

Curriculum Vitae

Walee Chamulitrat Ph.D.

January 2003

Education:

June 1977 Graduated from high school

June 1981 B.Sc. (chemistry), Mahidol University, Bangkok, Thailand

May 1986 Ph.D. (chemistry), University of Houston, TX.

Post-Graduate Education and Training:

1986-1988 Postdoctoral Fellow, U.S. Department of Agriculture, Agricultural Research Service, Philadelphia, PA.

1988-1990 Visiting Fellow, Laboratory of Molecular Biophysics, National Institute of Environmental Health Sciences(NIEHS), National Institutes of Health, Research Triangle Park, NC.

1990-1994 Visiting Associate, Laboratory of Molecular Biophysics, National Institute of Environmental Health Sciences(NIEHS), National Institutes of Health, Research Triangle Park, NC.

Academic Appointments:

1994-1998 Assistant Professor (Research), Department of Physiology, LSU Medical Center, New Orleans, LA.

1998-1999 Associate Professor (Research), Department of Physiology, LSU Medical Center, New Orleans, LA.

2000-2003 Deutsches Krebsforschungszentrum (DKFZ) Heidelberg, Germany

2003-present Dept. of Internal Medicine IV, University of Heidelberg

Professional Affiliations:

1983-present International Electron Paramagnetic Resonance Society

1992-present International Society for Free Radical Research (The Oxygen Society)

1994-present American Association for the Advancement of Sciences

1994-present New York Academy of Sciences

1996-present Shock Society

1998-present Nitric Oxide Society

Research Interests:

1. Applications of EPR spectroscopy and spin-trapping techniques in viable biological systems to investigate (patho)physiological problems.
2. Free radical biochemistry of oxygen-derived radicals and nitric oxide.
3. Modulation of inducible nitric oxide synthase on intestinal oxidative injury in epithelial cell and in vivo systems.
4. Alterations of intestinal epithelial barrier function induced by toxins or environmental agents on epithelial barrier function.
5. Role of intestinal lymphocytes on toxin- or chemical toxicant-induced free radical generation and changes in epithelial barrier function.
6. Role of gp91phox isoform Nox1 on cell transformation of human keratinocytes
7. Co-carcinogenicity between alcohol and virus on cell transformation

Academic Teaching Activities:

None

Other Professional Activities:

1. Served as a peer-reviewer for editors of the following journals: Free Radical Biology & Medicine; Free Radical Research; Chemical Research in Toxicology; Biochemical Journal; Biochim. Biophys. Acta; Chemical Biological Interactions; American Journal of Physiology; Alcoholism: Clinical and Experimental Research; Life Sciences; Journal of Lipid Research.
2. Served as an adhoc reviewer of three grants (1998-1999) for U.S. Department of Agriculture National Research Initiative Competitive Grants Program.

Clinical Activities:

None

Honors:

1983-84 Lynn Murray Scholarship Award, University of Houston

Financial Resources:

A. Past Grants

1. NIDDK: R29 DK 51704
 "Nitric Oxide and Gastrointestinal Oxidative Injury"
 \$ 346,087 direct costs for 5 years
 Starting date: June 1, 1997
 P.I.: Walee Chamulitrat
2. NIEHS: R03 ES09281
 "Inorganic Particles and Gastrointestinal Immune Cells"
 \$ 49,756 direct costs for 2 years
 Starting date: January 1, 1998
 P.I.: Walee Chamulitrat
3. NIAAA: pilot project of Alcohol Grant Center AA09803 (John J. Spitzer)
 "Role of Alcohol on Enteropathy of Tat Transgenic Mice"
 \$ 50,304 direct costs for 2 years
 Starting date: December 1, 1999
 P.I.: Walee Chamulitrat
 Co-P.I.: Ohm Prakash

Personnel under supervision:

May 1992 to Aug 1992 Harvey Chu, a pre-medical biology student worker from University of North Carolina at Chapel Hill, NC.; Obtained a M.D degree from Bowman Gray School of Medicine, Winston-Salem, NC.

Sep 1994 to Nov 1995 Nebojsa V. Skrepnik, a research associate at Department of Physiology, LSUMC, LA.; Employed as a clinical researcher at the Scott Stanley Cancer Center, New Orleans, LA.

Jan 1996 to Aug 1996 Nina L. Coley, a biology major student worker from Dillard University, New Orleans, LA.; Employed as a research associate at Cytogenics Laboratory, Department of Pathology, LSUMC, New Orleans, LA.

May 1996 to Jul 1998 Nicole S. Reed, a biology major student worker from Xavier University, New Orleans, LA.; Employed as a senior laboratory technician II at Dept. of Comparative Medicine-the Retrovirus Laboratory, Johns Hopkins University, Baltimore, MD.

