

Solve ME/CFS Initiative

Leveraging patient-centered research to cure ME/CFS

FORMERLY KNOWN AS THE CFIDS ASSOCIATION OF AMERICA

Welcome! Our 1st Research Roundtable

Our Sincere Thanks

Massachusetts CFIDS/ME & FM Association

Education, Support and Advocacy since 1985



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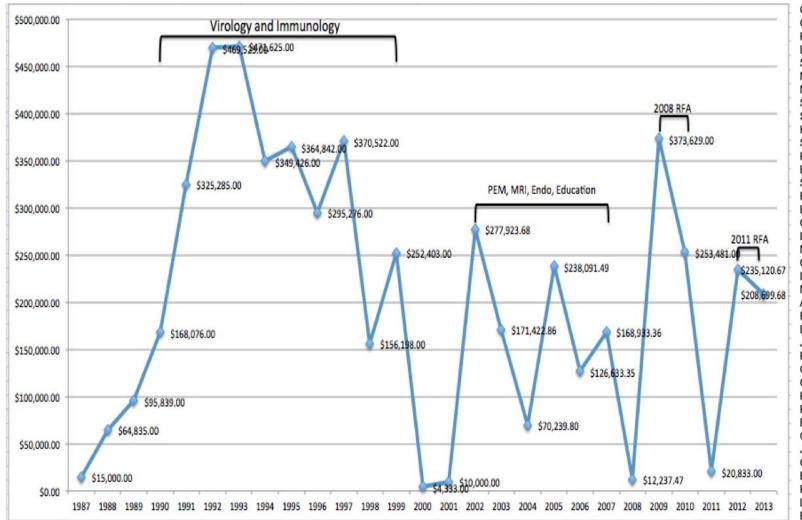
Our Mission:

Make ME/CFS understood, diagnosable and treatable.

Our Strategy:

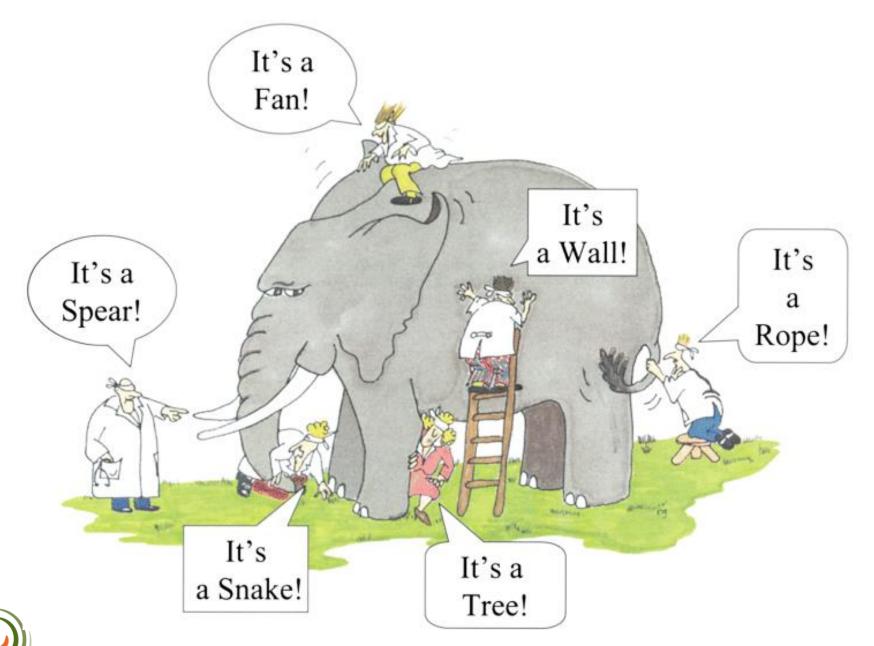
Stimulate participatory research aimed at the early detection, objective diagnosis and effective treatment of ME/CFS through expanded public, private and commercial investment

