

It is a common misconception that OCCAM manages all of the CAM projects for NCI. The vast majority of CAM projects are managed by other programs and laboratories throughout the Institute. After the close of the fiscal year, NCI's Division of Extramural Activities (DEA) provides OCCAM with a list of funded grants and cooperative agreements coded as containing some component of CAM research. Similarly, NCI's two intramural components, the Center for Cancer Research (CCR) and the Division of Cancer Epidemiology and Genetics (DCEG), provide lists of their potentially relevant projects. Also, a list of contracts identified as potentially containing CAM research is provided. OCCAM staff review each project to confirm they are accurately classified as CAM research. Then aspects of each project are identified allowing their placement into a sub-categories based on the type of research and CAM intervention type.

NCI's total CAM expenditure figure includes money awarded for intramural projects (projects conducted within NIH facilities and labs), extramural grants (projects conducted outside of NIH), cooperative agreements, contracts, and supplements. It is important to note the reported figure for total NCI CAM expenditures for a fiscal year only includes projects for which NCI is the primary funder.

TOTAL ESTIMATED CANCER CAM RESEARCH EXPENDITURE

In FY 2009, NCI invested \$114,441,501 for 429 intramural and extramural research projects relevant to CAM. For the purpose of the FY 2009 analysis, the following types of funding are included: intramural projects and extramural grants, cooperative agreements, contracts, and supplements. (See Figure 3.)

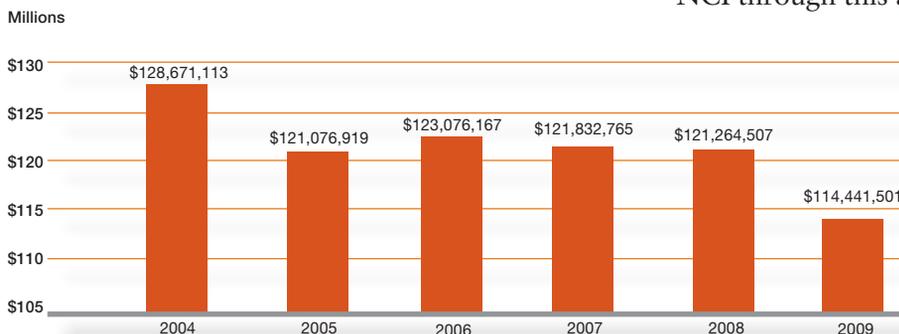
In addition, during FY 2009, NCI used \$21,637,877 in funds from the American Recovery and Reinvestment Act (ARRA) to award 104 CAM research grants.

The above numbers do not include CAM training grants (T and F awards), or K (research career) and R25 (cancer education) grants. These numbers are listed separately in Figure 4.

GRANT AWARDS BY FUNDING OPPORTUNITY ANNOUNCEMENT

In FY 2009, there were 73 funding opportunity announcements (FOA) that yielded cancer CAM grants. The program announcement (PA) "Research Project Grants (Parent R01)" (PA-07-070) was the most productive mechanism for attracting new CAM grants to NCI. A total of 65 of the 210 CAM grants awarded through FOAs in FY 2009 came to NCI through this announcement. (See Figure 5.)

FIGURE 3. NCI CAM EXPENDITURES: FY 2004-2009



* Footnote: Includes grants, cooperative agreements, intramural projects, and contracts. Grants and cooperative agreements are only included when NCI is the primary funding agency. Excludes training grants (Ts, Fs, Ks, and R25s). Total projects include all active projects in FY 2009.

FIGURE 4. NCI CAM TRAINING PROJECTS 2009

Training Grant Mechanisms	Number of Grants	Total Funding
F (31, 32)	5	\$ 142,346
K (01, 05, 07, 22, 23, 24)	24	\$ 2,208,263
R25	3	\$ 681,286
T32	1	\$ 286,091
TOTAL	33	\$3,317,986

