GAO REPORT: <www.gao.gov/archive/2000/he00098.pdf>

SUMMARY OF NIH FINDINGS - excerpts
GAO/ HEHS-00-98 Chronic Fatigue Syndrome

"NIH's CFS research is conducted by both intramural scientists employed by NIH as well as extramural scientists who are awarded grants or contracts for their work. The largest portion of NIH's CFS work has been performed within the National Institute of Allergy and Infectious Diseases (NIAID). Other NIH institutes and centers that have funded CFS research include the National Institute of Mental Health; the National Institute of Neurological Disorders and Stroke; the National Center for Research Resources; the National Cancer Institute; the National Heart, Lung, and Blood Institute; the National Institute of Arthritis and Musculoskeletal and Skin Diseases; and the National Institute on Child Health and Human Development…"

<Intramural>

"While NIH expenditures for CFS research have remained fairly stable over recent years, staffing levels at NIAID, the only institute for which we have data, have decreased. Between 1988 and 1996, the number of full-time-equivalent intramural staff increased from 2.5 to 3.25 staff. Since 1997,however, the number of intramural full-time-equivalent staff at NIAID working on CFS decreased from 2 in 1997 to less than 1 in 1999. Most of the intramural staff working on CFS in NIAID specialized in either nursing or internal medicine. In addition to the intramural staff, NIAID has a program officer assigned to the Virology Branch (which is responsible for the extramural CFS work at NIAID). Over the years, the amount of time devoted by the program officer to CFS work versus other work has ranged from 20 to 60 percent…"

"Recently, NIH moved the responsibility for coordinating efforts on CFS from NIAID to the Office of the NIH Director. NIH officials told us this was to centralize these efforts at NIH."

< 5 years later, has the move from NIAID to the Office of the NIH Director enabled and promoted quality CFS specific research? >

< Extramural>

"External grant applications are reviewed by special emphasis panels of external scientists who rate the merit of each application. Final decisions about the merit of grants are subsequently made by the relevant institute's external advisory council, which meets three times each year…"

"NIH officials told us they established a CFS Special Emphasis Panel for the review of CFS grant applications for a number of reasons, including demonstrating the agency's commitment to CFS research, because CFS is little understood and because so few applications for CFS were being received. The panels were designed to help facilitate consideration and scoring of CFS grant applications that might otherwise not receive scores favorable enough to be funded if reviewed by a standing study section. To date, a total of 30 extramural grants (or investigator-initiated research projects) reviewed by the panel have been funded…"

<The CFS SEP under MOSS is a multidisciplinary committee reviewing pain, sleep, TMJ, FM and other related grants. Are CFS specific grants being funded at the same rate as others submitted to this committee? >

"Members are selected for a special emphasis panel after grant applications are received so that those with appropriate expertise are appointed to serve as reviewers. Like all review panels, members of the CFS Special Emphasis Panel are external researchers, not employees of NIH. An NIH official told us that most applications that have gone to the CFS Special Emphasis Panel have received better scores than they would have if they had gone to a standing study section…"

<The list of 2004 reviewers shows 6 of 37 reviewers demonstrate CFS expertise. (See attached) Is this adequate? >

"The CFS Special Emphasis Panel was designed to help improve the chances of CFS grants getting funded. During fiscal years 1988 through 1999, the funding rate for CFS was 24.31 percent. 32 percent versus 28.31 percent for all grants across the same institutes that fund CFS research. It is plausible that the quality of CFS applications has been inferior to the quality of those in other areas, accounting for the lower rates. It is also plausible that this rate of funding is indeed higher than it would have been had the applications been reviewed by standing panels.

There is no objective way for either NIH or us to know how the use of a special emphasis panel to review grant applications has influenced the scoring and funding of those applications. We have added to our report that agency officials believe that review by the special emphasis panel improves the chances that a grant application will get a fundable score..."

<Use of SEP does not improve the chances of CFS specific grant awards as demonstrated by reviewer expertise, and CFS grants funded in 2004. Will further investigation concur with this conclusion? >

"NIH has used a number of mechanisms to ensure that CFS research was funded. The development of program announcements, creation of the special emphasis panel, the use of selective payment, and support of cooperative research centers seem to demonstrate NIH's commitment to CFS research…"

Report on 2001 – 2003 CFS related activities - Office of Research and Women's Health (ORWH) (Dr. Eleanor Hanna, ORWH)

US Department of Health and Human Services
Chronic Fatigue Syndrome Advisory Committee (CFSAC)
Inaugural Meeting
National Institutes of Health
Building 31C, Conference Room 10
Bethesda, Maryland

September 29th, 2003 10:00 AM to 5:00 PM - MEETING excerpt

Eleanor Hanna, PhD, Office of Research on Women's Health, NIH
Dr. Hanna explained that prior to October 1999, the responsibility for NIH CFS activities was held by NIAID. From October 1999 to March 2001, Dr. Dean simultaneously served as Co-Chair of the CFSCC for the Office of the NIH Director and Chair of the Trans-NIH Working Group.