Largest and Most Successful Private Funder of ME/CFS Research







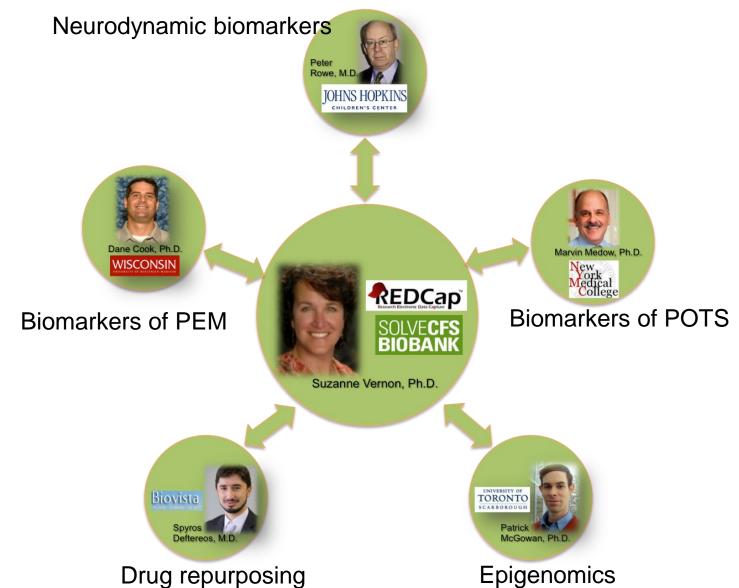


2008 – 1st ME/CFS Research Network

- Successes
 - Engaged new investigators and forged rew collaborations
 - Projects were both hypothesis testing and
 - hypothesis generating (a 🔊
 - Seed funded led to bigger funding \$7.5 milling
 - Several high impact collaborations
- Less
 - Septimons ufficient to make ME/CFS a focus of investigators research portfolio
 - Lack of access to well-characterized patients and samples
 - Lack of infrastructure to share and archive the data
 - Investigators move on



2011 – Discovery, Validation, Subtypes





Building the

Michael Houghton, PhD lenta University of Alberta

Ce BaseBiomarker Validation **Cluster Investigation**

(value 🚣 GSK study)

ANS autopartition tes

Generate douniversity of Missouri ples in the Sc reCFS BioBan this resource to the resourch community and to he ection. rese

Derya Unutmaz, M.D. **NYU Medical Center**

the value of mal

Immune Signatures



Steve Elledge, Ph.D. HHMI, Harvard

Antivirus fingerprint





Virome



Armin Alaedini, PhD Columbia University

Autoimmune Subtypes



Patrick McGowan, Ph.D.

University of Toronto **Epigenomics**



Drug Repurposing

Self-Report Information

















SolveCFS BioBank



SolveCFS BioBank – 2015 and Beyond

- Dr. Ralph & Marian Falk Medical Research
 Trust Catalyst Award \$500,000 (11/14-11/15)
 - Objective of this is to expand epigenetics study and "restock" the SolveCFS BioBank
 - Dr. Lucinda Bateman Clinical Investigator responsible for enrolling 300 participants: Collect clinical and survey information; blood
 - Dr. Patrick McGowan epigenetics



Questions: New Criteria

- Will you be using the new SEID criteria in your research studies?
 - Clinical diagnostic criteria that is not operationalized for research, requires clinical intuition.
 But these diagnostic criteria help focus research
- What impact will these new criteria have on new research, and will studies using them be comparable to studies using Fukuda or CCC criteria?
 - Help guide research: boon for objective diagnostics outcomes, devices
- Are there any particular areas of research that you are interested in sponsoring (e.g. areas noted in either P2P or IOM reports)?
 - Data from the SolveCFS BioBank was cited throughout the IOM report. FDA indicates the "core signs, symptoms and decrements of specific functioning" must be defined
- How do you ensure a diagnosis of ME/CFS is valid when asking for/collecting samples i.e. who determines diagnosis and how is this determined?
 - Current biosample inventory collected from 300 patients by Klimas, Peterson, Lapp and Bateman;
 - >1,200 participants in the SolveCFS Biobank, self-report diagnosis
 - 300 participants from current grant to restock
- Will this change with use of the new IOM clinical diagnostic criteria?
 - SolveCFS BioBank "learning system"

Questions: Biology

- Vagus Nerve Infection theory by Dr. Michael VanElzakker
 - Important hypothesis that I agree with; challenges in testing
- If you can, please comment on the issue of children "inheriting" CFS from their parents. I breastfed and am also wondering if that might have put my 8 yr. old daughter
 - ME/CFS results from a combination of genetics (vulnerability) and the environment (exposures including infection)
- I am fairly sure of when I got CF FM. I had my first surgery wa slow loss of energy to follow. I am chem sensitive now. Some people claim chem. started their prob. Why are there so many diff. causes noted as offsetting of conditions?
 - Because these conditions are defined by non-specific symptoms like pain and fatigue. Must couple this important, clinically meaningful information with biological information – biomarkers (e.g., antibodies, cytokines, imaging)
- Has cord blood been considered in helping with the effects of Chronic Fatigue?

Why and What's Next

- For Dr. Vernon: Thank you for heading up SMCI's innovative and successful research program! You have announced you are leaving SMCI. Can you tell us why, and what are your next steps?
 - It has been a successful 7 years
 - Transformed \$1.2M in research funding to >\$12M
 - Lowered barriers to research with the SolveCFS BioBank
 - Attracted some of the brightest investigators from the best institutions into ME/CFS research
 - Return to research (and that includes ME/CFS)!
 - Continue to consult with SMCI, write the next grant
 - Stayed tuned





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