease of \$2.552 billion (-6.1%) from the FY2020 program level.¹⁶ Under the amended FY2021 budget request, all the existing ICs and budget activity, except for NIAID and Buildings and Facilities, would have received a decrease compared to FY2020-enacted levels.¹⁷ The NIAID appropriation of \$5.885 billion would have been the same amount as the program level for NIAID at the time. The Buildings and Facilities appropriation of \$300 million would have been an increase of \$100 million from FY2020 in terms of discretionary LHHS budget authority.¹⁸

In addition, the FY2021 budget request proposed consolidating the Agency for Healthcare Research and Quality (AHRQ) into NIH, forming a 28th IC—the National Institute for Research on Safety and Quality (NIRSQ). The creation of a new NIH institute would generally require an

¹³ CRS communication with NIH, July 24, 2020.

¹⁴ NIH, *Congressional Justification: FY2021*, February 10, 2020, p. 75, at <https://officeofbudget.od.nih.gov/pdfs/FY21/br/1-OverviewVolumeSingleFile-toPrint.pdf>. This report uses FY2020 enacted funding levels from NIH, *Congressional Justification: FY2022*, May 28, 2021, p. 89-91, at <https://officeofbudget.od.nih.gov/pdfs/FY22/br/2022%20CJ%20Overview%20Volume%20May%2028.pdf>.

¹⁵ Letter from Michael R. Pence, President of the Senate, to Donald Trump, President of the United States, March 17, 2020, at <https://www.whitehouse.gov/wp-content/uploads/2020/03/Letter-regarding-additional-funding-to-support-the-United-States-response-to-COVID-19-3.17.2020.pdf>.

¹⁶ Amended budget request funding levels from Rep. Nancy Pelosi, “Explanatory Statement Submitted by Mrs. Lowey, Chairwoman of the House Committee on Appropriations Regarding H.R. 133, Consolidated Appropriations Act, 2021,” House of Representatives, Congressional Record, daily edition, vol. 166, part No. 218—Book IV (December 21, 2020).

¹⁷ Though the budget request provides an increase to the National Institute of General Medical Sciences (NIGMS) through discretionary LHHS budget authority, the total amount for NIGMS with the PHS evaluation transfer included is less than FY2020-enacted levels. For proposed FY2021 IC funding levels, see **Table A-1**.

¹⁸ FY2020 appropriations also directed a \$225 million transfer from the HHS nonrecurring expenses fund (NEF) to the NIH Building and Facilities (B&F) account; however, this transfer was not reflected in budget request tables.

amendment to PHS Section 401(d), which specifies that “[i]n the National Institutes of Health, the number of national research institutes and national centers may not exceed a total of 27.” The proposed NIRSQ would have received a total appropriation of \$355 million, including \$257 million in discretionary LHHHS budget authority and \$99 million in mandatory appropriations from the Patient-Centered Outcomes Research Trust Fund (PCORTF) in Social Security Act Section 1181. Congress did not adopt this proposal in FY2021 and did not adopt similar proposals to consolidate AHRQ into NIH as NIRSQ in FY2018, FY2019, or FY2020.

In July 2020, the House passed two consolidated appropriations bills with proposed funding levels for NIH accounts: H.R. 7617 with proposed LHHHS appropriations in Division E¹⁹ and H.R. 7608 with proposed INT appropriations in Division C.²⁰ In summary, House-passed appropriations would have provided NIH with an FY2021 estimated program level of \$42.221 billion.²¹ With this estimated funding, the House-proposed program level would be \$536 million (+1.3%) more than the FY2020-enacted program level and \$3.088 billion (+7.9%) more than the amended FY2021 budget request program level.

The House LHHHS appropriations bill (in Title VI of Division E) also included \$5 billion in emergency funding “to support biomedical research—including support for current grantees to cover the shutdown costs, startup costs, and other costs related to delays in research in 2020.”²² The \$5 billion would have been appropriated to the Office of the Director (OD). Of this total, the NIH Director was directed to transfer not less than \$2.500 billion to the IC accounts “in proportion to the amounts otherwise made available” in FY2020-enacted LHHHS appropriations, and to transfer the full FY2020-enacted amount to the Building and Facilities account.²³ As shown in the House report, this funding would have been distributed to all NIH accounts, except the Innovation Account, with funding levels ranging from \$5 million for the Fogarty International Center, to \$2.275 billion for the Office of the Director account.²⁴

The Senate did not complete committee or floor consideration of FY2021 LHHHS appropriations. The Chair of the Senate Appropriations Committee, however, released drafts of all 12 annual appropriations bills along with draft accompanying committee reports.²⁵

On December 27, 2020, Congress and President Trump finalized the NIH FY2021 appropriations by enacting the Consolidated Appropriations Act, 2021 (P.L. 116-260), which included final FY2021 LHHHS appropriations in Division H, Interior/Environment appropriations in Division G,

¹⁹ The Defense, Commerce, Justice, Science, Energy and Water Development, Financial Services and General Government, Labor, Health and Human Services, Education, Transportation, Housing, and Urban Development Appropriations Act, 2021.

