

DEPARTMENT OF HEALTH AND HUMAN SERVICES

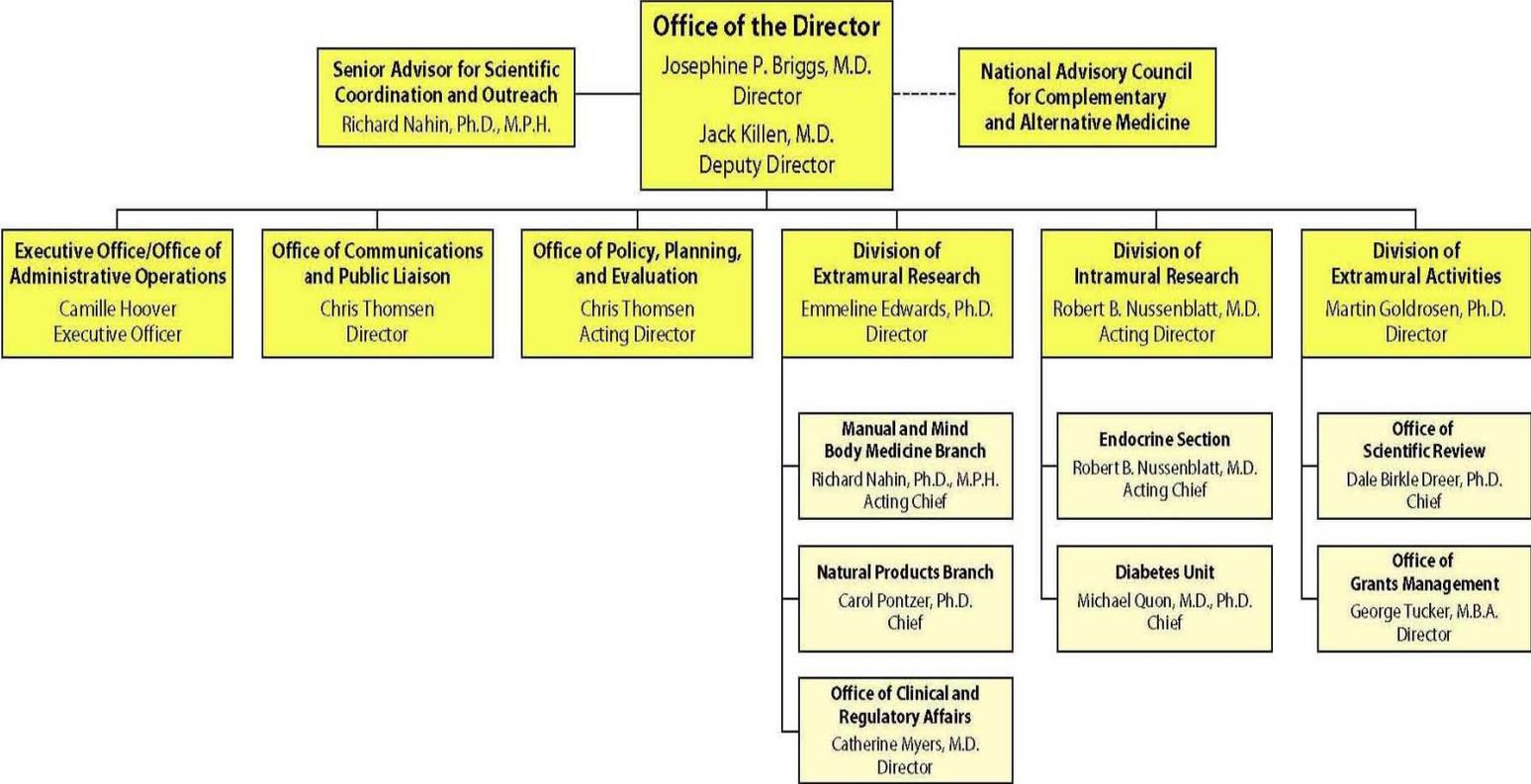
NATIONAL INSTITUTES OF HEALTH

National Center for Complementary and Alternative Medicine

<u>FY 2011 Budget</u>	<u>Page No.</u>
Organization chart.....	2
Appropriation language	3
Amounts available for obligation	4
Budget mechanism table.....	5
Budget authority by activity	6
Major Changes in Budget Request	7
Summary of changes	8
Budget Graphs	10
Justification narrative.....	11
Budget authority by object.....	19
Salaries and expenses	20
Authorizing legislation	21
Appropriations history.....	22
Detail of full-time equivalent employment (FTE).....	23
Detail of positions	24
New positions requested	25

National Institutes of Health

National Center for Complementary and Alternative Medicine



NATIONAL INSTITUTES OF HEALTH

National Center for Complementary and Alternative Medicine

For carrying out section 301 and title IV of the Public Health Services Act with respect to complementary and alternative medicine [\$128,844,000] **\$132,004,000** (Public Law 111-117, Consolidated Appropriations Act, 2010)

**National Institutes of Health
National Center for Complementary and Alternative Medicine**

Amounts Available for Obligation 1/

Source of Funding	FY 2009 Actual	FY 2010 Estimate	FY 2011 PB
Appropriation	\$125,471,000	\$128,844,000	\$132,004,000
Type 1 Diabetes	0	0	0
Rescission	0	0	0
Supplemental	0	0	0
Subtotal, adjusted appropriation	125,471,000	128,844,000	132,004,000
Real transfer under Director's one-percent transfer authority (GEI)	-205,000	0	0
Real transfer to the Global Fund to fight HIV/AIDS, Malaria and Tuberculosis	0	0	0
Comparative transfer to/from (specify)	-40,000	-53,000	0
Comparative transfer under Director's one-percent transfer authority (GEI)	205,000	0	0
Comparative transfer to the Global Fund to fight HIV/AIDS, Malaria and Tuberculosis	0	0	0
Comparative transfer from DHHS for Autism	0	0	0
Subtotal, adjusted budget authority	125,431,000	128,791,000	132,004,000
Unobligated balance, start of year	0	0	0
Unobligated balance, end of year	0	0	0
Subtotal, adjusted budget authority	125,431,000	128,791,000	132,004,000
Unobligated balance lapsing	-1,000	0	0
Total obligations	125,430,000	128,791,000	132,004,000

1/ Excludes the following amounts for reimbursable activities carried out by this account:

FY 2009 - \$2,000 FY 2010 - \$2,000 FY 2011 - \$2,000

Excludes \$0 in FY 2009, \$0 in FY 2010 and \$0 in FY 2011 for royalties.

