National Institutes of Health Research into ME/CFS

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> IACFS/ME Conference Ft. Lauderdale, FL October 26-30, 2016



National Institute of Neurological Disorders and Stroke



National Institutes of Health

- NIH's mission is to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.
- NIH is made up of 27 Institutes and Centers, each with a specific research agenda, often focusing on particular diseases or body systems.





Trans-NIH 27 Institutes, Centers and Offices





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National Institutes of Health

 Intramural Research – Research laboratories and NIH Clinical Center on NIH campus in Bethesda, MD



 Extramural Research – Research done by investigators located at institutions outside NIH and located in USA and throughout the world, supported by NIH grant awards





NIH ME/CFS Intramural Study

- Led by Dr. Avi Nath, Clinical Director at NINDS
- IRB approval received
- Studies at the NIH Clinical Center in Bethesda, MD
- Protocol includes detailed phenotyping, neurological and immunological studies



- First healthy control study participant has been to NIH
- Once all procedures are finalized, will begin recruiting 40 individuals with post-infectious ME/CFS who are within 5 years of the onset of the disease
- Extensive analysis and biospecimen collection
- http://mecfs.ctss.nih.gov/





ME/CFS Special Interest Group (SIG)

- Seminars organized by NIH intramural investigators
- Designed to educate and provide perspective for intramural staff and extramural program staff
- Information at: <u>http://mecfs.ctss.nih.gov/sig.html</u>



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- Revitalized in October 2015
- Chaired by Walter Koroshetz, MD, Director of NINDS
- Coordinated by Vicky Whittemore, PhD
- Representatives from 24 Institutes, Offices and Centers across NIH
- Developing short-, intermediate- and long-term goals and strategies to stimulate and support research on ME/CFS





Trans-NIH ME/CFS Working Group

Walter Koroshetz, M.D., Chair National Institute of Neurological Disorders and Stroke Vicky Whittemore, Ph.D., NIH Representative to HHS CFS Advisory

Committee National Institute of Neurological Disorders and Stroke

Harvey J. Alter, M.D., MACP NIH Clinical Center

Catherine Bennett, Ph.D. (*Alternate:* Christine Melchior, Ph.D.) NIH Center for Scientific Review

Joseph Breen, Ph.D. (*Alternate:* Joshua Milner, M.D.) National Institute of Allergy and Infectious Diseases

Milton Corn, M.D. National Library of Medicine

Emmeline Edwards, Ph.D. National Center for Complementary and Integrative Health

Basil Eldadah, M.D., Ph.D. National Institute on Aging

Bill Elwood, Ph.D. Office of Behavioral and Social Science Research

Yolanda Vallejo-Estrada, Ph.D. National Institute of Dental and Craniofacial Research

Adam Felsenfeld, Ph.D. National Human Genome Research Institute

Rohan Hazra, M.D. *Eunice Kennedy Shriver* National Institute of Child Health and Human Development **Mike Humble, Ph.D.** (*Alternate:* Jonathan Hollander, Ph.D.) National Institute of Environmental Health Sciences

Joyce Hunter, Ph.D. National Institute on Minority Health and Health Disparities

Kathy Jung, Ph.D. National Institute on Alcohol Abuse and Alcoholism

Cheryl Kitt, Ph.D. NIH Office of Extramural Research

Martha Matocha, Ph.D. (*Alternate:* Leorey Saligan, Ph.D., RN, CRNP) National Institute of Nursing Research

Cheryl L. McDonald, M.D. (*Alternate:* Shimian Zou, Ph.D.) National Heart, Lung, and Blood Institute

Christopher Mullins, Ph.D. National Institute of Diabetes and Digestive and Kidney Diseases

Ann O'Mara, Ph.D., R.N., M.P.H. National Cancer Institute

Matthew Rudorfer, M.D. National Institute of Mental Health

David Thomas, Ph.D. National Institute on Drug Abuse

Todd Wilson, D.O. (*Alternate:* David Eckstein, Ph.D.) National Center for Advancing Translational Research

James Witter, M.D., Ph.D. National Institute of Arthritis and Musculoskeletal and Skin Diseases

