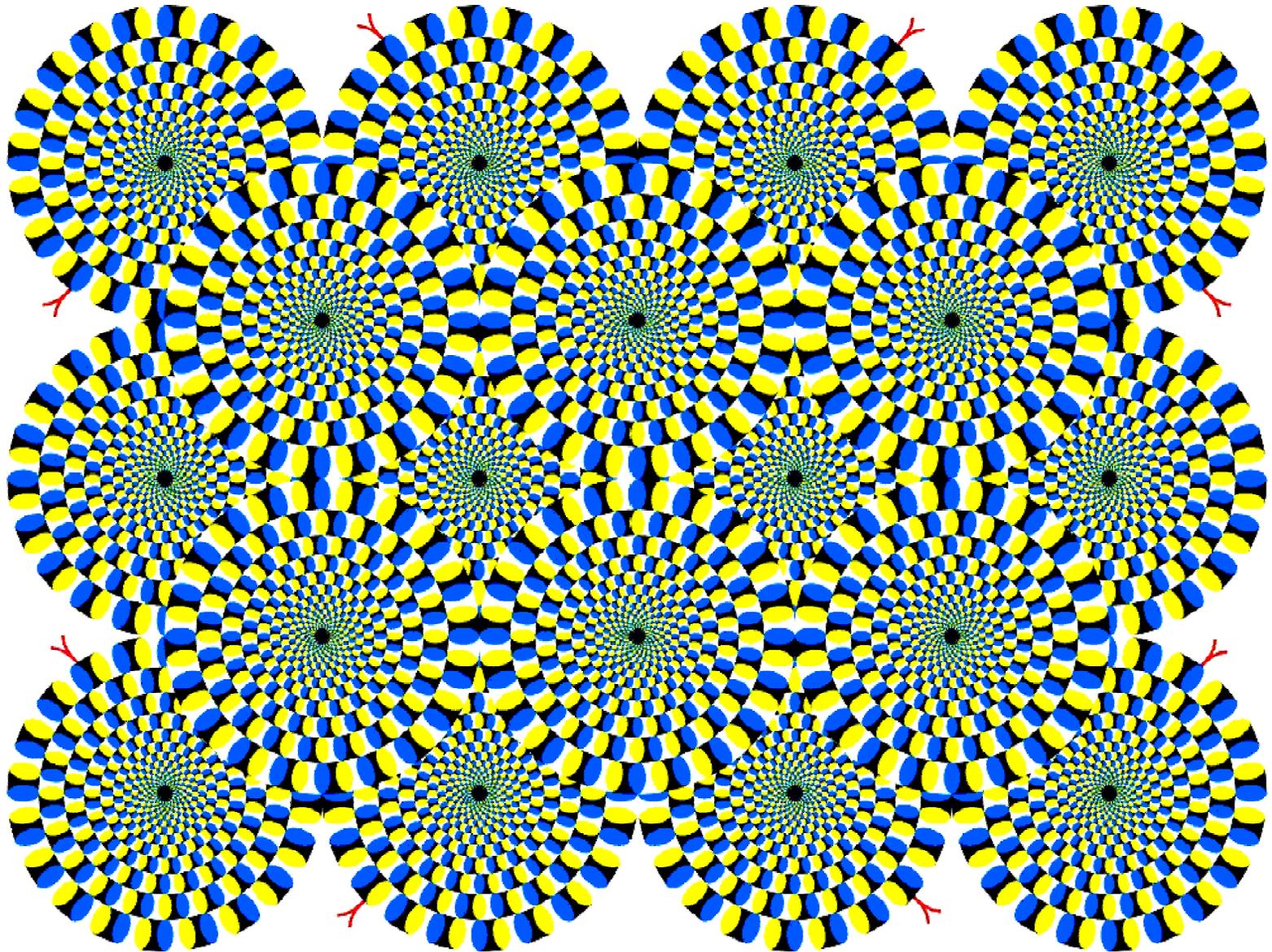


The NIH Roadmap



Briefing with Dr. Zerhouni and More

PRODUCTS

Windows/Mac

GrantSlam Solo:

\$415 (includes PHS 398 & 2590)

GrantSlam Campus:

Call! (req. FileMaker Pro & Server)

GrantSlam Network:

Call! (requires FileMaker Pro)

GrantSlam Updates & Support:

