

NADER G. ABRAHAM, PhD, Dr.H.C.,FAHA
E-mail: Nader.Abraham1@gmail.com

PERSONAL INFORMATION:

Temporary Address

1320 12th Street
Apt. A5
Huntington WV 25701
Work: (304) 691-1791
Mobile: (914) 325-4146

Permanent address:

1161 Bedford Road
Pleasantville, NY 10570
Telephone: (914) 769-2573
Mobile: (914) 325-4146

EDUCATION AND TRAINING:

- 1972-1975 Ph.D. Biomedical Science, Mount Sinai School of Medicine New York, NY
- 1975-1976 The Rockefeller University New York, NY, Department of Pharmacology,
Post-Doctoral Fellow
- 2009 Honorary Doctoral Degree in Pharmacy/Medicine, University of Catania,

EMPLOYMENT:

- 1972-1975 Mt. Sinai School of Medicine, Department of Biochemistry, Doctoral Student full-time
- 1977-1978 NYU Medical Center Department of Medicine, Associate Scientist full-time
- 1978-1993 NYMC Department of Medicine Assistant/Associate/Professor full-time
- 1993-present The Rockefeller University, Adjunct Professor, Part time or as needed.
- 1993-1996 NYU School of Medicine, Department of Medicine, and Professor full-time
- 1996-2009 Professor, Director of Stem cells/Gene Therapy, Department of Pharmacology and Medicine, New York Medical College, Valhalla, NY full-time
- 2009-2012 Research Professor, Department of Pharmacology and Medicine, New York Medical College, Valhalla, NY part-time as needed

EMPLOYMENT CONTINUED

- 2009-present Professor & Chairman, Department of Physiology & Pharmacology, The University of Toledo College of Medicine, Toledo, OH full-time
- 2012-present Vice Dean for Research, Marshall University Joan C. Edwards School of Medicine, Huntington WV full-time

NATIONAL AND INTERNATIONAL PROFESSIONAL SOCIETIES AND ACTIVITIES:

American Heart Association

2005- Present

Professional Member

American Society of Hematology

2005- Present

Professional Member

American Society of Nephrology

2005-Present

Professional Member

APS

2005-Present

Professional Member

FASEB

2005-Present

Professional Member

GROUPS OTHER THAN PROFESSIONAL SOCIETIES: (e.g. National Research Council)

National Institutes of Health

2004-present

AWARDS AND COMMENDATIONS:

Research Career Development Award

National Institute of Arthritis, Metabolism and Digestive Diseases

1981-1986

Award for the best single cardiology manuscript published by AMJS

Tinsley Harrison

1985

AWARDS AND COMMENDATIONS cont:

Alpha Omega Alpha,
Honor Medical Society
1990

Alma Mater Studiorum, Saecularia Nona Award
University of Bologna Italy
1996

Honored Professorship
Japanese Society for the Promotion of Science
1997

Dr David M Kovitz Lecturer Award,
University of Calgary, Canada
2003

Cardiovascular Distinguished Award,
University of Saskatoon, Canada
2004

Dean Distinguished Award for Stem Cells and Diabetes
University of Catania
Sicily 2004

Award for the use of Stem cells in the treatment of human heart failure
Kansai Medical School's
June 23, 2006

Dean Distinguished Award for Stem Cells and Diabetes,
New York Medical College, NY
2007

MENTORING:

Allen Pergson, Ph.D.
Department of Medicine /Pharmacology NYMC
1978-1980
NIH Grant Administrator

Jean-Michel Camadro, Ph.D.
Department of Medicine /Pharmacology NYMC
1983-1985
Professor at the University of Paris

MENTORING cont:

Michal Schwartzman, Ph.D.
Department of Pharmacology NYMC
1982-1983
Professor New York Medical College

David Dressner, M.D.
Department of Medicine /Pharmacology NYMC
1984-1985
Chief residence at Brown University

Jane H-C. Lin, Ph.D.
Department of Medicine /Pharmacology NYMC
1986-1990
Assistant Professor, New York Medical College

Ann Brown, Ph.D.
Department of Medicine NYMC
1987-1991
Professor, University of New York

Pavel Martasek, M.D.
Department of Pharmacology NYMC
1988-1991
Professor at University of San Antonio, Texas

Anna Matthew, M.D.
Department of Pharmacology NYMC
1988-1989
Private Practice with Goldberg/Matthews

Margaret Griffin, Ph.D.
Department of Pharmacology NYMC
1988-1990
Assistant Professor Fordham University,

Gabriel Loewy, M.D.
Department of Pharmacology NYMC
1990-1991
Associate Professor Chicago

Miki Nishimura, M.D.
Department of Pharmacology NYMC
1990-1991
Assistant Professor Chiba University Japan

Eunkyue Park, Ph.D.
Department of Pharmacology NYMC
1990-1992
Associate Professor, Korea

MENTORING cont:

Kazuya Kato, M.D.
Department of Pharmacology NYMC
1990-1991
Associate Professor of Surgery, Japan,

Martin Tiefenthaler, M.D.
Department of Pharmacology NYMC
1991-1993
Assistant Professor University of Innsbruck, Austria

Robert Staudinger, M.D.
Department of Pharmacology NYMC
1991-1995
Chief Resident at NYU School of Medicine.