Dr. Hanna was pleased that CFSAC has been convened since during the interim period, there were expectations that the Trans-NIH Working Group would be responsible for issues that fell under the CFSCC.

In February 2000, NIAID held a State of Science Consultation, which resulted in commissioning the *Defining and Managing Chronic Fatigue Syndrome* report that was subsequently released in October 2001 (AHRQ report number 42). This report essentially found that it was difficult to find treatments to recommend for CFS other than behavioral therapy or exercise treatments.

In June 2000, the last meeting of the CFSCC meeting was held, and the GAO report and future activities were discussed. In October 2000, a State of the Science Symposium was held, and in December 2000, the NIH working group was charged with writing a program announcement that incorporated the findings from this symposium.

Dr. Hanna explained that in April 2001, the responsibility for NIH CFS research was transferred to the Office of Research on Women's Health, OD, NIH. The Trans-NIH Working Group for Research on CFS was re-constituted.

In December 2001, program announcement PA-02-34 was published. This PA reflected the results of the State of Science Symposium; it encouraged multidisciplinary studies that look for connections between different body systems and creatively thinking "outside of the box."

After the publication of the PA, the number of grants reviewed increased from five in January 2002 to 15 for January 2004. Dr. Hanna noted that when she took over this group, one of the problems was that researchers were not submitting grant applications. In October 2002, the first council round of review took place in which applications acknowledging PA-02-34 were received. Since that time, 15 out of 67 applications have been assigned for review through January 2004.

<PA-02-34. Of the (4) new CFS grants in 2004, ONE was CFS specific and was reviewed by the CFS/FM SEP. (14) new FM grants were awarded in 2004 and SEVEN were FM specific, with (6) reviewed by the CFS/FM SEP. At a Chronic Fatigue Syndrome Advisory Committee in March 2004, Dr. Hanna stated that CFS grants are reviewed by the CFS/FM SEP ONLY and no other NIH panel reviews CFS grants. This is not the case with FM grants. Can we determine the total grants submitted in 2004, and those that were CFS specific? >

CFS research funding was $7.2 million for FY 2002, $7.5 million for FY 2003, and $7.7 million for FY 2004. These figures are an increase from the two lowest funding levels since 1994, which were $5.9 million in 1999 and $5.8 million in 2000. NIH funds 24 individual studies in addition to three Cooperative Research Centers. In addition, the National Center for Research Resources makes their facilities available.

<With so few CFS specific awards, the Cooperative Research Centers closed, how is the CFS money being spent? Who is accountable for this budget? >

Dr. Hanna noted that there are immunological studies, circulatory studies, neurological studies, epidemiological studies, Career Development Awards for research in psychiatric co-morbidities of CFS, brain studies that examine serotonin receptors and neurons, behavioral intervention studies, and complex research centers across the nation that supported 19 different studies for CFS researchers. A research grant funded in September 2003 is particularly critical to what the advocacy community was looking for and ranked in the top 5 percentile of applications in its second review. This study (1-RO1-HD-43301-1A1) examines CFS in adolescents at the University of Illinois, Chicago and is co-funded by ORWH and NICHD for a 5-year period.

Dr. Hanna noted that the NIH review process requires a testable hypothesis and researchers must explain how they will accomplish the study. Research proposals must rank in a respectable percentile to be funded. CFS research at NIH will only grow if more grant applications are submitted, accepted, and funded.

<Advocates question bias at onset within the Center for Scientific Review. We question bias in the selection of SEP reviewers. We wonder at the dramatic reduction of CFS awards as opposed to the increase of FM awards. Does this mean that CFS scientists writing proposals AFTER the Centers closed, became less skilled at grant writing? >

Dr. Hanna then reviewed more immediate activities at NIH. In June 2003, a scientific workshop, *Neuro-immune Mechanisms and Chronic Fatigue Syndrome: Will Understanding Central Mechanisms Enhance the Search for the Causes, Consequences and Treatment of CFS?,* was held. They took a whole-body approach. In October 2003, the Trans-NIH Working Group will begin drafting an RFA based on this workshop. She anticipates that based on the amount of time it takes to release a PA, it may be a year before this proposal is released.