NATIONAL INSTITUTES OF HEALTH
National Center for Complementary and Alternative Medicine
(Dollars in Thousands)

Budget Mechanism - Total

MECHANISM	FY 2009		FY 2009		FY 2010		FY 2010		FY 2011		Change	
	Actual		Recovery Act Actual		Recovery Act Estimate		Estimate		PB			
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Grants:												
Research Projects:												
Noncompeting	120	\$46,082		\$0	27	\$12,153	138	\$52,923	140	\$57,286	2	\$4,363
Administrative supplements	(16)	4,986	(11)	1,415	(2)	551	(14)	3,150	(11)	1,650	(3)	(1,500)
Competing:												
Renewal	0	200	1	1,200	0	0	0	0	0	0	0	0
New	74	22,496	18	9,734	1	399	66	20,642	60	19,164	(6)	-1,478
Supplements	0	0	12	3,053	0	0	0	0	0	0	0	0
Subtotal, competing	74	22,696	31	13,987	1	399	66	20,642	60	19,164	(6)	(1,478)
Subtotal, RPGs	194	73,764	31	15,402	28	13,103	204	76,715	200	78,100	(4)	1,385
SBIR/STTR	9	3,251	0	0	1	100	8	2,920	8	2,896	0	-24
Subtotal, RPGs	203	77,015	31	15,402	29	13,203	212	79,635	208	80,996	(4)	1,361
Research Centers:												
Specialized/comprehensive	6	2,401	2	1,224	2	1,234	6	2,460	6	2,500	0	40
Clinical research	0	0	0	0	0	0	0	0	0	0	0	0
Biotechnology	0	0	0	0	0	0	0	0	0	0	0	0
Comparative medicine	0	0	0	0	0	0	0	0	0	0	0	0
Research Centers in Minority Institutions	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal, Centers	6	2,401	2	1,224	2	1,234	6	2,460	6	2,500	0	40
Other Research:												
Research careers	55	6,650	1	54	1	54	56	6,748	58	6,950	2	202
Cancer education	0	0	0	0	0	0	0	0	0	0	0	0
Cooperative clinical research	0	0	0	0	0	0	0	0	0	0	0	0
Biomedical research support	0	0	0	0	0	0	0	0	0	0	0	0
Minority biomedical research support	0	0	0	0	0	0	0	0	0	0	0	0
Other	17	2,481	0	0	0	0	17	2,518	17	2,594	0	76
Subtotal, Other Research	72	9,131	1	54	1	54	73	9,266	75	9,544	2	278
Total Research Grants	281	88,547	34	16,680	32	14,491	291	91,361	289	93,040	(2)	1,679
Research Training:	<u>FTEs</u>						<u>FTEs</u>		<u>FTEs</u>			
Individual awards	21	861	0	0	0	0	21	868	21	910	0	42
Institutional awards	56	3,055	0	0	0	0	56	3,080	56	3,228	0	148
Total, Training	77	3,916	0	0	0	0	77	3,948	77	4,138	0	190
Research & development contracts (SBIR/STTR)	0	9,792	0	0	0	0	0	9,934	0	10,240	0	306
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Intramural research	<u>FTEs</u>		<u>FTEs</u>		<u>FTEs</u>		<u>FTEs</u>		<u>FTEs</u>		<u>FTEs</u>	
Research management and support	11	8,043	0	0	0	159	11	8,163	13	8,426	2	263
Construction	55	15,133	0	102	0	296	54	15,385	55	16,160	1	775
Buildings and Facilities	0	0	0	0	0	0	0	0	0	0	0	0
Buildings and Facilities	0	0	0	0	0	0	0	0	0	0	0	0
Total, NCCAM	66	125,431		16,782		14,946	65	128,791	68	132,004	3	3,213

Includes FTEs which are reimbursed from the NIH Roadmap for Medical Research

NATIONAL INSTITUTES OF HEALTH
National Center for Complementary and Alternative Medicine
BA by Program
(Dollars in thousands)

	FY 2007 Actual		FY 2008 Actual		FY 2009 Actual		FY 2009 Comparable		FY 2010 Estimate		FY 2011 PB		Change	
	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount
Extramural Research														
<u>Detail:</u>														
Clinical Research		\$50,364		\$49,071		\$49,341		\$49,341		\$50,886		\$51,930		1,044
Basic Research		36,955		39,927		42,129		42,129		43,235		44,088		853
Training		12,182		10,918		10,785		10,785		11,122		11,400		278
Subtotal, Extramural		99,501		99,916		102,255		102,255		105,243		107,418		2,175
Intramural research	13	7,443	12	7,452	11	8,043	11	8,043	11	8,163	13	8,426	2	263
Res. management & support	56	14,427	55	14,639	55	15,173	55	15,133	54	15,385	55	16,160	1	775
TOTAL	69	121,371	67	122,007	66	125,471	66	125,431	65	128,791	68	132,004	3	3,213

Includes FTEs which are reimbursed from the NIH Roadmap for Medical Research

Major Changes in the Fiscal Year 2011 Budget Request

Major changes by budget mechanism and/or budget activity detail are briefly described below. Note that there may be overlap between budget mechanism and activity detail and these highlights will not sum to the total change for the FY 2011 budget request for the National Center for Complementary and Alternative Medicine which is \$3.213 million more than the FY 2010 Estimate, for a total of \$132.004 million.

Research Project Grants (+\$1.361 million; total \$80.996 million). NCCAM will support a total of 208 Research Project Grant (RPG) awards in FY 2011. Noncompeting RPG's will increase by 2 awards and increase \$4.363 million of which \$1.408 will be for conversion of Pathway to Independence awards from careers to noncompeting RPGs. Competing RPG's will decrease by 6 awards and decrease by \$1.478 million. The NIH Budget policy for RPGs in FY 2011 is to provide a 2% inflationary increase in noncompeting awards and a 2% increase in average cost for competing RPGs.