Kazutera Kigasawa, MD.
Department of Pharmacology NYMC
1995-1996
Associate Professor of Ophthalmology, Tokai
University, Japan

Yan Lavrovsky, MD/ Ph.D.
Rockefeller University,
1996-2001
Assistant Professor, San Antonio University,
Manager in SERENO, Switzerland
1992-1995 (2001-present)

Robert A. Stoltz, MD, Ph.D.
Department of Pharmacology NYMC
1994-1995
Chief resident at University of Penn Philadelphia, PA,

John D. Lutton, Ph.D.,
The Rockefeller University, NY
1978-1997
Professor, New York Medical College

Shanlong Jiang, M.D.
Department of Pharmacology NYMC
1990-1996
Associate Scientist at The Rockefeller University, N.Y.
Manager, New York Blood Bank

Elena Chernolovskaya, Ph.D.
Department of Pharmacology NYMC
1990-1996
Russia, Director of Blood transfusion division in Moscow, Russia

MENTORING cont:

Jean-Louis da Silva, Ph.D.
Department of Pharmacology NYMC
1990-2000
France, Scientific Chief, IMSci Incorporation, NY
Manager of Publishing Co.

Steve Braunstein, M.D.
Department of Medicine/Pharmacology NYMC
1996-1998
Physician at New York School of Medicine

David Rosenblum, M.D.
Department of Pharmacology NYMC
1997-1998
Physician at Tel Shamir Medical Center, Tel Aviv, Israel

Hatem El Sabaawy, M.D.
Department of Pharmacology NYMC
1997-2001
NIH Cancer Institute Retroviral

Maivel H. Ghattas, Ph.D. /M.D.
Department of Pharmacology NYMC
2001-2002
Associate Professor, Egypt

Giovanni Li Volti, M.D./Ph.D.
Department of Pharmacology NYMC
2001-2002
Professor, University of Catania

Taketoshi Kushida, Ph.D. /M.D.
Department of Pharmacology NYMC
2001-2002
Assistant Professor

Liming Yang, M.D., Ph.D.
Department of Pharmacology NYMC
1997-2003
Postdoctoral Fellow
Manager, Merck

Shuo Quan, M.D./ Ph.D.
Department of Pharmacology NYMC
1997-2005
Manager, Merck

MENTORING cont:

Fady Botros, Ph.D.
Department of Pharmacology NYMC
2000-2005
Manager, Eli Lilly

Sylvia Shenouda, MS, Ph.D.
Department of Pharmacology NYMC
2000-2005
Ph.D. Student

Derek Taller, Ph.D.
Department of Pharmacology NYMC
2003-2004
Manager, at Benchmark

Marco Di Pascoli, M.D.
Department of Pharmacology NYMC
2005–2005
University of Padova, Italy

Maria Antonietta Di Noia, Ph.D.
Department of Pharmacology NYMC
2005–2005
University of Bari, Italy

Sridevi Kolluri, Ph.D.
Department of Pharmacology NYMC
2004-2005
Adjunct Faculty, College of Health Science, Kaplan

Sarah J. Van Driesche
Department of Pharmacology NYMC
2004–2005
MS, Ph.D. Student, The Rockefeller University, N.Y.

Adam Kruger, M.D.
Department of Pharmacology NYMC
2004-2006
Cardiologist

Rafal Olszanecki, Ph.D.
Department of Pharmacology NYMC
2006–2006
Assistant Professor, University of Krakow, Poland

Saadet Turkesseven, Ph.D.
Department of Pharmacology NYMC
2004-2007
Assistant Professor, Azmir, Turkey

MENTORING cont:

Shinji Omura, M.D., Ph.D.,
Department of Pharmacology NYMC
2005–2007
University of Hiroshima, Japan

Amit Asija, M.D.
Department of Pharmacology NYMC
2006–2007
Internal medicine training Fellow,

Peter Tsenovoy, M.D.
Department of Pharmacology NYMC
2005-2007
Internal Medicine Training Fellow, Harvard University, MA
Cardiology Fellowship , WCMC, NY

Tomoko Kawakami, M.D./Ph.D.
Department of Pharmacology NYMC
2006-2007
Private Practice, Okayama University, Japan