NIH and CDC have been trying to work more closely together in the last few years and are exploring the possibility of putting out joint RFAs in areas where their interests intersect….

<Has the NIH trans-working group been meeting? Do we have evidence of increased collaboration between CDC and NIH? CFS studies within NIH are conducted within the Division of Viral and Rickettsial Diseases, yet, within NIH, the National Institute of Allergy and Infectious Diseases absolved itself of CFS oversight in 2002 (see enclosed meeting minutes). How has this affected NIH and CDC combined efforts? >

Specific recommendations from the 2003 the workshop can be found at: www4.od.nih.gov/orwh/cfs-newhome.html.

National Institutes of Health
National Institute of Allergy and Infectious Diseases
National Advisory Allergy and Infectious Diseases Council

Minutes of Meeting - May 30, 2002

The 141st meeting of the National Advisory Allergy and Infectious Diseases Council (NAAIDC) was convened at 8:30 a.m., on Thursday, May 30, 2002 in Conference Rooms E1/E2, F1/F2, C1/C2 and D, Natcher Conference Center, National Institutes of Health. Dr. Anthony S. Fauci, Director of the National Institute of Allergy and Infectious Diseases (NIAID), presided as Chairman.

* editing of subtext

VI. **REPORT OF THE DMID COUNCIL SUBCOMMITTEE -** Carole A. Heilman, Ph.D., Director, DMID

* editing of subtext

In follow-up to the last Council meeting, Dr. Heilman returned to the question of whether the Subcommittee should approve a concept to renew the Chronic Fatigue Syndrome Cooperative Research Centers; Dr. David Morens, NIAID's CFS Program Officer, led this part of the discussion. At the January Council meeting, discussions had focused on the need to bring scientific expertise, in addition to that of infectious diseases, to CFS research due to the multifaceted nature of the illness. NIAID had set aside funds for this effort and had attempted to secure co-funding from other Institutes or Centers to fully fund this effort. In January, the Subcommittee asked Dr. Morens to make further attempts to solicit co-funding from other NIH entities to help support the Centers before a decision was made on the concept. He reported back at the current Subcommittee meeting that such efforts were unsuccessful. He then presented options to the subcommittee. After careful consideration and a lengthy discussion of all the options, the Subcommittee ultimately voted not to renew the Centers. Instead, they unanimously voted to give the money that NIAID had set aside for this concept to the NIH Office for Research on Women's Health, which coordinates CFS research for the entire NIH, to work with all relevant NIH Institutes and Centers to develop a new, trans-NIH CFS research effort.

Center for Scientific review – excerpts on selection process

http://www.csr.nih.gov/Events/studysectionservice.htm

Selection Criteria

General Requirements

- Candidates must be recognized authorities in their field.
- Candidates must be a principal investigator on a research project comparable to those being reviewed.
- There must be diversity with respect to the geographic distribution, gender, race and ethnicity of the membership.
- Candidates must be dedicated to high quality, fair reviews.

Expertise Requirements

- Expertise is the paramount consideration when developing/updating a study section roster.
- Each scientific area reviewed by the study section needs appropriate expert representation.
- The SRA must ensure that the study section does not become static. Care must be taken to ensure that the study section remains responsive to emerging areas of science and shifting scientific boundaries.
- It is important to consider that one-fourth of study section members will rotate off each year. This could dramatically affect the breadth of a study section's expertise without proper long-term planning.

Study Section-Specific Requirements

- Unique characteristics of study sections must be factored into selection of members. The breadth of science, the multidisciplinary or interdisciplinary nature of the applications, and the types of applications or grant mechanisms being reviewed play a large role in the selection of appropriate members.

Examples:

1 Study sections that review multidisciplinary or interdisciplinary applications have a greater need for scientists who have broader expertise or who have demonstrated the capacity to appreciate and evaluate areas of science outside their immediate area of expertise.

< The CFS SEP is a multidisciplinary review panel under Musculoskeletal, Oral and Skin Sciences (MOSS). The broader expertise can include FM, pain syndromes, TMJ, sleep disorders, health behaviors and so on. Is CFS scientific discovery disabled as long as the majority of review panel scientists have broader expertise? In addition, the professional interests, grant history and publications of these reviewers, demonstrate no knowledge of CFS work. See page 15- 26. >

2 Study sections covering clinically oriented research have a greater need for reviewers who are clinicians.

<Of the reviewers, (7) of 37 are MD's. Does this mean that few clinical investigations are submitted? >

3 Study sections reviewing bioengineering or bioinformatics applications or applications involving partnerships with small businesses have a greater need for scientists who work in non-academic settings.
- Group dynamics should be considered when selecting study section members.

