

**Chien-An Andy Hu, PhD**  
**Founding Director and Professor,**  
**Integrated Biomedical Sciences**  
**College of Science, Health and Pharmacy**  
**Roosevelt University, Schaumburg, IL60173**  
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## **EDUCATION:**

1993- **Postdoctoral Fellow, Human Molecular Genetics**  
1997- Howard Hughes Medical Institute, Institute of Genetic Medicine, Department of Pediatrics, Johns Hopkins University School of Medicine, Baltimore, Maryland  
Research Project: "Proline Metabolic Enzymes in Inborn Errors of Proline Metabolism and Other Diseases" Mentor: Dr. David Valle

1993- **PhD, Molecular Genetics**  
Department of Molecular Genetics, The Ohio State University, Columbus, Ohio  
Dissertation Title: "Osmoregulation and Proline Biosynthesis in Plants"  
Mentor: Dr. Desh Pal S. Verma

1991- **MS, Molecular Genetics**  
Department of Molecular Genetics, The Ohio State University, Columbus, Ohio  
Thesis Title: "Aerobic Status of Nodule Cells as Revealed by ADH-GUS Gene Introduction in Transgenic *Lotus corniculatus*"  
Mentor: Dr. Desh Pal S. Verma

1985- **BS, Microbiology**  
Department of Microbiology, Soochow University, Taipei, Taiwan  
Thesis Title: "Purification and Characterization of  $\alpha$ -Galactosidase from *Monascus*"  
Mentor: Dr. Hin-Chung Wong

## **OTHER TRAINING:**

2023 **Certificate, Continuing Education, Item Writing 101, Multiple-Choice Items with Realistic Clinical Scenarios**, The National Board of Osteopathic Medical Examiners (NBOME)

2022 **Certificate, Team-Based Learning Collaborative (TBLC) Fundamentals**, TBLC

2010 **Certificate, Leadership Training Workshop**, University of New Mexico, School of Medicine, Health Sciences Center (UNM SOM HSC)

2007 **Certificate, Essentials for Managers**, UNM, Anderson School of Management

2006 **Certificate, The Joan Gibson Health Care Ethics Program**, Institute for Ethics, UNM HSC

## **POSITIONS:**

**Sep 01, 2025 - present** **Founding Director and Tenured Professor**, Integrated Biomedical Sciences, College of Science, Health, and Pharmacy, Roosevelt University, Schaumburg, IL 60173

## **TEACHING**

Foundations in Biomedical Sciences (in preparation)

## **ADMINISTRATION**

**Directorship**, Graduate Programs in Integrated Biomedical Sciences (IBIOM)  
**Chair**, IBIOM Faculty Search Committee

**SCHOLARLY ACTIVITY****Mentor**, Faculty and student scholarly projects**Principal Investigator**, Applied and Integrated Research for Biomedicine (AIR4BIOM) projects

**Feb 01, 2022**    **Professor**, Department of Biomedical Sciences, Kansas College of  
**- May 31, 2025** Osteopathic Medicine (KansasCOM)

**TEACHING**

Sessions in Foundations in Health and Disease (FHD), Immuno-Heme-Lymph System (IHL),  
 Organ and Systems Modules (Musculoskeletal-skin, Renal, Special Senses,  
 Reproduction, and Respiratory), >20 sessions/year (refer to "Hu Taught Sessions")  
 Introduction to Medicine: Patient Presentation Track, Blood Module, Organ and Systems  
 Modules (Gastrointestinal, Cardiovascular, Renal, Respiratory, Musculoskeletal)

**ADMINISTRATION****Chair and Coordinator**, Committee of KansasCOM Dean's Lecture Series**Leader, Co-leader, and Facilitator**, Integrated teaching**SCHOLARLY ACTIVITY****Mentor**, Faculty and student scholarly projects**Principal Investigator**, Team research projects in OMM and biomedical research**Chair and Coordinator**, Dean's Lecture Series Committee, KansasCOM**SERVICE****Member**, Institutional Review Board (IRB) Committee**Member**, Budget Committee**Member**, Student Professional and Performance Committee (SPPC)**Ad hoc Member**, Faculty Search Committee

**2006-2021**    **Tenured Associate Professor, Department of Biochemistry and**  
**Molecular Biology (BMB), University of New Mexico School of**  
**Medicine (UNM SOM)**

**TEACHING**

2020-2021	<b>Gastrointestinal, Nutrition, and Metabolism (GINM), Medical School Block</b>
2019-2021	<b>Director/Instructor, Bioc495 (3 credit hours)</b> , Special Topics in Regulated Cell Death.
2018-2021	<b>Biomed 515 (3 credit hours)</b> , Cancer Biology, taught 1 week (2 meetings).
2017-2019	<b>Instructor, Bioc451 (3 credit hours)</b> , Physical Biochemistry, taught 2 weeks (4 meetings).
2017-2021	<b>Instructor, Bioc463 (3 credit hours)</b> , Biochemistry of Disease I, taught 5 weeks (10 meetings).
2012-2021	<b>Director/Coordinator, BMB Honors Research and Undergraduate Research Courses, Bioc497 (3 credit hours), Bioc498 (3 credit hours), and Bioc499 (1-3 credit hours).</b>
2018	<b>Instructor, Bioc464 (3 credit hours)</b> , Biochemistry of Disease II.
2017-2018	<b>Co-Chair/Director (with Professor W. Sherman Garver), Bioc448L (3 credit hours)</b> , Biochemical Methods Laboratory Course for BMB senior majors.