Ming Li, M.D. /Ph.D.
Department of Pharmacology NYMC
2006-2009
Post Doctoral Fellow, Kansai Medical Center, OSAKA

Angela Burgess
Department of Pharmacology NYMC
2006-present
M.D. /Ph.D. Student, New York Medical College

Dong Hyun Kim, Ph.D.
Department of Pharmacology NYMC
2006-present
Assistant Professor, University of Toledo-College of Medicine

Francesco Piccolomini, Ph.D. Student
Department of Pharmacology NYMC
2007-2008
CNR, University of Pisa, Italy

Martina Martinelli
Department of Pharmacology NYMC
2008-2009
Ph.D. Student, University of Pisa

Jian Cao, M.D./Ph.D.
Department of Pharmacology NYMC
2008-2009
Professor of Cardiology, Beijing , China

MENTORING cont:

Luca Vanella
Department of Pharmacology NYMC
2007-present
Ph.D. Student, University of Catania

Kazuyoshi Inoue, M.D.
Department of Pharmacology NYMC
2008-present New York Medical College
November-present Okayama University, Japan

Komal Sodhi, M.D.
Department of Physiology & Pharmacology
2009-present
Postdoctoral Fellow

Angelique Nicolai, M.D.
Department of Pharmacology, NYMC
2008- 2009
Postdoctoral Fellow
Residency Program Dermatology, WCMC, NY

George Drummond, Ph.D.
Department of Pharmacology NYMC
2006-present
Associate Professor and Visiting Professor

Luca Vanella, PhD
Department of Physiology & Pharmacology
2011-present
Visiting Assistant Professor, University of Catania, Italy

Dong Hyun Kim, Ph.D.
Department of Physiology & Pharmacology
2009-present
Assistant Professor, University of Toledo-College of Medicine

Nitin Puri, M.D/PhD.
Department of Physiology & Pharmacology
2009-present
Assistant Professor, University of Toledo-College of Medicine

Terry Hinds, PhD
Department of Physiology & Pharmacology
2011-present
Instructor, University of Toledo-College of Medicine

EDITORIAL BOARDS:

Stem Cells, 1991-1997
Blood, 1993-1998
Experimental Hematology, the Society for Experimental Biology and Medicine, 1995-1997
Acta Haematologica, 1997-1998.
Frontiers in Oxidant Physiology, 2011- Present.

JOURNAL PEER REVIEW:

Proc. Natl Acad. Sci..
Journal of Biological Chemistry
Science
FASEB
American Journal of Physiology
Journal of Pharmacology and Experimental Therapeutics,
Circulation
Circ Res
Nature and Proc
Cancer Research Therapy and Control
Nitric Oxide
Hypertension Research
Hypertension Journal
Journal of Experimental Medicine

STUDY SECTIONS, REVIEW PANELS:

NIH Panel for Excellency on Gene Therapy and Excellency in Molecular Hematology
Member (DK04-015 from 2004- 2009)

Renal Science Special emphasis Panel, Chairman
(ZRG1-RUS-E, 2004, 2008-2009),

ZRG1 DKUS-G 02 Study Section, 2/25/09 and Eicosanoids in Renal Function Program Projects, 2009 (ZDK1 GRB-S (M3).

The Austrian Research Council and The Wellcome Trust (UK) External reviewer, 2000-present.

COMMUNITY SERVICE AND ORGANIZATIONS:

- 1984-present Chairman of International Conferences on Molecular Biology and Hematopoiesis,
- 1988-1993 Microbiology-Immunology recruitment and new faculty members; participated in policies of advancement of research and funding for junior faculty and students; Intramural Grant Review Committee and Graduate Student Forum Reviewer for New York Medical College,
- 1991-1994 Cardiovascular Research Institute Advisory Committee
- 1993-1997 Member of Internal Review Board of New York University School of Medicine
- 1993-1997 Training of Resident Fellows in Pharmacology for New York University School of Medicine Brooklyn Hospital Campus
- 1997-2007 Member of the Board of Cancer Institute
- 1997-2009 Training of Cardiology and Medicine Fellows and Residents, in Pharmacology for Westchester Medical Center and NYMC

COMMITTEES, THE UNIVERSITY OF TOLEDO:

University of Toledo College of Medicine
Executive Committee
2009-present

University of Toledo College of Medicine
Biomedical Graduate Executive Committee
2009-present

SPECIAL/INVITED PRESENTATIONS AT NATIONAL AND INTERNATIONAL MEETINGS:

Invited Speaker; IUPHAR 9th International Congress of Pharmacology
London, England
1984

Invited Speaker; Centre National de la Recherche Scientifique
Institut Jacques-Monod, Paris, France
1987