Research Careers (+\$0.202 million; total \$6.950 million). NCCAM will support the Pathway to Independence program, by funding 2 additional awards in FY 2011. Total support for the Pathway program in FY 2011 is 4 awards and \$0.413 million.

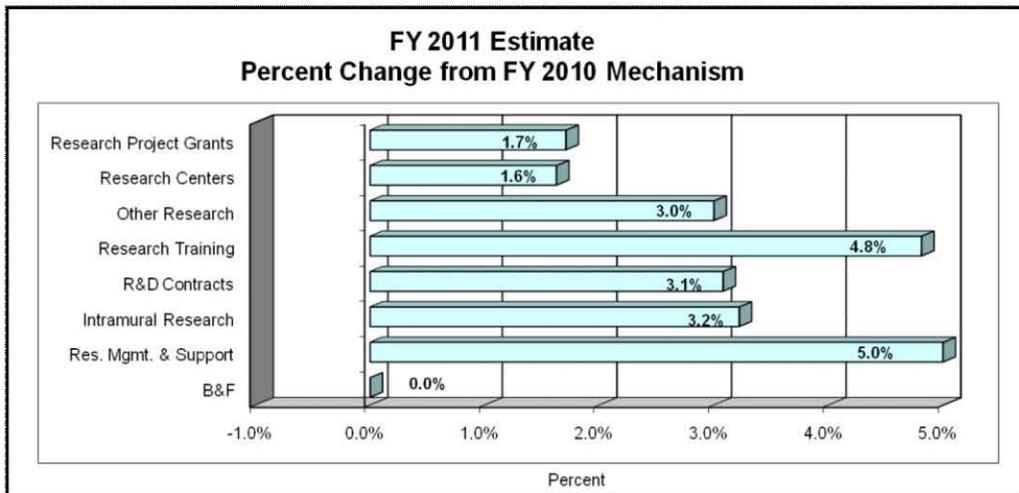
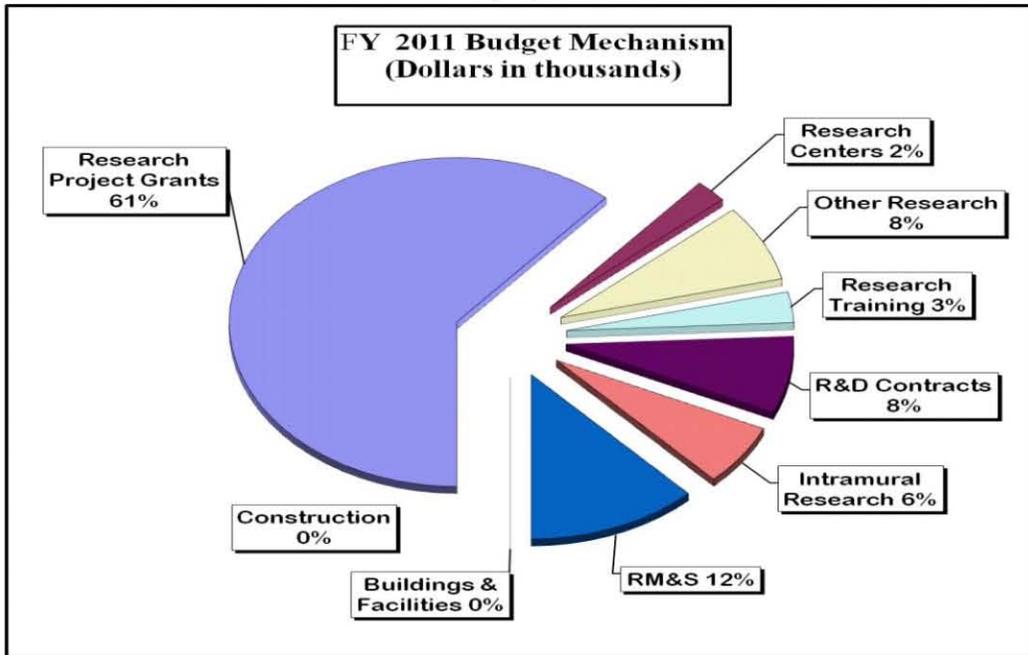
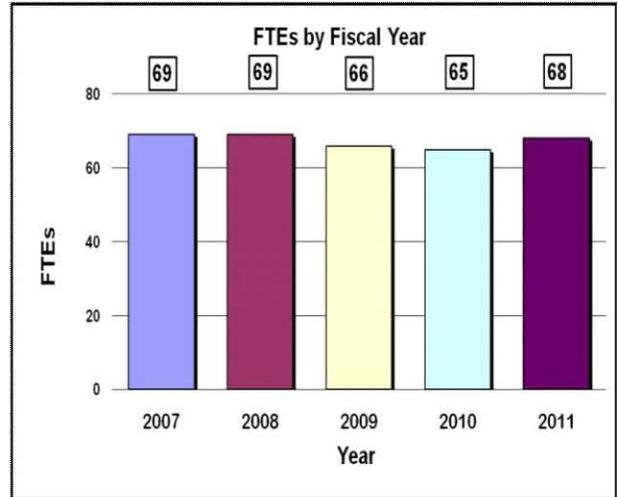
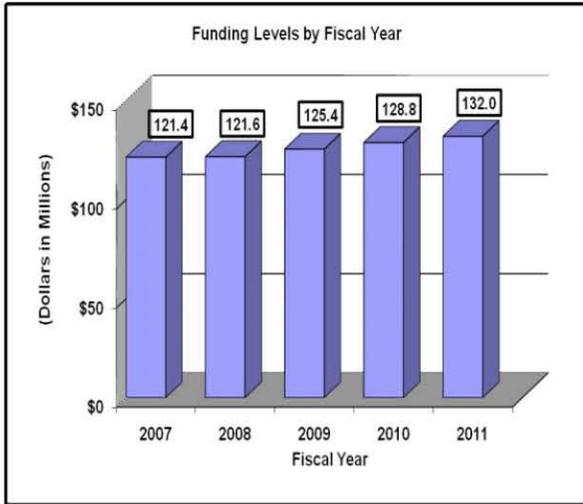
NATIONAL INSTITUTES OF HEALTH
National Center for Complementary and Alternative Medicine
Summary of Changes