2014-2017 **Chair/Director, Bioc448L (3 credit hours)**, Biochemical Methods Laboratory Course for BMB senior majors.

2014-2018 **Chair/Director, Biomed 515 (3 credit hours)**, Cancer Biology, graduate level.

### **ADMINISTRATION**

2010-2012 **Vice and Acting Chairman**, BMB, UNM SOM

### **SCHOLARLY ACTIVITY**

#### UNM SOM HSC & MAIN CAMPUS

2017-2021 **Member**, Biomedical Sciences Graduate Program (BSGP) Admission Committee

2017-2020 **Member**, Institutional Animal Care and Use Committee (IACUC), UNM HSC

2012-2017 **Member**, Human Tissue Repository Committee and Human Tissue Repository Scientific Review Committee, UNM HSC

2006-2017 **Member**, Scientific Advisory Council (SAC) to the Deans, UNM HSC

2012-2013 **Chair**, Search Committee, BMB and Brain and Behavior Health Institute (BBHI) Tenure-track Assistant Professor (successfully hired Dr. Meilian Liu as a tenure-track assistant professor, started Jan 2014)

2011-2012 **Member**, Institutional Animal Care and Use Committee (IACUC), UNM HSC

2010-2014 **Faculty Senator**, UNM HSC Council

2010-2011 **Member**, UNM SOM Promotion & Tenure Committee

2008-2014 **Faculty Senator**, UNM Main and HSC Campuses

2008-2011 **Member**, Multidisciplinary Advisory Council (MAC), UNM HSC

### **2001-2006 Assistant Professor, BMB, UNM SOM**

### **TEACHING**

2006-2016 **Chair/Coordinator, Biochem 463/Biomed 563 (3 credit hours)**, "Biochemistry of Disease I"

2006-2014 **Chair/Coordinator, Biochem 464/Biomed 564 (3 credit hours)**, "Biochemistry of Disease II"

2005-2013 **Member**, "The Cellular and Molecular Basis of Disease" Seminar Series Committee (1 credit hour)

2005 Summer **Phase I, BSEP Summer Program** "Programmed Cell Death in Health and Disease" three lectures- (4 hr)

2003 Spring **Pharmacy 598**, "Reactive Oxygen Species and Toxicology", one lecture, "ROS signaling and gene expression" and one journal club- (3 hr)

2004 Spring **Biomedical 624**, "Proteomics", one lecture, "Cancer Proteomics" and one journal club presentation (3 hr)

2003-2006 **Medical School GI/Nutrition Block Lectures**, three lectures, "Secretion and Absorption by Small Intestine and Pancreas", "Digestion and Absorption of Carbohydrates" and "Digestion and Absorption of Proteins" (6 hr/year)

2002-2006 **GI/Nutrition Block Tutorial**, small group tutor (36 hr/year)

2003-2021 **Biomed 515**, "Cancer Biology", one block, "Programmed Cell Death in Cancer (12 hr/year)"

2001-2004 **DOD Undergraduate Breast Cancer Summer Research Training Program**, "Pathways to Research Careers"

2001 **Biomed 501**, Frontiers in Medical Sciences, one presentation of the PI's research interests (1 hr)

## **ADMINISTRATION**

2005	<b>Chair, “The Cellular and Molecular Basis of Disease (CMBD)” Seminar Series</b>
2003-2005	<b>Chair, BMB Department Journal Club</b>
2003-2006	<b>Chair, BMB Department Seminar Committee</b>

## SERVICE

2005-2021	<b><u>Member</u></b> , Cancer Research and Treatment Center (renamed as of August 2015) Comprehensive Cancer Center, UNM HSC
2005-2013	<b><u>Member</u></b> , UNM HSC “Cell and Molecular Basis of Disease (CMBD) Seminar Series” Committee
2006-2007	<b><u>Member</u></b> , Search Committee, BMB Tenure-track Assistant Professors (successfully hired Drs. Marco Bisoffi and Karlett Parra as tenure-track assistant professors, started 2007)
2005	<b><u>Chair</u></b> , CMBD Seminar Series Committee, UNM HSC
2003-2006	<b><u>Member</u></b> , Biomedical Sciences Graduate Program (BSGP) Steering Committee
2002-2006	<b><u>Member</u></b> , BSGP Graduate Student Committee
2001-2006	<b><u>Member</u></b> , Environmental Disease and Toxicology Research Core 1, National Institute of Environmental Health Center, UNM College of Pharmacy
2001-2002	<b><u>Speaker</u></b> , twice to speak to cancer survivors, volunteers, and fundraisers in “Relay for Life, American Cancer Society”, Los Alamos and Hobbs

**1997-2001 Faculty Research Associate**, McKusick-Nathans Institute of Genetic Medicine, Johns Hopkins University School of Medicine, Baltimore, Maryland

## TEACHING

Help the Director to train postdoctoral fellows and graduate students in research.

