What have we learned?

- The research we fund makes a difference
- We need to carefully balance competing priorities
FY18 Total NIH Funding: $36.4B

NCCIH
$142M
<table>
<thead>
<tr>
<th>Focus of Clinical Study</th>
<th>Institution</th>
<th>Year Published</th>
<th>NIH Grant Support</th>
<th>Citation</th>
</tr>
</thead>
</table>
WHAT COULD POSSIBLY GO WRONG?
Influence of NCCIH funded trials on dietary supplement sales?

Vitamin E (1999 vs. 2008)

St. John's wort (1998 vs. 2008)
Echinacea Sales; 4-Week Periods: 2004 vs. 2005.
NEJM Echinacea study – published July 2005

Source: Nutrition Business Journal 2006
Use of Yoga and Meditation, U.S. Adults Aged 18 and Over

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012 Yoga</td>
<td>9.5%</td>
</tr>
<tr>
<td>2017 Yoga</td>
<td>14.3%</td>
</tr>
<tr>
<td>2012 Meditation</td>
<td>4.1%</td>
</tr>
<tr>
<td>2017 Meditation</td>
<td>14.2%</td>
</tr>
</tbody>
</table>

When setting research priorities NCCIH asks

- Is the topic appropriate to our mission and legislative language?
- Will the research meet a need not filled by other NIH programs?
Herb-Drug Interactions

Herbal Supplement and Potential Interactions

- Black Cohosh
  - Cimicifuga racemosa
  - Although concerns have been raised about possible interactions between black cohosh and various medications, based on the available clinical data, the risk of herb-interactions appears to be small.
  - Read more about the evidence and safety profile of black cohosh
  - Search PubMed for potential herb-drug interactions for black cohosh

- Echinacea
- Garlic
- Ginkgo Biloba
- Ginseng (Asian)
- Goldenseal
- Kava
- St. John’s Wort
NCCIH/ODS CARBON Program

Natural Products NMR Open Data Exchange (U24 Clinical Trial Not Allowed)

Center for Natural Product Technology, Methodology, and Productivity Optimization (U41 Clinical Trial Not Allowed)

Botanical Dietary Supplements Research Centers (U19 Clinical Trial Optional)
The Right FOA for the Right Stage

How does it work?
- Parent R01, R21 or R15
- Other active FOAs

Can the intervention be modified to enhance impact or adherence?
- Natural Product R33 or U01
- Mind Body R33, R34, or U01

Is it still effective when implemented in "real world" conditions?
- Natural Product Clinical UG3/UH3 & U24
- Mind Body Clinical UG3/UH3 & U24

Basic and Mechanistic
Translational
Intervention Refinement and Optimization
Efficacy/Effectiveness
Pragmatic Studies and Dissemination

Can the mechanistic impact be reliably measured in humans?
- Natural Product Clinical R61/R33
- Mind Body Mechanistic R61/R33

Does it work in comparison to an appropriate control?
- Natural Product Clinical UG3/UH3 & U24
- Mind Body Clinical UG3/UH3 & U24
Balance is the Key to Life
Contact
1-888-644-6226
info@nccih.nih.gov
nccih.nih.gov

Connect
nccih.nih.gov/connect