²⁰ The State, Foreign Operations, Agriculture, Rural Development, Interior, Environment, Military Construction, and Veterans Affairs Appropriations Act, 2021.

²¹ Estimated funding level also accounts for proposed full year extension of mandatory type I diabetes research funding per H.Rept. 116-450, p. 399.

²² H.R. 7617, Division E, Title VI. By convention, CRS does not add discretionary funding designated as an emergency requirement to regular appropriations amounts. However, H.Rept. 116-450 (p. 404) presents a combined proposed FY2021 NIH program level with emergency funding included of \$46.959.

²³ Ibid.

²⁴ H.Rept. 116-450, pp. 399-404.

²⁵ U.S. Congress, Senate Committee on Appropriations majority staff, “Committee Releases FY21 Bills in Effort to Advance Process, Produce Bipartisan Results,” press release, November 10, 2020, at <https://www.appropriations.senate.gov/news/committee-releases-fy21-bills-in-effort-to-advance-process-produce-bipartisan-results>.

and full year mandatory type 1 diabetes funding in Division BB. The enacted FY2021 NIH program level is made up of the following:

- \$41.432 billion in discretionary LHHS budget authority;
- \$1.272 billion pursuant to the PHS program evaluation transfer and a \$225 million transfer from the HHS nonrecurring expenses fund (NEF);²⁶
- \$82 million for the Superfund research program and related activities from Interior/Environment appropriations; and
- \$150 million in annual funding for the mandatory type 1 diabetes research program.

Accounting for transfers and other adjustments, cited budget documents show the FY2021 program level as \$42.936 billion.²⁷ This FY2021 NIH program level represents a \$1.251 billion increase (+3.0%) above the FY2020 program level. The FY2021 total for NIH is also \$3.802 billion (+9.7%) above the FY2021 budget request and \$715 million (+1.7%) above the program level proposed by the House-passed bills. In FY2021, all IC accounts received an increase above FY2020 funding levels, except for the Buildings and Facilities account, which had an unchanged funding level of \$200 million (see **Table A-1**). For the Innovation Account, the full amount authorized by the 21st Century Cures Act (\$404 million) was appropriated.

FY2022 Budget and Appropriations

President Biden's FY2022 budget request (May 28, 2021) proposes that NIH be provided with a total program level of \$51.953 billion, an increase of \$9.017 billion (+21.0%) from FY2021-enacted levels. The proposed FY2022 program level would be made up of²⁸

- \$50.456 billion in discretionary LHHS budget authority (nontransfer);
- \$1.272 billion pursuant to the PHS program evaluation transfer;
- \$84 million for the Superfund research program and related activities from Interior/Environment appropriations; and
- \$141 million in annual funding for the mandatory type 1 diabetes research program.²⁹

Under this request, all existing IC accounts would receive an increase compared to FY2021-enacted levels (see **Appendix A**). In addition, the full amount (\$496 million) authorized by the 21st Century Cures Act for FY2021 (P.L. 114-255) would be appropriated to the Innovation Account. The Buildings and Facilities (B&F) account would receive an increase of \$50 million (+25%) in LHHS discretionary budget authority, but an overall decrease of \$175 million (-41%)

²⁶ The NEF amount is not reflected in the FY2021 NIH program level in cited FY2022 budget request tables.

²⁷ See NIH, *Congressional Justification: FY2022*, May 28, 2021, p. 89-91, at <https://officeofbudget.od.nih.gov/pdfs/FY22/br/2022%20CJ%20Overview%20Volume%20May%2028.pdf>. Specifically, FY2022 budget documents reflect a transfer from NIH to HHS OIG, transfers between IC accounts, and do not account for the NEF transfer to the B&F account.

²⁸ NIH, *Congressional Justification: FY2022*, May 28, 2021, p. 89-91, at <https://officeofbudget.od.nih.gov/pdfs/FY22/br/2022%20CJ%20Overview%20Volume%20May%2028.pdf>.

²⁹ This proposed amount for the mandatory type 1 diabetes research program differs from the already enacted amount for FY2022 of \$150 million in PHSA Section 330B, as amended in P.L. 116-260, Division BB, Title III. According to the budget request, the FY2022 amount reflects sequestration of \$8.55 million. See "Budget Mechanism Table," p. 92 in <https://officeofbudget.od.nih.gov/pdfs/FY22/br/2022%20CJ%20Overview%20Supplementary%20Tables.pdf>.

when accounting for the additional NEF transfer of \$225 million directed to the B&F account in FY2021 appropriations.³⁰

The FY2022 budget request also proposes the creation of an Advanced Research Projects Agency for Health (ARPA-H) within NIH. The budget request included \$6.5 billion for ARPA-H “to build platforms and capabilities to deliver cures for cancer, Alzheimer’s disease, diabetes, and other diseases.”³¹ The \$6.5 billion for ARPA-H would account for 72.1% of the FY2022 budget request’s \$9.017 billion increase from FY2021-enacted levels. Further information on the ARPA-H proposal is provided below.

