ROLE OF GENES, ENVIRONMENT AND CHANCE IN DETERMINING AGING
37th Annual Meeting of the American Aging Association
22nd Annual Meeting of the American College of Clinical Gerontology
May 30 – June 2, 2008
Millennium Harvest House, Boulder, Colorado

Pre-Meeting Sessions
Aging Non-Human Primates:
Models, Progress & Future Directions

FRIDAY, MAY 30, 2008

PRE-CongRESS WELCOME AND OPENING REMARKS
Chair: Steven Kohama, PhD, Oregon National Primate Research Center

SESSION I
OVERVIEW OF AGING NON-HUMAN PRIMATE MODELS:
COMPARATIVE STUDIES OF AGING IN NONHUMAN PRIMATES
James Herndon, PhD, Yerkes National Primate Research Center

THE DIVERSITY OF AGE-RELATED NEUROPATHOLOGY IN PRIMATES
Todd Preuss, PhD, Yerkes National Primate Research Center

SEQUENCING OF THE RHESUS GENOME
Betsy Ferguson, PhD, Oregon National Primate Research Center

WHY DO PRIMATES LIVE SO LONG?
Steven Austad, PhD, – University of Texas Health Science Center San Antonio

SESSION II
BRAIN, ENDOCRINE & REPRODUCTIVE SYSTEMS:

BEHAVIORAL EFFECTS OF HORMONE REPLACEMENT IN RHESUS MONKEYS
Martha Neuringer PhD, Oregon National Primate Research Center

AGING EFFECTS ON COGNITION. EPIGENETIC FACTORS
Peter Rapp PhD, Mount Sinai School of Medicine

NEURAL SUBSTRATES OF HORMONE TREATMENT
John Morrison, PhD, Mount Sinai School of Medicine

REPRODUCTIVE AGING AND HORMONE EFFECTS IN THE BRAIN
Steven Kohama, PhD, Oregon National Primate Research Center

SESSION III
BRAIN AND COGNITIVE BEHAVIOR:

AGE-RELATED IMPAIRMENTS IN MEMORY AND EXECUTIVE FUNCTION IN THE RHESUS MONKEY
Mark Moss, PhD, Boston University

DISINHIBITION OF CAMP-JCN SIGNALING IN THE AGING PREFRONTAL CORTEX
Amy Aronson, PhD, Yale University

NEUROBIOLOGICAL SUBSTRATES OF AGING-RELATED COGNITIVE IMPAIRMENT
Douglas Rose, PhD, Boston University

NEUROPHYSIOLOGY OF THE AGING HIPPOCAMPUS
Carol Barnes, PhD, University of Arizona

*not confirmed

SESSION IV
BRAIN & MOTOR/ SLEEP / CIRCADIAN RHYTHMS / FUTURE DIRECTIONS

CNS MITOCHONDRIAL DYSFUNCTIONS AND AGE-ASSOCIATED MOTOR DECLINES IN RHESUS MONKEYS
Donald Gash, PhD, University of Kentucky

CIRCADIAN AGING, SLEEP AND HYPOTHALAMUS IN RHESUS MONKEYS
Iliana Zhdanova, PhD Boston University

NEUROENDOCRINE RHYTHMS IN THE AGED RHESUS MACAQUES
Henryk Urbanski, PhD, Oregon National Primate Research Center

FUTURE DIRECTIONS- INTERVENTIONS FROM RODENTS TO PRIMATES
Pamela Bickford, PhD, University of South Florida

6:00 pm – 7:30 pm
AGE CONFERENCE REGISTRATION AND WELCOME RECEPTION
SATURDAY, May 31, 2008
THE ROLE OF GENES, ENVIRONMENT
AND CHANGE IN DETERMINING AGING

Plenary Session I:
THE REMARKABLE PLASTICITY OF HUMAN
LONGEVITY
Jim Vaupel, PhD, Max Planck Center for
Demographic Research, Germany

