National Institute of Mental Health

CELEBRATING

75

YEARS

Transforming the Understanding and Treatment of Mental Illnesses

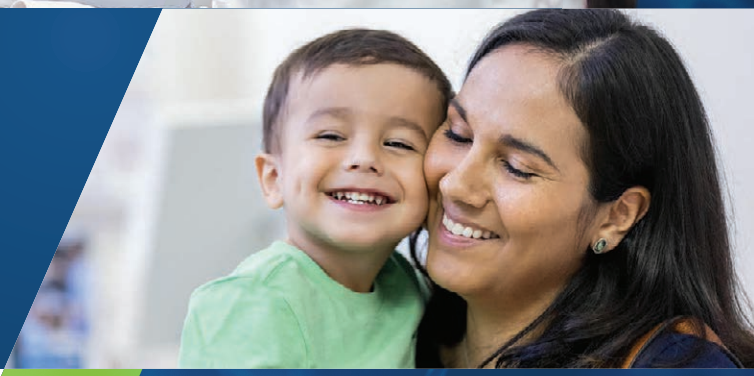
National Institute of Mental Health

About **NIMH**

The National Institute of Mental Health (NIMH) is the lead federal agency for research on mental disorders. NIMH is one of the 27 Institutes and Centers that make up the National Institutes of Health (NIH), the largest biomedical research agency in the world. NIH is part of the U.S. Department of Health and Human Services (HHS).

Vision

NIMH envisions a world in which mental illnesses are prevented and cured.



Mission

NIMH aims to transform the understanding and treatment of mental illnesses through basic and clinical research, paving the way for prevention, recovery, and cure.

Foreword

Joshua A. Gordon, M.D., Ph.D.
Director of NIMH

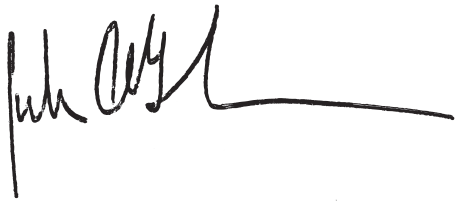
On July 3, 1946, President Harry S. Truman signed the National Mental Health Act. In addition to its broad purpose of improving "the mental health of the people of the United States," the act enabled the founding, three years later, of the National Institute of Mental Health, now part of the National Institutes of Health.

For 75 years, NIMH has been at the forefront of mental health research. Our mission is to transform the understanding and treatment of mental illnesses through basic and clinical research, paving the way for prevention, recovery, and cure. The institute's influence is widespread; NIMH-supported research has played a pivotal role in advancing our understanding of the brain, developing groundbreaking treatments and therapies, and improving the quality and availability of mental health care.

Numerous NIMH-funded advances achieved over the last 75 years made it challenging to decide what to highlight as we celebrate this milestone anniversary. As such, we aim to broadly present our history and a sampling of basic, translational, and clinical research—from research aimed at understanding how the brain impacts behavior to translational efforts to uncover novel treatment targets to clinical studies testing innovative interventions in real-world settings. There are many impactful stories of discovery driven by dedicated scientists here at NIMH and across the country, and we will continue to share them beyond this anniversary year.

We owe a great deal of thanks to the broader scientific, advocacy, legislative, and professional communities and the public for their instrumental support. I also want to personally thank the many devoted NIMH employees, past and present, and our collaborators at other NIH institutes, centers, and offices for their enthusiastic commitment to NIMH's mission. Finally, I want to thank everyone who has contributed to this celebration by sharing their time, expertise, and experiences. It is an honor and a privilege to serve as the director of a federal agency with such an inspirational and exciting mission.

I invite everyone to join us as we reflect on the successes and challenges of the past 75 years and look forward to the advances to come.



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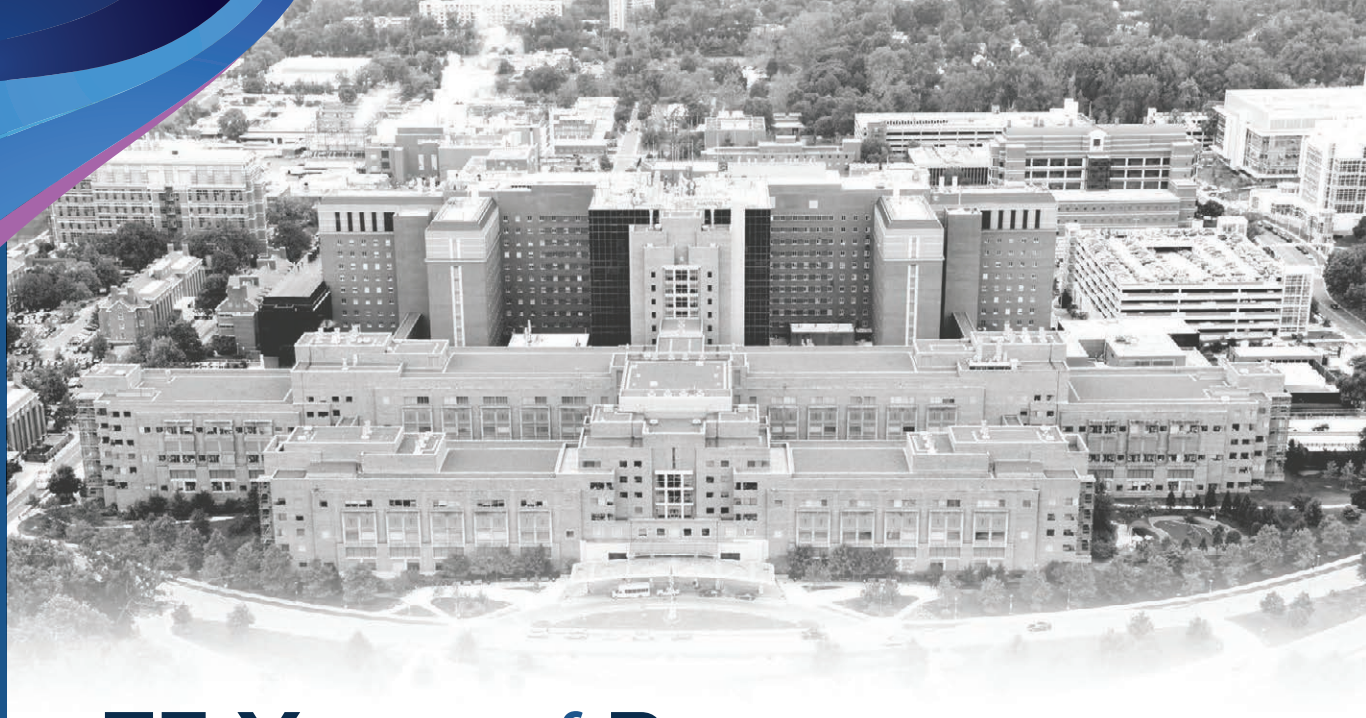


75 Years of Progress and Landmark Events

The National Institute of Mental Health (NIMH) was established in 1949, spurred by U.S. Public Health Service efforts predating World War II and reports of widespread mental illness among service members. NIMH's original mission had three main components: to train mental health professionals; to foster the spread of community-based mental health services; and to promote clinical, behavioral, and biological mental health research. The institute has seen many changes over the past 75 years, including shifts in organizational structure and administrative control and rapid developments in science and technology. Throughout this time, NIMH has maintained an unwavering commitment to guiding the nation as the lead federal agency for research on mental disorders.

This booklet provides an overview of NIMH's 75-year history, charting a timeline of key events and major research programs and public health initiatives. The timeline includes a selection of pivotal discoveries made by NIMH researchers and grantees, many of whom have received Nobel Prizes, Lasker Awards, and other accolades for their groundbreaking scientific achievements. The timeline also tracks NIMH's evolving research priorities and efforts to balance basic research with translational work to advance treatments for mental disorders and address mental health disparities. For a more comprehensive view, read the "Learn More About NIMH History" section at the back of this booklet and visit **www.nimh.nih.gov/75years**.

1946

On July 3, President Harry S. Truman signed the National Mental Health Act, which called for establishing a National Institute of Mental Health.

President Harry S. Truman. Credit Frank Gatteri, United States Army. Courtesy of Harry S. Truman Library & Museum.

> *"There is also a special need for research on mental diseases and abnormalities. We have done pitifully little about mental illnesses. Accurate statistics are lacking, but there is no doubt that there are at least two million persons in the United States who are mentally ill and that as many as 10 million will probably need hospitalization for mental illness for some period in the course of their lifetime. A great many of these persons would be helped by proper care."*
>
> ***President Harry S. Truman***
> ***Special Message to Congress Recommending a Comprehensive Health Program***

On August 15, U.S. Surgeon General Thomas Parran, Jr., M.D., and several nationally known psychiatrists attended the first meeting of the National Advisory Mental Health Council. The group was tasked with advising NIMH on its policies and activities.

