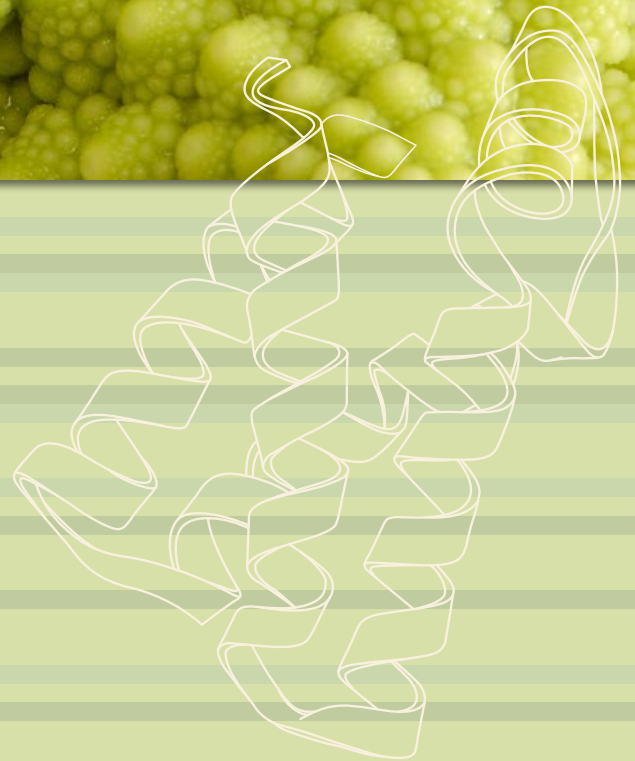




CAM RESEARCH  
PORTFOLIO ANALYSIS  
FY 2011



## The CAM Portfolio Analysis Process

How much money does NCI spend on CAM research each year? This is one of the questions most frequently posed to OCCAM. Researchers, cancer patient advocates, proponents of CAM, and Congress are interested in the answer, and OCCAM is responsible for gathering the data needed to report the total CAM expenditures budget figure each year.

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 sub-categories based on the type of research and CAM intervention investigated.

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.



*NCI's total CAM expenditure figure includes money awarded for intramural projects, extramural grants, cooperative agreements, contracts, and supplements*

**TOTAL ESTIMATED CANCER CAM RESEARCH EXPENDITURE**

In FY 2011, NCI invested \$105,341,737 for 382 intramural and extramural research projects relevant to CAM. For the purpose of the FY 2011 analysis, the following types of funding are included: intramural projects and extramural grants, cooperative agreements, contracts, and supplements (Figure 2).

The above numbers do not include CAM training grants (T and F awards), K (research career) or R25 (cancer education) grants. These numbers are listed separately in Figure 3.

**BREAKDOWN BY RESEARCH TYPE**

The accompanying pie-chart (Figure 4) shows the distribution of the projects by prevention, treatment, symptom/side effects management, epidemiology, and conferences. In FY 2011, 60.8% of cancer CAM-related research project funds went to various cancer prevention efforts, while treatment, symptom/side effects management, epidemiology, and conferences received 18.4%, 15.2%, 5.5%, and 0.03% respectively.

FIGURE 2: NCI CAM EXPENDITURES FY 2003–2011\*

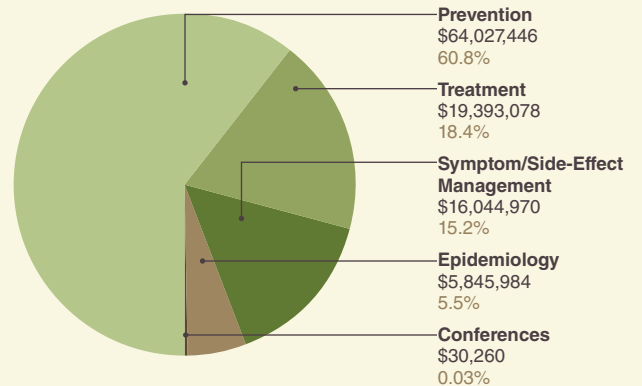


\* Includes grants, cooperative agreements, intramural projects, and contracts. Grants and cooperative agreements are only included when NCI is the primary funding agency. Excludes training grants (T's, F's, K's and R25s). Total projects include all active projects in FY2011.

FIGURE 3: NCI CAM TRAINING PROJECTS 2011

Training Grant Mechanisms	Number of Grants	Total Funding
F (31,32)	4	\$132,157
K (01, 05, 07, 22, 23, 24)	16	\$1,434,554
R25	4	\$760,861
T32	3	\$472,829
<b>TOTAL</b>	<b>27</b>	<b>\$2,800,401</b>

FIGURE 4: 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 (T's, F's, K's and R25s). Total projects include all active projects in FY2011.