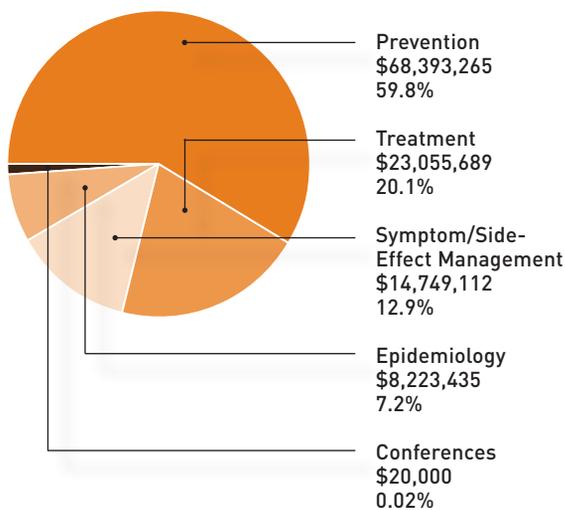
Note: does not include ARRA awards

FIGURE 5. NUMBER OF GRANT AWARDS BY FUNDING OPPORTUNITY ANNOUNCEMENT

*CA05-013	2	PA04-068	1	PA06-314	2	PA07-100	2	PA08-032	1	PAR06-294	4	Total	
*CA05-014	1	PA04-099	2	PA06-315	6	PA07-174	1	PA08-050	1	PAR06-313	21	Solicited	237
*CA07-025	6	PA04-108	1	PA06-351	4	PA07-175	2	PA08-051	1	PAR06-451	1	Total	
*CA08-004	1	PA05-027	1	PA06-400	7	PA07-176	1	PA08-074	1	PAR06-458	1	Unsolicited	150
*CA08-018	1	PA05-040	1	PA06-412	3	PA07-177	1	PA08-121	1	PAR06-505	1	Total	
*ES02-009	1	PA05-059	1	PA06-413	3	PA07-257	2	PA08-149	1	PAR08-020	1	Grants	
*HL08-013	1	PA05-125	2	PA06-414	2	PA07-258	1	PA08-209	1	PAR08-055	15	Awarded	387
*OD03-008	1	PA05-141	1	PA06-440	1	PA07-280	1	PAR03-153	1	PAR08-135	2		
PA02-169	1	PA06-042	2	PA06-510	9	PA07-320	1	PAR04-011	1	PAS02-009	1		
PA04-046	1	PA06-283	2	PA07-007	3	PA07-356	1	PAR05-156	5				
PA04-053	3	PA06-303	1	PA07-070	65	PA07-362	5	PAR06-073	2				

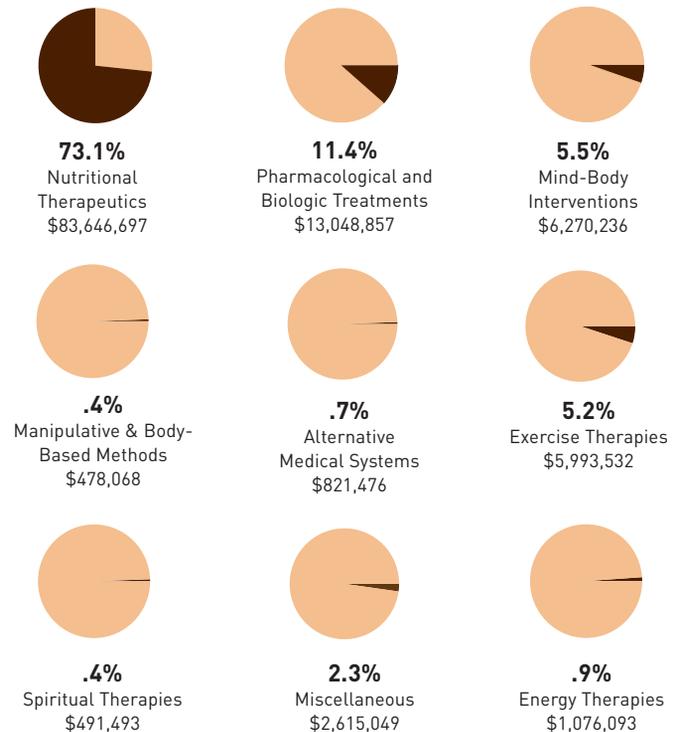
* Request for Applications (RFA).