## **ADMINISTRATION**

N/A

## **SCHOLARLY ACTIVITY**

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## Peer-reviewed publications (see Publications)

**1993-1997 Postdoctoral Fellow**, Howard Hughes Medical Institute, McKusick-Nathans Institute of Genetic Medicine, Johns Hopkins University School of Medicine, Baltimore, Maryland

## **MENTEES AND STUDENTS (2001 to 2021):**

- Junior Faculty (3 total, and all Under-Represented Minorities (URMs))
- Research Scientists and postdoctoral fellows (6 total, and all URMss)
- Medical students (4 total, all URMss, and 1 female)

Adam Azar July, 2016-2018

- Project: “SNP Analysis of Human P5CR1 in Melanoma”

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**Chris Coriz** July, 2011-2018

- Project: “Blocking of ApoL6-induced Apoptosis in Human Atherosclerotic Lesion Cells”

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**S. Anthony Kaviratne** June 2006-December 2006

- Project: "The role of apolipoprotein L6 in cardiovascular disease"
- Yuxian Xu** June 2006- May 2010
- Project: "Evaluation of proteasome activities in cells under ischemia conditions in vitro"
- **Graduate students (17 total, 10 URM, and 9 women)**
    - **Two PhD students (1 URM, and one female)**  
**Ramesh Raj Kaini** (MD), BSGP, UNM-SOM, PhD  
 Dissertation: *Functions of Autophagy in Lipid Homeostasis and Survival in Androgen-dependent Prostate Cancer.* May 2012  
 Published papers:
      1. Kaini RR, Sillerud LO, Zhaorigetu S, Hu CA. Autophagy regulates lipolysis and cell survival through lipid droplet degradation in androgen-sensitive prostate cancer cells. *Prostate*. 2012 Sep 15; 72(13):1412-22. PubMed PMID: 22294520; PubMed Central PMID: 22294520; PMC3418419.
      2. Kaini RR, Hu CA. Synergistic killing effect of chloroquine and androgen deprivation in LNCaP cells. *Biochem Biophys Res Commun*. 2012 Aug 24; 425(2):150-6. PubMed PMID: 22819840.
      3. Zhaorigetu S, Wan G, Kaini R, Jiang Z, Hu CA. ApoL1, a BH3-only lipid-binding protein, induces autophagic cell death. *Autophagy*. 2008 Nov; 4(8): 1079-82.
      4. Wan G, Zhaorigetu S, Liu Z, Kaini R, Jiang Z, Hu CA. Apolipoprotein L1, a novel Bcl-2 homology domain 3-only lipid-binding protein, induces autophagic cell death. *J Biol Chem*. 2008 Aug 1; 283(31):21540-9.
- **Kirsten White**, BSGP, UNM-SOM, PhD  
 Dissertation: *Autophagy and Melanoma.* May 2015  
 Published papers:
    1. White KA, Luo L, Thompson TA, Torres S, Hu CA, Thomas NE, Lilyquist J, Anton-Culver H, Gruber SB, From L, Busam KJ, Orlow I, Kanetsky PA, Marrett LD, Gallagher RP, Sacchetto L, Rosso S, Dwyer T, Cust AE, Begg CB, Berwick M; GEM Study Group. Variants in autophagy-related genes and clinical characteristics in melanoma: a population-based study. *Cancer Med*. 2016 Nov; 5:3336-3345.
    2. Hu CA, White KA, Torres S, Ishak M, Sillerud L, Miao Y, Liu Z, Wu, L. Sklar, Berwick M. Apoptosis and Autophagy: The Yin-Yang of Homeostasis in Cell Death in Cancer. In *Autophagy: Cancer, Other Pathologies. Inflammation, Immunity, Infection, and Aging* 2015 Volume 7, M. A. Hayat, edit., AP Press.
    - **Nine dissertation/thesis committee members (7 PhD and 2 MS, 5 URM)**
    - **Six rotation students (6 total, 4 URM)**
- **Post-bachelor students (14 total, 7 URM, and 6 women)**
  - **Undergraduate students (29 total, 14 URM, and 12 women)**
  - **High school students (2 total, both URM women)**

## ACADEMIC SERVICE (from 2001 to 2021):

### Representative National/International Grant Review Panels

- AHA, Review Panel, "AHA 2018-2019 Career Development Award Vascular Basic Sciences"
- NIH, e.g., R24, USA
- Collaborative Research and Development Grant, NSERC, Canada

### Journal Editor

- **Editorial Board Member**, *The Open COVID-19 Journal (TOCOVIDJ)*, from 2020 (active)
- **Guest Editor-in-Chief**, Three Special Issues, *Amino Acids*
  - "Cellular, Organoid and Animal Models in Therapeutics," 49 (12). 2017;
  - "Amino Acids and Autophagy," 47 (10), 2015, with Drs. Zhenlong Wu and Junjun Wang;
  - "Proline Metabolism in Health and Disease" 35(4), 2008, with David Valle and James Phang
- **Editor, Amino Acids** (2008-2018)

### Journal Peer Reviewer

American Journal of Human Genetics  
 APMIS  
 Biochemical Journal  
 Cancer Research  
 Cell Research (China)  
 Cell Death and Disease  
 Cureus, Journal of Medical Science  
 Experimental Biology and Medicine,  
 FEBS OpenBio,  
 Human Molecular Genetics,  
 Journal of Animal Science,  
 Journal of Functional Food,  
 Journal of Nutrition,  
 Medical Science Educator,  
 Nephrology Dialysis Transplantation,  
 Oncotargets,  
 Science,  
 Toxicology and Applied Pharmacology