EPIDEMIOGENETICS OF HUMAN AGING
Mario Fraga, PhD, National Cancer Center, Spain

SESSION I (dual sessions I and II)
NEUROGENESIS IN AGING
Chair: Paul Buckford, PhD, University of South Florida

STEM CELL CHANGES WITH AGE:
PROLIFERATION OR MATURATION?
Ashok Shetty, PhD, Duke University

AGING CHANGES IN NEUROGENESIS AND
BEHAVIOR
Nore Abrus, PhD, INSERM, France

NEUROGENESIS IN THE AGING NON-HUMAN
PRIMATE: WHAT HAPPENS TO ALL THESE NEW
CELLS?
Douglas Rosene, PhD, Boston University

SESSION II (dual sessions I and II)
AGING AND TURNOVER OF EXTRACELLULAR
MATRIX (ECM)
Chair: John D. Furter, MS, Legendary
Pharmaceuticals, FL

OVERVIEW OF AGING AND TURNOVER OF THE
ECM
John D. Furter, ME, Legendary Pharmaceuticals

CHEMICAL AGING OF THE ECM BY CARBONYL
AND OXIDANT STRESS: PROSPECTS FOR
INTERVENTION
Vincent M. Monnier, MD, Case Western Reserve
University

GLYCATED ECM HAMRMS MESENCHYMAL STEM
CELLS IN OLD AGE: SIGNALING AND
STRUCTURAL MECHANISMS.
Alexandra Stolzing, PhD, Fraunhofer Institute for Cell
Immunology, Leipzig, Germany

REMODELING OF ECM IN AMPHIBIAN
REGENERATION.
David M. Gardiner, PhD, University of California,
Irvine

VINCENT CRISTOFALO MEMORIAL AWARD AND
LECTURE SPONSORED BY THE AMERICAN
FEDERATION FOR AGING RESEARCH (AFAR)

SESSION III (dual sessions III and IV)
NUTRITION AND THE "LONGEVITY DIVIDEND"
Chair: Jim Joseph, PhD, USDA, Tufts University

PREVENTION OF ALZHEIMER DISEASE: OMEGA
3 FATTY ACIDS AND CURCUMIN
Gregory M. Cole, PhD, VA Medical Center and UCLA

THE ROLE OF ANTIOXIDANT DIETS IN
COGNITION IN THE AGED BEAGLE.
Elizabeth Head, PhD, University of California at Irvine

GUT/BRAIN INTERACTIONS IN OBESITY
Debbie Cregg, PhD, University of Cincinnati

SIGNALLING MECHANISMS INVOLVED IN THE
BENEFICIAL EFFECTS OF POLYPHENOLS.
Jim Joseph, PhD, Tufts University

SESSION IV (dual sessions III and IV)
TRANS-ATLANTIC AWARENESS AND
COLLABORATION SYMPOSIUM ON AGING
RESEARCH
Chair: Richard Faragher, PhD, University of Brighton,
UK and Holy Van Remmen, University of Texas
Health Science Center San Antonio

ROLE OF SIRT1 IN RESTRICTED ENERGY
INTAKE
Dianne Ford, PhD, Newcastle University, UK

ADVANCED GLYCA TION END PRODUCTS: CAUSE
OR EFFECT OF AGING
Elizabeth Oster, PhD, Brighton University

SKELETAL MUSCLE PERFORMANCE
AND NUTRITION
Gadys Orambe-Pearson, PhD, Manchester
Metropolitan University

STEM CELLS IN DOWN’S PATIENTS: A ROLE IN
PREMATURE AGING?
Ilaria Bellantuono, PhD, Sheffield University

Dual Sessions

SUBMITTED PAPER SESSIONS
SHORT PAPERS CHOSEN FROM ABSTRACTS

POSTER SESSION
Focus is on Studies in Humans and Tissue
Culture

AGE BOARD OF DIRECORS DINNER MEETING

STUDENT SESSION AND DATA BLITZ
STUDENT SOCIAL

SUNDAY, JUNE 1, 2008
Plenary Session II
THE NEMATODE C. ELEGANS AND ITS
CONTRIBUTIONS TO AGING RESEARCH
Heidi Tissenbaum, PhD, University of Massachusetts
Medical School