Advanced Research Projects Agency for Health (ARPA-H) in the FY2022 Budget Request

On May 28, 2021, the Office of Budget and Management (OMB) submitted President Biden’s FY2022 budget request to Congress. This budget request proposed the creation of an Advanced Research Projects Agency for Health (ARPA-H) within the National Institutes of Health (NIH). The budget request included \$6.5 billion for ARPA-H “to build platforms and capabilities to deliver cures for cancer, Alzheimer’s disease, diabetes, and other diseases.” Funding was requested for a period of three years to “allow for both scale-up in FY 2022 and redeployment of resources in the next two years if projects fail to meet performance milestones.” The vast majority of funding would support extramural research, with a small amount of funding reserved for staffing and administrative functions. Unlike NIH Institutes and Centers (ICs), ARPA-H would not have its own intramural research program.

ARPA-H would be modeled after the Defense Advanced Research Projects Agency (DARPA), which primarily works with the Department of Defense (DOD), and would contain several “DARPA model” characteristics, including a flat and nimble organizational structure, tenure-limited program managers with a high degree of autonomy to select and fund projects, and a milestone-based contract approach. While this organizational structure would be “operationally unique” from NIH ICs, ARPA-H would still coordinate research and activities with NIH ICs and other HHS agencies.

The FY2022 budget request describes four broad project areas that ARPA-H would fund:

- tackling bold challenges requiring large scale, sustained, cross-sector coordination;
- creating new capabilities (e.g., technologies, data resources, disease models);
- supporting high-risk exploration that could establish entirely new paradigms; and
- overcoming market failures through critical solutions, including financial incentives.

Most ARPA-H awards would be given to industry, universities, and nonprofit research institutions, and may involve some agreements with other federal agencies. ARPA-H would make use of some of NIH’s flexible hiring and funding authorities, such as its Other Transaction Authority mechanisms.³²

For further information and analysis regarding ARPA-H, see CRS Insight INI 1674, *Advanced Research Projects Agency for Health (ARPA-H): Considerations for Congress*

Trends

Table 1 outlines NIH program level funding over the previous 25 years; **Figure 1** illustrates funding trends in both current (also called nominal dollars) and projected constant (i.e., inflation-adjusted) FY2022 dollars (funding shown is total budget authority).

³⁰ Accounting for the directed NEF transfer, the Buildings and Facilities account has a total FY2021 funding level of \$425 million. This total account amount is not reflected in budget request documents.

³¹ NIH, *Congressional Justification: FY2022*, May 28, 2021, p. 10, at <https://officeofbudget.od.nih.gov/pdfs/FY22/br/2022%20CJ%20Overview%20Volume%20May%2028.pdf>.

³² NIH, *Congressional Justification: FY2022*, May 28, 2021, pp. 10-11, at <https://officeofbudget.od.nih.gov/pdfs/FY22/br/2022%20CJ%20Overview%20Volume%20May%2028.pdf> and HHS, “FY2022 Budget in Brief,” pp. 59-60, at <https://www.hhs.gov/sites/default/files/fy-2022-budget-in-brief.pdf>.

NIH has seen periods of high and low funding growth. Between FY1996 and FY1998, funding for NIH grew from \$11.928 billion to \$13.675 billion (nominal dollars). Over the next five years, Congress and the President doubled the NIH budget to \$27.167 billion in FY2003. In each of FY1999 through FY2003, NIH received annual funding increases of 14% to 16%. From FY2003 to FY2015, NIH funding increased more gradually in nominal dollars.³³ In some years, (FY2006, FY2011, and FY2013) funding for the agency decreased in nominal dollars.³⁴ From FY2016 through FY2020, NIH has seen funding increases of over 5% each year. The largest increase was from FY2017 to FY2018, where the program level increased by \$3.010 billion (+8.8%), making this the largest single-year nominal dollar increase since FY2003. (If adopted, the FY2022 request program level would surpass this prior largest annual program level increase).