Anti-Cancer Agents in Medicinal Chemistry  
 Autophagy  
 Cancer Chemotherapy and Pharmacology  
 Carcinogenesis  
 Cell Death and Differentiation  
 Clinical and Experimental Metastasis  
 Diseases  
 FEBS Letters  
 Human Genetics  
 Journal of Agricultural and Food Chemistry  
 Journal of Biological Chemistry  
 Journal of Neuroscience Research  
 Journal of Pediatric Biochemistry  
 Molecular Carcinogenesis  
 Oncogene  
 PLoS One  
 The Open COVID-19 Journal (TOCOVIDJ)

## RESEARCH FUNDING:

**Project title:** *'Role of cytokines and APOL1 in the pathogenesis of childhood HIV-associated nephrology'*

**Principal investigator:** Ray, Patricio, Children's National Medical Center, and George Washington University School of Medicine, Washington, DC

**Co-investigator and sub-awardee:** Hu, Chien-An A.

**Funding organization:** NIDDK (R01DK103564)

**Starting and stopping dates:** August 01, 2014-June 30, 2018

**Summary:** Investigate the combinational effect of cytokines and ApoL1 in HIV-associated nephropathy in children using cell and animal models, and human samples.

**Project title:** *"High throughput drug screening- inhibitors of ApoL6-induced apoptosis in cancer and atherosclerosis"*

**Principal investigator:** HU, Chien-An A.

**Funding organization:** Cardiology Division, UNM Hospital

**Starting and stopping dates:** October 1, 2013- June 30, 2018

**Summary:** Characterization of repurposed drugs that enhance or block ApoL6-induced apoptosis in cell-based drug screening models.

**Project title:** *" High throughput drug screening- Inhibitors of ApoL6-induced apoptosis in atherosclerosis and cancer"*

**Principal investigator:** HU, Chien-An A., Sklar, Larry, and Laskey, Warren

**Percent effort:** 1%

**Funding organization:** CTSC, UNM HSC

**Starting and stopping dates:** October 1, 2013-September 30, 2014

**Summary:** Characterization of repurposed drugs that enhance or block ApoL6-induced apoptosis in cell-based drug screening models.

**Project title:** *"The combined structural bioinformatics and functional approach for the characterization of the non-synonymous SNPs of apolipoprotein Ls (ApoLs)"*

**Principal investigator:** HU, Chien-An A.

**Percent effort:** 4%

**Funding organization:** New Mexico INBRE (2P20RR016480); Dr. Jeffrey B. Arterburn, P.I., New Mexico State University; Task #7

**Starting and stopping dates:** July 2009- Feb 2014

**Summary:** To dissect functions of the nonsynonymous SNP alleles of ApoLs using structural and functional analysis.

**Project title:** *"Functional genomics and expression analyses of human APOL1 in kidney cells in HIV-associated nephropathy"*

**Principal investigator:** HU, Chien-An A.

**Percent effort:** 1%

**Funding organization:** Children's National Medical Center; Reference #1667

**Starting and stopping dates:** May 1, 2011-April 30, 2012, no cost extension to April 30, 2013

**Summary:** To investigate 1). Functional genomics analysis of SNPs of the human APOL1 gene in DNA/RNA samples, isolated from cells established from HIVAN patients; 2). Levels of ApoL1 proteins in urine samples of HIVAN and control patients; 3). Levels of ApoL1 proteins in podocytes and/or other cell types isolated from HIVAN and control patients; and 4). construction and functional expression of pathological SNP alleles of the human APOL1 gene in model kidney cell lines.

**Project title:** *"Role of ApoL6 in atherosclerosis and cancer"*

**Principal investigator:** HU, Chien-An A.

**Percent effort:** 5%

**Funding organization:** UNM HSC

**Starting and stopping dates:** April 1, 2010-December 31, 2011

**Summary:** To investigate the role of ApoL6 in ROS generation and apoptosis in atherosclerosis and cancer.

**Project title:** *"Novel proapoptotic BH3-only proteins in cancer apoptosis"*

**Principal investigator:** HU, Chien-An A.

**Percent effort:** 40%

**Funding organization:** NCI RO1 (5RO1CA106644)

**Starting and stopping dates:** May 15, 2005-March 31, 2010

**Summary:** Using a combination of sophisticated approaches in database mining, functional genomics, structural prediction, proteomics, lipidomics, and functional assays, this project aimed at the identification and characterization of novel BH3-only pro-death genes/proteins and their roles in cancer cell death.