1947

On July 1, the U.S. Public Health Service Division of Mental Hygiene awarded the first mental health research grant, "Basic Nature of the Learning Process," to Winthrop N. Kellogg, Ph.D., of Indiana University.

1949

On April 1, NIMH was formally established under the direction of psychiatrist and public health advocate Robert H. Felix, M.D., as one of the first institutes of the National Institutes of Health (NIH).

Robert H. Felix, M.D., NIMH director from 1949 to 1964. Courtesy of National Library of Medicine.

1951

In June, the first scientific director of NIMH, Seymour Kety, M.D., Ph.D., began building a joint basic intramural research program for NIMH and the newly created National Institute of Neurological Diseases and Blindness (NINDB). This research program evolved into the NIMH Intramural Research Program, the internal research division of NIMH. As of 2023, the NIMH Intramural Research Program comprised more than 650 staff and more than 40 research groups conducting basic, clinical, and translational research to advance understanding of the diagnosis, causes, treatment, and prevention of mental disorders.

1952

On December 20, psychiatrist Robert A. Cohen, M.D., created a joint NIMH–NINDB clinical research program in time for the opening of the NIH Clinical Center in July 1953.

1955

On July 28, the Mental Health Study Act of 1955 (Public Law [P.L.] 84-182) called for "an objective, thorough, and nationwide analysis and reevaluation of the human and economic problems of mental illness."

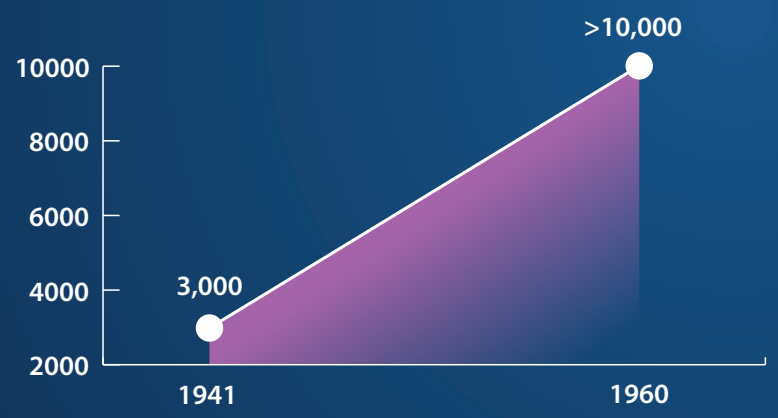
1956

On August 2, Congress passed the Health Amendments Act of 1956 (P.L. 84-911). Title V of the legislation allowed NIMH to award "special project grants" about mental health. In expanding NIMH's existing mandate, the act enabled NIMH to be more involved in community-based mental health efforts and programs.

On October 16, NIMH created the Psychopharmacology Service Center to coordinate the large-scale testing of new compounds. The congressionally funded effort, led by Jonathan O. Cole, M.D., spurred the discovery of the blockbuster drugs chlorpromazine and meprobamate to treat mental disorders. The center later evolved into the Early Clinical Drug Evaluation Unit, a collaborative program capable of conducting large nationwide clinical trials. This program, later renamed the New Clinical Drug Evaluation Unit, held an annual meeting that became a critical meeting in this domain, bringing together NIH researchers, academic investigators, industry scientists, U.S. and international regulators, and other professionals working in various aspects of drug development and clinical trials. Output from the program influenced the evolution of treatment research and the development of new treatments and treatment strategies.

Training Mental Health Professionals

In 1941, there were only 3,000 psychiatrists in the United States, nowhere near enough to provide care on the scale Dr. Felix envisioned. In 1948, NIMH began awarding grants to academic research and medical school programs, and through the next decade, the bulk of NIMH funding went toward these training programs. The grants were heavily weighted toward psychiatry—Dr. Felix even devised a funding formula: 40% went to psychiatry, and 20% each went to psychology, social work, and nursing. Due largely to NIMH efforts, by 1960, the number of psychiatrists in America exceeded 10,000. The NIMH mission later refocused on supporting research and the training of researchers; the institute no longer directly supports the training of mental health professionals.



NIMH Efforts Greatly Increased the Number of U.S. Psychiatrists After WWII

1961

The report, *Action for Mental Health*, assessed mental health conditions and resources throughout the United States "to arrive at a national program that would approach adequacy in meeting the individual needs of the mentally ill people of America." The report commanded the attention of President John F. Kennedy, who established a cabinet-level interagency committee to examine the recommendations and determine an appropriate federal response.

1963

On February 5, President Kennedy submitted a special message to Congress—the first presidential message to the legislature on mental health issues. Energized by the president's focus, Congress passed the Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963 (P.L. 88-164) on October 31, beginning a new era in federal support for mental health services. NIMH assumed responsibility for monitoring the nation's community mental health center programs.

President John F. Kennedy signed the Mental Retardation Facilities and Community Mental Health Centers Construction Act on October 31, 1963. Credit: Cecil Stoughton. White House Photographs. Courtesy of John F. Kennedy Presidential Library and Museum, Boston, Massachusetts.

> *"Most of the major diseases of the body are beginning to give ground in man's increasing struggle to find their cause and cure. But the public understanding, treatment, and prevention of mental disabilities have not made comparable progress since the earliest days of modern history...This situation has been tolerated far too long. It has troubled our national conscience—but only as a problem unpleasant to mention, easy to postpone, and despairing of solution."*
>
> ***President John F. Kennedy***
> ***Special Message to Congress on Mental Illness and Mental Retardation***

1965

A provision in the Social Security Amendments of 1965 (P.L. 89-97) provided funds and a framework for a new Joint Commission on the Mental Health of Children to recommend national action for child mental health. The Community Mental Health Centers Act Amendments of 1965 (P.L. 89-105) also passed this year, which authorized grants to help pay the salaries of professional and technical personnel in federally funded community mental health centers.

1966

In response to President Lyndon B. Johnson's pledge to apply scientific research to social challenges, NIMH refocused its efforts on fighting specific mental health problems. The institute established centers for research, training, and services covering topics such as schizophrenia, substance use, suicide prevention, crime, and child and family mental health. The National Center for Prevention and Control of Alcoholism was also established due to the emerging public recognition of alcoholism as a disease.

1967

On January 1, NIMH was separated from NIH by executive order and made an independent division within the U.S. Public Health Service. However, the NIMH Intramural Research Program, which conducted studies in the NIH Clinical Center and other NIH facilities, remained at NIH under an agreement for joint administration between NIH and NIMH.

Cognitive Behavioral Therapy

In the 1960s, Aaron Beck, M.D., and Albert Ellis, Ph.D., conducted NIMH-supported research that led to the development of cognitive therapy, now known as cognitive behavioral therapy (CBT). CBT began to gain widespread adoption as a form of psychotherapy in the 1970s and 1980s. During this time, studies demonstrated the effectiveness of CBT for treating various mental disorders, including depression, anxiety, and phobias.

Since then, CBT has become one of the most widely used forms of psychotherapy, with numerous research studies supporting its effectiveness. It is often used in combination with other treatments, such as medication, and has been adapted for use in various settings, including schools, hospitals, and community clinics.

On September 29, 2006, Dr. Beck received the prestigious Albert Lasker Basic Medical Research Award for the development of CBT, which transformed the understanding and treatment of many mental disorders.

1967

On August 13, U.S. Department of Health, Education, and Welfare Secretary John W. Gardner, Ph.D., transferred administrative control of St. Elizabeths Hospital—the federal government's only civilian psychiatric hospital—to NIMH. Research was an important part of the work of St. Elizabeths through its Clinical Pharmacology Research Center, which made significant contributions to neurological and clinical research.

St. Elizabeths Hospital in Washington, D.C., was home to NIMH's pathbreaking Clinical Pharmacology Research Center, which was founded in 1958 by Joel Elkes, M.D. (pictured front row, second from left). NIMH continued to conduct research on the hospital campus until 1999. Credit: Joel Elkes. Courtesy of Office of NIH History & Stetten Museum.

1968

On April 1, NIMH became a component of the Health Services and Mental Health Administration within the U.S. Public Health Service.

Prominent Black psychiatrists James P. Comer, M.D., M.P.H. (right), and J. Alfred Cannon, M.D. (second from right), worked with NIMH to create the Center for Minority Group Mental Health Programs in 1970. Courtesy of Center for the History of Medicine, Harvard University.

Impact of the Civil Rights Movement

After the passage of the 1964 Civil Rights Act, a group of Black psychiatrists became determined to meet the challenge of institutional racism head-on. They considered racism a type of mental illness and argued that Black Americans were underrepresented in and underserved by NIMH.