Basic Science Consultant; Department of Internal Medicine
University of Innsbruck, Austria
1987

Invited Lecturer; International Meeting, Porphyrin and Porphyries,
Institute S. Gallicano, **Rome, Italy**
1987

SPECIAL/INVITED PRESENTATIONS AT NATIONAL AND INTERNATIONAL MEETINGS
(cont.):

Taipei Conference on Prostaglandin and Leukotriene Research
Taipei, Taiwan
1988

Chairman, Oxidation Symposium 14th International Congress of Biochemistry
Prague, Czechoslovakia,
1988

Invited Lecturer; 2nd International Conference on Leukotrienes & Prostanoids
Jerusalem, Israel
1988

Departments of Nutrition/Medicine Karolinska Institute
Stockholm, Sweden,
1989

Chairman of Bile Pigment Session; "A Century of Porphyries"
Department of Medicine, University of Glasgow
Glasgow, Scotland
1989

Chairman, Cyclosporine and Renal Toxicity; XIth International Congress of Nephrology
Tokyo, Japan, 1990

Invited Lecturer; Department of Internal Medicine
University of Innsbruck, Austria
1990

Invited Lecturer; Department of Internal Medicine
University of Innsbruck, Austria
1991

Invited Lecturer; 11th International Conference on Iron Proteins,
Jerusalem, Israel
1993

Invited Lecturer; 12th International Congress of Nephrology,
Jerusalem, Israel
1993

Invited Lecturer; Department of Medicine
University of Catania
Catania, Italy
1994

Chairman, Growth Factor Session
International Society of Experimental Hematology,
Dusseldorf, Germany
1995

SPECIAL/INVITED PRESENTATIONS AT NATIONAL AND INTERNATIONAL MEETINGS

cont:

Invited Lecturer; 1st Annual Meeting of the Association of Ocular Pharmacology and Therapeutics,
New Orleans, Louisiana; January
1995

Chairman, 25th Annual Meeting of International Society for Experimental Hematology
Sheraton New York, New York
August 23-27, 1996

Invited lecturer, International EU Meeting on New Therapeutic Approaches in Hereditary Eye Disease,
Madrid, Spain
September, 1996

Invited Lecturer; Adenovirus Interferon Gene Transfer into CD34+Cells of Normal and Chronic Myelocytic Leukemia
Martin-Luther-University of Halle-Wittenberg
Halle, Germany
October, 1996

Invited Lecturer; Gene transfer of alpha interferon into hematopoietic stem cells (CD34+ cells)
Dansk Haematologisk Selskab, rigshospitalet
Copenhagen, Denmark
October, 1996

Invited Speaker; Adenovirus-Mediation HO-1 Gene Transfer into Ocular Tissues;
International EU Meeting: New Therapeutic Approaches in Hereditary Eye Disease
Madrid, Spain
September 6-9, 1996

Invited speaker; Interferon Gene Transfer into CD34 Cells of Patients with CML; Acute Leukemia VII- Experimental Approaches and Novel Therapies
Munster, Germany,
February 22-26, 1997

Invited Speaker; Retrovirus and Adenovirus Mediated Interferon Gene Transfer into Hematopoietic Stem Cells (CD34+) of Normal and Chronic Myelogenous Leukemia; 3rd International Workshop on Gene Transfer in Hematology and Oncology
Dusseldorf, Germany,
February 2, 1997.

Invited Speaker; Preclinical Results of Hematopoietic Stem Cells Base Interferon-Gene Therapy Study Group of Gene Therapy Workshop
Tokyo, Japan
1997

Invited Speaker; Gene Therapy for Cardiovascular Disease; the First International Conference of the Faculty of Medicine
University of Jordan
October 17-19, 1998

SPECIAL/INVITED PRESENTATIONS AT NATIONAL AND INTERNATIONAL MEETINGS
cont:

Chairman, Gene Therapy II; International Society of Experimental Hematology
Cannes, France
1997.

Guest Speaker, Vascular Injury-Coupled Induction of Oxidative Stress Genes: Paradigm for Gene Therapy
Kansai Medical University, **Osaka, Japan**
1998.

Invited Speaker, Heme oxygenase Gene and its Role in Angiogenesis, Tokoku University School of Medicine,
Sendai, Japan
1998.

Invited Speaker; Manipulation of Heme Oxygenase Expression by Gene Transfer and Metalloporphyrins: Implications in Cell Injury and Repair,
29th Annual Meeting of American Society for Neurochemistry,
Denver, Colorado, 1998.

Invited Speaker; Heme Mediated Molecules and Inflammation is Modulated by Upregulation of Heme Oxygenase Gene Expression,
University Deglistudi di
Catania, Institute Di Pathologia General, Catania, Italy
February 1999.