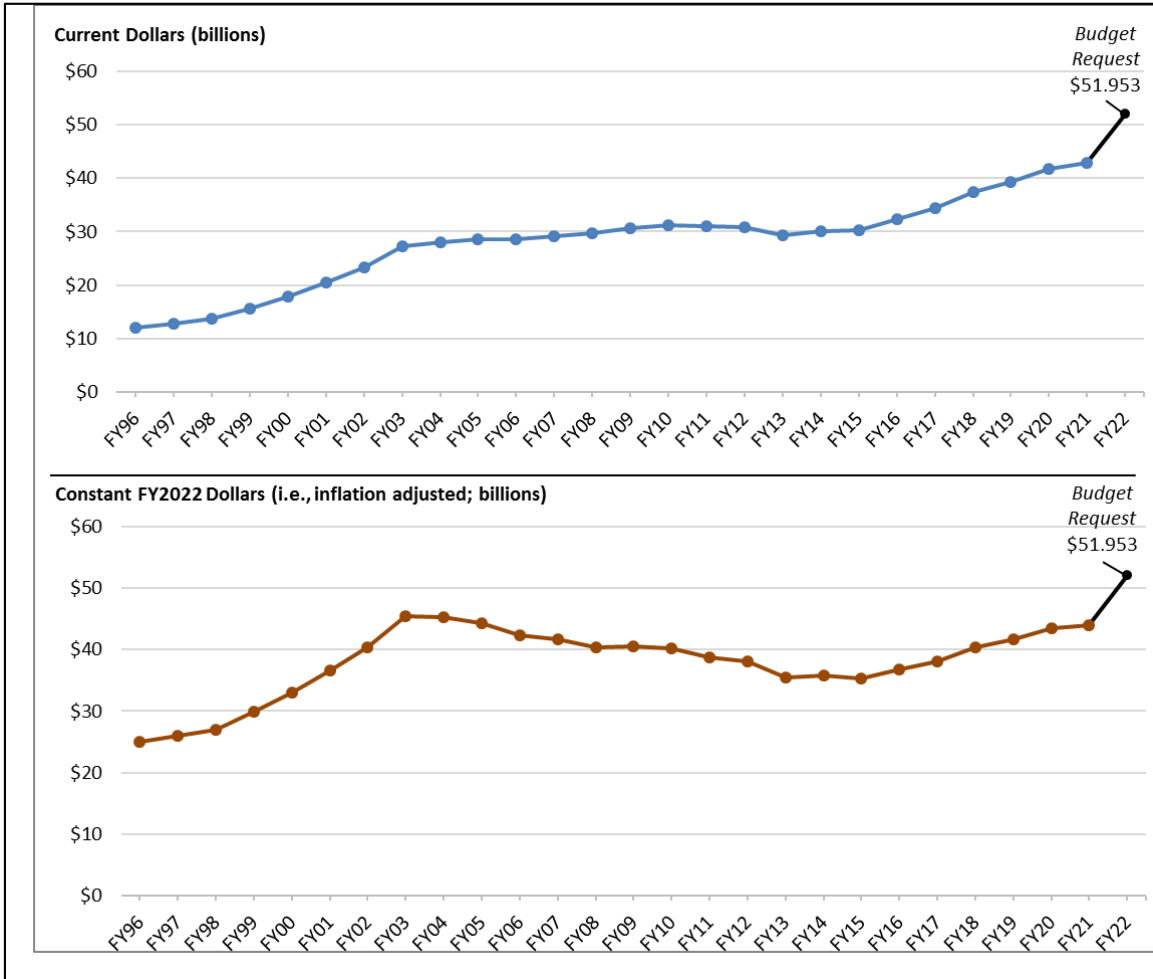
The lower half of **Figure 1** shows NIH funding adjusted for inflation (in projected constant FY2022 dollars) using the Biomedical Research and Development Price Index (BRDPI).³⁵ It shows that the purchasing power of NIH funding peaked in FY2003 (the last year of the five-year doubling period) and then declined fairly steadily for more than a decade until consecutive funding increases were provided in each of FY2016 through FY2021. The FY2021 program level is 3.3% below the peak FY2003 program level. The FY2022 budget request would provide a program level that is 14.4% above the peak FY2003 program level.

³³ Amounts shown in **Table 1** include appropriations for the Global Fund to Fight AIDS, TB, and Malaria (FY2002 - FY2011) that were subject to transfer-out. As of FY2012, NIH no longer receives appropriations for the National Institute of Allergy and Infectious Diseases (NIAID) identifying resources for the Global Fund; this responsibility was transferred to another federal agency. For further details on the amounts transferred out by fiscal year, see the “Supplemental Appropriation Data Table” for “History of Congressional Appropriations, Fiscal Years 2000-2012” at http://officeofbudget.od.nih.gov/approp_hist.html.

³⁴ For instance, the FY2006 total was 0.1% lower than the previous year, the first time that NIH appropriations had decreased since FY1970; the FY2011 total, provided in the Full-Year Continuing Appropriations Act, 2011 (P.L. 112-10), was 1.0% below the previous fiscal year; the FY2013 total, provided in the Consolidated and Further Continuing Appropriations Act, 2013 (P.L. 113-6), was reduced by the March 2013 sequestration and a transfer of funding under the authority of the HHS Secretary (\$1.553 billion and \$173 million, respectively), resulting in a budget that was 5.0% lower than the prior year.

³⁵ The index is developed for NIH by the Bureau of Economic Analysis of the Department of Commerce. It reflects the increase in prices of the resources needed to conduct biomedical research, including personnel services, supplies, and equipment. It indicates how much the NIH budget must change to maintain purchasing power. See “NIH Price Indexes,” at <https://officeofbudget.od.nih.gov/gbiPriceIndexes.html>.

Figure I. National Institutes of Health (NIH) Funding, FY1996-FY2022
 Program Level Funding in Current and Projected Constant (FY2022) Dollars.



Source: NIH Budget Office, Appropriations History by Institute/Center (1938 to Present), at http://officeofbudget.od.nih.gov/approp_hist.html. The FY2020, FY2021, and FY2022 program levels are based on NIH, *Congressional Justification: FY2022*, May 28, 2021, p. 89-91, at <https://officeofbudget.od.nih.gov/pdfs/FY22/br/2022%20CJ%20Overview%20Volume%20May%2028.pdf>. Inflation adjustment reflects the Biomedical Research and Development Price Index (BRDPI), updated March 2021, at <https://officeofbudget.od.nih.gov/gbiPriceIndexes.html>.