**Project title:** *'Mutations of PUMA cause prostate cancer development and aggressiveness'*

**Principal investigator:** HU, Chien-An A.

**Percent effort:** 17%

**Funding organization:** Department of Army (PC040298; W81XWH-05-1-0357)

**Starting and stopping dates:** May 2005-May 2007

**Summary:** Based on our preliminary observation that expression of PUMA (P53 Upregulated Modulator of Apoptosis) is relatively high in normal prostate cells and significantly reduced in prostate cancer (PCa) cell models, and the fact that PUMA's chromosome localization on 19q13 and PUMA's role as a pro-apoptotic effector, we hypothesized that PUMA may be a candidate gene (or susceptibility locus) that, when mutated or downregulated, promotes tumor progression and aggressiveness. Moreover, based on the strong familial linkage between chromosome 19q13 and PCa in different families, and the availability of DNA samples from PCa patients, we further hypothesized that there may be some pathological point-mutation or small-deletion mutant alleles of PUMA that were inherited in the chromosome 19q13-associated PCa families. In this project, we (1) surveyed the PUMA gene for mutations using RT-PCR amplification, PCR amplification of genomic DNA, and direct sequencing of amplified amplicons from PCa cell models, LNCaP, DU145, and PC3; and (2) surveyed the PUMA gene for mutations using PCR amplification of genomic DNA and direct sequencing of amplified amplicons of the clinical samples that were isolated from PCa patients and control. We found no mutations in the coding sequence of the PUMA gene of the familial, 19q13-associated PCa patients. It is possible that PUMA is not "the gene" mutated in 19q13-associated PCa patients. This notion is supported by three recent papers documenting that the coding sequence of PUMA is not mutated in three other cancer types: gastric, colorectal, and head and neck. Alternatively, mutations could be present in the 5'-UTR, promoter region, or introns of the PUMA gene.

**Project title:** *'Mutations of PUMA cause prostate cancer development and aggressiveness'*

**Principal investigator:** HU, Chien-An A.

**Percent effort:** 5%

**Funding organization:** UNM-SOM Research Allocation Committee (C-2264-RAC)

**Starting and stopping dates:** January 2005-December 2005

**Summary:** (see above)

**Project title:** *'PUMA, p53 upregulated modulator of apoptosis, in ROS generation in cancer'*

**Principal investigator:** HU, Chien-An A.

**Percent effort:** 5%

**Funding organization:** UNM-SOM Research Allocation Committee

**Starting and stopping dates:** July 2003-June 2004

**Summary:** study of the molecular mechanisms of PUMA-induced apoptosis in cancer.

**Project title:** *'P53 targets, apoptosis and cancer'*

**Principal investigator:** HU, Chien-An A.

**Percent effort:** 5%

**Funding organization:** ACS-IRG-192 412488-00095

**Starting and stopping dates:** 7/1/01-6/30/02

**Summary:** study of the molecular mechanisms of **p53 and POX/proline mediated apoptosis**, their possible physiological significance, and the potential use of p53 and proline/POX induced apoptosis as a therapeutic intervention in certain cancers.

#### EXTERNAL HONORS/AWARDS:

2017-2019     **Adjudicator, PhD Dissertation**, Institute of Science, GITAM University, India  
 2016-2019     **Xiaoxiang Fellow and Lecture Professorship**, Hunan Normal University, Changsha, Hunan, China (invited to the School for delivering lectures and conducting research collaborations)  
 2016-2020     **Foreign Expert and Professorship**, Wuhan Polytechnic University, Wuhan, Hubei, China (invited to the School for delivering lectures and conducting research collaborations)  
 2014-2016     **Professorship Under CAS President's International Fellowship Initiative (PIFI), Chinese Academy of Sciences, China** (via Institute of Subtropical Agriculture, Chinese Academy of Sciences, Changsha, Hunan, China)  
 2014-2016     **Evergreen Scholar**, Institute of Animal Sciences, Wuhan Polytechnic University, Wuhan, Hubei, China  
 2005, '06, '09     **Recipient**, American Association for Cancer Research (AACR) Minority-Serving Institution Faculty Scholar Award in Cancer Research  
 2001-2002     **Recipient**, American Cancer Society Institutional Grant at UNM HSC. Dr. Hu was invited twice to speak to cancer survivors, volunteers, and fundraisers in "Relay for Life, American Cancer Society", Los Alamos and Hobbs, 2001-2002  
 2001     **Scholar**, one of 12 scholars who were funded, in part, through a Howard Hughes Grant to UNM HSC Cancer Center

#### INTERNAL HONORS/AWARDS:

1997     **Recipient**, *Francis F. Schwentker Award for Excellence in Research* by Residents and Fellows, Department of Pediatrics, Johns Hopkins Hospital  
 1993-1997     **Recipient**, *Howard Hughes Medical Institute Postdoctoral Fellowship*  
 1992     **First-place Winner**, Scott Falkenthal Memorial Graduate Student Colloquium, Department of Molecular Genetics, The Ohio State University  
 1992     **Recipient**, *Outstanding Research Paper Award*, 1992 Graduate Research Forum in the Area of Biological Sciences, Council of Graduate Students, The Ohio State University  
 1985     **Recipient**, *Undergraduate Thesis Award*, Department of Microbiology, Soochow University, Taipei, Taiwan

#### PEER-REVIEWED PUBLICATIONS (>100 articles and book chapters)

**Representative articles (Dr. Hu as the corresponding authors are highlighted)**

Cruz H, Shah P, Wohlgemuth N, Ketchum R, Nassif, **Hu CA**. Pyroptosis in Ulcerative Colitis, Biomarkers and Therapeutic Targets. *Journal Biomed Sci* 2025, 32,106. <https://doi.org/10.1186/s12929-025-01206-x>

**Hu CA**, Baum C, Xie Y. Cancer Metastasis Through the Lymphatics: Invasion and Dissemination. *Lymphatics* 2025, 3(3), 17; <https://doi.org/10.3390/lymphatics3030017>