FY 2010 estimate		\$128,791,000	
FY 2011 estimated budget authority		132,004,000	
Net change		3,213,000	
CHANGES	2010 Current Estimate Base		Change from Base
	FTEs	Budget Authority	FTEs Budget Authority
A. Built-in:			
1. Intramural research:			
a. Annualization of January 2010 pay increase			
		\$1,646,000	\$10,000
b. January FY 2011 pay increase			
		1,646,000	17,000
c. Zero less days of pay (n/a for 2011)			
		1,646,000	0
d. Payment for centrally furnished services			
		1,783,000	36,000
e. Increased cost of laboratory supplies, materials, and other expenses			
		4,734,000	76,000
Subtotal			139,000
2. Research management and support:			
a. Annualization of January 2010 pay increase			
		\$7,882,000	\$48,000
b. January FY 2011 pay increase			
		7,882,000	83,000
c. Zero less days of pay (n/a for 2011)			
		7,882,000	0
d. Payment for centrally furnished services			
		1,243,000	25,000
e. Increased cost of laboratory supplies, materials, and other expenses			
		6,260,000	100,000
Subtotal			256,000
Subtotal, Built-in			395,000

NATIONAL INSTITUTES OF HEALTH
National Center for Complementary and Alternative Medicine

Summary of Changes--continued

CHANGES	2010 Current Estimate Base		Change from Base	
	No.	Amount	No.	Amount
B. Program:				
1. Research project grants:				
a. Noncompeting	138	\$56,073,000	2	\$2,863,000
b. Competing	66	20,642,000	(6)	(1,478,000)
c. SBIR/STTR	8	2,920,000	0	(24,000)
Total	212	79,635,000	(4)	1,361,000
2. Research centers	6	2,460,000	0	40,000
3. Other research	73	9,266,000	2	278,000
4. Research training	77	3,948,000	0	190,000
5. Research and development contracts	0	9,934,000	0	306,000
Subtotal, extramural				2,175,000
6. Intramural research	<u>FTEs</u> 11	8,163,000	<u>FTEs</u> 2	124,000
7. Research management and support	54	15,385,000	1	519,000
8. Construction		0		0
9. Buildings and Facilities		0		0
Subtotal, program		128,791,000		2,818,000
Total changes	65		3	3,213,000



Justification of Budget Request

National Center for Complementary and Alternative Medicine

Authorizing Legislation: Section 301 and title IV of the Public Health Service Act, as amended.

Budget Authority

	FY 2009	FY 2010	FY 2011	FY 2011+/-
	<u>Appropriation</u>	<u>Appropriation</u>	President's <u>Budget</u>	2010 <u>Appropriation</u>
BA	\$125,431,000	\$128,791,000	\$132,004,000	+\$3,213,000
FTE	66	65	68	+3

This document provides justification for the Fiscal Year (FY) 2011 activities of the National Center for Complementary and Alternative (NCCAM), including HIV/ AIDS activities. Details of the FY 2011 HIV/AIDS activities are in the "Office of AIDS Research (OAR)" Section of the Overview. Details on the Common Fund are located in the Overview, Volume One. Program funds are allocated as follows: Competitive Grants/Cooperative Agreements; Contracts; Direct Federal/Intramural and Other.

DIRECTOR'S OVERVIEW

The National Center for Complementary and Alternative Medicine (NCCAM) is entering its second decade as the Federal Government's lead agency for research on complementary and alternative medicine (CAM). Building on 10 years of scientific progress, a robust research enterprise, and strong collaborations across the National Institutes of Health, NCCAM is now shaping its future through a comprehensive strategic planning process that involves its diverse stakeholder community. The Center's third strategic plan will ensure that NCCAM not only continues to support the best and most promising CAM research but also provides evidence-based information on CAM therapies used by millions of Americans. The strategic plan will focus on establishing research priorities that reflect emerging evidence on which therapies are most promising, as well as how Americans are using complementary health practices.

By both criteria—use and scientific promise—research on CAM for chronic pain is a top priority. Millions of Americans suffer from chronic pain. Its annual economic cost, including health care expenses, lost income, and lost productivity, is estimated to be \$100 billion. In addition, the 2007 National Health Interview Survey (NHIS) found that chronic pain is by far the most common reason Americans use CAM. Increasing evidence from rigorous scientific studies indicates that certain CAM therapies (e.g., relaxation techniques, acupuncture, chiropractic manipulation, and massage) may be useful in managing chronic pain.

Given these facts, NCCAM is strengthening its portfolio of research on non-pharmacological pain management. For example, NCCAM has recently refined its signature research program, Centers of Excellence for Research on CAM (CERC), to focus on studying CAM therapies for pain management. Through the CERC initiative, researchers at leading research institutions will bring a multidisciplinary, synergistic approach to the study of CAM for its potential for addressing this important public health problem.

Other new NHIS data show that Americans are spending approximately \$34 billion out-of-pocket on CAM products and services—with nearly two-thirds being spent on "self-care" items, forms of CAM that individuals use on their own without seeing a health care provider. Of this, approximately \$14.8 billion is spent on nonvitamin, nonmineral, natural products (such as botanicals and other dietary supplements). These findings reinforce the importance of NCCAM's continued commitment to building a base of rigorous, objective, scientific evidence on the safety and efficacy of natural products. NCCAM-funded botanical researchers are taking advantage of the unprecedented scientific opportunities now available to understand the mechanisms by which natural products could change disease processes through the application of state-of-the-art technologies, such as high throughput screening methods, studies of epigenomics, and studies of the microbiome. These techniques are yielding promising leads for new therapies, as well as insights into the biological mechanisms of natural products. And in light of continuing reports highlighting safety concerns of natural products, the Center in close cooperation with regulatory agencies, will maintain its focus on helping to provide consumers, health care providers, and policymakers with reliable and objective data regarding the safety of natural products.

