CONFERENCE PROGRAM

TABLE OF CONTENTS

AGENDA
- Agenda
- Small Group Session Information

CONFERENCE INFORMATION
- Conference Grant Overview
- Conference Organizers
- Questions & Comments
- Funding Organizations
- Participant & Speaker Directory

SPEAKER INFORMATION
- Speaker Information, Talk Summaries, & Key References

KEY SLIDES
- Key Presentation Slides

NOTES
- Notes Pages
**CONFERENCE AGENDA**

**Bedside-to-Bench Conference**

**September 3-5, 2008**

**"IDIOPATHIC FATIGUE & AGING"**

**SEPTEMBER 3, 2008 - EVENING SESSION**

<table>
<thead>
<tr>
<th>TIME</th>
<th>SPEAKER</th>
<th>TOPIC/AGENDA ITEM</th>
<th>SPEAKER INFO TAB PAGE #</th>
<th>KEY SLIDES TAB PG #</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:00PM</td>
<td></td>
<td>Buffet Dinner will be served.</td>
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**Introduction & Overview**

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<thead>
<tr>
<th>TIME</th>
<th>SPEAKER</th>
<th>TOPIC/AGENDA ITEM</th>
<th>SPEAKER INFO TAB PAGE #</th>
<th>KEY SLIDES TAB PG #</th>
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</thead>
<tbody>
<tr>
<td>6:00-6:15PM</td>
<td>Taffet &amp; Alexander</td>
<td>Orientation, &quot;Fatiguability&quot;</td>
<td>1</td>
<td>N/A</td>
</tr>
<tr>
<td>6:15-6:35PM</td>
<td>Nayfield &amp; Eldadah</td>
<td>Highlights of previous exploratory conf, challenges of research in the field, domains of study, why focus on energy balance</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td>6:35-6:55PM</td>
<td>Ferrucci</td>
<td>Dynamics of energy balance and use and relation to fatigue</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>6:55-7:30PM</td>
<td></td>
<td>Discussion</td>
<td></td>
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**SEPTEMBER 4, 2008 - DAY 1**

<table>
<thead>
<tr>
<th>TIME</th>
<th>SPEAKER</th>
<th>TOPIC/AGENDA ITEM</th>
<th>SPEAKER INFO TAB PAGE #</th>
<th>KEY SLIDES TAB PG #</th>
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</thead>
<tbody>
<tr>
<td>8:15AM</td>
<td></td>
<td>Continental Breakfast will be served.</td>
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</table>

**Energy utilization and its relationship to fatigue**

<table>
<thead>
<tr>
<th>TIME</th>
<th>SPEAKER</th>
<th>TOPIC/AGENDA ITEM</th>
<th>SPEAKER INFO TAB PAGE #</th>
<th>KEY SLIDES TAB PG #</th>
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</thead>
<tbody>
<tr>
<td>9:00-9:30AM</td>
<td>Ferrucci</td>
<td>Gender, body comp, diet, PA and energy balance</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>9:30-10:00AM</td>
<td>Celi</td>
<td>Thyroid and energy expenditure</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td>10:00AM-10:30AM</td>
<td>Alexander</td>
<td>Relationship between maximal and submaximal oxygen use and self-reported fatigue. Comment about “-ability” vs usual performance “fatiguability”</td>
<td>6</td>
<td>34</td>
</tr>
<tr>
<td>10:30AM-11:30AM</td>
<td>Taffet &amp; Hadley</td>
<td>What does evidence about energy consumption and mitochondrial function with exercise have to do with fatigue of aging</td>
<td>7</td>
<td>40</td>
</tr>
<tr>
<td>11:30AM-12:10PM</td>
<td></td>
<td>Discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:10PM-1:00PM</td>
<td>LUNCH</td>
<td></td>
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**Mitochondrial and muscle contributions to energy balance and fatigue**

<table>
<thead>
<tr>
<th>TIME</th>
<th>SPEAKER</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1:00PM-1:30PM</td>
<td>Wallace</td>
<td>Mitochondrial function and energy balance</td>
<td>9</td>
<td>N/A</td>
</tr>
<tr>
<td>1:30PM-2:00PM</td>
<td>Goodpaster</td>
<td>Mitochondrial dysfunction and muscle</td>
<td>10</td>
<td>49</td>
</tr>
<tr>
<td>2:00PM-2:30PM</td>
<td>Kent-Braun</td>
<td>Neural and Muscular Factors in Muscle Fatigue of Older Adults</td>
<td>12</td>
<td>56</td>
</tr>
<tr>
<td>2:30PM-3:10PM</td>
<td></td>
<td>Discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:10PM-3:30PM</td>
<td></td>
<td>Break</td>
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**Central processes including inflammation and oxidative stress**