\$66 1 year
\$125 2 years
\$178 3 years

Replacement Manual:

(Manuals included with shipped orders)

\$20 + \$17
shipping/handling

SHIPPING/HANDLING (quantity 1):

Downloads: Free

Ground(3-5 business days): \$17

Next Day Delivery: \$32

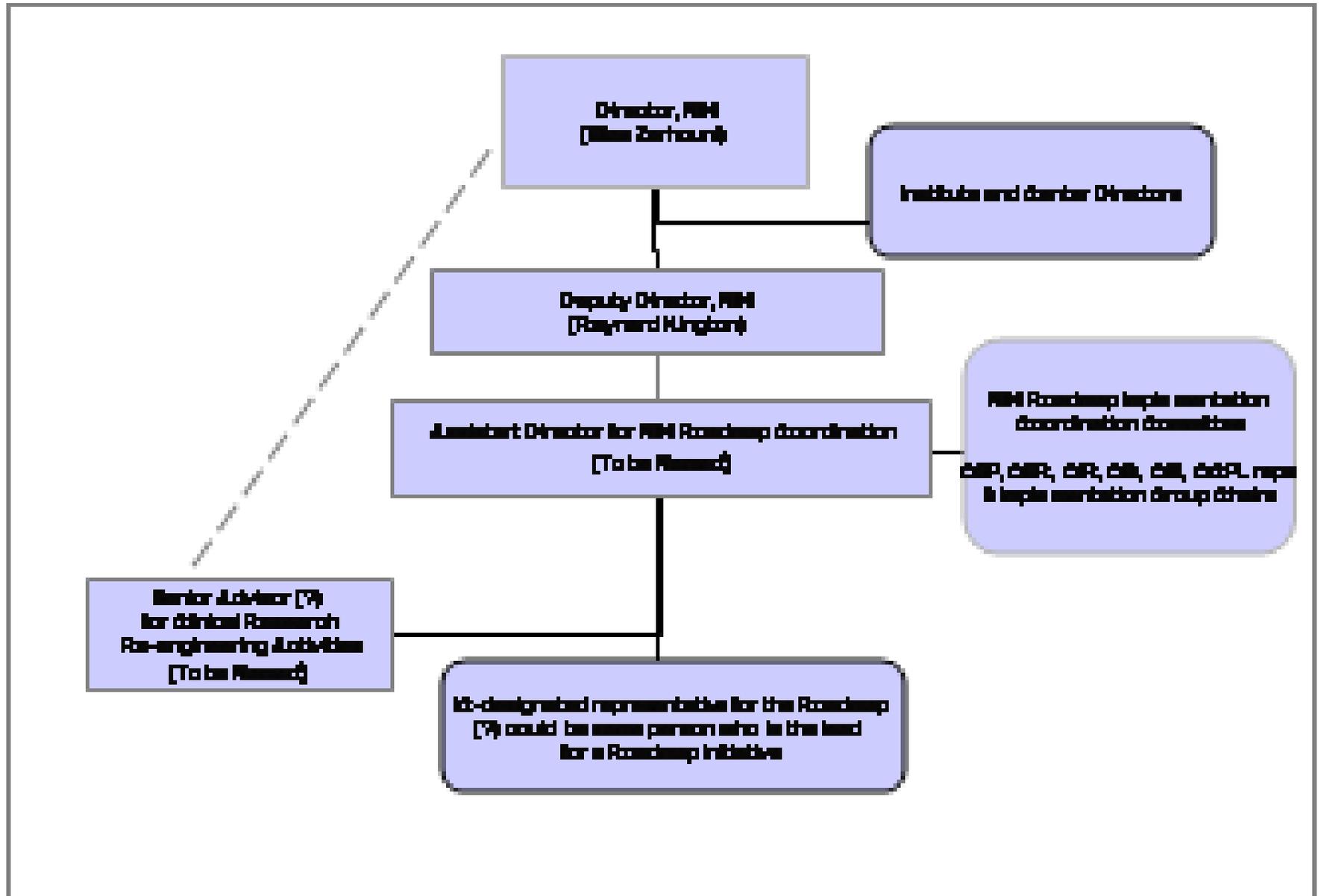
Order by fax: (503) 297-0414

Order by phone: (503) 297-2108 x202

Roadmap Chronology

August 2002	Consultation with over 100 thought leaders
September 2002	IC Directors Leadership Forum
March 2003	Formation of 15 Roadmap Working Groups, involving over 300 experts
April 2003	Presentation to Council of Public Representatives (COPR)
May 2003	Working Groups Develop Proposed Roadmap Initiatives and Plans
June 20, 2003	IC Directors' Retreat
June 30, 2003	Presentation to the Advisory Committee to the Director (ACD)
November, 2003	Established Assistant Director for Roadmap Coordination
FY 2004 & beyond	Staged Implementation