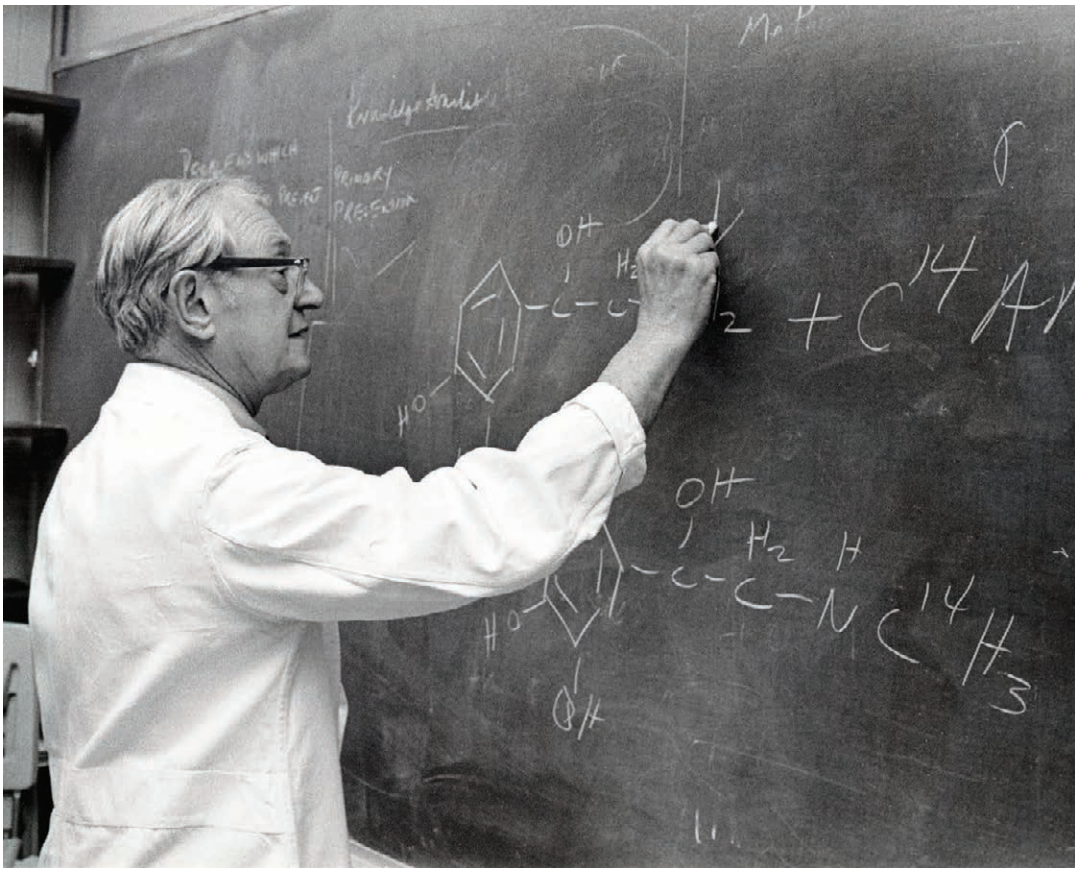
This group of Black psychiatrists—led by Chester M. Pierce, M.D., at Harvard University and James P. Comer, M.D., M.P.H., at Yale University—began a series of contentious negotiations with NIMH leadership and other influential White psychiatrists. This culminated in a confrontation between the newly organized Black Psychiatrists of America and White attendees at the May 1969 American Psychiatric Association convention. The Black Psychiatrists of America demanded a center dedicated to Black mental health at NIMH, prioritization of research and training programs for Black psychiatrists, and creation of new mental health programs for Black Americans.

Dr. Comer, UCLA psychiatrist J. Alfred Cannon, M.D., M.P.H., and NIMH Director Bertram S. Brown, M.D., developed a framework for the proposed tenth NIMH center. The Center for Minority Group Mental Health Programs was established in the fall of 1970 as NIMH's first official effort to increase the representation of people from minority groups among extramural awardees and intramural positions. By 1971, the center had launched a minority fellowship program and begun awarding research and training grants.

1970

On April 6, the U.S. Food and Drug Administration (FDA) approved lithium as a treatment for mania, a feature of bipolar disorder. This treatment, informed by NIMH-supported research, led to sharp drops in inpatient days and suicide rates among people with bipolar disorder and reduced economic costs associated with the illness. The FDA later approved lithium for the maintenance treatment of bipolar disorder.

On October 15, NIMH intramural researcher Julius Axelrod, Ph.D., and two other researchers received the Nobel Prize in Physiology or Medicine for research on the chemistry of nerve transmission. Dr. Axelrod's work established that norepinephrine was inactivated through "reuptake" by the same cells that secreted it. The discovery led to the development of selective serotonin reuptake inhibitors (SSRIs), the first blockbuster neuropharmacological medication since the 1950s. SSRIs are a class of medications commonly used as antidepressants. They work by increasing brain levels of serotonin, a neurotransmitter involved in regulating mood, appetite, and sleep.



Julius Axelrod, Ph.D. Courtesy of National Library of Medicine.

1970

On December 31, the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act (P.L. 91-616) established the National Institute on Alcohol Abuse and Alcoholism (NIAAA) within NIMH.

1972

On March 21, Congress passed the Drug Abuse Office and Treatment Act (P.L. 92-255), which called for the future establishment of a National Institute on Drug Abuse (NIDA) within NIMH.

1973

NIMH went through a series of organizational moves. The institute temporarily rejoined NIH on July 2 with the abolishment of the Health Services and Mental Health Administration. The Alcohol, Drug Abuse, and Mental Health Administration—composed of NIAAA, NIDA, and NIMH—was established as the successor organization.

1974

On May 14, the Alcohol, Drug Abuse, and Mental Health Administration was officially established when President Richard Nixon signed the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act Amendments of 1974 (P.L. 93-282).

1975

The Community Mental Health Centers Amendments of 1975 outlined requirements for national standards, quality assurance programs, and data collection, which set the stage for performance criteria in community mental health centers.

1977

On February 17, President Jimmy Carter established the President's Commission on Mental Health by executive order. President Carter charged the commission with reviewing the nation's mental health needs and making recommendations to the president on how best to meet these needs. First Lady Rosalynn Carter served as the honorary chair of the commission.

1978

On April 27, the President's Commission on Mental Health submitted its final report to President Carter. The report contained more than 100 recommendations for expanding existing programs and creating new ones to make the community mental health center program more flexible and to extend mental health services. The report's appendices included three additional volumes with recommendations from more than 20 task panels focused on a wide range of mental health and substance use issues.

1980

In October, NIMH released preliminary results from its Epidemiological Catchment Area Survey. Most notably, the survey found that nearly one in five Americans suffered from a diagnosable psychiatric disorder within any six-month period. The effort, underway since 1977, was conducted by research teams at five universities and looked at rates of mental disorders in five cities. The extensive survey allowed for the accurate categorization of specific disorders in a general population for the first time.

On October 7, President Carter signed the Mental Health Systems Act (P.L. 96-398). The act created a complex federal, state, and local partnership focused on preventing mental illnesses. It expanded the Community Mental Health Center program and extended help to "chronically mentally ill individuals, children and youth, elderly individuals, racial and ethnic minorities, women, poor persons, and persons in rural areas."

NIMH participated in developing the U.S. Surgeon General's Report, *Toward a National Plan for the Chronically Mentally Ill*, a sweeping effort to improve services and fine-tune various federal entitlement programs for those with severe, persistent mental disorders.

1981

On August 13, President Ronald Reagan signed the Omnibus Budget Reconciliation Act of 1981 (P.L. 97-35). This act repealed the Mental Health Systems Act and consolidated the treatment and rehabilitation service programs of the Alcohol, Drug Abuse, and Mental Health Administration into a single block grant that enabled each state to administer its allocated funds. With the repeal of most of the community mental health legislation and the establishment of block grants, the federal role shifted to providing technical assistance to increase the capacity of state and local mental health service professionals.

On November 18, NIMH intramural researcher Louis Sokoloff, M.D., Ph.D., received the Lasker Basic Medical Research Award, considered the "American Nobel Prize" of clinical medical research. Previous researchers had found evidence for changing glucose levels in the brain but could not link those changes to specific brain regions. Dr. Sokoloff developed a noninvasive technique to track the movement of a radioactive analog of glucose in the brain, which allowed researchers to measure glucose metabolism and map brain function. This technique paved the way for the development of positron emission tomography (PET) imaging of the living brain.

1983

In research supported by NIMH, zoologist Fernando Nottebohm, Ph.D., discovered the formation of new neurons in the brains of adult songbirds. This evidence of neurogenesis (the process by which new neurons are formed in the brain) opened an exciting and clinically promising new line of research in brain science. It was 15 years, however, before investigators found evidence for continued neurogenesis in the brains of adult humans.