White C, Xie Y, Bigham J, Stanzak A, Ninan D, **Hu CA**. Osteopathic Manipulative Medicine and Disorders: An Overview of Peer-Reviewed Publications 2018–2022. *Cureus* 2024 June 11, 16(6): e62185. doi:10.7759/cureus.62185

**Hu CA**, Isozymes of P5C reductase (PYCR) in human diseases: focus on cancer. *Amino Acids*. 2021 <https://doi.org/10.1007/s00726-021-03048-x>

**Hu CA**, Murphy I, Klimaj S, Reece J, Chand, Hitendra. SARS-CoV-2, inflammatory apoptosis, and cytokine storm syndrome. *The Open COVID Journal*. 2021 DOI: 10.2174/2666958702101010022

**Hu CA**, Zharigetu S, Davidson WS, Laskey W. ApoL6: A novel biomarker of apoptotic and necroptotic activity in evolving ST-segment myocardial infarction in man. *J Integrative Cardiol Open Access*. 2020 DOI: 10.31487/j.JICOA.2020.04.10

**Hu CA**, Laskey W, Fu S, Qiu Y, Liu Y, Ding X, Ying Y, Ma T, Sklar L. Apoptosis cellular models in cancer therapeutics. *Clin Oncol Res*. 2020 DOI: 10.31487/j.COR.2020.07.13

Murphy I, Wan G, Fu S, Qiu Y, Liu Y, Ma, T, Sklar L, **Hu CA**. ApoL6 induces dichotomous cell death involving apoptosis and necroptosis. *Clin Oncol Res*. 2020 DOI: 10.31487/j.COR.2020.07.12

Wu Z, Hou Y, Dai Z, **Hu CA**, Wu G. Metabolism, nutrition, and redox signaling of hydroxyproline. *Antioxid Redox Signal*. 2019 Feb 1;30(4):674-682. PubMed PMID: 28934858.

Hussain SS, George S, Singh S, Jayant R, **Hu CA**, Sopori M, Chand HS. A small molecule BH3-mimetic suppresses cigarette smoke-induced mucous expression in airway epithelial cells. *Sci Rep*. 2018 Sep 14;8(1):13796. PubMed PMID: 30218002; PubMed Central PMCID: PMC6138652.

Savic J, **Hu CA**. Necroptosis and myocardial infarction. *J Biomed Sci Tech*. 2018 1 (1): 47-55.

Liu Y, Wang X, Hou Y, Yin Y, Qiu Y, Wu G, **Hu CA**. Roles of amino acids in preventing and treating intestinal diseases: recent studies with pig models. *Amino Acids*. 2017 Aug;49(8):1277-1291. Review. PubMed PMID: 28616751.

Beckerman P, Park ASD, Karchin JB, Dummer P, Soomro I, Qiu C, Miner JK, **Hu CA**, Rohacs T, Kazunori I, Shuta I, Saleem MA, Palmer M, Cuervo AM, Kopp JB, Susztak K. Transgenic expression of human APOL1 risk variants in podocytes induces kidney disease in mice. *Nat. Med.* 2017 Apr;23(4):429-438. doi: 10.1038/nm.4287. Epub 2017 Feb 20.

White KA, Luo L, Thompson TA, Torres S, **Hu CA**, Thomas NE, Lilyquist J, Anton-Culver H, Gruber SB, From L, Busam KJ, Orlow I, Kanetsky PA, Marrett LD, Gallagher RP, Sacchetto L, Rosso S, Dwyer T, Cust AE, Begg CB, Berwick M; GEM Study Group. Variants in autophagy-related genes and clinical characteristics in melanoma: a population-based study. *Cancer Med*. Nov; 5:3336-3345. PubMed PMID: 27748080; PubMed Central PMCID: PMC5119988.

Li F, Li Y, Duan Y, **Hu CA**, Tang Y, Yin Y. Myokines and adipokines: Involvement in the crosstalk between skeletal muscle and adipose tissue. *Cytokine Growth Factor Rev*. 2016 Oct 13. pii: S1359-6101(16)30091-0. PubMed PMID:27765498.

Neuwelt A, Sidhu N, **Hu CA**, Mlady G, Eberhardt SC, Sillerud LO. Iron-based superparamagnetic nanoparticle contrast agents for MRI of infection and inflammation. *Am J Roentgenol*. 2015 Mar; 204(3):W302-13. PubMed PMID: 25714316; PubMed Central PMCID: PMC4395032.

Nighot PK, **Hu CA**, Ma TY. Autophagy enhances intestinal epithelial tight junction barrier function by targeting Claudin-2 protein degradation. *J Biol Chem*. 2015 Mar 13; 290(11):7234-46. PubMed PMID: 25616664; PubMed Central PMCID: PMC4358142.

Yang J, **Hu CA**, Miao Y. Tc-99m-labeled RGD-conjugated alpha-melanocyte stimulating hormone hybrid peptides with reduced renal uptake. *Amino Acids*. 2015 Apr; 47(4):813-23. PubMed PMID:25557051; PubMed Central PMCID: PMC4363277.

Zhang H, **Hu CA**, Kovacs-Nolan J, Mine Y. Bioactive dietary peptides and amino acids in inflammatory bowel disease. *Amino Acids*. 2015 Oct;47(10):2127-41. PubMed PMID: 25501277.