Roadmap Coordination/ Implementation Reporting Structure



Roadmap Implementation

- 🍁 All NIH ICs have made the corporate decision to have a common pool of resources that will be used for all current and future investment in the Roadmap initiative
- 🍁 \$128 M in FY 2004
- 🍁 Over \$2B by FY 2009

NIH Roadmap

Three CORE Themes

-  New Pathways to Discovery
-  Research Teams of the Future
-  Re-engineering the Clinical Research Enterprise

Key Points

🎃 26 initiatives

- ◉◉ **Some conceptual, some mechanistic**
- ◉◉ **16 extramural initiatives in development**
 - 8 published due in Feb/March
- ◉◉ **Some intramural**

🎃 All ICs are part of the initiatives by default

🎃 Monies to fund the initiatives already decided

Director's Innovator Award

- 🎃 New program to support individuals with untested ideas with groundbreaking potential
- 🎃 Totally new peer review process
- 🎃 Provides \$500K/year for five years
- 🎃 Encourages innovation, risk-taking
- 🎃 Expected to be highly competitive

Potential Impacts

Positive

- **Support for the new NIH Director**
- **Community sees opportunities**
- **Potential leverage of selected initiatives by NIH Staff**
- **Monies from the taps used to fund grants for the current and future years until the competitive renewal**

Negative

- **Budget taps now and in the future**
- **Potential scientific and programmatic impact on planned activities**
- **Impact on resources other than budget**
- **Lack of coordination/ownerships/responsibility/implementation details**
- **Lack of integrations with IC mission**
- **Long term impact NIH's future**

Unknown

- **Lots**

NIH Roadmap - Breakout

New Pathways to Discovery

- **Building blocks, biological pathways, and networks**
- **Molecular Libraries and Imaging**
- **Structural Biology**
- **Bioinformatics and Computational Biology**
- **Nanomedicine**

Research Teams of the Future

- **High-Risk Research**
- **Interdisciplinary Research**
- **Public-Private Partnerships**

Re-engineering the Clinical Research Enterprise

NIH Roadmap

New Pathways to Discovery

- **Building blocks, biological pathways, and networks**
 - 2 RFA (each \$7.5 M) – Dr. Giovanni
- **Molecular Libraries and Imaging**
 - 1 RFA (\$7 M) – Dr. Sharmai
- **Structural Biology**
 - 1 RFA (\$5M) – Dr. Dieffenbach
- **Bioinformatics and Computational Biology**
 - 1 RFA (\$14-17M) – Dr. Morris
- **Nanomedicine**

Research Teams of the Future

- **High-Risk Research**
- **Interdisciplinary Research**
 - 2 RFA (1 for \$9 M; 1 for 1.5M)
- **Public-Private Partnerships**
 - Mr. Mowatt & Dr. Mllman

Re-engineering the Clinical Research Enterprise

- 1 RFA (\$7 M) – Dr. Tramont

New Pathways to Discovery

Building blocks, biological pathways, and networks

•• **Metabolomics Technology Development**

- \$7.4 million for FY04; Applications due 3/24/04 (All ICs)

•• **National Technology Centers for Networks and Pathways**

- \$7.4 million for FY04; Applications due 3/16/04 (All ICs)

Molecular Libraries and Imaging

•• **Development of High Resolution Probes for Cellular Imaging**

- \$7 million for FY04; Applications due 11/20/03 (NIGMS)

Structural Biology

•• **Centers for Innovation in Membrane Protein Production**

- \$5 million for FY04; Applications due 3/11/04 (All ICs)

Bioinformatics and Computational Biology

•• **National Centers for Biomedical Computing**

- \$14-17 million for FY04; Applications due 1/23/04 (All ICs)

New Pathways to Discovery – (not launched)