1984

Researchers in the NIMH Intramural Research Program published one of the earliest studies of seasonal affective disorder. The seminal study, which described patients who experienced depressive symptoms that emerged during the fall and winter and went away during the spring and summer, provided the first working definition of the disorder. Norman Rosenthal, M.D., and Thomas Wehr, M.D., both in the NIMH Clinical Psychobiology Branch, led the research. Frederick Goodwin, M.D., NIMH scientific director and chief of intramural research, was also a contributor. Study results also showed that light therapy had a robust antidepressant effect, effectively reducing depressive symptoms in people with seasonal affective disorder.

1987

On October 1, the U.S. Department of Health and Human Services transferred administrative control of St. Elizabeths Hospital from NIMH to the city of Washington, D.C. NIMH retained research facilities on the hospital grounds.

The FDA approved SSRIs for treating depression. Building on the pioneering work of Dr. Axelrod and others at NIMH, researchers demonstrated the effectiveness of SSRIs as antidepressant medications. In the decades following FDA approval, SSRIs became one of the most widely prescribed antidepressants in the world due in part to their relatively mild side effects compared to other medications.

1989

On July 25, in response to reports by the advisory councils of NIMH and the National Institute of Neurological Disorders and Stroke, President George H.W. Bush signed a declaration designating the 1990s the "Decade of the Brain."

NIMH Director Lewis L. Judd, M.D., worked closely with members of Congress to have the 1990s dubbed the "Decade of the Brain." From left are Senator Pete Domenici, Senator Donald Riegle Jr., President George H.W. Bush, Health and Human Services Secretary Louis Wade Sullivan, M.D., Dr. Judd, and Representative Silvio O. Conte. Courtesy of George Bush Presidential Library and Museum.

> *"The human brain, a three-pound mass of interwoven nerve cells that controls our activity, is one of the most magnificent—and mysterious—wonders of creation. The seat of human intelligence, interpreter of senses, and controller of movement, this incredible organ continues to intrigue scientists and layman alike."*
>
> ***President George H.W. Bush***
> ***Proclamation by the President of the United States of America***

On September 25, NIMH staff, members of Congress, and mental health advocates attended a ceremony for the dedication of the NIMH Neuroscience Center and the NIMH Neuropsychiatric Research Hospital, located on the St. Elizabeths Hospital grounds.

1991

Psychologist Marsha M. Linehan, Ph.D., and colleagues published findings from their NIMH-supported research on dialectical behavior therapy (DBT), a new treatment approach for people with borderline personality disorder. DBT enhanced standard change-oriented techniques from cognitive behavioral therapy with concepts of acceptance and validation of one's present situation and emotional state. DBT also focused on helping people build skills to manage intense emotions, reduce self-destructive behaviors, and improve relationships. This study and later research showed that adults who received DBT engaged in fewer and less severe suicidal behaviors, had fewer inpatient days in the hospital, and were more likely to stay in therapy than those who received standard care. Later studies showed DBT to reduce suicidal behavior in adolescents. Later in her career, Dr. Linehan discussed her lived experience and how it helped inform novel strategies to treat mental illness and reduce suicide risk.

1992

On July 10, President Bush signed the ADAMHA Reorganization Act (P.L. 102-321), abolishing the Alcohol, Drug Abuse, and Mental Health Administration. The research components of NIMH, NIAAA, and NIDA rejoined NIH, thereby reuniting NIMH with the leading medical research agency in the United States and ensuring the future of neuroscience and mental health research. The service components of each institute became part of a new U.S. Public Health Service agency—the Substance Abuse and Mental Health Services Administration. Within NIMH, new offices were created to support research on prevention, special populations, rural mental health, and HIV/AIDS.

1993

NIMH coordinated a multi-institute effort to launch the Human Brain Project, a comprehensive neuroscience database accessible via an international computer network through cutting-edge imaging, computer, and network technologies.

1996

On October 3, President Bill Clinton established the National Bioethics Advisory Commission. The commission issued the resulting report, *Research Involving Persons With Mental Disorders That May Affect Decision-Making Capacity*, in 1999. This report informed NIMH policies to safeguard and improve protections for human participants in clinical mental health research.

1997

At the request of Congress, NIH created the NIH Autism Coordinating Committee to increase the quality of research on autism spectrum disorder. The director of NIMH was made co-chair of the committee along with the director of the National Institute of Child Health and Human Development.

1998

In September, NIMH launched several long-term, large-scale, multisite, community-based clinical studies to determine the effectiveness of certain treatments. Specifically, the studies focused on treatments for depression, treatments for bipolar disorder, and antipsychotic medications as part of treatment for schizophrenia and for the management of psychosis and behavioral symptoms associated with Alzheimer's disease.

1999

The NIMH Neuroscience Center and NIMH Neuropsychiatric Research Hospital were relocated from St. Elizabeths Hospital grounds in Washington, D.C., to the NIH campus in Bethesda, Maryland, in response to the recommendations of the 1996 review of the NIMH Intramural Research Program by the Intramural Planning Committee.

Aerial shot of the NIH campus. Courtesy of Office of NIH History and Stetten Museum.

In June, NIMH developed materials and helped organize the first White House Conference on Mental Health in Washington, D.C. The conference brought together national leaders, mental health scientific and clinical personnel, patients, and consumers to discuss needs and opportunities to understand and treat mental disorders.

In July, U.S. Surgeon General David Satcher, M.D., Ph.D., released *The Surgeon General's Call to Action to Prevent Suicide*. Another report, *Mental Health: A Report of the Surgeon General*, followed in December. NIMH and other federal agencies collaborated to prepare both landmark reports.

1999

In December, the main findings from the Multimodal Treatment of ADHD study were published. NIMH sponsored the multisite study to compare the leading treatment approaches for attention-deficit/hyperactivity disorder (ADHD), one of the most common developmental disorders in childhood. Study participants included nearly 600 children, ages 7-9 years, seen at six study sites. In contrast to previous short-term studies, this study examined treatment effects for up to 14 months. Results showed that a combination treatment approach that included both medication and behavior therapy and a medication-only approach were both generally more effective in reducing ADHD symptoms compared to behavioral treatment alone or routine community care. The study also showed that these benefits lasted for as long as 14 months. Subsequent analyses and publications examined the impact of the interventions on various areas of functioning and the long-term course of youth in the study.

2000

On October 9, researchers Eric Kandel, M.D., Ph.D., Paul Greengard, Ph.D., and Arvid Carlsson, M.D., Ph.D., received the 2000 Nobel Prize in Physiology or Medicine for their respective research on the functioning of signal transduction proteins in learning, memory, and movement. Dr. Kandel and Dr. Greengard conducted NIMH-supported research for more than 30 years. Dr. Kandel, who worked in the NIMH Intramural Research Program in the 1950s, received the prize for his research on the functional modification of synapses, which allow neurons to communicate in the brain. His work established that the formation of memories is a consequence of short- and long-term changes in the biochemistry of neurons and showed that these changes occur at the level of synapses.

The Nobel Prize recognized Dr. Greengard's discovery that dopamine and several other transmitters can alter the functional state of neuronal proteins. These findings made it clear that signaling between neurons could alter their function not only in the short term but also in the long term. In addition, Dr. Greengard discovered that subsequent environmental signals could reverse such changes.

On October 17, President Clinton signed the Children's Health Act of 2000 (P.L. 106-310), which created the Interagency Autism Coordinating Committee to coordinate all autism-related efforts within the U.S. Department of Health and Human Services. By 2001, NIMH had been designated to lead implementation of the Interagency Autism Coordinating Committee, with the NIMH director as the committee chair.

2000

On November 3, Nancy Andreasen, M.D., Ph.D., a psychiatrist whose research was supported by NIMH for many years, received the National Medal of Science for her groundbreaking work in schizophrenia that joined behavioral science with neuroscience and neuroimaging.

NIMH and other federal agencies collaborated to prepare a report on the Surgeon General's Conference, *Children's Mental Health: A National Action Agenda*. Released by Surgeon General Dr. Satcher, this report indicated that the poor mental health of many children and adolescents in the United States represented a national public health crisis. The National Action Agenda outlined goals and strategies to improve services for children and adolescents with mental and emotional disorders.

2002

In September, NIMH published a national conference report, *Mental Health and Mass Violence: Evidence-Based Early Psychological Intervention for Victims/Survivors of Mass Violence: A Workshop to Reach Consensus on Best Practices*. Although most people recover from a traumatic event over time, the report indicated that early psychological intervention guided by qualified mental health professionals could reduce the harmful psychological and emotional effects of exposure to mass violence. NIMH collaborated with the U.S. Department of Defense, other federal agencies, and the American Red Cross to prepare this report.