June 1998 to Aug 1998 Emily Lehmann, a chemistry major student worker from Goucher College, Baltimore, MD.

May 1998 to 1999 Enze Wang, M.D., a postdoctoral fellow at Department of Physiology, LSUMC, New Orleans, LA.

Sept 2001-present Warangkana Chunglok, a graduate student from Dept. of Medical Technology, Mahidon University, Bangkok, Thailand

Major Collaborations while at NIEHS and LSU Medical Center:

- Dr. Ronald P. Mason, Laboratory of Molecular Biophysics, NIEHS, NC
- Dr. Colin F Chignell, LMB, NIEHS, NC
- Dr. Thomas E. Eling, LMB, NIEHS, NC
- Dr. Garry R. Buettner, The University of Iowa, Iowa city, IA
- Dr. Myron S. Cohen, University of North Carolina, Chapel Hill, NC
- Dr. Denis Riendeau, Merck Frosst Centre for Therapeutic Research, Canada
- Dr. Richard G. Cutler, National Institute on Aging, Baltimore, MD
- Dr. Luis Molina y Vedia, Burroughs Wellcome, Research Triangle Park, NC
- Dr. Michael I. Luster, Laboratory of Molecular Pathology, NIEHS, NC
- Dr. J. Brice. Weinberg, VA and Duke University Medical Centers, NC
- Dr. John J. Spitzer, Physiology, LSU Medical Center, LA
- Dr. Kathleen H. McDonough, Physiology, LSU Medical Center, LA

Invited Workshop Lectures:

1. Served as a lecturer in a short course on "Electron Paramagnetic Resonance", U.S. Department of Agriculture, Philadelphia, PA, January, 15-16, 1986.
2. Served as a lecturer in "Workshop on EPR spectroscopy", Oxygen Society 1996 Annual Meeting, Biological Electron Spin Resonance Workshop, Miami Beach, FL, November 20, 1996, title of the lecture "Nitric oxide-iron protein complexes".
3. Served as a co-organizer and a lecturer in "Workshop on Detection of Free Radicals" at Chulabhorn Research Institute, Bangkok, Thailand, May 22-24, 1997, title of the lectures "Consequences and Fingerprints of Free Radical Attacks", "Detection of Nitric Oxide and Experimental Design", and "Free Radical Involvement during Gastrointestinal Inflammation".
4. Served as a lecturer in "Workshop on Free Radicals in Biology and Medicine" at Medical Technology Department, Mahidol University, Sirirat School of Medicine, Bangkok, Thailand, May 27, 1997, title of the lecture "Generation of Free Radicals", and "Consequences and Fingerprints of Free Radical Attacks".
5. Served as a lecturer in "Free Radical Toxicology Workshop" at Institute of Toxicology, College of Medicine, National Taiwan University, Taipei, Taiwan, Republic of China, June 3, 1997, title of the lecture "Modulation of Gastro-intestinal Oxidative Injury by Nitric Oxide".
6. Served as a lecturer in "Free Radical Course on EPR" at Annual Meeting of the Oxygen Club of California, Santa Barbara, CA, February 6-8, 1998, title of the lecture "Nitric oxide-iron protein complexes".

Seminars and Conference Oral Presentations:

1. Seminar speaker, Chemistry Department, University of Houston, Houston, TX, November 16, 1983, "Electron spin resonance of motional studies in polymers using peroxy spin probes".
2. Seminar speaker, Chemistry Department, University of Houston, Houston, TX, April 24, 1984, "Chemical and lattice Properties of FeOCl intercalation compounds by Mossbauer spectroscopy".
3. Seminar speaker, Chemistry Department, Mahidol University and Silpakorn University, Bangkok, Thailand, October 15-17, 1986 "An overview of electron paramagnetic resonance in characterization of polymers and oxide surfaces".
4. Seminar speaker, NIEHS, Research Triangle Park, NC, October 7, 1987, "Peroxy radicals in polymers".
5. Seminar speaker, Chemistry Department, Mahidol University, Bangkok, Thailand, March 3, 1989, "Peroxy, alkoxy and carbon-centered radical formation from organic hydroperoxides catalyzed by chloroperoxidase".
6. Conference speaker, 2nd International Symposium on Spin-trapping and Aminoxyl Radical Chemistry, University of Guelph, Guelph, Canada, July 4, 1989, "Peroxy, alkoxy and carbon-centered radical formation from organic hydroperoxides catalyzed by chloroperoxidase".
7. Conference speaker, 21st Southeastern Magnetic Resonance Conference, Memphis, TN, October 6, 1989, "Peroxy, alkoxy and carbon-centered radical formation from organic hydroperoxides catalyzed by chloroperoxidase".
8. Seminar speaker, Physics Department, California State University at Northridge, CA, November 14, 1990, "Free radical metabolites in a lipoxygenase system: electron spin resonance investigations".
9. Seminar speaker, Physics Department, Mahidol University, Bangkok, Thailand, December 6, 1990, "Free radical metabolites catalysed by lipoxygenase".
10. Conference speaker, 3rd International Symposium on Spin-trapping and Aminoxyl Radical Chemistry, Kyoto, Japan, November 24, 1991, "Nitroxide metabolites from alkylhydroxylamines and N-hydroxyurea derivatives resulting from reductive inhibition of soybean lipoxygenase".
11. Speaker for a poster presentation, Nitric Oxide in Health and Disease Symposium, The Robert Wood Johnson Medical School, Piscataway, NJ, June 22, 1993, "Nitric oxide formation during light-induced decomposition of phenyl N-tert-butyl nitron".
12. Seminar speaker, Biochemistry Department, Mt. Sinai School of Medicine, NY, January 24, 1994, "Nitric oxide production during endotoxic shock in experimental animals treated with *Corynebacterium parvum* and carbon tetrachloride".