As in other areas of biomedical science, building an evidence base for CAM requires research that addresses a continuum of questions. Basic research asks how a therapy affects the body and bodily processes (such as how the chemicals in an herb reduce inflammation, or how the brain responds to acupuncture). Translational research, also known as "bench-to-bedside" research, determines whether we have the methods and tools needed to detect and measure a therapy's effect in people. Efficacy studies look for evidence of a therapy's safety and benefit in people under optimal research conditions, as in controlled clinical trials. Effectiveness research asks how well the therapy works in the real world and in comparison to other treatments. Ensuring an optimal balance among these wide-ranging questions for priority research areas is a third focus of NCCAM's strategic planning efforts.

Because many of the most promising CAM approaches are already in widespread use, comparative effectiveness research (CER) studies are of particular interest and importance in the field of CAM research. This kind of research looks at data from real-world settings to compare strengths and weaknesses of various medical interventions. Results can provide patients and health care providers with practical information for choosing intervention that are most effective and have the most value. It is interesting to note that at least 3 of the top 100 priorities for CER identified in a recent Institute of Medicine study involved CAM therapies (acupuncture, dietary supplements, and

mindfulness approaches). Ongoing NCCAM studies are comparing the effectiveness of CAM and conventional approaches, as well as interventions that combine them in various ways. For example, one study is using existing data (including 5 years of insurance claims) to compare patients who see CAM providers to treat their back pain with those who do not. The study will evaluate back pain-related outcomes, quality of care, costs, and use of other services.

To conduct this research on CAM, we must have a strong research community, one that includes both conventional researchers and CAM practitioners skilled and knowledgeable in research methodology. NCCAM has partnered with the Bernard Osher Foundation to support research training for CAM practitioners. This effort is critical to the long-term investment in building and sustaining the biomedical research community.

NCCAM enters its second decade at a time of both extraordinary scientific opportunity and the special challenge of health care reform. In partnership with a vibrant research community, we must embrace this time of opportunity and challenge and continue to build an evidence base on the safety and potential value of CAM. Moreover, we need to share the results of our research with the public, health care professionals, and policymakers so that the best possible decisions can be made regarding CAM use and its integration with other forms of health care.

Overall Budget Policy:

Guided by its strategic plan, the advice of the National Advisory Council for Complementary and Alternative Medicine, and input from a diverse community of stakeholders, NCCAM builds the scientific evidence base for complementary and alternative medicine (CAM) by stimulating research and increasing research capacity. In FY 2011, NCCAM will continue to fund multidisciplinary investigator-initiated research, will support new investigators on R01 equivalent awards at success rates equivalent to those of established investigators submitting new R01 equivalent applications, and encourage capacity building across the field of CAM research. Areas of special emphasis include studies examining the effectiveness of CAM approaches to alleviate chronic pain and translational research to improve the quality, reproducibility, and comparability of clinical CAM research. The Division of Intramural Research and Research Management and Support will receive modest increases to maintain staffing levels and ensure responsible oversight of research activities.

Funds are included in R&D contracts to support several trans-NIH initiatives, such as the Therapies for Rare and Neglected Diseases program (TRND), the Basic Behavioral and Social Sciences Opportunity Network (OppNet), and support for a new synchrotron at the Brookhaven National Laboratory, as well as increased support for other HHS agencies through the program evaluation set-aside.”

FY 2011 JUSTIFICATION BY PROGRAM

Program Descriptions and Accomplishments

Extramural Basic Research: Basic research clarifies fundamental biological effects that are central to the development of the evidence base in complementary and alternative medicine (CAM) and underpins the design of clinical research. NCCAM supports investigator-initiated basic research and will increase, through targeted initiatives, its support for translational research on CAM. NCCAM has basic research initiatives such as *Mechanisms of Immune Modulation*, which fund studies with the ability of various interventions to affect inflammatory processes that underlie many conditions for which Americans frequently use CAM, such as chronic pain and allergy.

In its cornerstone Centers of Excellence for Research on CAM (CERC), NCCAM researchers at the Massachusetts General Hospital are studying the neural basis for the effects of acupuncture through the use of functional magnetic resonance imaging. The Center is testing the hypothesis that acupuncture generates a widespread response in the brain, and that the brain's limbic system plays a central role in this response. The NCCAM CERC at Oregon State University is using cell culture studies and relevant animal models to determine the molecular and cellular mechanisms of action and *in vivo* safety and efficacy of selected antioxidant therapies in aging, amyotrophic lateral sclerosis (ALS, commonly known as Lou Gehrig's disease), and cardiovascular diseases.

Budget Policy: The FY 2011 NCCAM budget estimate for extramural basic research is \$51.930 million, an increase of \$1.044 million or 2.0 percent above the FY 2010 enacted level. The FY 2011 basic research plan supports an increase of the evidence base on the physiological mechanisms underlying CAM practices, as well as the development and validation of methods and approaches needed to ensure that clinical research has a solid foundation and facilitate the integration of proven CAM approaches into health care.

Extramural Clinical Research: The NCCAM extramural research program funds multidisciplinary clinical investigations at leading U.S. biomedical and CAM research institutions on various CAM modalities. Clinical CAM research ranges from small pilot studies to large-scale clinical trials and epidemiological studies supported through solicited research initiatives, collaboration between NIH Institutes and Centers, and investigator-initiated research.

There are numerous and important basic, translational, and clinical research questions to be addressed in pursuing the promising leads which have emerged in the past decade and building an evidence base regarding the safety and utility of CAM approaches in treating pain. NCCAM has identified use of CAM for alleviation of pain as the focus of the CERC program in FY 2011. Such research requires a multidisciplinary, multi-level, interactive CERC program.

Budget Policy: The FY 2011 NCCAM budget estimate for extramural clinical research is \$44.088 million, an increase of \$0.853 million or 2.0 percent above the FY 2010 enacted level. The NCCAM clinical research plan will target the strategic priorities of support for CAM efficacy and effectiveness research, with the ultimate goal to inform the scientific evidence base on CAM for specific indications.