Examples:

1 There is a need for balance in the level of seniority represented among members of a study section. Too many senior-level reviewers are just as problematic as too few.
2 There is a need to balance those who are generalists and provide the broader perspective needed for evaluation of the overall impact of a given project and those who are specialists and provide a more focused perspective needed to ensure proper evaluation of feasibility.
3 For study sections that cover multiple scientific areas or disciplines within the context of a common theme, there is a particular need for reviewers who bridge these areas or disciplines so as to prevent factions from developing within the study section.

For further information about the nomination process, please go to:
<http://www.csr.nih.gov/Events/studysectionservice.htm>

Selecting Study Section Members

- After identifying potential reviewers, further information is needed regarding:

1 Their NIH or other agencies grant history
2 Their publication history
3 Their professional status and/or record of accomplishments
4 Their review experience

- In terms of review experience, it is particularly important to determine:

1 Whether these potential study section members are currently serving on any other study section (concurrent service on two study sections as a member of one and an ad hoc reviewer on another is allowed).
2 Whether they are serving on an Institute's Council (concurrent service on an Institute's Council and a study section, even as a temporary reviewer, is not allowed).
3 Whether they have had prior review experience either as a temporary member or as a previous study section member (a second term is allowed, but only after an absence of at least a year).

- As a part of the selection process, most individuals are asked to first serve on the study section as a temporary reviewer, since the reviewer's objectivity and ability to work in a group are important considerations for membership. Service as a temporary reviewer is a mechanism for preparing reviewers for regular study section membership as well as a means for bringing needed expertise and a fresh perspective to a study section.

<The CFS SEP is an Ad Hoc Committee that meets three times per year with a different chairperson each session. From 1992 until 1998, Dr. Ben Natelson, a CFS expert, chaired the CFS SEP review panels. Without a standing chair, is the committee less effective for CFS specific funding? >

Summary of Questions

5 years later, has the move from NIAID to the Office of the NIH Director been effective with CFS specific research?

The CFS SEP under MOSS is a multidisciplinary committee reviewing pain, sleep, TMJ, FM and other related grants. Are CFS specific grants funded at the same rate as others submitted to this committee?

The list of 2004 reviewers shows 5 of 37 reviewers demonstrate CFS expertise. (See attached) Is this adequate?

Use of SEP does not improve the chances of CFS specific grant awards as demonstrated by reviewer expertise, and CFS grants funded in 2004. Will further investigation concur with this conclusion?

PA-02-34. Of the (4) new CFS grants in 2004, ONE was CFS specific and was reviewed by the CFS/FM SEP. (14) new FM grants were awarded in 2004 and SEVEN were FM specific, with (6) reviewed by the CFS/FM SEP. At a Chronic Fatigue Syndrome Advisory Committee in March 2004, Dr. Hanna stated that CFS grants are reviewed by the CFS/FM SEP ONLY and no other review committee. This is not the case with FM grants. Can we determine the total grants submitted in 2004, the number that were CFS specific and the number funded?

With so few CFS specific awards, and the Cooperative Research Centers closed, how is the CFS money spent? Who is accountable for this budget?

Advocates question bias at onset within the Center for Scientific Review. We question bias in the selection of SEP reviewers and we wonder at the dramatic reduction of CFS awards as opposed to the increase of FM awards. Does this mean that CFS scientists writing proposals AFTER the Centers closed, became less skilled at grant writing?

Has the NIH trans-working group been meeting? Do we have evidence of increased collaboration between CDC and NIH? CFS studies within NIH are conducted within the Division of Viral and Rickettsial Diseases, yet, within NIH, the National Institute of Allergy and Infectious Diseases absolved its CFS oversight in 2002 (see enclosed meeting minutes). How has this affected NIH and CDC combined efforts?

The CFS SEP is a multidisciplinary review panel under Musculoskeletal, Oral and Skin Sciences (MOSS). The broader expertise can include FM, pain syndromes, TMJ, sleep disorders, health behaviors and so on. Is CFS scientific discovery disabled as long as the majority of review panel scientists have broader expertise? In addition, the professional interests, grant history and publications of these reviewers, demonstrate no knowledge of CFS work. (See page 15- 26) Can selection bias be investigated?

Of the reviewers, 7 of 37 are MD's. Does this mean that few Clinical Investigations are submitted?

The CFS SEP is an Ad Hoc Committee that meets three times per year with a different chairperson each session. From 1992 until 1998, Dr. Ben Natelson, a CFS expert, chaired the CFS SEP review panels. Without a standing chair, is the committee less effective for CFS specific funding?