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<tr>
<th>TIME</th>
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</thead>
<tbody>
<tr>
<td>3:30PM-4:00PM</td>
<td>Meeusen</td>
<td>Central Fatigue – the Serotonin Hypothesis and Beyond</td>
<td>13</td>
<td>57</td>
</tr>
<tr>
<td>4:00PM-4:30PM</td>
<td>Dantzer</td>
<td>From Inflammation to Sickness, Depression and Fatigue</td>
<td>16</td>
<td>58</td>
</tr>
<tr>
<td>4:30PM-5:00PM</td>
<td>Andrade</td>
<td>Oxidative stress and muscle fatigue</td>
<td>17</td>
<td>60</td>
</tr>
<tr>
<td>5:00PM-5:40PM</td>
<td></td>
<td>Discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:40PM-6:40PM</td>
<td></td>
<td>Working dinner in small groups. See Discussion Topics On Next Page.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6:40PM-7:40PM</td>
<td></td>
<td>Group Reports, Feedback, &amp; Discussion</td>
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**SEPTEMBER 5, 2008 - DAY 2**

<table>
<thead>
<tr>
<th>TIME</th>
<th>SPEAKER</th>
<th>TOPIC/AGENDA ITEM</th>
<th>SPEAKER INFO TAB PAGE #</th>
<th>KEY SLIDES TAB PG #</th>
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<tbody>
<tr>
<td>7:30AM</td>
<td></td>
<td>Continental Breakfast will be served.</td>
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</table>

**Disease-based models of fatigue mechanism and relation to aging and energy balance**

<table>
<thead>
<tr>
<th>TIME</th>
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<th>KEY SLIDES TAB PG #</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00AM-8:30 AM</td>
<td>Mancini</td>
<td>Congestive heart failure, oxygen utilization, and muscle NMR</td>
<td>18</td>
<td>N/A</td>
</tr>
<tr>
<td>8:30AM-9:00AM</td>
<td>Gerschenson</td>
<td>HIV</td>
<td>18</td>
<td>N/A</td>
</tr>
<tr>
<td>9:00AM–9:30AM</td>
<td>Cleeland</td>
<td>Fatigue and Cancer Treatment: A Model for Studying Fatigue</td>
<td>19</td>
<td>61</td>
</tr>
<tr>
<td>9:30AM-10:00AM</td>
<td>Zee</td>
<td>Sleep and Energy Balance</td>
<td>20</td>
<td>67</td>
</tr>
<tr>
<td>10:30AM-11:10AM</td>
<td></td>
<td>Discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:10AM-11:30AM</td>
<td></td>
<td>Break</td>
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**Methodological Issues**

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<thead>
<tr>
<th>TIME</th>
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</tr>
</thead>
<tbody>
<tr>
<td>11:30AM-12:00PM</td>
<td>Butt</td>
<td>Fatigue measurement approaches, NIH PROMIS initiative</td>
<td>21</td>
<td>69</td>
</tr>
<tr>
<td>12:00PM-12:30PM</td>
<td>Chen</td>
<td>Performance measures related to energy expenditure and physical activity (including doubly labeled water, actigraphy)</td>
<td>23</td>
<td>74</td>
</tr>
<tr>
<td>12:30PM-1:30PM</td>
<td></td>
<td>Lunch and small group sessions. See Discussion Topics On Next Page.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:30-2:30PM</td>
<td></td>
<td>Group Reports, Feedback, &amp; Discussion. Summary discussion of priorities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:30PM</td>
<td></td>
<td>OPEN SESSION ENDS</td>
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SMALL GROUP SESSION ASSIGNMENT
All Small Group Sessions will be asked to identify and report back on:
1. Key Gaps
2. Barriers & Opportunities
3. Methodological Work
4. Research Priorities

SMALL GROUP SESSION INFORMATION
Please sign up for your preferred small group sessions at the registration table. Small Group Sessions are as follows:

SEPTEMBER 4, 2008 (WORKING DINNER)
QUESTION #1 (For groups 1A & 1B): What are the key mechanisms underlying fatigue with aging?