Chairman of Molecular Diagnosis Session 10th Symposium on Autologous Peripheral Blood Stem Cell Transplantation, **Dusseldorf, Germany**
September 5, 1999.

Chairman of Gene Therapy Session in the International Society for Experimental Hematology
Dusseldorf, Germany
August, 1999.

State-of- the-Art-Speakers “Gene Therapy and Molecular Diagnosis” 4th International Neurobiology Meeting”, Chairman, Dr. G.J.M. Maestroni”
Locarno, Switzerland,
April 1999.

Invited Speaker; “Regulatory Role of Heme Oxygenase Gene Transfer on Heme-Dependent Eicosanoids Metabolism” U.M.D.N.J. Robert Wood Johnson,
New Brunswick, NJ
October 4, 1999.

Chairman,”1st International conference on heme oxygenase (HO/CO) held in Marriott Hotel, World Trade Center, New York and the 13th International Molecular Biology of Hematopoiesis”
Marriott Hotel, World Trade Center, New York
July, 2000

SPECIAL/INVITED PRESENTATIONS AT NATIONAL AND INTERNATIONAL MEETINGS
cont:

Invited Speaker; Catania, Italy, and Topic: Heme Oxygenase And Endothelial Cells Cell Cycle Progression Using Micro Arrays Technology
Catania University, Italy
2000.

Keynote Speaker to the 5th International Conference on Cellular Stress Responses, Pisa Convention center,
ABIOPHEN , Inc. Pisa , Italy
2001

Invited Speaker to University of Milan, Department of Nephrology Topic: Cytoprotective Effect Of Heme Oxygenase In Hemoglobin And TNF α Mediated Cell Cycle Progression And Cell Death.

Milan, Italy
April 8, 2002

Chairman of the 2nd. International conferences on antioxidants and heme oxygenase
Catania, Italy
June 10, 2002

Chairman of Scientific Session on Inflammation and Leukocyte-Endothelial interactions.
For the American Heart Association
Chicago, Illinois,
November 17-20, 2002

Visiting Professor, Department of Medicine,
Canada, Lecturer on Stem Cells to treat cancer and diabetes
Calgary University, Canada
May 15-18, 2002

Recipients of Cardiovascular Distinguished Award and visiting Professor, Department of Physiology and Medicine,
University of Saskatoon, Canada
March 18, 2004.

Invited Speaker on "Stem Cell Therapy and Pancreatic Transplant in Treatment of Diabetes:
Role of Heme Oxygenase
University of Catania,
October 4, 2004.

Invited Speaker to 5th Freiburg Symposium "Molecular Hematology". Sponsored by the "Stem Cells and Treatment of Diabetes"
University of Freiburg, Germany
October 23, 2004

Chairman of the 1st International Symposium on Geriatric Medicine and HO/CO in cardiovascular and neuronal systems
(Beijing, P.R. China)
July 6-7, 2005

SPECIAL/INVITED PRESENTATIONS AT NATIONAL AND INTERNATIONAL MEETINGS
cont:

Chairman of the scientific session on NO/CO signaling session" 20th IUBMB International
Kyoto, Kyoto, Japan
June 19-23, 2006 and

Guest Speaker on June 21, 2006, Lack of HO-1 in transgenic rats Increases iNOS but decreases eNOS and Impairs Endothelial Function, 11th FAOBMB Congress,
Kyoto, Japan, June 19-23, 2006

Invited Speaker; "Stem Cell Therapy and Treatment of Diabetes" to Okayama University Graduate School of Medicine and Dentistry, Dep. Of Anesthesiology and resuscitology,
Okayama, Japan
June 23, 2006.

Invited Speaker;"Use of Stem cells in the treatment of human myocardial infarction and in Atherosclerosis of experimental diabetes. Kansai Medical School, Stem cells center, Department of **Pathology, Osaka, Japan**
June 24, 2006.

Invited Speaker by Taisho Pharmaceutical, "Heme oxygenase-based therapeutic strategies for the treatment of diabetes and cardiovascular diseases".
Tokyo, Japan
June 26, 2006.

Invited Speaker to one day Symposium on "NO/Co gas in Biology Symposium Guest speakers and Chairman Title of presentations "Silencing impact of HO-1/HO-2 on NOS and oxidative stress mediated cell death and the role of mitochondria" by University of Keio, School of Medicine and Dentistry,
Tokyo, Japan
June 27, 2006.