Portrait of a Program—Effectiveness of Complementary and Alternative Health Practices

FY 2010	\$2.255 million
FY 2011	\$2.316 million
Change	\$0.061 million

Although existing studies have provided information on patterns of complementary and alternative medicine (CAM) use in the general population, little research has been conducted on the effectiveness of CAM modalities and integrated health models in primary care. To address this knowledge gap, NCCAM will support research to: 1) discover if certain well-characterized CAM modalities for which there is already evidence of efficacy add value to conventional treatment for back pain; and 2) measure the impact of integrative medicine delivery models on the promotion of healthy behaviors such as smoking cessation, physical activity, and healthy eating.

Research funded by this initiative will take advantage of new or existing practice-based research networks (PBRNs), which cover large patient populations in diverse medical settings and are likely to be representative of patients seeking primary care. The utilization of collaborative networks of office-based practices for the purpose of research is a promising approach to the study of CAM. CAM and integrative medicine providers tend to deal with the management of unselected patients, many of whom present with multiple problems or because they seek improved overall health. This initiative will assess whether data collected at PBRNs can be used to increase scientific knowledge about CAM through the application of health services research methodology.

This initiative will make an important contribution to comparative effectiveness research as it will study CAM as it is used in real-world settings. Since nearly 40 percent of American adults use CAM and spend nearly \$34 billion out-of-pocket each year on CAM products and services, the impact on health policy is significant. That is why the PBRN network is a logical research setting. PBRNs—some of which have existed in the United States for more than 20 years—involve community-based clinicians and their staffs in activities designed to understand and improve primary care. PBRN efforts link relevant clinical questions with rigorous research methods in community settings to produce scientific information that is externally valid, and, in theory, assimilated more easily into everyday practice. Increasingly, PBRNs are recognizing their potential to expand their purpose, and are supporting quality improvement activities within primary care practices and the adoption of an evidence-based culture in primary care practice. This initiative will provide rigorous evaluation of the value of CAM approaches in real world primary care settings and will contribute to the NIH goal of putting science to work for the benefit of health reform.

Portrait of a Program—Complementary Health Practices for Pain Management

FY 2010 **\$14.917 million**

FY 2011 **\$15.320 million**

Change **\$0.403 million**

Alleviation of pain is by far the most common health problem for which Americans turn to complementary and alternative medicine (CAM). According to data from the 2007 National Health Interview Survey, chronic pain (including back pain, headache, and arthritis pain) is the most common reason for the use of CAM, and patients with musculoskeletal problems make up the majority of visits to CAM providers. A growing body of research suggests that certain CAM health practices can complement the pharmacological management of pain and may at times yield better clinical outcomes than the use of drugs alone. The potential of this research to affect practice is supported by recent recommendations in guidelines of the American College of Physicians and the American Pain Society to consider massage, chiropractic, or acupuncture in back pain management.

NCCAM-funded basic and clinical research in pain management has demonstrated promising results in a number of areas. Basic research has provided evidence of significant effect of mind-body practices on the underlying biological mechanisms of pain perception and control. For example, brain imaging studies have yielded insights into the central mechanisms activated by placebo analgesia and acupuncture. Clinical studies have shown that patients with chronic low-back pain who received acupuncture or simulated acupuncture treatments benefited more than patients receiving only conventional care. Ongoing research is comparing the cost and utilization of conventional medical services for the treatments of musculoskeletal pain conditions by patients who use CAM providers with those who do not.

While NCCAM-supported research is producing promising results, much research remains to be done to pursue these promising leads and to build an evidence base on the safety and utility of CAM approaches to treating pain. To address this research need, NCCAM has identified the study of CAM practices for alleviation of pain as a high priority for future research. As part of this research priority, in 2008, NCCAM launched the *Effectiveness Research—CAM Interventions and Chronic Back Pain initiative* to strengthen the evidence for promising CAM interventions for pain management as used in "real world" health care settings. And, in 2009, NCCAM hosted the NIH Workshop on Nonpharmacologic Management of Back Pain to identify clinical research questions related to the treatment of back pain. Finally, the Center has identified pain management as the initial focus for the renewal of the Centers of Excellence for Research on CAM (CERC) program in 2009. The mission of the CERC program is to support and enhance research in NCCAM's targeted high-priority research areas, with a particular focus on research areas where multidisciplinary scientific teams are critical for progress.

Extramural Research Training and Capacity Building.

The basic, translational, and clinical research required to develop the evidence base for CAM cannot be developed without the expertise of CAM practitioners working in partnership with conventional researchers. To increase the number, quality, and diversity of investigators who conduct research on CAM, NCCAM supports a variety of training and career development activities for pre-doctoral and post-doctoral students, CAM practitioners, and conventional medical researchers and practitioners.

NCCAM continues to partner with The Bernard Osher Foundation on new training and career development awards to support research career development for CAM health

professionals. The program's eligibility has been expanded to include individuals from a broader range of professional backgrounds.

Budget Policy: The NCCAM FY 2010 budget proposal for extramural research training and capacity building is \$11.400 million, an increase of \$0.278 million or 2.0 percent above the FY 2009 enacted level. To address the ongoing need to build and sustain CAM research capacity, NCCAM will make awards under its ongoing training initiatives that target CAM and conventional investigators at various stages of their careers, including the *Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellowship Training in Complementary and Alternative Medicine (F31)*, *Mentored Patient-Oriented Research Career Development Award (K23)*, *Midcareer Investigator Award in Patient-Oriented Research (K24)*, and the *Bernard Osher Foundation/NCCAM CAM Practitioner Research Career Development Award (K01)*.

Intramural Research. NCCAM's Division of Intramural Research (DIR) conducts basic, translational, and clinical research on a range of CAM modalities, including dietary supplements and acupuncture, and provides a Complementary and Integrative Medicine Consult Service to provide advice on the appropriate role of CAM interventions for patients who are participating in NIH Clinical Center research protocols (nccam.nih.gov/research/consultservice).

In FY 2009 NCCAM carried out a comprehensive assessment by an independent expert (Blue Ribbon) panel of the scientific contributions and future directions for the DIR as part of its third strategic plan development process. The panel recommended an interdisciplinary research program that should be build around the unifying theme of mind-body medicine. A search for a DIR director with neuroscience expertise is under way.