2003

NIMH established the Limited Access Data Repository, the institute's first effort to provide an infrastructure that could support data sharing among extensive NIMH-funded clinical studies. The repository served as a platform for researchers to access datasets to conduct secondary analyses until 2017, when data from those clinical trials were moved to the NIMH Data Archive.

2004

NIMH's large-scale practical clinical trial—the Treatment of Adolescent Depression Study—published significant first-phase results on the most effective treatment for adolescents with depression. The study showed that a combination of cognitive behavioral therapy and the medication fluoxetine (the only FDA-approved antidepressant for children and adolescents at the time) was most effective at treating depression over 12 weeks.

The study's principal investigator, John March, M.D., M.P.H., presented additional results to NIMH's National Advisory Mental Health Council in September 2006. These results, which extended the study's time frame to 18 weeks, once again showed that the combination of cognitive behavioral therapy and fluoxetine provided the fastest, most effective treatment for adolescent depression. Although psychotherapy alone was a viable option for adolescents who could not take medication, it took an additional six months to achieve the improvement seen with treatment that included medication.

2005

The Clinical Antipsychotic Trials of Intervention Effectiveness research program—another NIMH large-scale practical clinical trial—provided the first real-world test of antipsychotic medications for people with schizophrenia. Its first phase compared the effectiveness and side effects of four newer medications and one older medication for treating schizophrenia. All the medications—even the older, less expensive medication, perphenazine—showed comparable effectiveness. However, many people in the study stopped taking the medications due to intolerable side effects or a failure to control symptoms adequately.

Results from the first phase of the study were released in 2006 and showed that antipsychotic medications commonly prescribed to treat delusions, aggression, hallucinations, and similar symptoms of Alzheimer's disease could also benefit some people with schizophrenia. Still, the medications were no more effective than a placebo when considering adverse side effects. The study advanced the field by directly comparing multiple antipsychotic drugs within a single trial. The extensive information provided by this direct comparison helped clinicians determine the best medication for individual patients.

2006

The NIMH-funded Sequenced Treatment Alternatives to Relieve Depression (STAR*D) research program reported a series of results over the course of the year. A large-scale practical clinical trial led by NIMH, the study was also the nation's largest clinical trial of treatments for depression at the time. The results provided real-world insight into depression treatment, including alternate options for people who do not respond to SSRIs, and highlighted opportunities for personalized approaches to depression care.

Sequenced Treatment Alternatives to Relieve Depression

The Sequenced Treatment Alternatives to Relieve Depression (STAR*D) study tested the effectiveness of different antidepressant medications. It was the largest and longest study ever conducted to evaluate depression treatment. The first study phase included 2,876 participants receiving care at 41 clinical sites around the United States.

A key strength of STAR*D was its focus on people receiving treatment in primary care and other real-world settings. The study had fewer exclusion criteria than usual clinical trials, and almost half the study sites were primary care. Participants' depression symptoms and medication side effects were measured using standardized clinician and patient rating scales, which helped clinicians track participants' progress throughout the study and provide them with consistent, measurement-based care.

STAR*D aimed to use a highly systematic approach to test depression treatments. All study participants were initially treated with citalopram, a standard antidepressant medication. Only about 30% of participants achieved remission in this initial trial. Those who did not achieve remission with citalopram alone were treated with an additional medication or switched to a different medication, with the option of adding cognitive therapy in both cases. Over the course of the study, clinicians continued to make treatment decisions in a consistent, stepwise manner based on this augment-or-switch approach.

At the end of 12 months, 70% of participants had achieved symptom-free status. However, many participants needed to try two or three medications and go through several months of treatment before finding a medication that worked for them. This result underscored the importance of continuing to try new treatments when initial efforts do not work.

The STAR*D trial showed the limitations of existing treatments for depression and for whom certain medications were most likely to work. The study also helped move the field toward personalized, measurement-based care and demonstrated the feasibility of conducting large-scale, community-based trials across many settings.

Building on previous research, several studies in the NIMH Intramural Research Program demonstrated that the medication ketamine could relieve symptoms of depression within hours in people with treatment-resistant depression, a marked contrast to existing medications that could take weeks to have noticeable effects. These studies also helped identify possible underlying mechanisms, moving scientists closer to understanding how to develop new fast-acting antidepressant medications.

New Hope for Treatment-Resistant Depression

NIMH-sponsored studies have shown that ketamine can be an effective treatment option for people with depression who have not responded to SSRIs and other antidepressant medications. NIMH intramural researchers carried out much of this work.

In 2006, NIMH intramural researchers Husseini Manji, M.D., and Carlos Zarate, M.D., along with Dennis Charney, M.D., at Mt. Sinai Medical School, reported findings from the first study investigating ketamine for people with treatment-resistant depression. The researchers found that ketamine produced rapid, robust, and relatively sustained antidepressant effects in patients who had already tried several antidepressant medications without seeing improvement.

Dr. Zarate and other intramural researchers have continued this work, investigating the neurobiological mechanisms that drive ketamine's therapeutic effects and examining ketamine as a possible treatment for people with bipolar depression and anhedonia and people experiencing suicidal thoughts.

On December 19, President George W. Bush signed the Combating Autism Act of 2006 (P.L. 109-416). The measure called for increased research on autism spectrum disorder. The Interagency Autism Coordinating Committee, co-chaired by the NIMH director, was also reauthorized and chartered as a federal advisory committee.

Findings from the Systematic Treatment Enhancement Program for Bipolar Disorder research project, an NIMH practical clinical trial, revealed that people with bipolar disorder were more likely to recover from a depressive episode and stay well over the longer term if their treatment included both intensive psychotherapy and medication.

2008

In August, NIMH published its *Strategic Plan for Research* with four primary objectives:

- Promote discovery in the brain and behavioral sciences to fuel research on the causes of mental disorders
- Chart mental illness trajectories to determine when, where, and how to intervene
- Develop new and better interventions that incorporate the diverse needs and circumstances of people with mental illnesses
- Strengthen the public health impact of NIMH-supported research

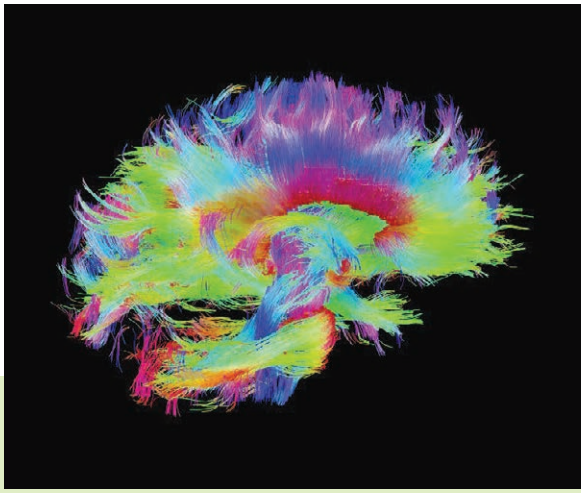
The Child/Adolescent Anxiety Multimodal Study examined strategies for treating clinically significant anxiety among children ages 7-17 years. Results of the six-site clinical trial revealed that, although the combination of cognitive behavioral therapy and antidepressant medication was most effective at treating anxiety, each treatment alone was also effective. The findings indicated that clinicians and families have several viable treatment options for young people with anxiety disorders, depending on treatment availability and preferences.

The Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS) launched as a partnership between NIMH and the U.S. Army to conduct research to help reduce suicide rates among members of the military. The multisite, multiyear study, which included soldiers in all phases of service, was the largest study of mental health risk and resilience ever conducted among military personnel.

The study showed a rise in suicide deaths from 2004 to 2009 not only among currently and previously deployed soldiers but also among soldiers who were never deployed. Nearly half of soldiers who reported a previous suicide attempt indicated that their first attempt was prior to enlistment. Soldiers also reported higher rates of certain mental disorders than civilians. Results from Army STARRS have informed actionable strategies to enhance mental health and reduce suicide risk among members of the military and civilians.

Twelve NIMH staff members received the 2008 Hubert H. Humphrey Award for Service to America for their work addressing veterans' mental health needs. These staff members developed a new initiative to support research that would describe and evaluate national, state, and local programs addressing the mental health needs of returning service members and their families.

The NIH Blueprint for Neuroscience Research launched the Human Connectome Project as a Blueprint Grand Challenge. Supported by NIMH and other Blueprint partners, the Human Connectome Project aimed to map the neural pathways that underlie human brain function. The effort expanded to measuring macroscale brain connections across the lifespan.