**Hu CA**, Hou Y, Yi D, Qiu Y, Wu G, Kong X, Yin Y. Autophagy and tight junction proteins in the intestine and intestinal diseases. *Animal Nutr*. 2015 1(1):123-127.

**Hu CA**, Wu Z, Wang J. Erratum to: Amino acids and autophagy: their crosstalk,

interplay, and interlock. ***Amino Acids***. 2015 Oct 26. [Epub ahead of print] PubMed PMID: 26498007.

**Hu CA**, Ray PE. How complicated can it be? The link between APOL1 risk variants and lipoprotein heterogeneity in kidney and cardiovascular diseases. ***Nephrol Dial Transplant***. 2015 Oct 3. pii: gfv357. [Epub ahead of print] PubMed PMID: 26433015.

**Hu CA**, Wu Z, Wang J. Amino acids and autophagy: their crosstalk, interplay, and interlock. ***Amino Acids***. 2015 Oct; 47(10):2035-6. PubMed PMID: 26374643.

**Hu CA**, Wu Z, Wu G, Zhaorigetu S, Chand H, Sun K, Ji Y, Wang B, Dai Z, Walton B, Miao Y, Hou Y. Intimacy and a deadly feud: the interplay of autophagy and apoptosis mediated by amino acids. ***Amino Acids***. 2015 Oct; 47(10):2089-99. PubMed PMID: 26354329.

**Hu CA**, Hou Y. (2014) Mammalian P5CR and P5CDH: protein structure and disease association. ***SJO Biochem***. 1: 4-7.

Kaini RR, Sillerud LO, Zhaorigetu S, **Hu CA**. Autophagy regulates lipolysis and cell survival through lipid droplet degradation in androgen-sensitive prostate cancer cells. ***Prostate***. 2012 Sep 15; 72(13):1412-22. PubMed PMID: 22294520; PubMed Central PMID: 22294520; PMC3418419.

Kaini RR, **Hu CA**. Synergistic killing effect of chloroquine and androgen deprivation in LNCaP cells. ***Biochem Biophys Res Commun***. 2012 Aug 24; 425(2):150-6. PubMed PMID: 22819840.

**Hu CA**, Klopfer EI, Ray PE. Human apolipoprotein L1 (ApoL1) in cancer and chronic kidney disease. ***FEBS Lett***. 2012 Apr 5; 586(7):947-55. PubMed PMID: 22569246; PubMed Central PMCID: PMC3349435.

Klionsky DJ, **Hu CA** et al. Guidelines for the use and interpretation of assays for monitoring autophagy. ***Autophagy***. 2012 Apr;8(4):445-544. PubMed PMID: 22966490; PubMed Central PMCID: PMC3404883.

Zhaorigetu S, Yang Z, Toma I, McCaffrey TA, **Hu CA**. Apolipoprotein L6, induced in atherosclerotic lesions, promotes apoptosis and blocks Beclin 1-dependent autophagy in atherosclerotic cells. ***J Biol Chem***. 2011 Aug 5; 286(31):27389-98. PubMed PMID: 21646352; PubMed Central PMCID: PMC3149332.

**Hu CA**, Bart Williams D, Zhaorigetu S, Khalil S, Wan G, Valle D. Functional genomics and SNP analysis of human genes encoding proline metabolic enzymes. ***Amino Acids***. 2008 Nov;35(4):655-64. PubMed PMID: 18506409; PubMed Central PMCID: PMC2707926.

**Hu CA**, Phang JM, Valle D. Proline metabolism in health and disease. Preface. ***Amino Acids***. 2008 Nov; 35(4):651-2. PubMed PMID: 18504525; PubMed Central PMCID: PMC2659409.

**Hu CA**, Khalil S, Zhaorigetu S, Liu Z, Tyler M, Wan G, Valle D. Human Delta1-pyrroline-5-carboxylate synthase: function and regulation. ***Amino Acids***. 2008 Nov;35(4):665-72. PubMed PMID: 18401542; PubMed Central PMCID: PMC2707934.

Zhaorigetu S, Wan G, Kaini R, Jiang Z, **Hu CA**. ApoL1, a BH3-only lipid-binding protein, induces autophagic cell death. ***Autophagy***. 2008 Nov; 4(8): 1079-82. PubMed PMID: 18927493; PubMed Central PMCID: PMC2659410.

Wan G, Zhaorigetu S, Liu Z, Kaini R, Jiang Z, **Hu CA**. Apolipoprotein L1, a novel Bcl-2 homology domain 3-only lipid-binding protein, induces autophagic cell death. ***J Biol Chem***. 2008 Aug 1;283(31):21540-9. PubMed PMID: 18505729; PubMed Central PMCID: PMC2490785.

Liu Z, Wan G, Heaphy C, Bisoffi M, Griffith JK, **Hu CA**. A novel loss-of-function mutation in TP53 in an endometrial cancer cell line and uterine papillary serous carcinoma model. ***Mol Cell Biochem***. 2007 Mar; 297(1-2):179-87. PubMed PMID: 17119852.

**Hu CA**, Donald SP, Yu J, Lin WW, Liu Z, Steel G, Obie C, Valle D, Phang JM. Overexpression of proline oxidase induces proline-dependent and mitochondria-mediated apoptosis. ***Mol Cell Biochem***. 2007 Jan;295(1-2):85-92. PubMed PMID: 16874462.

