

CURRICULUM VITAE

CHUNG EUN HA

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EDUCATION:

In Je University KimHae, Korea	B.Sc.	1984-1991	Biology
University of Hawaii at Manoa Honolulu, Hawaii	Ph.D.	1993-1999	Biomedical Sciences (Biochemistry)

HONORS:

1997	FAOBMB 20 th Anniversary Travel Fellowship
1997-1999	American Heart Association Pre-doctoral Fellowship
2002	Annual Biomedical Symposium Faculty Division JABSOM Deans' Award

MEMBERSHIP IN PROFESSIONAL SOCIETIES:

Federation of Asian and Oceanian Biochemists and Molecular Biologists (FAOBMB), Council member
American Society for Biochemistry and Molecular Biology (ASBMB)
Association of Biochemistry Educators (ABE)
Hawaii Biochemists, Molecular Biologists, Biophysicists Group (HBMBBG), Treasurer

MAJOR RESEARCH INTERESTS:

Human Serum Albumin – structure and functions; biochemical alterations in myocardial infarction; role as an important antioxidant in the body; free fatty acid binding properties; recombinant human serum albumin expression; site-directed mutagenesis; albumin-mediated reverse cholesterol transport; modulators for apo B secretion from Hepatocytes; various free fatty acids/albumin complexes' effects on insulin secretion from cultured insulinoma cells, glycated albumin's effects on apo B secretion from hepatocytes & insulin secretion from insulinoma cells.

RESEARCH AND/OR PROFESSIONAL EXPERIENCES:

1992-1993	Research Associate, Institute of Basic Sciences, InJe University, KimHae, Korea
1993-1994	Project Assistant, Population Project, East-West Center, Honolulu, HI
1994-1999	Graduate Assistant, Department of Biochemistry & Biophysics, University of Hawaii
1999-2001	Research Associate, Department of Biochemistry & Biophysics, University of Hawaii
2003-2004	Fellow, John A. Burns School of Medicine Office Medical Education Fellowship Program
2001-2008	Assistant Professor of Imi Ho'ola Post-Baccalaureate Program, Department of Native Hawaiian Health, John A. Burns School of Medicine, University of Hawaii

2002-2011	Clinical Assistant Professor, Department of Anatomy, Biochemistry, & Physiology, John A. Burns School of medicine, University of Hawaii
2008-present	Associate Professor of Imi Ho'ola Post-Baccalaureate Program, Department of Native Hawaiian Health, John A. Burns School of Medicine, University of Hawaii
2011-present	Clinical Associate Professor, Department of Anatomy, Biochemistry, & Physiology, John A. Burns School of Medicine, University of Hawaii

PUBLICATIONS IN PEER-REVIEWED SCIENTIFIC JOURNALS:

1. **Ha CE**, Bhagavan NV, Loscalzo M, Chan SK, Nguyen HV, Rios CN, Honda SA. Congestive Heart Failure: A Case of Protein Misfolding. *Hawaii J. Med. Public Health*. 2014 Jun; 73(6):172-174.
2. **Ha CE**, Bhagavan NV. Novel Insights into the Pleiotropic Effects of Human Serum Albumin in Health and Disease. *Biochim. Biophys. Acta*. 2013 Dec; 1830(12):5486-5493. Science Citation Index Impact Factor: **4.204**.
3. Twei V, Ha JS, **Ha CE**. Effects of Human Serum Albumin Complexed with Free Fatty Acids on Cell Viability and Insulin Secretion in the Hamster Pancreatic Beta-cell line HIT-T15. *Life Sciences*. 2011 Apr; 88(17-18):810-8. Science Citation Index Impact Factor: **2.704**.
4. Jourd'heuil FL, Lowery AM, Melton EM, Mnaimneh S, Bryan NS, Fernandez BO, Park JH, **Ha CE**, Bhagavan NV, Feelisch M, Jourd'heuil D. Redox-Sensitivity and Site-Specificity of S- and N-Denitrosation in proteins. *PLoS ONE*. 2010 Dec;5(12):e14400. Science Citation Index Impact Factor: **4.351**.
5. Twei V, Maiyosh G, **Ha CE**. Type 2 Diabetes Mellitus and Obesity in Sub-Saharan Africa. *Diabetes/Metabolism Research and Reviews*. 2010 Sep;26(6):433-45. Science Citation Index Impact Factor: **2.762**.
6. Manoukian AA, **Ha CE**, Seaver LH, Bhagavan NV. A Neonatal Death Due to Medium Chain Acyl-CoA Dehydrogenase Deficiency: Utilization of the Neonatal Metabolic Screen in a Functional Approach to Sudden Unexplained Infant Death. *American Journal of Forensic Medicine and Pathology*. 2009 Sep;30(3):284-6. Science Citation Index Impact Factor: **0.883**.
7. Bhagavan NV, Ha JS, Park JH, Honda SA, Rios CN, Sugiyama C, Fujitani GK, Takeuchi IK, **Ha CE**. Utility of Serum Free Fatty Acids Concentrations as Marker for Acute Myocardial Infarction and their potential role in the Formation of Ischemia Modified Albumin: A Pilot Study. *Clinical Chemistry*. 2009 Aug;55(8):1588-90. Science Citation Index Impact Factor: **7.905**.
8. **Ha CE**, Ha JS, Therault AG, Bhagavan NV. Effects of Statin treatments on Human Serum Albumin secretion and Synthesis in HepG2 cells. *J. of Biomed Sci*. 2009 Mar 11;16:32. Science Citation Index Impact Factor: **2.460**.
9. **Ha CE**, Masaki KH, Petrovich H, Chen R, Launer L, Bhagavan NV, Remaly AT, Curb JD. Human Serum Albumin Levels and Cardiovascular Risk Factors: The Honolulu Heart Program. *Hawaii Medical Journal*. 2007 Jun;66(6):148-152.
10. Ha JS, Theriault A, Bhagavan NV, **Ha CE**. Fatty acids bound to human serum albumin and its structural variants modulate apolipoprotein B secretion in HepG2 cells. *Biochim Biophys Acta*. 2006 Jul;1761(7):717-724. Science Citation Index Impact Factor: **4.656**.
11. Simard JR, Zunszain PA, **Ha CE**, Yang JS, Bhagavan NV, Petitpas I, Curry S, Hamilton JA. Locating high-affinity fatty acid-binding sites on albumin by x-ray crystallography and NMR spectroscopy. *Proc Natl Acad Sci USA*. 2005 Dec 13;102(50):17958-63. Science Citation Index Impact Factor: **9.681**.