Research Management and Support (RMS). Through its RMS activities, NCCAM continued to fund meritorious basic, clinical, and translational research and research training efforts, and the Center has also continued its health information dissemination and education/outreach activities, such as the *Time To Talk* outreach initiative nccam.nih.gov/timetotalk and an online continuing education program for physicians and nurses.

In FY 2009, NCCAM celebrated its 10th anniversary as an NIH Center with a number of special outreach activities: The inaugural Stephen E. Straus Distinguished Lecture, a scientific symposium "Exploring the Science of CAM," and the launch of a new section of its website specifically for health care providers.

Recovery Act Implementation

Recovery Act Funding: \$31.728 million

In FY 2009, the National Center for Complementary and Alternative Medicine (NCCAM) received \$31.7 million under the American Recovery and Reinvestment Act. Of this amount, \$16.8 million was obligated in FY 2009 and \$14.9 million will be obligated in FY 2010. These funds will support scientific research on complementary and alternative medicine (CAM) for a number of significant health problems for which CAM shows promise of public health benefit.

With the 2007 National Health Interview Survey revealing that the most common reason Americans use CAM is for treatment of pain, studies on chronic pain are a vital component of NCCAM's research portfolio. Recovery Act-funded research on chronic pain examines the value of acupuncture for carpal tunnel syndrome, natural products and massage for osteoarthritis of the knee, and spinal manipulation for low back pain. Research on CAM approaches for diseases related to aging include studies on antioxidants for Parkinson's disease and omega-3 fatty acids (found in foods such as fatty fish and vegetable oil) for stroke. New projects related to digestive health research include herbal supplements for food allergies, probiotics – live microorganisms (in most cases, bacteria) that are similar to normal microorganisms found in the human gut – for newborn digestive health, and amino acids for inflammatory bowel disease.

In addition, Recovery Act funding is supporting research on the effects of meditation on immune and psychosocial function, yoga for smoking cessation, and acupuncture for chronic insomnia. NCCAM's Recovery Act funds are being invested in promising areas of research that will advance the field of CAM research, improve the health of the Nation, and create new jobs

NATIONAL INSTITUTES OF HEALTH
National Center for Complementary and Alternative Medicine

Budget Authority by Object

	FY 2010 Estimate	FY 2011 PB	Increase or Decrease	Percent Change
Total compensable workyears:				
Full-time employment	65	68	3	4.6
Full-time equivalent of overtime and holiday hours	0	0	0	0.0
Average ES salary	\$0	\$0	\$0	0.0
Average GM/GS grade	12.4	12.4	0.0	0.0
Average GM/GS salary	\$99,799	\$101,795	\$1,996	2.0
Average salary, grade established by act of July 1, 1944 (42 U.S.C. 207)	\$88,046	\$89,807	\$1,761	2.0
Average salary of ungraded positions	164,139	167,422	3,283	2.0
OBJECT CLASSES	FY 2010 Estimate	FY 2011 Estimate	Increase or Decrease	Percent Change
Personnel Compensation:				
11.1 Full-time permanent	\$5,199,000	\$5,460,000	\$261,000	5.0
11.3 Other than full-time permanent	1,627,000	1,759,000	132,000	8.1
11.5 Other personnel compensation	179,000	188,000	9,000	5.0
11.7 Military personnel	177,000	215,000	38,000	21.5
11.8 Special personnel services payments	269,000	314,000	45,000	16.7
Total, Personnel Compensation	7,451,000	7,936,000	485,000	6.5
12.0 Personnel benefits	1,876,000	1,986,000	110,000	5.9
12.2 Military personnel benefits	201,000	236,000	35,000	17.4
13.0 Benefits for former personnel	0	0	0	0.0
Subtotal, Pay Costs	9,528,000	10,158,000	630,000	6.6
21.0 Travel and transportation of persons	128,000	134,000	6,000	4.7
22.0 Transportation of things	75,000	81,000	6,000	8.0
23.1 Rental payments to GSA	0	0	0	0.0
23.2 Rental payments to others	12,000	12,000	0	0.0
23.3 Communications, utilities and miscellaneous charges	166,000	175,000	9,000	5.4
24.0 Printing and reproduction	105,000	113,000	8,000	7.6
25.1 Consulting services	1,008,000	1,072,000	64,000	6.3
25.2 Other services	4,023,000	4,166,000	143,000	3.6
25.3 Purchase of goods and services from government accounts	13,088,000	13,485,000	397,000	3.0
25.4 Operation and maintenance of facilities	69,000	74,000	5,000	7.2
25.5 Research and development contracts	4,374,000	4,447,000	73,000	1.7
25.6 Medical care	0	0	0	0.0
25.7 Operation and maintenance of equipment	125,000	129,000	4,000	3.2
25.8 Subsistence and support of persons	0	0	0	0.0
25.0 Subtotal, Other Contractual Services	22,687,000	23,373,000	686,000	3.0
26.0 Supplies and materials	585,000	576,000	(9,000)	-1.5
31.0 Equipment	196,000	204,000	8,000	4.1
32.0 Land and structures	0	0	0	0.0
33.0 Investments and loans	0	0	0	0.0
41.0 Grants, subsidies and contributions	95,309,000	97,178,000	1,869,000	2.0
42.0 Insurance claims and indemnities	0	0	0	0.0
43.0 Interest and dividends	0	0	0	0.0
44.0 Refunds	0	0	0	0.0
Subtotal, Non-Pay Costs	119,263,000	121,846,000	2,583,000	2.2
Total Budget Authority by Object	128,791,000	132,004,000	3,213,000	2.5

Includes FTEs which are reimbursed from the NIH Roadmap for Medical Research

NATIONAL INSTITUTES OF HEALTH
National Center for Complementary and Alternative Medicine