Steve Zullo, Ph.D. National Institute on Biomedical Imaging and Bioengineering



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Trans-NIH ME/CFS Working Group Goals

Short Term Goals FY16-FY17

Complete detailed portfolio analysis	Intermediate Goals	
Issue Notice soliciting Administrative Supplements (NINDS, NIAID, others) and fund awards Issue Request for Information (RFI) to solicit input on areas of research priorities	FY17-FY18	Long Term Goals
	NIH Program Staff attend ME/CFS conference in 2016 and participate in	FY18-FY22
	grant workshop	Constant we die de serbicients de la
	Work with FDA to develop clearly defined endpoints for treatment trials and interventions	Support meritorious clinical trial applications
Develop inventory of available biospecimens and linked phenotypic		Ongoing support of ME/CFS Collaborative Research Centers and
data for use in research	Develop mechanisms for access to available biospecimens for potential identification of biomarkers	Coordinating Center
Organize P2P Federal Partners meeting n Spring 2016		Develop new RFAs as appropriate Research agement
nitiate collaboration for Common Data Elements for ME/CFS (Workshop in October 2016) with the CDC	Launch ME/CFS Collaborative Research Centers and ME/CFS Data Management and Coordinating Center	
Develop plan for communication with and engagement of ME/CFS stakeholders	Foster and develop international collaborations and partnerships to foster ME/CFS research	
Develop FOAs for ME/CFS Collaborative Research Centers and ME/CFS Data Management and Coordinating Center	Assess clinical trial readiness and potential treatment and intervention trials for ME/CFS	
	Leverage CDC health care provider educational materials	





Short-Term Goals

- Stimulate research: Notice of Availability of Administrative Supplements on ME/CFS: Released April 7, 2016 [by NIAID, NINDS, NIDCR, NINR, NCCIH]
 - 7 awards supported by NIAID and NINDS in FY16
- Foster collaboration: Federal Partners meeting held on May 24, 2016 as follow-up to Pathways to Prevention ME/CFS Workshop in December 2014 (NIH, FDA, CDC, AHRQ, HRSA, SSA, CMS)
 - Collaborations identified and initiated. Summary of meeting in preparation.
- Identify research priorities: Request for Information released on May 25, 2016 and responses received on research priorities for ME/CFS
- Common Data Elements Project initiated session on Friday evening
- Foster international discussion and collaboration
 - Discussions held with Canadian Institute for Health Research about partnering opportunities



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ME/CFS Common Data Elements





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ME/CFS Research Funding



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NIH Funding for ME/CFS Research (2007-2015)





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NIH Request for Information

- Emerging needs and opportunities that should be considered as new ME/CFS research strategies are developed
- Analyzing responses and preparing summary of responses
- Next steps include discussion of research priorities and strategies to achieve goals of the research



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- Trans-NIH CFS/ME Working Group developing an extramural research program to support studies on the cause, prevention, diagnosis, pathophysiology and treatment of ME/CFS
- Encourage Investigator-initiated grants submitted through parent grant announcements
- Encourage submission of applications from young investigators to develop pipeline of investigators



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NIH Funding Opportunity Announcements

Notice of Intent to Publish RFAs released on Friday, October 22, 2016

- Multi-disciplinary, multi-site ME/CFS collaborative research centers and a data management coordinating center
- Foster use of common protocols and common data elements across sites to enable longitudinal studies of large cohorts of individuals with ME/CFS
- Enable and support research at academic centers
- Partner with Clinical Science Translational Awards (CTSAs) where possible to provide infrastructure
- Encourage involvment of young and new investigators (both basic science and clinical)
- Require community engagement and involvement to ensure success
- Discussions underway to partner with international partners to expand network of ME/CFS Collaborative Research Centers





Long-term Goals

- Support and expand ME/CFS collaborative research centers as funding allows
- Support the development of new therapies and treatments for ME/CFS
- Support clinical trials for ME/CFS
- Ultimately, to improve the quality of life for all individuals with ME/CFS





For More Information

NIH ME/CFS Website: https://www.nih.gov/mecfs



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