12. Yang J, **Ha CE**, Bhagavan NV. Site-directed mutagenesis study of the role of histidine residues in the neutral-to-basic transition of human serum albumin. *Biochim Biophys Acta*. 2005 June 20;1724(1-2):37-48. Science Citation Index Impact Factor: **4.204**.
13. Liu R, Yang J, **Ha CE**, Bhagavan NV, Eckenhoff RG. Truncated human serum albumin retains general anesthetic binding activity. *Biochem J*. 2005 May 15;388(pt1):39-45. Citation Index Impact Factor: **4.654**.
14. Siemiarczuk A, Petersen CE, **Ha CE**, Yang J, Bhagavan NV. Analysis of Tryptophan Fluorescence Lifetimes in a Series of Human Serum Albumin Mutants with Substitutions in Subdomain 2A. *Cell Biochem Biophys*. 2004;40(2):115-22. Citation Index Impact Factor: **1.912**.
15. Liu R, Meng Q, Xi J, Yang J, **Ha CE**, Bhagavan NV, Eckenhoff RG. Comparative binding character of two general anaesthetics for sites on human serum albumin. *Biochem J*. 2004 May 15;380(Pt 1):147-52. Citation Index Impact Factor: **4.654**.
16. Petitpas I, Petersen CE, **Ha CE**, Bhattacharya AA, Zunszain PA, Ghuman J, Bhagavan NV, Curry S. Structural basis of albumin-thyroxine interactions and familial dysalbuminemic hyperthyroxinemia. *Proc Natl Acad Sci U S A*. 2003 May 27;100(11):6440-5. Citation Index Impact Factor: **9.681**.
17. Ha JS, **Ha CE**, Chao JT, Petersen CE, Theriault A, Bhagavan NV. Human serum albumin and its structural variants mediate cholesterol efflux from cultured endothelial cells. *Biochim Biophys Acta*. 2003 May 12;1640(2-3):119-28. Citation Index Impact Factor: **4.947**.
18. Bhagavan NV, Lai EM, Rios PA, Yang J, Ortega-Lopez AM, Shinoda H, Honda SA, Rios CN, Sugiyama CE, **Ha CE**. Evaluation of human serum albumin cobalt binding assay for the assessment of myocardial ischemia and myocardial infarction. *Clin Chem*. 2003 Apr;49(4):581-5. Citation Index Impact Factor: **7.905**.
19. Liu R, Pidikiti R, **Ha CE**, Petersen CE, Bhagavan NV, Eckenhoff RG. The role of electrostatic interactions in human serum albumin binding and stabilization by halothane. *J Biol Chem*. 2002 Sep 27;277(39):36373-9. Citation Index Impact Factor: **4.651**.
20. Petersen CE, **Ha CE**, Curry S, Bhagavan NV. Probing the structure of the warfarin-binding site on human serum albumin using site-directed mutagenesis. *Proteins*. 2002 May 1;47(2):116-25. Citation Index Impact Factor: **3.337**.
21. Subramaniam R, Fan XJ, Scivittaro V, Yang J, **Ha CE**, Petersen CE, Surewicz WK, Bhagavan NV, Weiss MF, Monnier VM. Cellular oxidant stress and advanced glycation endproducts of albumin: caveats of the dichlorofluorescein assay. *Arch Biochem Biophys*. 2002 Apr 1;400(1):15-25. Citation Index Impact Factor: **3.370**.
22. Yang J, Petersen CE, **Ha CE**, Bhagavan NV. Structural insights into human serum albumin-mediated prostaglandin catalysis. *Protein Sci*. 2002 Mar;11(3):538-45. Citation Index Impact Factor: **2.735**.
23. Harohalli K, Petersen CE, **Ha CE**, Feix JB, Bhagavan NV. Site-directed mutagenesis studies of human serum albumin define tryptophan at amino acid position 214 as the principal site for nitrosation. *J Biomed Sci*. 2002 Jan-Feb;9(1):47-58. Citation Index Impact Factor: **2.460**.
24. Eckenhoff RG, Petersen CE, **Ha CE**, Bhagavan NV. Inhaled anesthetic binding sites in human serum albumin. *J Biol Chem*. 2000 Sep 29;275(39):30439-44. Citation Index Impact Factor: **4.651**.
25. Petersen CE, **Ha CE**, Harohalli K, Feix JB, Bhagavan NV. A dynamic model for bilirubin binding to human serum albumin. *J Biol Chem*. 2000 Jul 14;275(28):20985-95. Citation Index Impact Factor: **4.651**.
26. **Ha CE**, Petersen CE, Park DS, Harohalli K, Bhagavan NV. Investigations of the effects of ethanol on warfarin binding to human serum albumin. *J Biomed Sci*. 2000 Mar-Apr;7(2):114-21. Citation Index