Notes: By convention, program level totals include amounts “transferred in” pursuant to PHS tap but do not include any amounts “transferred out” under this same authority. Program level includes all budget authority, including appropriations for the Global Fund to Fight AIDS, TB, and Malaria (FY2002-FY2011) that were subject to transfer-out. As of FY2012, NIH no longer receives appropriations for the National Institute of Allergy and Infectious Diseases (NIAID) identifying resources for the Global Fund; this responsibility was transferred to another federal agency. In general, amounts provided to NIH designated for emergency requirements are excluded from these totals (e.g., FY2020 amount does not include the amounts provided in the coronavirus supplemental appropriations acts, summarized in “Coronavirus Supplemental Appropriations”).

Table I. NIH Funding, FY1996-FY2022

Program Level Funding in Current and Constant (FY2022) Dollars (billions)

Fiscal Year	Program Level Current \$	% Change	Program Level Projected Constant FY2021 \$	% Below FY2003 ^a
1996	11.928	5.6%	25.045	
1997	12.741	6.8%	26.028	
1998	13.675	7.3%	27.020	
1999	15.629	14.3%	29.934	
2000	17.841	14.1%	32.942	
2001	20.459	14.7%	36.561	
2002	23.321	14.0%	40.340	
2003	27.167	16.5%	45.396	
2004	28.037	3.2%	45.167	-0.5%
2005	28.594	2.0%	44.341	-2.3%
2006	28.560	-0.1%	42.328	-6.8%
2007	29.179	2.2%	41.664	-8.2%
2008	29.607	1.5%	40.385	-11.0%
2009	30.545	3.2%	40.480	-10.8%
2010	31.238	2.3%	40.176	-11.5%
2011	30.916	-1.0%	38.657	-14.8%
2012	30.861	-0.2%	38.099	-16.1%
2013	29.316	-5.0%	35.526	-21.7%
2014	30.143	2.8%	35.760	-21.2%
2015	30.311	0.6%	35.243	-22.4%
2016	32.311	6.6%	36.769	-19.0%
2017	34.301	6.2%	38.044	-16.2%
2018	37.311	8.8%	40.375	-11.1%
2019	39.313	5.4%	41.661	-8.2%
2020	41.685	6.0%	43.483	-4.2%
2021	42.936	3.0%	43.887	-3.3%
2022PB	51.953	21.0%	51.953	+14.4%

Sources: NIH Budget Office, Appropriations History by Institute/Center (1938 to Present), at https://officeofbudget.od.nih.gov/approp_hist.html. The FY2020, FY2021, and FY2022 program levels are based on NIH, *Congressional Justification: FY2022*, May 28, 2021, p. 89-91, at <https://officeofbudget.od.nih.gov/pdfs/FY22/br/2022%20CJ%20Overview%20Volume%20May%2028.pdf>. Inflation adjustment reflects the Biomedical Research and Development Price Index (BRDPI), updated March 2021, at <https://officeofbudget.od.nih.gov/gbiPriceIndexes.html>.

Notes: By convention, budget tables, such as **Table I**, include amounts “transferred in” pursuant to PHS tap but do not include any amounts “transferred out” under this same authority. Program level includes all budget authority, including appropriations for the Global Fund to Fight AIDS, TB, and Malaria (FY2002-FY2011) that were subject to transfer-out. As of FY2012, NIH no longer receives appropriations for the National Institute of Allergy and Infectious Diseases (NIAID) identifying resources for the Global Fund; this responsibility was transferred to another federal agency. In general, amounts provided to NIH for emergency requirements are

excluded from these totals (e.g., the FY2020 and FY2021 amounts do not include the amounts provided in the coronavirus supplemental appropriations acts, summarized in “Coronavirus Supplemental Appropriations”). PB denotes “President’s Budget.”

- a. FY2003 was the year that NIH received the most program level funding.

Appendix A. NIH Funding Details

Table A-1. National Institutes of Health Funding
(budget authority, in millions of dollars)