GROUP #1A – Will focus on this question from a clinical (human) research perspective
   Moderator: Ferrucci
   Recorder: Studenski
   Room: Glen Echo

GROUP #1B – Will focus on animal or basic-bench research foci.
   Moderator: Taffet
   Recorder: Kent-Braun
   Room: Great Falls

QUESTION #2 (For groups 2A & 2B): What are appropriate measures of fatigue?

GROUP #2A – Will focus on this question from a clinical (human) research perspective
   Moderator: Alexander
   Recorder: Nayfield
   Room: Glen Echo

GROUP #2B – Will focus on animal or basic-bench research foci.
   Moderator: Eldadah
   Recorder: Goodpaster
   Room: Timberlawn

SEPTEMBER 5, 2008 (WORKING LUNCH)
QUESTION #1 (For groups 1A & 1B): How do we include fatigue measures in human observational and clinical trial studies?

GROUP #1A – Will focus on this question from a clinical (human) research perspective
   Moderator: Studenski
   Recorder: Butt
   Room: Glen Echo

GROUP #1B – Will also focus on this question from a clinical (human) research perspective
   Moderator: Ferrucci
   Recorder: Alexander
   Room: Great Falls
QUESTION #2 (For groups 2A & 2B): How do we account for diseases and comorbidities that impact on fatigue?

GROUP #2A – Will focus on this question from a clinical (human) research perspective
   Moderator: Nayfield
   Recorder: Eldadah
   Room: Glen Echo

GROUP #2B - Will focus on animal or basic-bench research foci.
   Moderator: Goodpaster
   Recorder: Taffett
   Room: Timberlawn
CONFERENCE GRANT OVERVIEW
In 2003, the AGS was awarded NIA support for a three-year conference series “Bedside to Bench”. The goal of this conference series is to heighten research attention on clinical geriatric issues that are of pressing concern clinically, or have the potential to greatly improve clinical care or prevention for older adults if scientific knowledge is advanced. The short-term outcome of each of the proposed conferences is to identify the recommended research agenda for pressing clinical geriatrics issues. The ultimate outcome of the recommended research will be to obtain research results that can be translated into improved clinical care and health outcomes of older adults.

In 2006, the NIA renewed the grant for an additional three years. “Idiopathic Fatigue & Aging” is the fifth Bedside-to-Bench research conference, sponsored by the American Geriatrics Society, the National Institute on Aging (NIH), and the John A Hartford foundation. “Idiopathic Fatigue & Aging,” provides opportunities to learn about cutting edge research developments; participate in drafting recommendations for future research; and network with colleagues and leaders in the field. Four earlier Bedside-To-Bench conferences were held in 2004, 2005, 2006, and 2007. Future conferences include a 2009 conference concerning inflammation and nutrient metabolism.

CONFERENCE ORGANIZERS

U13 OVERSIGHT BOARD
Marie Bernard, MD
Marie-Bernard@ouhsc.edu

Rafael Lentigua, MD
ral4@columbia.edu

Susan Nayfield, MD
nayfiels@mail.nih.gov

Joseph Ouslander, MD
jouslan@emory.edu

Stephanie Studenski, MD MPH
StudenskiS@dom.pitt.edu

PLANNING COMMITTEE
Neil Alexander, MD
nalexand@med.umich.edu

Basil A. Eldadah, MD, PhD*
EldadahB2@nia.nih.gov

Luigi Ferrucci, MD*
ferruccilu@grc.nia.nih.gov

Susan Nayfield, MD, MSc*
nayfiels@mail.nih.gov

Stephanie Studenski, MD, MPH
StudenskiS@dom.pitt.edu

George E. Taffet, MD
gtaffet@bcm.tmc.edu

QUESTIONS AND COMMENTS
Please feel free to email Anne Marie Evriviades at aevriviades@americangeriatrics.org with any questions or comments you may have about this conference. Your feedback is highly appreciated!
Funding Organizations

The 5th Annual Bedside to Bench Conference, *Idiopathic Fatigue of Aging*, is sponsored by grants from The National Institute on Aging, the American Geriatrics Society, and the John A. Hartford Foundation.

**American Geriatrics Society**
Founded in 1942, the American Geriatrics Society ([www.americangeriatrics.org](http://www.americangeriatrics.org)) is a nationwide, not-for-profit association of geriatrics health care professionals dedicated to improving the health, independence, and quality of life of all older people. The Society supports this mission through activities in clinical practice, professional and public education, research, and public policy. With an active membership of over 6,700 health care professionals, the Society has become a pivotal force in shaping attitudes, policies, and practices in geriatric medicine.