White matter fiber architecture from the Connectome Scanner dataset. Shown are the corpus callosum and brainstem pathways. The fibers are color coded by direction: red = left-right, green = anterior-posterior, blue = ascending-descending (RGB = XYZ). Courtesy of Laboratory of Neuro Imaging and Martinos Center for Biomedical Imaging, Consortium of the Human Connectome Project, ***www.humanconnectomeproject.org****.*

The Human Connectome Project

The goal of the Human Connectome Project was to acquire and share data about the structural and functional connectivity of the human brain. Researchers studied the brain's complex wiring by collecting data from thousands of research participants using state-of-the-art brain imaging technologies. Researchers also collected participants' DNA, demographic information, and behavioral data to examine how genetics and the environment influence brain connectivity.

The project was the first time that researchers combined different brain imaging technologies to map the brain's long-range connections systematically. This research paved the way for a deeper understanding of how our brain circuitry changes as we age or because of psychiatric and neurologic conditions.

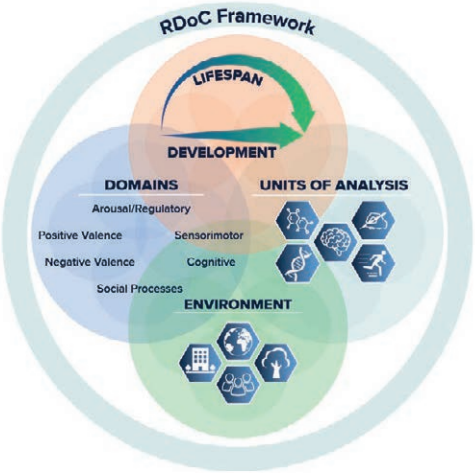
The Human Connectome Project led to new data models, informatics, and analytic tools that advanced researchers' ability to image and analyze brain connections. These advances played a major role in accelerating progress in the emerging human connectomics field and contributed to the formation of the *Brain Research Through Advancing Innovative Neurotechnologies*® Initiative, or The BRAIN Initiative®.

2009

The Treatment of SSRI-Resistant Depression in Adolescents research project was an NIMH-funded practical clinical trial that examined difficult-to-treat depression among adolescents across multiple sites. The study showed that teens who did not respond to a first antidepressant medication were more likely to see symptom improvement if they switched to another antidepressant and added psychotherapy instead of only switching medications.

2010

In July, NIMH launched the Research Domain Criteria (RDoC) initiative, providing a research framework for developing new ways of classifying mental disorders based on behavioral dimensions and neurobiological measures. The intent was to apply modern research approaches in genetics, neuroscience, and behavioral science to studying mental illnesses, independently from the classification systems by which patients were typically grouped.



The overlapping circles in the RDoC framework represent the integration and intersection of multiple components—including lifespan development, environmental factors, and fundamental biobehavioral processes—in mental health research, as well as various ways to measure these intertwined components. Courtesy of NIMH.

On November 10, NIMH intramural researcher Mortimer Mishkin, Ph.D., was awarded the National Medal of Science at a White House ceremony. In studies spanning more than five decades, Dr. Mishkin and colleagues examined the neural mechanisms underlying perception and memory. Dr. Mishkin's work explored how the brain processes input from vision, hearing, and touch to encode memory and shed light on the organization of memory and memory disorders in humans.

2011

On July 6, the Grand Challenges in Global Mental Health initiative began. Co-led and funded by NIMH, the Grand Challenges brought together the largest-ever international Delphi panel—more than 400 participants representing work conducted in 60 countries—to determine priorities for research relevant to mental, neurological, and substance use disorders.

2011

On August 25, NIMH was named by the White House as a "Champion of Change" for its efforts supporting research on suicide prevention. The White House Champions of Change initiative celebrated diverse individuals and organizations making an impact in communities and helping the country rise to the challenges of the 21st century.

2012

On August 31, President Barack Obama signed an executive order directing key federal departments and agencies, including NIH, to expand suicide prevention strategies and improve access to mental health and substance abuse treatment services for veterans, service members, and their families. The order also called for developing a National Research Action Plan with strategies to improve the diagnosis and treatment of post-traumatic stress disorder (PTSD) and other mental health conditions. NIMH led NIH's participation in the action plan, which made significant progress in establishing common data elements to guide research on traumatic stress and suicide risk prevention and developing scalable interventions for PTSD and suicide prevention.

Researchers in the NIMH Intramural Research Program published the Ask Suicide-Screening Questions (ASQ) measure—a brief screening instrument clinicians can administer in 20 seconds to identify a patient's risk for suicide. An NIMH-led multisite study showed that a "yes" to any of the measure's four questions identified 97% of young people at risk for suicide among those screened in pediatric emergency departments. Additional NIMH research subsequently validated the ASQ in pediatric inpatient care and integrated it into an evidence-based pathway for youth suicide prevention. This pathway served as a scientific basis for the Blueprint for Youth Suicide Prevention developed by the American Academy of Pediatrics and the American Foundation for Suicide Prevention.

In 2014, intramural researchers led a multisite study that confirmed the ASQ as a valid screening tool for suicide risk in adults. The researchers then expanded these studies into an ASQ Toolkit that clinicians can use to identify and manage suicide risk in both children and adults in a variety of medical settings. Intramural researchers have also worked with NIMH experts in global mental health and international collaborators to translate the ASQ into more than 20 languages and validate the ASQ through research in other countries. By enabling culturally responsive early identification and assessment of people at high risk for suicide, the ASQ Toolkit has enhanced suicide prevention for youth and adults in medical settings worldwide.

2013

On April 2, President Obama announced the launch of the *Brain Research Through Advancing Innovative Neurotechnologies*® Initiative, or The BRAIN Initiative®—a major initiative focused on revolutionizing our understanding of the human brain. The president proposed $100 million for the first year of what he called "the next great American project." NIH, the Defense Advanced Research Projects Agency, the National Science Foundation, and several private laboratories and foundations began working to develop the next generation of tools for decoding the language of the brain.

NIH Director Dr. Francis Collins introduced President Barack Obama at the BRAIN Initiative event at the White House in 2013. Credit: Official White House photo by Chuck Kennedy.

> *"The human brain is the most complicated biological structure in the known universe. We've only just scratched the surface in understanding how it works or, unfortunately, doesn't quite work when disorders and disease occur...This is just the beginning of a 12-year journey, and we're excited to be starting the ride."*
>
> ***Former NIH Director Francis S. Collins, M.D., Ph.D.***
> ***Announcement on the unveiling of the BRAIN Initiative***

On September 20, Thomas C. Südhof, M.D., and Richard H. Scheller, Ph.D., received the Lasker Basic Medical Research Award. The researchers, whose work had been supported by NIMH, were recognized for their work mapping the molecular mechanisms involved in neurotransmitter release. Dr. Südhof later received the 2013 Nobel Prize in Physiology or Medicine for his NIMH-supported research on how the brain sends and receives chemical messages.

Brain Research Through Advancing Innovative Neurotechnologies® Initiative

The *Brain Research Through Advancing Innovative Neurotechnologies*® Initiative, or The BRAIN Initiative®, established with the aim of revolutionizing our understanding of the human brain, was announced by President Obama in 2013. In the years leading up to this announcement, scientists had made several landmark discoveries that paved the way for unprecedented collaboration and discovery across scientific fields. Researchers sequenced the human genome for the first time, created new tools for mapping neuronal connections, and developed high-resolution imaging technologies. At the same time, the field saw the maturation of nanoscience and the rise of biological engineering. Together, these breakthroughs created an opportunity to unlock the mysteries of the brain.

Building on recent discoveries, the BRAIN Initiative aimed to accelerate the development and application of innovative technologies to produce a revolutionary, dynamic picture of the human brain. This dynamic picture would show how individual cells and complex neural circuits interact in both time and space, providing unprecedented opportunities to understand brain function and dysfunction. Dozens of leading technology firms, academic institutions, scientists, and other key contributors to the field of neuroscience have recognized the importance of these aims and made significant commitments to advancing the BRAIN Initiative.

2014

NIMH launched the Emergency Department Screening for Teens at Risk for Suicide study in a network of hospital emergency departments across the United States as a part of the institute's research agenda for suicide prevention. The study aimed to develop and test a personalized, computer-based suicide risk screening tool for teenagers that could improve screening and enable earlier intervention. In 2021, researchers involved in the study developed a computerized adaptive screening tool, which correctly identified more than 80% of youth who went on to attempt suicide in the three months following screening. The screener has offered a valuable tool for rapidly identifying youth at risk for suicide in emergency departments.

2014

On April 2, the NIMH-funded BrainSpan Atlas of the Developing Human Brain consortium project reported its first major findings. The effort was intended to provide a comprehensive three-dimensional atlas of the brain and profile gene activity across the brain, beginning prenatally.