Institutes/Centers	FY2020 Final	FY2021 Request	FY2021 Final	FY2022 Request
Cancer Institute (NCI)	\$6,440	\$5,881	\$6,559	\$6,733
Heart, Lung, and Blood Institute (NHLBI)	\$3,625	\$3,298	\$3,665	\$3,846
Dental/Craniofacial Research (NIDCR)	\$478	\$435	\$485	\$516
Diabetes/Digestive/Kidney (NIDDK) ^a	\$2,115	\$1,924	\$2,132	\$2,219
Neurological Disorders/Stroke (NINDS)	\$2,447	\$2,245	\$2,511	\$2,783
Allergy/Infectious Diseases (NIAID) ^b	\$5,876	\$5,885	\$6,067	\$6,246
General Medical Sciences (NIGMS) ^c	\$1,706	\$1,931	\$1,720	\$1,825
Child Health/Human Development (NICHD) ^d	\$1,798	\$1,416	\$1,838	\$1,942
National Eye Institute (NEI)	\$823	\$749	\$836	\$859
Environmental Health Sciences (NIEHS) ^e	\$803	\$730	\$815	\$937
National Institute on Aging (NIA)	\$3,546	\$3,226	\$3,900	\$4,036
Arthritis/Musculoskeletal/Skin Diseases (NIAMS)	\$625	\$568	\$634	\$680
Deafness/Communication Disorders (NIDCD)	\$491	\$446	\$498	\$512
National Institute of Mental Health (NIMH)	\$2,043	\$1,845	\$2,106	\$2,214
National Institute on Drug Abuse (NIDA)	\$1,458	\$1,432	\$1,480	\$1,853
Alcohol Abuse/Alcoholism (NIAAA)	\$547	\$497	\$555	\$570
Nursing Research (NINR)	\$172	\$157	\$175	\$200
Human Genome Research Institute (NHGRI)	\$604	\$550	\$616	\$633
Biomedical Imaging/Bioengineering (NIBIB)	\$405	\$368	\$411	\$422
Minority Health/Health Disparities (NIMHD)	\$336	\$305	\$392	\$652
Complementary/Integrative Health (NCCIH)	\$152	\$138	\$154	\$184
Advancing Translational Sciences (NCATS)	\$833	\$788	\$855	\$879
Fogarty International Center (FIC)	\$81	\$74	\$84	\$96
National Library of Medicine (NLM)	\$457	\$416	\$462	\$475
Office of Director (OD) ^f	\$2,007	\$2,099	\$2,175	\$2,245
Innovation Account ^g	\$157	\$109	\$109	\$150
Buildings and Facilities (B&F) ^h	\$200	\$300	\$200	\$250
National Institute for Research on Safety & Quality (NIRSQ)	—	\$257	—	—
Advanced Research Projects Agency for Health (ARPA-H)	—	—	—	\$6,500
Subtotal, NIH (LHHS Discretionary BA)	\$40,223	\$38,070	\$41,432	\$50,456
PHS Program Evaluation (provided to NIGMS)	\$1,231	\$741	\$1,272	\$1,272

Institutes/Centers	FY2020 Final	FY2021 Request	FY2021 Final	FY2022 Request
Superfund (Interior approp. to NIEHS) ⁱ	\$81	\$74	\$82	\$84
Nonrecurring Expenses Fund (NEF) Transfer (to Buildings and Facilities) ⁱ	(\$225)	—	(\$225)	—
Mandatory type I diabetes funds (to NIDDK) ^k	\$150	\$150	\$150	\$141 ^l
Patient-Centered Outcomes Research Trust Fund (PCORTF)	—	\$98	—	—
NIH Program Level	\$41,685	\$39,133	\$42,936	\$51,953

Source: NIH, “FY2022 Budget Request by IC (Summary Table),” at <https://officeofbudget.od.nih.gov/pdfs/FY22/br/2022%20CJ%20Overview%20Supplementary%20Tables.pdf>, pg. 89, except as noted below. FY2021 request amounts from Rep. Nancy Pelosi, “Explanatory Statement Submitted by Mrs. Lowey, Chairwoman of the House Committee on Appropriations Regarding H.R. 133, Consolidated Appropriations Act, 2021,” House of Representatives, Congressional Record, daily edition, vol. 166, part No.218—Book IV (December 21, 2020).

Notes: Totals may differ from the sum of the components due to rounding. Amounts in table may differ from actuals in many cases. By convention, budget tables such as **Table A-1** do not subtract the amount of transfers to the evaluation tap from the agencies’ appropriation. In general, amounts provided to NIH for emergency requirements are excluded from these totals (e.g., FY2020 and FY2021 amounts do not include the amounts provided in the coronavirus supplemental appropriations acts, summarized in “Coronavirus Supplemental Appropriations”).

- a. Amounts for the NIDDK do not include mandatory funding for type I diabetes research (see note k).
- b. The White House amended the NIAID FY2021 budget request on March 17, 2020, in a supplemental request letter for COVID-19 funding, to \$5,885,470,000, which is \$439,584,000 above the original FY2021 budget request.
- c. Amounts for NIGMS do not include funds from PHS Evaluation Set-Aside (§241 of the PHS Act).
- d. FY2020 and FY2021 funding level for NICHD adjusted for comparability in NIH FY2022 budget tables to reflect the proposed transfer of the ECHO and INCLUDE programs from OD to NICHD.
- e. Amounts for NIEHS do not include Interior/Environment Appropriations amount for Superfund research (see note i).
- f. Includes \$12.6 million transfer from the Pediatric Research Initiative Fund (PRIF) as authorized by the Gabriella Miller Kids First Research Act. FY2020 and FY2021 amounts for this account adjusted for comparability reflect the proposed transfer of ECHO and INCLUDE programs from OD to NICHD in the FY2022 request.
- g. The amount shown for the NIH Innovation Account in each column represents only a portion of the total appropriation to the account (\$404 million for FY2021; \$496 million for FY2022. The remaining funds for this account are reflected, where applicable, into the totals for other ICs. For FY2022, this includes \$194 million to NCI for cancer research and \$76 million to each of NINDS and NIMH for the BRAIN Initiative (\$152 million total for BRAIN).
- h. Amounts for the Building and Facilities account do not include directed transfers from the nonrecurring expenses fund in FY2020 and FY2021 enacted appropriations (see note j).
- i. This is a separate account in the Interior/Environment appropriations for NIEHS research activities related to Superfund research.
- j. The nonrecurring expenses fund (NEF) permits HHS to transfer unobligated balances of expired discretionary funds from FY2008 and subsequent years into the NEF account. Congress and the President authorized use of the funds for capital acquisitions including information technology (IT) and facilities infrastructure (42 U.S.C. §3514a), and can direct the funds to certain accounts through appropriations acts. NEF transfers are shown as non-add in this budget presentation as these amounts were not reflected in FY2022 budget request tables.
- k. Mandatory funds are available to NIDDK for type I diabetes research under PHSA Section 330Bm, which was most recently extended through FY2023 by the Consolidated Appropriations Act, 2021 (P.L. 116-260; Division BB, Title II)