Invited Speaker on "Use of Stem cells in the treatment of human myocardial infarction" by University of Pisa medical school and CNR.
Pisa, Italy
July 6, 2006

Invited Speaker; "Metabolic syndrome and Heme oxygenase in Type 1 diabetes" 3rd Cell stress society International congress on Stress Responses in Biology and Medicine and 2nd international congress of Stress Research,
Budapest, Hungary
Aug 23-26, 2007

State of the art lecture" Heme oxygenase and cardiovascular disease", 5th Heme Oxygenase Conference,
Krakow, Poland
September 7, 2007

SPECIAL/INVITED PRESENTATIONS AT NATIONAL AND INTERNATIONAL MEETINGS
cont:

Invited Speaker on "CO and NO: Lack of HO-1 or HO-2 in transgenic rats Increases iNOS but decreases eNOS and Impairs vascular function in type 1 diabetes: Role of EC-SOD" 8th World Congress for Microcirculation

Milwaukee, USA,

August, 15-19, 2007

Invited Speaker;" Molecular Biology of Stem cells: Clinical applications, Conference on Prospective on Stem cell Therapy, ABIOGEN Pharma SPA,

University of Pisa, Italy

June 4 2007

Chairman of Stem cells and imaging: International symposium on IBM-BMT,

Osaka, Japan

October 28, 2007

Invited Speaker; "Functional significance of heme oxygenase in metabolic syndrome, insulin resistance and cardiovascular diseases", Biological Sciences, Bar-Ilan

University, Ramat-Gan, Israel

February 17, 2008

Invited Speaker; "Significance of heme oxygenase and Stem cells in metabolic syndrome and cardiovascular diseases". Cardiology Center at Rabin Medical Center ,

Tel Aviv, Israel February 18, 2008

on "Significance of heme oxygenase in cardiovascular diseases" CNR Cardiology division and **University of Pisa, Italy**

October 30, 2008.

Invited Speaker;"Functional expression of Heme oxygenase-Stem cells in Obesity, diabetes and CVD" Scuola Superior Sant' Anna and CNR Institute of Physiology

Pisa, Italy

May 22, 2008

Invited Speaker;"Role of heme oxygenase in regulation of heme degradation and Heme biosynthesis in normal and disease states" The Swedish Society of Medicine

Stockholm, Sweden

June 14-18, 2009

Invited Speaker;"The role of gender in obesity Apo A1 Mimetic Peptide L-4F Regulates nitric Oxide, Sex Hormone and Weight gains in Female Mice"

Kansai Medical University

Moriguchi, Osaka, Japan

March 19, 2009

Invited Speaker;"34th FEBS Congress Lifes Molecular Interactions

Prague Czech Republic

July 4-9, 2009

SPECIAL/INVITED PRESENTATIONS AT NATIONAL AND INTERNATIONAL MEETINGS
cont:

Invited Speaker;" Distinct regulation of inflammatory cytokines and adiponectin by HO-1 induction leads to amelioration of diabetes and adiposity" International Society for Heart Research – Israel Subsection Conference Felsenstein Medical Research Center, Beilinson Campus,

Tel Aviv, Israel

February 23, 2009.

Chairman of Cardiovascular session in Italian Society of Physiological Science 2009,

Sicily, Italy,

January 30, 2009

Invited Speaker; " Nitric oxide-Carbon monoxide interaction and Oxidative stress in obesity and diabetes" and consultant on the characterization of medistinal fat and perpherl andothelial cells in coronary artery graft of non-insulin dependent mellitus patients to Medical Research Center, Beilinson Campus, Rabin Medical Ceneter

Tel Aviv, Israel,

January 3 2010.

Invited Speaker: " Apo-A1 mimetic peptide, L-4F, effect on obesity / diabetes and cardiovascular diseases: Role of stem cells" Legacy Heritage – Institute of Rambam

Tel Aviv, Israel 2010

Invited Speaker; "Significance of heme oxygenase and Stem cells in cardiovascular diseases". University Of Mobile,

Alabama, 2011

Visiting Professor and Guest speaker to Taiwan Physiological Society and Twain national Defense Hospital "Antioxidant and Stem cells function in cardiovascular diseases".

Taipei, Taiwan, 2011

Invited Speaker, "Stem Cells defects in CVD" University of Florida, Gainesville
Florida, 2011.

Invited Speaker "Stem cell Niche and regenerative medicine: A debate on sources and types of cells for therapeutic Applications in **EB meeting Symposium: Latest on the Potential of Stem Cell Therapy in Cardiovascular Diseases, April 10 2011.**

Invited Speaker to teach on EICOSANOIDS AND THERAPEUTICS OF CARDIOVASCULAR DISEASE" on Eicosanoids in cardiovascular disease course" Erice, Sicily, **June 19th-23rd 2011**

Invited speaker to present: Inaugural lecture on Heme Oxygenases: Discovery and Clinical Significance in Diabetes and Cardiovascular Disease; conference on "Advances in Heme oxygenase and oxidative stress" **University of Catania, Italy, April 13, 2012**

