



Metabolic Engineering

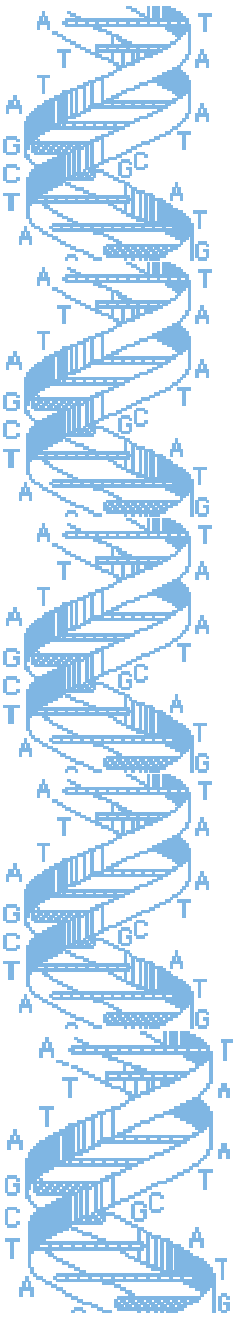
Fred Heineken

Chair

Interagency Metabolic Engineering Working Group (MEWG)

Program Director
National Science Foundation

May 10, 2004

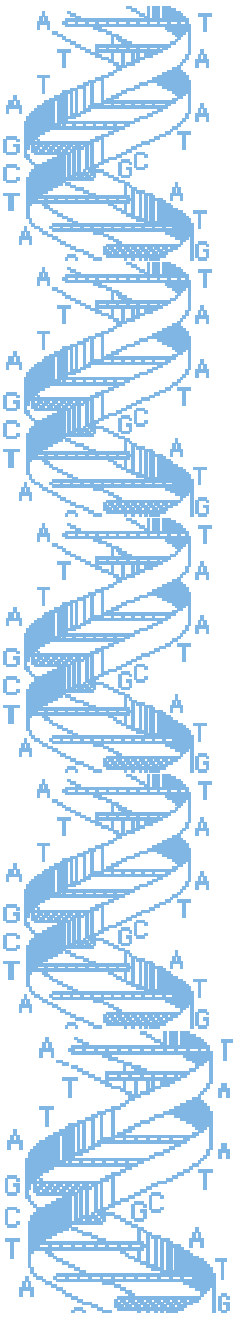




Metabolic Engineering

Participating Agencies/Departments

- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Energy
- Environmental Protection Agency
- National Aeronautics and Space Administration
- National Institutes of Health
- National Science Foundation





Metabolic Engineering

Metabolic Engineering Working Group

Goals

- Promote the Advancement of Metabolic Engineering
- Coordinate Federal Metabolic Engineering Research
- Identify and Address Gaps in Metabolic Engineering Research





Metabolic Engineering

Accomplishments

- Generated an Interagency Web Site
(www.metabolicengineering.gov)
- Held Seven Interagency Conferences on Metabolic Engineering
- Issued Five Interagency Announcements of Opportunities in Metabolic Engineering





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5 Interagency Announcements of Opportunities in Metabolic Engineering
(NSF 98-49) (NSF 99-85) (NSF 01-19) (NSF 02-037) (NSF 03-516)

Topic Areas of Interagency Interest

- Instrumentation, Tools, and Methods to facilitate the Study of Metabolic Pathways in Cells
- Quantitative and Conceptual Models
- Bioinformatics



Metabolic Engineering

Responses to Announcements

	<u>NSF 98-49</u>	<u>NSF 99-85</u>	<u>NSF 01-19</u>	<u>NSF 02-037</u>	<u>NSF 03-516</u>
Pre-Proposals	35	59	0	0	0
Full-Proposals	19	29	33	47	41
Awards	5	6	13	11	10
Award Totals	\$3.6M	\$3.1M	\$7.5M	\$7.6M	\$5.8M





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Issues/Challenges

- Obtain Agreement on Language for a Five-Year Plan
- Obtain Approval of Five-Year Plan by the Subcommittee on Biotechnology Steering Group
- Obtain Agreement on Language for an Interagency Program Announcement and Where to Issue the Announcement
- Obtain Agreement on the Review of Proposals Responding to an Interagency Program Announcement
- Obtain Agreement on Funding Mechanisms for Awards

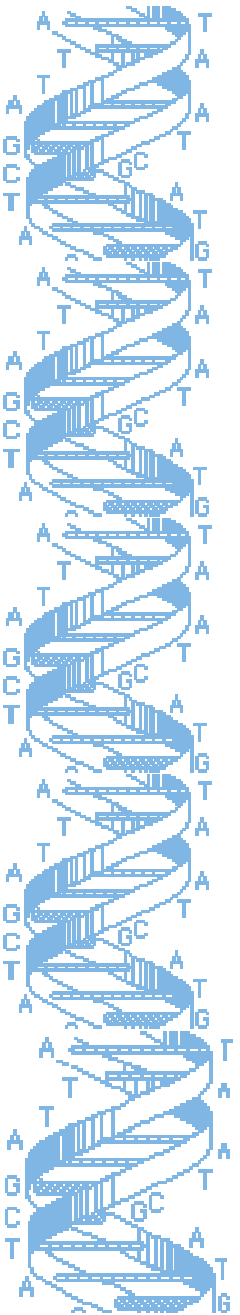




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Resolution of Issues/Challenges

- Five-Year Plan Approved by the Subcommittee on Biotechnology Steering Group
- Program Announcements issued by the National Science Foundation
- Letters of Agreement Signed When Needed
- Management Plan Detailed How Awards are to be Administered





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Lessons Learned

- Be as Flexible as Possible to Accommodate Different Agency Cultures
- Avoid Transferring Funds Amongst the Participating Agencies





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Future Plans

- Issue New Interagency Announcements of Opportunities in Metabolic Engineering
- Sponsor Annual Interagency Conferences on Metabolic Engineering
- Maintain an Up-To-Date Interagency Web Site for Metabolic Engineering