FIGURE 6. NCI CAM RESEARCH PROJECTS BY RESEARCH TYPE*



* Includes grants, cooperative agreements, intramural projects, and contracts. Grants and cooperative agreements are only included when NCI is the primary funding agency. Excludes training grants (Ts, Fs, Ks, and R25s). Total projects include all active projects in FY 2009.

FIGURE 7. NCI CAM RESEARCH PROJECTS BY CAM CATEGORY*



BREAKDOWN BY RESEARCH TYPE

The accompanying pie-chart (Figure 6) shows the distribution of the projects by prevention, treatment, symptom/side effect management, epidemiology, and conferences. In FY 2009, 59.8% of cancer CAM-related research project funds went to various cancer prevention efforts, while treatment, symptom/side effect management, epidemiology, and conferences received 20.1%, 12.9%, 7.2%, and 0.02%, respectively.

BREAKDOWN BY MAJOR CAM THERAPY CATEGORY

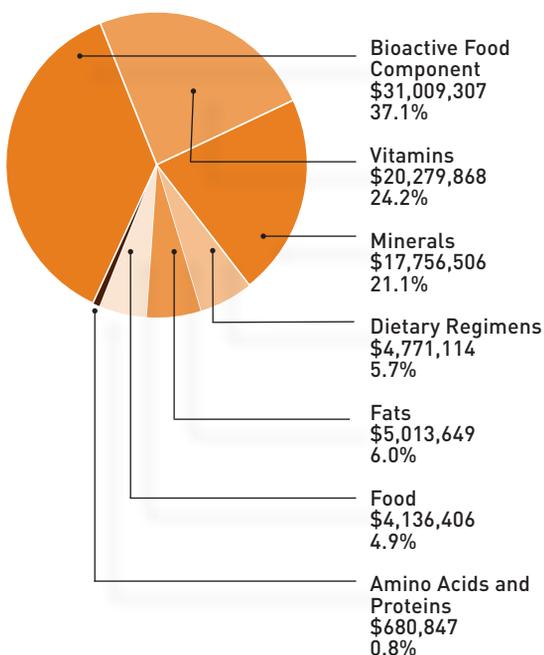
In FY 2009, NCI performed or supported research addressing a variety of CAM therapies (Figure 7). These CAM therapies fall into nine groups: alternative medicine systems, exercise therapies, manipulative and body-based methods, mind-body

interventions, nutritional therapeutics, pharmacological and biologic treatments, energy therapies, spiritual therapies, and miscellaneous (See page 4 for definitions of CAM categories.)

The largest percentage (73.1%) of CAM research funding went to projects that investigated nutritional therapeutics, which can be further broken out into subcategories of research on: foods (e.g., broccoli and berries); minerals (e.g., calcium and selenium); vitamins (e.g., vitamins C and D); bioactive food components (e.g., isoflavones and carotenoids); dietary regimens (e.g., caloric restriction and high fruits and vegetables); fats (e.g., linoleic acid and omega-3); and amino acids and proteins (e.g., N-acetyl cysteine and glycine).

Figure 8 shows the distribution of projects by the subcategories of nutritional therapeutics.

FIGURE 8. NCI CAM NUTRITIONAL THERAPEUTICS PROJECTS BY CATEGORY*



* Includes grants, cooperative agreements, intramural projects, and contracts. Grants and cooperative agreements are only included when NCI is the primary funding agency. Excludes training grants (Ts, Fs, Ks, and R25s). Total projects include all active projects in FY 2009.

FIGURE 9. NCI CAM RESEARCH PROJECTS BY CANCER TYPE*

Bladder	\$1,199,673
Brain	\$78,271
Breast	\$16,507,760
Cervical	\$1,139,517
Childhood Cancer	\$255,131
Colorectal	\$13,328,973
Esophageal	\$1,215,134
Gastric	\$1,513,176
Head and Neck	\$2,734,530
Hematologic	\$1,746,274
Kidney	\$219,375
Liver	\$994,798
Lung	\$10,970,632
Multiple Types	\$34,929,506
Ovarian	\$325,644
Pancreatic	\$2,482,683
Prostate	\$21,294,607
Skin: Melanoma and Non-Melanoma	\$3,460,961
Small Intestines	\$44,856
TOTAL:	\$114,441,501

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