- I. FY2022 proposed amount for the type I diabetes research program (\$141 million) is lower than enacted funding level for FY2022 (\$150 million). According to the budget request, the FY2022 amount reflects sequestration of \$8.55 million. See “Budget Mechanism Table,” p. 92 in <https://officeofbudget.od.nih.gov/pdfs/FY22/br/2022%20CJ%20Overview%20Supplementary%20Tables.pdf>.

Program-Specific Funding

In recent years, Congress and the President have increasingly specified funding levels for programs or research areas within NIH accounts throughout the budget and appropriations process. Congress uses language in reports and explanatory statements accompanying appropriations bills to designate funding for specified purposes. This is a relatively new practice that has expanded since FY2015.³⁶ For the most part, Congress does not specify NIH funding for particular diseases or areas of research, instead allowing the ICs to award funding within their mission areas. Funding is generally awarded on a flexible and competitive basis through various funding mechanisms intended to balance scientific opportunity with health priorities.³⁷

In FY2021, Congress used explanatory statement language to specify a certain amount of IC funding for designated purposes, as summarized in **Table A-2**. Sometimes the language specifies that “no less than” a certain amount can be designated for a certain purpose; in other cases, language “provides” or “recommends” that an amount be spent on a certain purpose. For FY2021, while the House report (H.Rept. 116-450) also included funding levels for some of the below programs, the amounts in the explanatory statement supersede those. Both the explanatory statement and the House report include many additional statements directing the agency to prioritize certain programs or areas of research, as well as expressing the opinion or concerns of Congress regarding NIH; these broad statements are not summarized here. In addition, the President has proposed broad funding increases for certain research and other areas in his FY2022 budget request.

Table A-2. Specified NIH Funding Levels in FY2021 Explanatory Statement

Institute/Center	Program	Amount
Cancer Institute (NCI)	NCI Paylines	\$250 million, an increase of \$38 million
	Childhood Cancer Survivorship, Treatment Access, and Research (STAR) Act	\$30 million
Neurological Disorders/Stroke (NINDS)	HEAL Initiative (opioid misuse and addiction)	No less than \$270 million
	Centers for AIDS Research	\$61 million, an increase of \$10 million

³⁶ As recently as December 2014, the explanatory statement on the FY2015 omnibus stipulated, “In keeping with longstanding practice, the agreement does not recommend a specific amount of NIH funding for this purpose [Alzheimer’s disease] or for any other individual disease. Doing so would establish a dangerous precedent that could politicize the NIH peer review system. Nevertheless, in recognition that Alzheimer’s disease poses a serious threat to the Nation’s long-term health and economic stability, the agreement expects that a significant portion of the recommended increase for NIA should be directed to research on Alzheimer’s. The exact amount should be determined by scientific opportunity of additional research on this disease and the quality of grant applications that are submitted for Alzheimer’s relative to those submitted for other diseases.” See *Congressional Record*, daily edition, vol. 160, no. 151, Book II (December 11, 2014), p. H9832.

³⁷ CRS Report R41705, *The National Institutes of Health (NIH): Background and Congressional Issues*.

Institute/Center	Program	Amount
National Institute of Allergy and Infectious Diseases (NIAID)	Lyme disease and other tick-borne diseases	An increase of \$10 million
	Regional biocontainment laboratories (RBL)	\$40 million
	Universal flu vaccine	No less than \$220 million, an increase of \$20 million
General Medical Sciences (NIGMS)	Institutional Development Award (IDeA) Program	\$397 million, an increase of \$10 million
Child Health/Human Development (NICHD)	Research on the survival and healthy development of preterm infants	An increase of \$10 million
Aging (NIA)	Alzheimer's disease and related dementias	No less than \$3.118 billion
Drug Abuse (NIDA)	HEAL Initiative (opioid misuse and addiction)	No less than \$270 million
Genome Research (NHGRI)	Emerging Centers of Excellence in Genomic Sciences	\$13 million
Minority Health/Health Disparities (NIMHD)	Research Centers in Minority Institutions	\$80 million, an increase of \$5 million
Advancing Translational Sciences (NCATS)	Clinical and Translational Science Awards (CTSAs)	\$588 million
	Cures Acceleration Network	Up to \$60 million
	Gene Vector Initiative	\$10 million
Office of the Director (OD)/ Multi-Institute Research Initiatives	<i>All of Us</i> Precision Medicine Initiative	\$500 million ^a
	Artificial intelligence/big data	\$105 million, including \$50 million to expand machine learning-focused grants and \$55 million for the Office of Data Science Strategy
	Grants for biomedical research facilities	\$50 million
	Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative	\$560 million, ^b including \$40 million for the Human Brain Cell Atlas and \$20 million for the Armamentarium for Brain Cell Access.
	Environmental Influences on Child Health Outcomes (ECHO)	\$180 million
	Firearm injury and mortality prevention research	\$13 million
	HHS Office of National Security allocation for foreign threats program	\$5 million
	IDeA States Pediatric Clinical Trials Network	No less than the FY2020 funding level (\$15 million)
	Office of AIDS Research, for HIV/AIDS research	\$3.090 billion