**BREAKDOWN BY MAJOR CAM THERAPY CATEGORY**

In FY 2011, NCI performed or supported research addressing a variety of CAM approaches (Figure 5). These CAM therapies fall into nine groups: alternative medicine systems, energy therapies, exercise therapies, manipulative and body-based methods, mind-body interventions, nutritional therapeutics, pharmacological and biologic treatments, spiritual therapies, and miscellaneous.

The largest percentage (70.1%) 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 6 shows the distribution of projects by the subcategories of nutritional therapeutics.

FIGURE 5: NCI CAM RESEARCH PROJECTS BY CAM CATEGORY\*

A	B	C	D	E	F	G	H	I
Nutritional Therapeutics	Pharmacological and Biologic Treatments	Exercise Therapies	Mind-Body Interventions	Miscellaneous	Alternative Medical Systems	Energy Therapies	Manipulative and Body-based Methods	Spiritual Therapies
\$73,822,107 70.1%	\$11,241,945 10.7%	\$7,952,892 7.6%	\$4,554,383 4.3%	\$3,002,474 2.9%	\$2,259,428 2.1%	\$1,195,143 1.1%	\$755,576 0.7%	\$557,790 0.5%

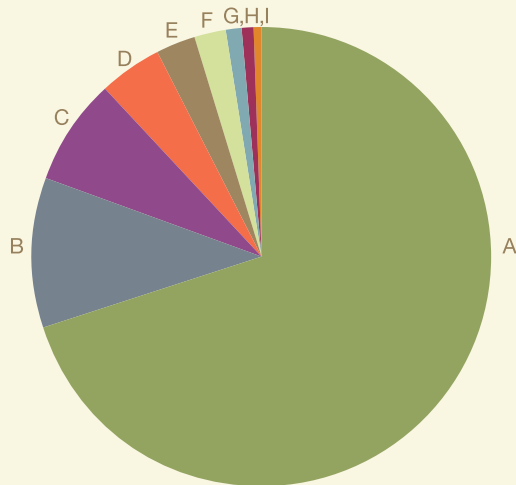
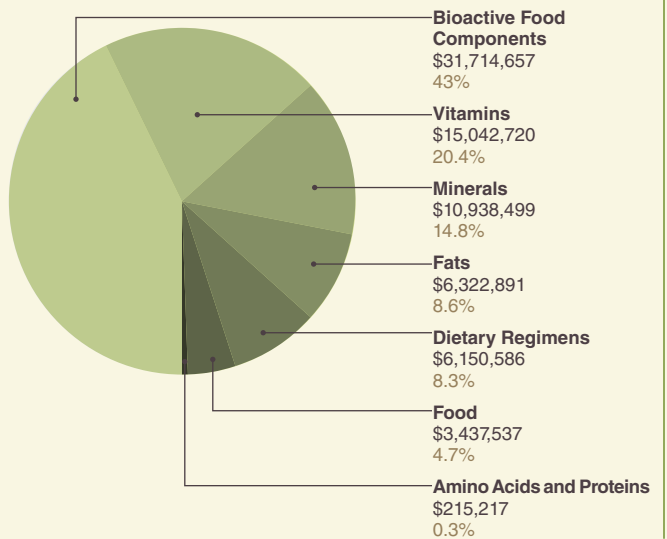


FIGURE 6: NCI CAM NUTRITIONAL THERAPEUTICS PROJECTS BY CATEGORY\*



\* 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 (T's, F's, K's and R25s). Total projects include all active projects in FY2011.

**BREAKDOWN BY CANCER TYPE**

The research projects that make up NCI's FY 2011 CAM research portfolio address 19 categories of cancer types. Among the various categories, prostate, breast, colorectal, and lung cancers received the largest amounts of cancer CAM research funding. Nearly 25% of NCI's cancer CAM research funding supported projects addressing "multiple types" of cancer.

For a complete listing of the cancer type categories and estimated funding amounts, please see Figure 7 below.

FIGURE 7: NCI CAM RESEARCH PROJECTS BY CANCER TYPE\*

Bladder	\$1,821,067
Brain	\$503,280
Breast	\$17,906,361
Cervical	\$606,829
Childhood Cancer	\$480,646
Colorectal	\$18,868,169
Esophageal	\$1,198,777
Gastric	\$2,012,671
Head and Neck	\$3,147,427
Hematologic	\$2,089,455
Kidney	\$41,578
Liver	\$1,015,442
Lung	\$5,980,610
Various (Multiple Types)	\$25,898,621
Ovarian	\$835,888
Pancreatic	\$3,485,480
Prostate	\$15,694,395
Skin: Non-Melanoma and Melanoma	\$3,422,254
Thyroid	\$332,786
<b>Total</b>	<b>\$105,341,737</b>

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