- Building blocks, biological pathways, and networks
 - **Metabolomics Technology Development**
 - \$7.4 million for FY04; Applications due 3/24/04 (All ICs)
 - **National Technology Centers for Networks and Pathways**
 - \$7.4 million for FY04; Applications due 3/16/04 (All ICs)
 - **Assay Development**
 - ML103B R03s; Applications due 3/26/04 (NINDS)
- Molecular Libraries and Imaging
 - **Development of High Resolution Probes for Cellular Imaging**
 - \$7 million for FY04; Applications due 11/20/03 (NIGMS)
 - **Molecular Libraries Screening Centers**
 - MH-05-001 U54; Applications due 6/16/04 (NHGRI)
- Structural Biology
 - **Centers for Innovation in Membrane Protein Production**
 - \$5 million for FY04; Applications due 3/11/04 (All ICs)
 - **Structural Biology Roadmap**
 - GM-04-004 P50; Applications due 3/11/04
- Bioinformatics and Computational Biology
 - **National Centers for Biomedical Computing**
 - \$14-17 million for FY04; Applications due 1/23/04 (All ICs)
 - **Cheminformatics**
 - ML102; Applications due 3/26/04 (NHGRI)

Research Teams of the Future

 High-Risk Research

 Interdisciplinary Research

• • **Curriculum Development Award in Interdisciplinary Research**

➤ \$ 1.5M K07; Applications due 2/24/04 (All ICs)

• • **Exploratory Centers (P20) for Interdisciplinary Research**

➤ \$9 million for FY04; Applications due 2/24/04 (All ICs)

 Public-Private Partnerships

Research Teams of the Future (not launched)

High-Risk Research

Interdisciplinary Research

•• **Curriculum Development Award in Interdisciplinary Research**

- \$ 1.5M K07; Applications due 2/24/04 (All ICs)

•• **Exploratory Centers (P20) for Interdisciplinary Research**

- \$9 million for FY04; Applications due 2/24/04 (All ICs)

•• **Short Interdisciplinary Research Programs**

- DK-04-003 R13; Applications due 2/11/04 (NIDDK)

•• **Health Sciences Research: Biology, Behavior, Environment**

- OB-03-009 T32; Applications due 3/11/04

•• **Training for a New Interdisciplinary Research Workforce (new T mechanism)**

- DK-04-002 K07; Applications due 3/10/04 (NIDDK)

•• **Conferences and Networks to Develop & Improve Methods and Measurement in Interdisciplinary Research**

- No request yet; Applications due 4/04

Public-Private Partnerships

Re-engineering the Clinical Research Enterprise

Multidisciplinary Clinical Research Career Development Program

•• **\$7 million for FY04; Applications due 3/23/04 (All ICs)**

Re-engineering the Clinical Research Enterprise

(not launched)

Multidisciplinary Clinical Research Career Development Program

- **\$7 million for FY04; Applications due 3/23/04 (All ICs)**

Enabling Technologies for Improved Assessment of Clinical Outcomes

- **AR-04-007 U01; Applications due 3/22/04**

Roadmap Implementation: Considerations

- 🍊 Is the initiative truly transforming -- will it dramatically change how or what biomedical research is conducted in the next decade?
- 🍊 Would the outcomes from the initiative be used by and synergize the work of many ICs?
- 🍊 Can the NIH afford NOT to do it?
- 🍊 Will the initiative be compelling to our stakeholders, especially the public?
- 🍊 Does the initiative position the NIH as unique -- doing something that no other entity can or will do?

National Institutes of Health FY 2004 Roadmap Initiatives (Dollars in millions)

Implementation Group	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Total
Molecular Libraries and Imaging	32	67	92	116	129	120	556
Building Blocks, Biological Pathways and Networks	15	29	31	20	21	9	125
Structural Biology	5	10	10	10	10	10	55
Bioinformatics and Computational Biology	12	24	24	24	24	24	132
Nanomedicine	0	6	12	12	25	25	80
Interdisciplinary Research	20	27	26	69	68	59	270
High-risk Research	6	11	17	22	28	33	117
Public-Private Partnerships	1	1	1	1	1	1	3
Re-engineering the Clinical Research Enterprise	38	61	120	174	214	227	833
Total Roadmap Initiatives	128	237	332	448	520	507	2,172

Questions, Comments?

www.nihroadmap.nih.gov