Human adult whole brain, cortex—gyral. Courtesy of Allen BrainSpan Atlas of the Developing Human Brain, ***https://brainspan.org/static/atlas****.*

NIMH adopted a new policy for clinical trials that required future trials to follow an experimental therapeutics approach. Under this mechanism-based approach to intervention development and testing, trials are designed not only to test whether an intervention works but also to advance understanding of how the intervention works. The policy stipulated that clinical trials must also meet new recruitment, data sharing, and reporting standards.

2015

NIMH published a new *Strategic Plan for Research*. Informed by the successes and challenges of recent years, the plan updated the strategic objectives outlined in 2008 to balance the need for long-term investments in basic research with urgent mental health needs. The four strategic objectives in the 2015 plan were:

- Define the mechanisms of complex behaviors
- Chart mental illness trajectories to determine when, where, and how to intervene
- Strive for prevention and cures
- Strengthen the public health impact of NIMH-supported research

The Study to Assess Risk and Resilience in Servicemembers-Longitudinal Study (STARRS-LS) was launched as an extension of Army STARRS, representing a partnership between NIMH and the U.S. Army, U.S. Department of Defense, and U.S. Department of Veterans Affairs. STARRS-LS researchers continued to analyze Army STARRS data while also collecting new data to learn about suicide risk and mental health among military personnel throughout their Army careers and during the transition to civilian life.

Researchers in NIMH's Recovery After an Initial Schizophrenia Episode (RAISE) initiative reported that treating people with first-episode psychosis using a team-based coordinated specialty care approach produced better clinical and functional outcomes than typical community care. Investigators also found that treatment was most effective for people who received care soon after psychosis symptoms began.

Recovery After an Initial Schizophrenia Episode Initiative

NIMH launched the Recovery After an Initial Schizophrenia Episode (RAISE) research initiative in 2008 to test the effectiveness and implementation of coordinated specialty care (CSC) to treat first-episode psychosis in communities across the United States. NIMH funded RAISE and called for developmentally informed, comprehensive, patient-centered interventions to meet the needs of youth experiencing the earliest stages of serious mental illness.

NIMH engaged extensively with organizations and communities—including federal partners, advocacy groups, professional organizations, and local and state mental health authorities—to ensure RAISE findings would be relevant and actionable for rapid translation into clinical practice. These collaborations, coupled with RAISE findings demonstrating the effectiveness of CSC, created the momentum for targeted federal support of CSC services and broad expansion of CSC treatment programs nationwide.

Based on RAISE results, the Centers for Medicare & Medicaid Services posted a bulletin for state Medicaid directors about covering CSC as an evidence-based treatment for first-episode psychosis. The Veterans Health Administration and the U.S. Department of Labor also endorsed CSC.

Ultimately, RAISE not only contributed to a new way to organize and deliver treatment, but it also produced findings that changed the standard of practice for early schizophrenia treatment in the United States.

2015

On February 6, NIMH announced the creation of the Early Psychosis Intervention Network (EPINET), designed to link treatment centers for early psychosis in a network of evidence-based coordinated specialty care programs. The initiative was built on the insights developed during the NIMH RAISE initiative. By 2020, EPINET included a data coordinating center, eight scientific hubs, and more than 100 community clinics in a national learning health system aimed at improving services and outcomes for thousands of people experiencing an initial episode of psychosis.

2017

NIMH supported the launch of a major BRAIN Initiative effort to discover and catalog the brain's "parts list." This effort, known as the BRAIN Initiative Cell Census Network, was established as a cooperative network of comprehensive centers, specialized laboratories, and an integrated data center.

> *"Before we can fully understand how our brains work, we need to understand how the parts work. Making molecular, anatomical, and functional data about brain cells available to the broad research community will speed our understanding of how cells and circuits are organized, revealing the rules of communication within the world's most complex known organ."*
>
> ***Former NIH Director Francis S. Collins, M.D., Ph.D.***
> ***Speech on the BRAIN Initiative***

On April 29, results published from the Emergency Department Safety Assessment and Follow-up Evaluation study showed that hospital emergency departments can play a vital role in reducing suicide attempts among adults. The study was the largest emergency department-based suicide intervention trial ever conducted in the United States, taking place over five years in eight hospitals across seven states. The results showed that screening, followed by safety planning guidance and periodic phone check-ins after discharge, led to a 30% decrease in suicide attempts compared to standard emergency department care. The study was another example of NIMH's prioritized suicide prevention research agenda.

On July 11, NIMH proposed the creation of the NIMH Data Archive to serve as an online resource for investigators seeking to share data, tools, methods, and analyses from research with human participants. The NIMH Data Archive, which was built upon the preexisting National Database for Autism Research, brought together other digital repositories, including the Research Domain Criteria Database, the National Database for Clinical Trials Related to Mental Illness, and the NIH Pediatric MRI Repository.

2018

NIH released the first dataset from the Adolescent Brain Cognitive Development℠ Study, the largest long-term study of brain development and child health ever conducted in the United States, to the scientific community through the NIMH Data Archive. The comprehensive dataset—including measures of brain development; social, emotional, and cognitive development; mental health; substance use and attitudes; gender identity and sexual health; and various physical health and environmental factors—allowed researchers to address numerous questions related to adolescent brain development to help inform future prevention and treatment efforts, public health strategies, and policy decisions.

NIH launched the Helping to End Addiction Long-term® Initiative as an ambitious, high-priority effort across the institutes to speed scientific solutions to stem the opioid public health crisis. Launched in April 2018, the initiative focused on improving prevention and treatment strategies for opioid misuse and addiction and enhancing pain management. As a major partner in the initiative, NIMH led a research program focused on optimizing the delivery of services for people with opioid use disorder, mental disorders, and suicide risk. NIMH-supported efforts have included research to adapt the collaborative care model to treat co-occurring mental and substance use disorders and a program to reduce suicide deaths by identifying people at risk when seen in primary care settings.

Researchers in the NIMH Intramural Research Program collaborated with the Indian Health Service (IHS) to pilot suicide risk screening in IHS emergency departments serving American Indian/Alaska Native communities. A follow-up quality improvement project further demonstrated the feasibility of suicide risk screening in IHS emergency departments. Intramural researchers subsequently used these findings to guide the implementation of suicide risk screening in more than 100 IHS medical settings (including 22 emergency departments) around the United States.

2019

On March 5, the FDA approved esketamine as a fast-acting and noninvasive treatment for depression that works via a different neurochemical pathway from other antidepressants. In the 1990s, Dr. Charney and another researcher, John Krystal, M.D., found that intravenous ketamine improved depressive symptoms within hours rather than the usual days or weeks. In the 2000s, research led by intramural researchers Dr. Manji and Dr. Zarate showed that ketamine worked by blocking the NMDA receptor in brain cells. Their research also showed that ketamine stimulated the activity of the AMPA receptor. Dr. Manji built on this finding to produce an alternative way of delivering ketamine in the form of esketamine, which is delivered via nasal spray.

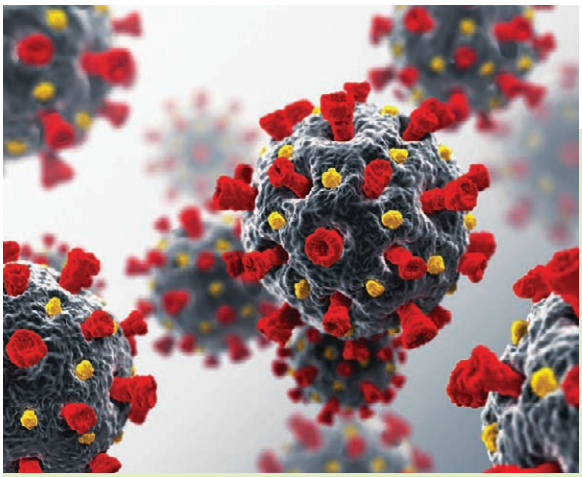
2019

On March 19, the FDA approved the medication brexanolone as the first successful treatment for severe postpartum depression. In the 1980s and 1990s, NIMH intramural researcher Steven Paul, M.D., showed that the neurosteroid allopregnanolone promoted anesthesia during pregnancy by stimulating the inhibitory neurotransmitter GABA. Subsequent research demonstrated that brexanolone, an intravenous form of allopregnanolone, treated postpartum depression by continuing the stimulation of GABA into the postpartum period.

> *"The approval of brexanolone is a cause for celebration for psychiatric neuroscience, as it represents a true bench-to-bedside success for our field. The promise of basic neuroscience to provide truly novel and effective treatments for psychiatric disorders has for a long time been only that: a promise. But not anymore."*
>
> ***NIMH Director Joshua A. Gordon, M.D., Ph.D.***
> ***NIMH Director's Message***

NIMH established the Advanced Laboratories for Accelerating the Reach and Impact of Treatments for Youth and Adults with Mental Illness research center program to support the advancement of clinical research and practice. The program was designed to leverage practice-based infrastructure, stakeholder engagement, and transdisciplinary research teams capable of incorporating insights from new fields and emerging technologies. These innovative components were expected to speed the translation of research into clinical practice. At launch, the program comprised research teams at eight centers. By 2023, the program had expanded to 14 centers focused on a range of populations and spanning a variety of real-world settings where services are delivered.