Symposium Chairman for ASPET meeting' Emerging Role of Heme Oxygenase in Cardiovascular and Metabolic diseases. EB, **San Diego, CA, April 24, 2012**

Chair "HO-1 in diabetes and metabolic syndrome" session in the 7th, International Conference on Heme Oxygenase. **Edinburg, 1st June, 2012**

CONSULTATIVE ACTIVITIES:

Bayer 1987
Allergen 1987
Pfizer 1987
Gillette Company 1989
Merck 1990
Bruin Pharma 2007
GSK 2008,
TransPharmaceutical, NC, 2012

MAJOR RESEARCH INTERESTS:

See attached Page

PAST RESEARCH SUPPORT, TRAINING GRANTS:

University of Hemin Control of Protein Synthesis
N.I.A.M.D.D.S.T.H Grant #AM05559
1978-1981
\$144,000.00/year
NYMC Department of Pharmacology
Principal Investigator

Control Mechanisms in Heme Synthesis
U.S.P.H.S. Grant #AM21682
1979-1981
\$393,000.00

NYMC Department of Pharmacology
Co-Principal Investigator-
Co-Principal Investigator

Effect of Chelating Agents on Heme Metabolism
National Kidney Foundation
1982-1983
\$6,900.00
NYMC Department of Pharmacology
Principal Investigator

Regulation of Porphyrin and Heme Biosynthesis
Research Career Development Award,
NIH#1 KO4AM00781
1981-1986
\$245,000.00/year
NYMC Department of Pharmacology
Principal Investigator

The Role of Environmental Agents on Heme Metabolism
NIH #AM29742
1982-1985
\$1,611,621.00/5 years
NYMC Department of Pharmacology
Principal Investigator

Novel Corneal Arachidonate Metabolites Via Cytochrome P450
NIH #1 RO1 EY06513-01A2
1987-1990
\$419,886.00
NYMC Department of Pharmacology
Principal Investigator Michael L. Schwartzman Ph.D.
Co-Principal Investigator

Effect of Tenidap on Cytochrome P450
Pfizer, Inc.
1990-1992
\$52,000.00
NYMC Department of Pharmacology
Principal Investigator

Novel Corneal Arachidonate Metabolites Via Cytochrome P450
NIH
1990-1995
\$659,428.00
NYMC Department of Pharmacology
Principal Investigator Michael L. Schwartzman Ph.D.
Co-Principal Investigator

Role of Arachidonate ω -1 Hydroxylation in Hypertension
NIH #PO HL34300 (PPG)
1990-1995
\$428,000.00/year for 5 years
NYMC Department of Pharmacology
Principal Investigator

Mechanism of Hemoglobin Influence on Hematopoiesis
Somatogen, Inc.
1993-1994
\$126,000.00
NYMC Department of Pharmacology
Principal Investigator

PAST RESEARCH SUPPORT, TRAINING GRANTS cont:

Alleviation of Contact Lens-induced Complications by Manipulating Heme Oxygenase and Cytochrome P450 Activities in the Rabbit Eye

Allergan, Inc.

1993-1995

\$105,000.00

NYMC Department of Pharmacology

Principal Investigator

Cloning and Expression of Human Kidney P450 Epoxygenase

American Heart Association, NYS

1993-1995

\$60,000.00

NYMC Department of Pharmacology

Principal Investigator

Manipulation of Human Heme Oxygenase and Angiogenesis

Allergan, Inc.

1995-1996

\$96,000

NYMC Department of Pharmacology

Principal Investigator

Transcriptional Regulation of Hemoglobin Toxicity to Endothelial Cells

NIH #1RO1-HL54138-01

1994-1998

\$1,105,120.00

NYMC Department of Pharmacology

Principal Investigator

The Gillette Company, Medical Evaluation Laboratories

Stress Gene Expression in the Human Corneal Epithelial Cell Line in Response to Ocular Irritants

1997-1998

\$100,000.00

NYMC Department of Pharmacology

Principal Investigator

Retrovirus and Adenovirus IFN-alpha Gene Transfer

Zalmen A. Arlin Cancer Institute#B49 26-81

1997-2001

\$450,000

Zalmen A. Arlin Cancer Institute, Westchester Medical Center, NY

Principal Investigator

PAST RESEARCH SUPPORT, TRAINING GRANTS cont:

Gene Therapy Programs
St. Vincent's Hospital #005169-101
1999-2002
\$200,000.00

Principal Investigator

Heme Oxygenase Regulation of Eicosanoids Biosynthesis
NIH/NIDDK RO1 DK56601
2000-2005
\$313,356/ 4 years
NYMC Department of Pharmacology

Principal Investigator

Heme Oxygenase Gene Targeting and Blood Pressure Regulation
American Heart Association
2000-2003
Grant in Aid \$60,000 per year/3 years
NYMC Department of Pharmacology