**John A. Hartford Foundation**
Founded in 1929, the John A. Hartford Foundation is a committed champion of training, research and service system innovations that promote the health and independence of American’s older adults. Through its grantmaking, the Foundation seeks to strengthen the nation’s capacity to provide effective, affordable care to this rapidly increasing older population by educating “aging-prepared” health professionals (physicians, nurses, social workers), and developing innovations that improve and better integrate health and supportive services. The Foundation was established by John A. Hartford. Mr. Hartford and his brother, George L. Hartford, both former chief executives of the Great Atlantic & Pacific Tea Company, left the bulk of their estates to the Foundation upon their deaths in the 1950s. Additional information about the Foundation and its programs is available at [www.jhartfound.org](http://www.jhartfound.org).

**National Institute on Aging**
The NIA is the leading federal agency supporting and conducting biomedical, social and behavioral research and training related to aging and the diseases and special needs of older people. It is part of the National Institutes of Health—The Nation's Medical Research Agency. NIH includes 27 institutes and centers and is a component of the U.S. Department of Health and Human Services. NIH is the primary federal agency for conducting and supporting basic, clinical and translational medical research, and it investigates the causes, treatments, and cures for both common and rare diseases. For more information about NIH and its programs, visit [www.nih.gov](http://www.nih.gov).
PARTICIPANT DIRECTORY

PLANNING COMMITTEE

Neil Alexander, MD
nalexand@med.umich.edu

Basil A. Eldadah, MD, PhD*
EldadahB2@nia.nih.gov

Luigi Ferrucci, MD*
ferruccilu@grc.nia.nih.gov

Susan Nayfield, MD, MSc*
nayfiels@mail.nih.gov

Stephanie Studenski, MD, MPH
StudenskiS@dom.pitt.edu

George E. Taffet, MD
gtaffet@bcm.tmc.edu

SPEAKERS

Zeeshan Butt
z-butt@northwestern.edu

Francesco Celi*
francescoc@niddk.nih.gov

Kong Chen*
chenkong@niddk.nih.gov

Charles Cleeland
ccleeland@mdanderson.org

Robert Dantzer
dantzer@uiuc.edu

Mariana Gerschenson
gerschen@hawaii.edu

Bret Goodpaster
Goodpaster@dom.pitt.edu

Evan Hadley*
ehadley@nih.gov

Jane Kent-Braun
janekb@kin.umass.edu

Donna Mancini
dmm31@columbia.edu

Romain Meeusen
rmeeusen@vub.ac.be

Doug Wallace
dwallace@uci.edu

Phyllis Zee
p-zee@northwestern.edu

*denotes NIH Representative
PARTICIPANT DIRECTORY (Cont’d)

TRAVEL GRANT RECIPIENTS

Stephen Anton, PhD  
SAnton@aging.ufl.edu  
Helen Lum, MD, MS  
helen.lum@duke.edu  
William Durham  
wjdurham@utmb.edu  
Todd M. Manini, PhD  
TManini@aging.ufl.edu  
Yohannes Endesahw MD MPH  
yendesh@emory.edu  
Susan Murphy ScD, OTR  
sumurphy@med.umich.edu  
Hermes Florez  
hflorez@med.miami.edu  
Kris Ann Oursler,MD,ScM  
koursler@grecc.umaryland.edu  
Susan E. Hardy, MD, PhD  
seh46@pitt.edu  
Susan J. Zieman, MD, PhD  
szieman@jhmi.edu

ATTENDEES & DISCUSSANTS

Jennifer Brach  
jbrach@pitt.edu  
Deborah Lekan, MSN, RNC  
lekan001@mc.duke.edu  
Patricia B. Crane, PhD, RN, FAHA  
pbcrane@uncg.edu  
Dan Longo, MD*  
longod@mail.nih.gov  
Mat Maurer, MD  
msm10@columbia.edu  
Jessie VanSwearingen, PhD, PT, FAPTA  
jessievs@pitt.edu  
Pamela Parsons, PhD, RN  
pparsons@mcvh-vcu.edu  
Sonja Vestergaard, PhD*  
vestergaards@mail.nih.gov  
Craig D. Rubin, MD  
Craig.Rubin@UTSouthwestern.edu  
Jeremy Walston, MD  
jwalston@jhmi.edu  
Thuy-Tien Dam  
tt_dam@yahoo.com  
*denotes NIH Representative

SCIENCE WRITER

Frances McFarland Horne, PhD, MA  
mcfarlandhorne@hotmail.com