Institute/Center	Program	Amount
	Office of Research on Women's Health (ORWH)	an increase of \$5 million
	Investigation of Co-Occurring Conditions Across the Lifespan to Understand Down Syndrome (INCLUDE)	no less than \$65 million, an increase of \$5 million

Source: U.S. Congress, House and Senate Committees on Appropriations, Subcommittee on the Departments of Labor, Health and Human Services, Education, and Related Agencies, *Division H—Department of Labor, Health and Human Services, and Education and Related Agencies [LHHS] Appropriations Act, 2021*, committee print, 116th Cong., 2nd sess., December 21, 2020, pp. 44-71, 154-159.

- a. Amount likely includes \$109 million from the Innovation Account as authorized in the Cures Act.
- b. Amount likely includes \$100 million from the Innovation Account for the BRAIN Initiative as authorized by the Cures Act (split between NINDS and NIMH in FY2021 appropriations).

Table A-3. Specified NIH Funding Levels in FY2022 Budget Request

Program/Activity	Amount
Opioid, stimulant, and pain research	\$2.2 billion—\$811 million for the Helping to End Addiction Long-term (HEAL) Initiative and more than \$1.4 billion to support ongoing research
Health disparities and inequities research	\$330 million—\$250 million for NIMHD and \$80 million for targeted cardiovascular, nursing, and international health disparities and inequities research at NHLBI, NINR, and the Fogarty International Center, respectively
Research on the effects of climate change on human health	\$100 million
Centers for AIDS Research	\$26 million
Maternal health and Pregnancy Outcomes Vision for Everyone (IMPROVE) initiative	\$30 million
Firearm violence prevention research	\$25 million
Research on COVID-19 and individuals at risk for, or experiencing, mental disorders	\$25 million
Collaboration to Assess Risk and Identify Long-term Outcomes for Children with COVID (CARING for Children with COVID) research program	\$15 million
Creating a Diverse Biomedical Workforce—increasing opportunities for early-career investigators, reaching underrepresented groups, and tracking and evaluating diversity and inclusion metrics at NIH ICs	\$16 million
NIH cybersecurity modernization and improvements	\$100 million
Nonhuman primate resource infrastructure expansion at the National Primate Research Centers and Caribbean Primate Research Center	\$30 million

Source: HHS, “FY2022 Budget in Brief,” pp. 60-64, at <https://www.hhs.gov/sites/default/files/fy-2022-budget-in-brief.pdf>. For the most part, the budget request does not specify funding amounts by institute/center or account.

Appendix B. Acronyms and Abbreviations

Acronym/ Abbreviation	Organization/Term
ARPA-H	Advanced Research Projects Agency for Health
DARPA	Defense Advanced Research Projects Agency
DOD	Department of Defense
FIC	Fogarty International Center
FY	Fiscal Year
IC	Institutes and Centers
NASEM	National Academies of Sciences, Engineering, and Medicine
NCATS	National Center for Advancing Translational Sciences
NCCIH	National Center for Complementary and Integrative Health
NCI	National Cancer Institute
NEF	Nonrecurring Expenses Fund
NEI	National Eye Institute
NHGRI	National Human Genome Research Institute
NHLBI	National Heart, Lung, and Blood Institute
NIA	National Institute on Aging
NIAAA	National Institute on Alcohol Abuse and Alcoholism
NIAID	National Institute of Allergy and Infectious Diseases
NIAMS	National Institute of Arthritis and Musculoskeletal and Skin Diseases
NIBIB	National Institute of Biomedical Imaging and Bioengineering
NICHD	National Institute of Child Health and Human Development
NIDA	National Institute on Drug Abuse
NIDCD	National Institute on Deafness and Other Communication Disorders
NIDCR	National Institute of Dental and Craniofacial Research
NIDDK	National Institute of Diabetes and Digestive and Kidney Diseases
NIEHS	National Institute of Environmental Health Sciences
NIGMS	National Institute of General Medical Sciences
NIMH	National Institute of Mental Health
NIMHD	National Institute on Minority Health and Health Disparities
NINDS	National Institute of Neurological Disorders and Stroke
NINR	National Institute of Nursing Research
NLM	National Library of Medicine
OD	NIH Office of the Director
PHS	Public Health Service

Author Information

Kavya Sekar
Analyst in Health Policy

Acknowledgments

CRS Research Assistant Isaac Nicchitta provided valuable assistance in analysis and writing for this report.

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.