Impact Factor: **2.460**.

27. Petersen CE, **Ha CE**, Harohalli K, Park DS, Bhagavan NV. Familial dysalbuminemic hyperthyroxinemia may result in altered warfarin pharmacokinetics. *Chem Biol Interact*. 2000 Feb 1;124(3):161-72. Citation Index Impact Factor: **2.969**.
28. Petersen CE, **Ha CE**, Harohalli K, Park DS, Feix JB, Isozaki O, Bhagavan NV. Structural investigations of a new familial dysalbuminemic hyperthyroxinemia genotype. *Clin Chem*. 1999 Aug;45(8 Pt 1):1248-54. Citation Index Impact Factor: **7.905**.
29. **Ha CE**, Petersen CE, Park DS, Harohalli K, and Bhagavan NV. Identification of key amino acid residues involved in specific interactions between digoxin and human serum albumin. *J. Bioc. Mol. Biol. and Biop*. 1999;2: 201.
30. Park DS, Petersen CE, **Ha CE**, Harohalli K, Feix JB, Bhagavan NV. Expression of a human serum albumin fragment (consisting of subdomains 1A, 1B and 2A) and a study of its properties. *IUBMB Life*. 1999;48(2):169-74. Citation Index Impact Factor: **2.789**.
31. Petersen CE, **Ha CE**, Harohalli K, Park D, Bhagavan NV. Mutagenesis studies of thyroxine binding to human serum albumin define an important structural characteristic of subdomain 2A. *Biochemistry*. 1997 Jun 10;36(23):7012-7. Citation Index Impact Factor: **3.377**.
32. Petersen CE, **Ha CE**, Jameson DM, Bhagavan NV. Mutations in a specific human serum albumin thyroxine binding site define the structural basis of familial dysalbuminemic hyperthyroxinemia. *J Biol Chem*. 1996 Aug 9;271(32):19110-7. Citation Index Impact Factor: **4.651**.
33. Petersen CE, **Ha CE**, Mandel M, Bhagavan NV. Expression of a human serum albumin variant with high affinity for thyroxine. *Biochem Biophys Res Commun*. 1995 Sep 25;214(3):1121-9. Citation Index Impact Factor: **2.406**.

Book Chapters

Bhagavan NV and **Ha CE**. (2011). Chapter 6. Structural insights into the pleiotropic functions of human serum albumin (HSA). In Otagiri, M (Ed), Human Serum Albumin: New insights on its structural dynamics, functional impacts and pharmaceutical applications (1st ed.). Kumamoto: Sojo University Publishing Co.

Books

N. V. Bhagavan & C. E. Ha, Essentials of Medical Biochemistry with Clinical Cases, 1st Edition (textbook, ISBN:0120954613). 600 pages, Academic Press, January 2011.

N. V. Bhagavan & C. E. Ha, Essentials of Medical Biochemistry with Clinical Cases, 2nd Edition (textbook, ISBN:0124166873). 752 pages, Academic Press, June 2015.

PATENT

1. A patent has published by the U.S. patent office entitled, "Fatty acid markers for the diagnosis, prognosis and management of cardiovascular disease" on February 24, 2011, U.S. Patent Publication No. 2011-0045520-A1.