Salaries and Expenses

OBJECT CLASSES	FY 2010 Estimate	FY 2011 PB	Increase or Decrease	Percent Change
Personnel Compensation:				
Full-time permanent (11.1)	\$5,199,000	\$5,460,000	\$261,000	5.0
Other than full-time permanent (11.3)	1,627,000	1,759,000	132,000	8.1
Other personnel compensation (11.5)	179,000	188,000	9,000	5.0
Military personnel (11.7)	177,000	215,000	38,000	21.5
Special personnel services payments (11.8)	269,000	314,000	45,000	16.7
Total Personnel Compensation (11.9)	7,451,000	7,936,000	485,000	6.5
Civilian personnel benefits (12.1)	1,876,000	1,986,000	110,000	5.9
Military personnel benefits (12.2)	201,000	236,000	35,000	17.4
Benefits to former personnel (13.0)	0	0	0	0.0
Subtotal, Pay Costs	9,528,000	10,158,000	630,000	6.6
Travel (21.0)	128,000	134,000	6,000	4.7
Transportation of things (22.0)	75,000	81,000	6,000	8.0
Rental payments to others (23.2)	12,000	12,000	0	0.0
Communications, utilities and miscellaneous charges (23.3)	166,000	175,000	9,000	5.4
Printing and reproduction (24.0)	105,000	113,000	8,000	7.6
Other Contractual Services:				
Advisory and assistance services (25.1)	1,008,000	1,072,000	64,000	6.3
Other services (25.2)	4,023,000	4,166,000	143,000	3.6
Purchases from government accounts (25.3)	7,822,000	8,006,000	184,000	2.4
Operation and maintenance of facilities (25.4)	69,000	74,000	5,000	7.2
Operation and maintenance of equipment (25.7)	125,000	129,000	4,000	3.2
Subsistence and support of persons (25.8)	0	0	0	0.0
Subtotal Other Contractual Services	13,047,000	13,447,000	400,000	3.1
Supplies and materials (26.0)	585,000	576,000	(9,000)	-1.5
Subtotal, Non-Pay Costs	14,118,000	14,538,000	420,000	3.0
Total, Administrative Costs	23,646,000	24,696,000	1,050,000	4.4

**NATIONAL INSTITUTES OF HEALTH
National Center for Complementary and Alternative Medicine**

Authorizing Legislation

	PHS Act/ Other Citation	U.S. Code Citation	2010 Amount Authorized	FY 2010 Estimate	2011 Amount Authorized	FY 2011 PB
Research and Investigation	Section 301	42§241	Indefinite	\$128,791,000	Indefinite	\$132,004,000
National Center for Complementary and Alternative Medicine	Section 402(a)	42§281	Indefinite		Indefinite	
Total, Budget Authority				128,791,000		132,004,000

**NATIONAL INSTITUTES OF HEALTH
National Center for Complementary and Alternative Medicine**

Appropriations History

Fiscal Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation ^{1/}
2002	100,063,000	99,288,000	110,000,000	104,644,000
Rescission				(52,000)
2003	112,547,000	112,547,000	114,149,000	114,149,000
Rescission				(742,000)
2004	116,202,000	116,202,000	117,092,000	117,752,000
Rescission				(774,000)
2005	121,116,000	121,116,000	121,900,000	123,116,000
Rescission				(1,011,000)
2006	122,692,000	122,692,000	126,978,000	122,692,000
Rescission				(1,227,000)
2007	120,554,000	120,554,000	121,982,000	121,576,000
Rescission				0
2008	121,699,000	123,380,000	124,213,000	121,577,000
Rescission				(2,162,000)
Supplemental				647,000
2009	121,695,000	125,878,000	125,082,000	125,471,000
Rescission				0
2010	127,241,000	129,953,000	127,591,000	128,844,000
Rescission				0
2011	132,004,000			

1/ Reflects enacted supplementals, rescissions, and reappropriations.

**NATIONAL INSTITUTES OF HEALTH
National Center for Complementary and Alternative Medicine**

Details of Full-Time Equivalent Employment (FTEs)

OFFICE/DIVISION	FY 2009 Actual	FY 2010 Estimate	FY 2011 PB
Office of the Director	4	4	4
Office of Administrative Operations	15	14	14
Office of Communication and Public Liaison	7	7	7
Office of Science Policy, Planning, and Evaluation	4	4	4
Division of Extramural Research and Training	16	16	17
Office of Scientific Review	6	6	6
Office of International Health Research	1	1	1
Office of Clinical and Regulatory Affairs	2	2	2
Office of Intramural Research	11	11	13
Total	66	65	68
Includes FTEs which are reimbursed from the NIH Roadmap for Medical Research			
FTEs supported by funds from Cooperative Research and Development Agreements			
	(0)	(0)	(0)
FISCAL YEAR	Average GM/GS Grade		
2007	12.2		
2008	12.2		
2009	12.4		
2010	12.4		
2011	12.4		

**NATIONAL INSTITUTES OF HEALTH
National Center for Complementary and Alternative Medicine**

Detail of Positions

GRADE	FY 2009 Actual	FY 2010 Estimate	FY 2011 PB
Total, ES Positions	0	0	0
Total, ES Salary	0	0	0
GM/GS-15	8	8	8
GM/GS-14	14	14	14
GM/GS-13	19	19	20
GS-12	7	6	7
GS-11	3	3	4
GS-10	0	0	0
GS-9	4	4	4
GS-8	0	0	0
GS-7	3	3	3
GS-6	0	0	0
GS-5	1	1	1
GS-4	1	1	1
GS-3	0	0	0
GS-2	0	0	0
GS-1	0	0	0
Subtotal	60	59	62
Grades established by Act of July 1, 1944 (42 U.S.C. 207):			
Assistant Surgeon General	0	0	0
Director Grade	1	1	1
Senior Grade	0	0	0
Full Grade	0	0	0
Senior Assistant Grade	1	1	1
Assistant Grade	0	0	0
Subtotal	2	2	2
Ungraded	21	21	21
Total permanent positions	59	59	59
Total positions, end of year	83	83	83
Total full-time equivalent (FTE) employment, end of year	66	65	68
Average ES salary	0	0	0
Average GM/GS grade	12.4	12.4	12.4
Average GM/GS salary	99,799	99,799	101,795

Includes FTEs which are reimbursed from the NIH Roadmap for Medical Research.

**NATIONAL INSTITUTES OF HEALTH
National Center for Complementary and Alternative Medicine**

New Positions Requested

	FY 2011		
	Grade	Number	Annual Salary
Health Science Administrator	13	1	\$89,033
Nurse	12	1	74,872
Lab Technician	11	1	62,467
Total Requested		3	\$226,372