13. Seminar speaker, Department of Physiology, Louisiana State University Medical Center, LA, January 27, 1994, "Endotoxin-induced nitric oxide production on experimental models of liver injury"
14. Conference speaker, International Business Communications' 3rd Symposium on Nitric oxide, Philadelphia, PA, March 17, 1994, "Nitric oxide targets hemoproteins in the liver during endotoxic shock".
15. Seminar speaker, Chemistry Department, University of Houston, TX, October 12, 1994, "EPR Studies of nitric oxide production in the liver injury".
16. Seminar speaker, Department of Physiology, Louisiana State University Medical Center, LA, May 8, 1995, "Endotoxin induced-oxidative injury in the rat small intestine".
17. Invited symposium speaker, Rocky Mountain Conference on Analytical Chemistry (EPR Section), Denver, CO, July 23, 1996, "Targets of nitric oxide in the rat gastrointestinal tract".
18. Seminar speaker, Radiation Biology Branch, National Cancer Institute, Bethesda, MD, December 10, 1996, "Modulation of gastrointestinal oxidative injury by nitric oxide".
19. Invited symposium speaker, Association for Gnotobiotics, New Orleans, LA, April 8, 1997, "Targets of nitric oxide in the rat gastrointestinal tract".
20. Seminar speaker, Department of Physiology, Louisiana State University Medical Center, LA, October 20, 1997, "Trinitrobenzenesulfonic acid-induced colitis: EPR investigations".
21. Seminar speaker, Department of Pharmacology, Louisiana State University Medical Center, LA, February 17, 1998, "Detection of free radicals during inflammation of rat small intestine".
22. Seminar speaker, Toxicology Branch, National Institute of Occupational Safety and Health, Morgantown, WV, May 6, 1998, "Inflammation of gastrointestinal tract induced by toxic chemicals".
23. Seminar speaker, Department of Physiology, Louisiana State University Medical Center, Shreveport, May 16, 1998, "Oxygen radical generation by rat gastrointestinal epithelial and lymphoid cells".
24. Seminar speaker, Department of Physiology, Louisiana State University Medical Center, New Orleans, March 8, 1999, "Responsiveness of Intestinal Lymphoid and Epithelial Cells to Inorganic Dusts: An Environmental Health Perspective".
25. Seminar speaker, Department of Biomedical Sciences, College of Pharmacy, University of Rhode Island, Kingston, RI, March 25, 1999, "Role of Intestinal Lymphocytes in the Toxicity of Environmental Particulates and Food Additives".
26. Invited conference speaker, 3rd International Conference on Nitroxide Radicals, University of Kaiserslautern, Kaiserslautern, Germany, September 28, 2001, "EPR Studies of rat intestinal tissues".

27. Seminar speaker, Department of Toxicology and Cancer Risk Factors, DKFZ, Heidelberg, Germany, 13 June 2002, "NADPH Oxidase in keratinocytes: Possible role in skin and oral carcinogenesis".
28. Invited conference speaker, 7rd International Symposium on Spin Trapping 2002, 'Spin Traps, Nitroxides and Nitric Oxide: Spectroscopy, Chemistry and Radical Biology', The Carolina Inn, Chapel Hill, North Carolina, USA, July 7-12, 2002, "EPR Studies of rat intestinal tissues".
29. Seminar speaker, Department of Toxicology and Pharmacology, University of Lausanne, Switzerland, 18 March 2003, "NADPH Oxidase in keratinocytes: Possible role in skin and oral carcinogenesis"

Personal Data:

Citizenship: Thailand

Date of Birth: July 4, 1959

Sex: Female

Status: Married to Dr.Dr. Wolfgang M. Hartmann, citizen of Germany