2019



*3D illustration of coronavirus. Credit: **www.istockphoto.com/portfolio/BlackJack3D**.*

Impact of the Coronavirus Pandemic

Coronavirus (COVID-19), a disease caused by the SARS-CoV-2 virus, was discovered in December 2019 and quickly spread around the world.

The COVID-19 pandemic disproportionately impacted people in underserved and minoritized communities. People in these communities experienced greater rates of illness and death due to SARS-CoV-2 infection and broader mental health consequences of the pandemic's social, behavioral, and economic impacts. Reports indicated that many people experienced a decline in mental health during the pandemic, including increased symptoms of depression and anxiety and increased rates of substance use.

In response, NIMH funded research to understand the long-term mental health impacts of the pandemic and evaluate scalable interventions that could meet the increased mental health needs of diverse populations. NIMH committed to prioritizing research on COVID-19 and funding studies examining the pandemic's ongoing impacts and effective ways to support mental health during public health emergencies.

2020

NIMH published a new *Strategic Plan for Research*, which provided a framework for research to leverage new opportunities for scientific exploration and addressed new challenges in mental health. The four goals outlined in the 2020 plan formed a broad roadmap for the institute's research priorities, ranging from fundamental science to public health impact:

- Define the brain mechanisms underlying complex behaviors
- Examine mental illness trajectories across the lifespan
- Strive for prevention and cures
- Strengthen the public health impact of NIMH-supported research

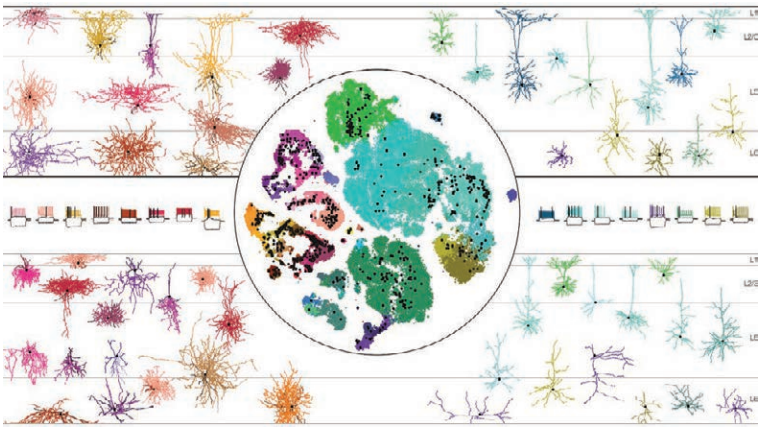
2020

NIH launched a public-private partnership to meet the urgent need for early therapeutic interventions for people at risk of developing schizophrenia. The Accelerating Medicines Partnership® program for schizophrenia brought together NIH, the FDA, and multiple nonprofit and private organizations in a united effort to better understand underlying biological pathways and identify new treatment targets.

> *"The Accelerating Medicines Partnership® program for schizophrenia furthers NIMH's ongoing commitment to research improving the lives of people with early psychosis and schizophrenia. This innovative partnership is an exciting opportunity to accelerate research that will spur new pharmacologic approaches to early intervention, leading to positive impacts in the lives of patients with schizophrenia."*
>
> ***NIMH Director Joshua A. Gordon, M.D., Ph.D.***
> ***Announcement on the launch of the Accelerating Medicines Partnership® program for schizophrenia***

2021

The BRAIN Initiative Cell Census Network unveiled an atlas of cell types and an anatomical neuronal wiring diagram for the mammalian primary motor cortex, derived from detailed studies of mice, monkeys, and humans. This publicly available resource represented the culmination of an international collaboration by more than 250 scientists at more than 45 institutions across three continents. The findings appeared in 17 associated papers published in a dedicated issue of the journal *Nature*.



A multicolor visualization of the mouse primary motor cortex transcriptomic taxonomy overlaid with mapped neuronal cells surrounded by color-coordinated pictures of different types of neurons (GABAergic, glutamatergic, chandelier, etc.) and their electrophysiological signatures. Credit: BRAIN Initiative Cell Census Network, Nature, ***https://creativecommons.org/licenses/by/4.0***.

2021

In December, U.S. Surgeon General Vivek H. Murthy, M.D., issued *The U.S. Surgeon General's Advisory on Protecting Youth Mental Health*. The advisory, developed with input from NIMH and other federal agencies, recognized mental health as an essential part of overall health and acknowledged the effects of the COVID-19 pandemic on youth mental health. The advisory included recommendations to increase timely data collection and research to identify and respond to youth mental health needs.

2022

NIMH supported the launch of two transformative projects through the BRAIN Initiative: the BRAIN Initiative Cell Atlas Network and the Armamentarium for Precision Brain Cell Access. The BRAIN Initiative Cell Atlas Network represented the next step in NIH's efforts to generate a complete reference atlas of cell types and circuits in the human brain across the lifespan. The Armamentarium for Precision Brain Cell Access aimed to generate tools that would allow researchers to target specific brain cells and neural circuits. Together, these BRAIN 2.0 projects aimed to transform our understanding of brain cell types and provide the precise tools needed to access them, helping unravel the complex workings of the human brain and inform treatments of brain disorders.

2023

The *White House Report on Mental Health Research Priorities*, published in February, outlined administration-wide needs and opportunities to advance mental health research. Areas of emphasis included addressing mental health inequities, understanding and leveraging digital mental health interventions, and supporting and expanding the mental health workforce. NIMH substantively contributed to development of the report, which highlighted several NIMH-supported research initiatives.

In May, U.S. Surgeon General Murthy issued *The U.S. Surgeon General's Advisory on Social Media and Youth Mental Health*. The advisory called for urgent action to clarify the mental health impacts of social media use, maximize the benefits and minimize the harms of social media platforms, and create safer and healthier online environments. NIMH and other federal agencies advised on the preparation of the report.

NIMH celebrated its 75th anniversary. A yearlong program of events launched with the inaugural scientific symposium, "The Evolution of Mental Health Research." Over the anniversary year, NIMH sponsored numerous activities, including symposiums, lectures, and sessions at scientific meetings. NIMH also shared stories of discovery and inspiration from its past, present, and future.

For more information, stories, and highlighted research, visit *www.nimh.nih.gov/75years*

Future Directions

Over the last 75 years, NIMH has been at the forefront of scientific advances that have transformed our understanding of mental illnesses and generated evidence-based approaches to mental health care. Our successes are a testament to the hard work, bright minds, and innovative spirit of those contributing to the institute's mission.

Looking back on the many NIMH-supported advancements gives reason to celebrate and provides perspective for moving forward. Mental illnesses are common, affecting tens of millions of people in the United States—and worldwide—each year. Suicide remains an urgent public health concern and one of the leading causes of death in the United States.

We need to continue to drive research that defines the biological underpinnings of these disorders and the ongoing translational and clinical research to turn that knowledge into effective treatment options. Although we cannot predict the next public health emergency or the complex scientific questions that will arise, we can prepare to meet such challenges by setting an ambitious research agenda and building a talented, diverse cohort of mental health researchers to see it through.

The evolving *NIMH Strategic Plan for Research* maps our path. We have charted numerous routes—from basic research to translational efforts to clinical studies testing novel approaches in community settings. We are also ready to adapt to the challenges and opportunities ahead.

Over the next 75 years and beyond, NIMH will continue to prioritize excellent science that brings hope and solutions to people with mental illnesses, their families, and their communities. We remain mindful of the journey ahead and draw strength from the hope that drives us forward.

Learn more about the *NIMH Strategic Plan for Research* at *www.nimh.nih.gov/strategicplan*

NIMH Directors

Name	Tenure
Robert H. Felix	1949–1964
Stanley F. Yolles	1964–1970
Bertram S. Brown	1970–1977
Francis N. Waldrop (Acting)	1977–1978
Herbert Pardes	1978–1984
Larry Silver (Acting)	1984
Shervert H. Frazier	1984–1986
Frank J. Sullivan (Acting)	1986–1988
Lewis L. Judd	1988–1990
Alan I. Leshner (Acting)	1990–1992
Frederick K. Goodwin	1992–1994
Rex William Cowdry (Acting)	1994–1996
Steven E. Hyman	1996–2001
Richard K. Nakamura (Acting)	2001–2002
Thomas R. Insel	2002–2015
Bruce Cuthbert (Acting)	2015–2016
Joshua A. Gordon	2016–Present

Learn More About NIMH History

The following sources provide more information on NIMH and its history:

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