AGING TWINS – WHAT THEY TELL US
Kaare Christensen, MD, PhD, University of Southern
Denmark
Note: Dual Sessions (Sessions V and VII will run concurrently as will Sessions VI and VIII)

SESSION V and VI
AGING IS GOING TO THE DOGS
Co-Chairs: Donald K. Ingram, PhD, Pennington Biomedical Research Center, LSU System; Norm Wolf, DVM, PhD, University of Washington School of Medicine

WHAT THE DOG GENOME IS TELLING US ABOUT "NAKING ON RONES"
Gordon Lark, PhD, University of Utah

RELATIONSHIP OF METABOLIC RATE, SIZE, AND LONGEVITY IN CANINES
Kimberly Greer, PhD, Texas A & M University

THE DOG AS A MODEL OF BRAIN AGING
Carl Cotman, PhD, University of California at Irvine

BEHAVIORAL ANALYSIS OF AGING IN DOGS
N. W. Milgram, PhD, CanCog Technologies Inc., Ontario, CA

DIET RESTRICTION AND AGING IN DOGS
Dennis Lawler, DVM, The Nestle Research Center-St Louis

AGING OF THE EYE IN DOGS
Norm Wolf, DVM, PhD, University of Washington School of Medicine

AGE-RELATED CHANGES IN IMMUNE FUNCTION IN DOGS
Michael G. Hayak, PhD, Iams Company Research and Development

CANCER AND AGING IN DOGS
David J. Water, DVM, PhD, Purdue University

SESSION VII
PROTEIN AGGREGATION IN DISEASES OF AGING, SESSION
Chair: Chris Link, PhD, University of Colorado Boulder

GENETICS OF NEURODEGENERATIVE DISEASES
Richard Morimoto, PhD, Northwestern University

PROTEIN QUALITY CONTROL, CATARACT AND AMYLOID
Allan Tayor, PhD, Tufts University

PROTEIN AGGREGATION IN AN ALZHEIMERS DISEASE MODEL IN THE WORM
Chris Link, PhD, University of Colorado at Boulder

SESSION VIII
HABITUAL EXERCISE AND ARTERIAL AGING
Chair: Douglas Seals, PhD, University of Colorado at Boulder

AGING, HABITUAL EXERCISE AND ENDOTHELUM-DEPENDENT DILATION IN HUMANS.
Douglas Seals, PhD, University of Colorado at Boulder

MECHANISMS OF AGE AND HABITUAL EXERCISE ON VASOMOTOR FUNCTION IN RODENTS
Judy Muller-Delp, PhD, West Virginia University

AGING, HABITUAL EXERCISE AND LARGE ELASTIC ARTERY STIFFNESS
Ilirufumi Tameke, PhD, University of Texas at Austin

DUAL SESSIONS
SUBMITTED PAPEER SESSION
SHORT PAPERS CHOSEN FROM ABSTRACTS

AGE BUSINESS MEETING
Open to all Members

COCKTAIL RECEPTION AND POSTER PRESENTATION II

MCNADAY, JUNE 2, 2008

PLENARY SESSION III
STUDIES ON AGING IN DROSOPHILA
Linda Partridge, PhD, University College London

IDENTIFICATION OF LONGEVITY GENES IN HUMANS
Eline Stalboom, PhD, Laiden University Medical Center

SESSION IX
AGING AND THE IMMUNE SYSTEM
Chair: Rita Effros, PhD, University of California at Los Angeles

EFFECTS OF AGING ON HEMATOPOIESIS AND PATTERNS OF LEUKEMOGENESIS
Kenneth Dorschkind, PhD, University of California at Los Angeles

THE CONTROL OF FUNCTIONAL LYMPHOCYTE LONGEVITY DURING AGING
Anne Akbar, PhD, University College London, UK

TELOMERASE-BASED APPROACHES TO IMPROVING IMMUNE FUNCTION DURING AGING.
Rita B. Effros, PhD, University of California at Los Angeles