Principal Investigator

Heme oxygenase gene transfer and antioxidants
The Rockefeller University
2002-2006
\$30,000/year/4 years
NYMC Department of Pharmacology

Principal Investigator

Vasoactive Hormones and Blood Pressure Regulation
NIH/NHLBI - HL18579 (PPG)
2000-2005
\$248,103/ 5 years
NYMC Department of Pharmacology

Principal Investigator

Heme oxygenase and oxidative stress
Artificial Kidney Foundations, Inc.
2001-2005
\$65,000/year/5 years
NYMC Department of Pharmacology

Principal Investigator

Hormonal Regulation of Blood Pressure Gene Therapy Core
NIH #2PO1 HL34300-16
2000-2006
\$ 225,000/5 years
NYMC Department of Pharmacology and The Rockefeller University

Principal Investigator

PAST RESEARCH SUPPORT, TRAINING GRANTS cont

Heme oxygenase/carbon monoxide and endothelial cell integrity in diabetes
Philip Morris Research Group Inc
2004-2007
\$ 935,000/ 3 Year
NYMC Department of Pharmacology
Principal Investigator

Heme Oxygenase Regulation of Eicosanoids Biosynthesis
NIH/NIDDK Type: RO1 DK56601
July 2005 to December 2009
\$ 1,950,000/ 5 years
UT-HSC Department of Pharmacology, The Rockefeller University
Principal Investigator

PPG Hormonal Regulation of Blood Pressure “Core C:
NIH/NHLBI
July 2006-December 2010
\$ 1,950,000/ 5 years
UT-HSC Department of Pharmacology and The Rockefeller University
Principal Investigator

CURRENT RESEARCH SUPPORT, TRAINING GRANTS:

Oxidative Stress and HO in Diabetes
NIH/NIDDKRO R01 DK068134-01-
July 2006 to July 2012,
\$1,950,700/ 5 years
UT-HSC Department of Physiology and Pharmacology and The Rockefeller University
Principal Investigator

Heme Oxygenase Regulation of Eicosanoids Biosynthesis (Score 12 %)
NIH/NIDDK Type: RO1 DK56601
July 2010 to January 2015
\$ 2,350,000/ 5 years
UT-HSC Department of Physiology and Pharmacology and The Rockefeller University
Principal Investigator

Hormonal Regulation of Blood Pressure
NIH/NHLBI PPG
April 2011- June 2016
\$ 1,950,000/ 5 years
UT-HSC Department of Physiology and Pharmacology and The Rockefeller University
Principal Investigator

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7. Heme Oxygenase in Biology and Medicine Vol. 1 (Nader G Abraham, Jawed Alam and Karl A. Nath Ed.) Kluwer Academic/Plenum publishers, NY, NY 2002.
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MAJOR RESEARCH INTERESTS:

Research programs in Dr. Abraham's laboratory are focused on vascular dysfunction which are a prelude to cardiovascular and metabolic diseases including hypertension, stroke, diabetes and obesity, the role of oxidative stress, inflammatory cytokines, hypoadiponectinemia and lipid-derived from arachidonic acid in the initiation of vascular dysfunction. *The central hypothesis focuses on heme oxygenase (the most potent anti-oxidant gene in human body)-adiponectin-EET plays an essential role in vascular function. We believe that heme oxygenase acts as a molecular "switch" to genetically reprogram stem cells and subsequently vascular endothelium through activation of a unique signaling cascade with amplification of protective circuits to provide resistance to vascular dysfunction. Heme oxygenase also serves as the mediator of cross-talk between adipose tissue and the vasculature. Studies in his lab focus on the impact of adipocyte stem cell dysfunction on vascular endothelial integrity through the prism of heme oxygenase.*

Human biological materials and experimental animal models of diabetes and obesity are used to examine the use of stem cell interventions and molecular, gene therapy that amplify the heme oxygenase system. Additionally, one of our research approaches represents a powerful tool to identify therapeutic strategies and novel biomarkers for cardiovascular and metabolic diseases (e.g. circulating endothelial cells and progenitor stem cells [EPCs] for better prognosis). We believe that the effect of anti-diabetic drugs alone or in combination with the antioxidant genes, have a differential impact on stem cell function and vascular diseases as well as on stem cells differentiation into adipocyte and osteoblast. The genomic approach and gene array analysis described in various publications from our laboratory represents a powerful tool to systematically investigate therapeutic approaches, and hence, facilitate translational research in hypertension, diabetes and the metabolic syndrome using stem cells and or gene therapy. Additionally, our lab is developing genetic testing for several human genetic diseases to predict future pathophysiological conditions using cell therapy for disease prevention.