FROM MICE TO MEN: TRANSLATING BASIC SCIENCE TO IMPROVE VACCINES IN OLDER ADULTS.
Jaret McElhaney, MD, Univ. of British Columbia. Vancouver

SESSION X
PHYSIOLOGICAL HORMESIS AND LIFE EXTENSION
Chair: Gordon Lithgow, PhD, Buck Institute for Age Research
Registration Category

<table>
<thead>
<tr>
<th>Daily Bird Fees</th>
<th>Regular Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 4/1/08</td>
<td>Or after 4/1/08</td>
</tr>
</tbody>
</table>

Please circle your choice.

Pre-Meeting Symposium: May 30, 2008

Member $90.00 $105.00
Non-Member $90.00 $115.00
Student* $50.00 $75.00

AGE Meeting: May 31 – June 2, 2008

Fees do not include registration to the pre-meeting Symposium.

Meeting Registration
Member $240.00 $290.00
Meeting Registration with Scientific Membership $350.00 $400.00
Meeting Registration Non-Member $375.00 $425.00
Meeting Registration With Lay Membership $290.00 $340.00
Meeting Registration Student* $170.00 $220.00
Meeting Registration Post-Doctoral Fellow* $185.00 $235.00

*Includes automatic membership.

For membership benefits, please visit the Membership page on our website: www.americanaging.org.

Guest Fees
Includes participation at the Welcome Reception Cocktail Reception and Awards Luncheon as described in the Preliminary Program. $125.00 $125.00

Payment Enclosed (make payable to AGE in US dollars)
Be sure to include fee for Pre-Meeting Symposium if mailing.

Charge to: ___ VISA ___ MasterCard ___ Am Express

TOTAL AMOUNT DUE including Pre-Meeting Symposium)

CARD NUMBER ________ EXP. DATE ________

NAME ________________________________ (exactly as it appear on credit card)

SIGNATURE ____________________________

Your Information □ Male □ Female

NAME ________________________________ (as you want it to appear on name badge) DEGRE/TITLE ____________________________

ADDRESS ________________________________

STATE ZIP CODE ____________________________

AFFILIATION/Organization ____________________________

EMAIL ADDRESS ____________________________ (required)

PHONE (including Country Code) ____________________________ FAX ____________________________

(Session continued)

HORMESIS, CALORIE RESTRICTION AND LIFE EXTENSION.
Ed Masono, PhD University of Texas Health Science Center at San Antonio

GROWTH HORMONIE, HORMESIS AND LONGEVITY IN MICE
Holly Brown-Borg, PhD, University of North Dakota

GENETIC AND STOCHASTIC ASPECTS OF HORMESIS
James R. Cypser, PhD, University of Colorado

HORMESIS AND AGING IN C. ELEGANS
Gordon Lithgow, PhD, Buck Institute for Age Research

AMERICAN AGING ASSOCIATION AWARDS LUNCHEON
(AI meeting registrants invited)

Distinguished Achievement
Denham Harman Research Award
Paul Glenn Post Doctoral Award
Walter Nicolai Pre Doctoral Award

DENHAM HARMAN LECTURE FOR 2008

NATHAN SHOCK SYMPOSIUM
Final speaker list pending

* not confirmed

ABSTRACT SUBMISSION AND AWARDS
Deadline March 1, 2008

For more information about the AGE Annual Meeting and abstract submissions, visit www.americanaging.org or contact Donna Gini

AMERICAN AGING ASSOCIATION
Phone: 1-602-627-2526 Fax: 1-602-665-9747
E-mail: amraging@aol.com

American Aging Association has secured a number of hotel rooms at the Millennium Harvest House Boulder, Colorado USA. Phone 1-303-443-3853 Fax: 1-303-443-1480. There are a limited number of rooms at the rate of $125.00 and $145.00. Please book early, as there is limited availability.

For reservations, please call: 1-800-545-6258 and mention "American Aging Association" or book online at www.americanaging.org/accommodations.html and use group code AAAMT