Liu Z, Lu H, Shi H, Du Y, Yu J, Gu S, Chen X, Liu KJ, **Hu CA**. PUMA overexpression induces reactive oxygen species generation and proteasome-mediated stathmin degradation in colorectal cancer cells. *Cancer Res.* 2005 Mar 1;65(5):1647-54. PubMed PMID: 15753358.

Liu Z, Lu H, Jiang Z, Pastuszyn A, **Hu CA**. Apolipoprotein L6, a novel proapoptotic Bcl-2 homology 3-only protein, induces mitochondria-mediated apoptosis in cancer cells. *Mol Cancer Res.* 2005 Jan; 3(1):21-31. PubMed PMID: 15671246.

Gu S, Liu Z, Pan S, Jiang Z, Lu H, Amit O, Bradbury EM, **Hu CA**, Chen X. Global investigation of p53-induced apoptosis through quantitative proteomic profiling using comparative amino acid-coded tagging. *Mol Cell Proteomics.* 2004 Oct; 3(10):998-1008. PubMed PMID: 15284338.

**Hu CA**, Lin WW, Obie C, Valle D. Molecular enzymology of mammalian Delta1-pyrroline-5-carboxylate synthase. Alternative splice donor utilization generates isoforms with different sensitivity to ornithine inhibition. *J Biol Chem.* 1999 Mar 5;274(10):6754-62. PubMed PMID: 10037775.

Geraghty MT, Vaughn D, Nicholson AJ, Lin WW, Jimenez-Sanchez G, Obie C, Flynn MP, Valle D, **Hu CA**. Mutations in the Delta1-pyrroline 5-carboxylate dehydrogenase gene cause type II hyperprolinemia. *Hum Mol Genet.* 1998 Sep;7(9):1411-5. PubMed PMID: 9700195.

**Hu CA**, Lin WW, Valle D. Cloning, characterization, and expression of cDNAs encoding human delta 1-pyrroline-5-carboxylate dehydrogenase. *J Biol Chem.* 1996 Apr 19; 271(16):9795-800. PubMed PMID: 8621661.

Kishor PBK, Z. Hong Z, G.-H. Miao GH, **Hu CA**, and D. P. S. Verma DPS. Overexpression of  $\Delta^1$ -pyrroline-5-carboxylate synthetase increases proline production and confers osmotolerance in transgenic plants. *Plant Physiol.* (1995) 108, 1387-1394.

Delauney AJ, **Hu CA**, Kishor PB, Verma DP. Cloning of ornithine delta-aminotransferase cDNA from *Vigna aconitifolia* by trans-complementation in *Escherichia coli* and regulation of proline biosynthesis. *J Biol Chem.* 1993 Sep 5; 268(25):18673-8. PubMed PMID: 8103048.

**Hu CA**, Delauney AJ, Verma DP. A bifunctional enzyme (delta1-pyrroline-5-carboxylate synthetase) catalyzes the first two steps in proline biosynthesis in plants. *Proc Natl Acad Sci U S A.* 1992 Oct 1; 89(19):9354-8. PubMed PMID: 1384052; PubMed Central PMCID: PMC50125.

Wong HC, **Hu CA**, Yeh HL, Su W, Lu HC, Lin CF. Production, purification, and characterization of alpha-galactosidase from *Monascus pilosus*. *Appl Environ Microbiol.* 1986 Nov; 52(5):1147-52. PubMed PMID: 16347214; PubMed Central PMCID: PMC239188.

## BOOK CHAPTERS:

**Hu CA** (2016) Autophagy and Tight junction Proteins in Intestinal Cells. In *“Animal Nutrition and Regulation of Feed and Reproductive Environment” “Forum of Chinese Academy of Engineering”*

Phang J, **Hu CA**, Valle D. (2016, online edition) Disorders of proline and hydroxyproline metabolism. In *“The Online Metabolic and Molecular Bases of Inherited Disease (OMMBID)”* D. Valle, editor-in-chief. McGraw-Hill, Inc.

**Hu CA**, White K, Torres S, Ishak M, Sillerud L, Miao Y, Liu Z, Wu L, Sklar B, Berwick M (2015) Apoptosis and Autophagy: The Yin-Yang of Homeostasis in Cell Death in Cancer. In *“Autophagy: Cancer, Other Pathologies, Inflammation, Immunity, Infection, and Aging”* Volume 7, M. A. Hayat, edit., AP Press.

Fu XS, **Hu CA**, Chen J, Wang J, Liu KJR. (2005) Cancer genomics, proteomics, and clinical applications. In *“Genomics Signal Processing and Statistics”*

Phang J, **Hu CA**, Valle D. (2005, online edition) (2001) Disorders of proline and hydroxyproline metabolism. In "**The Metabolic and Molecular Bases of Inherited Disease**" C. R. Scriver, A. L. Beaudet, W. S. Sly, and D. Valle, eds. McGraw-Hill, Inc.

Verma DPS, **Hu CA**, Delauney AJ. (1993) Genetic manipulation for proline overproduction and the control of osmoregulation in plants. In "**Adaptation of Vegetable and Other Food Crops to Temperature and Water Stress**," International Symposium on *Adaptation of Vegetable and Other Food Crops to Temperature and Water Stress*. Asian Vegetable Research and Development Center.

Verma DPS, **Hu CA**, Delauney AJ, Miao G, Hong Z. (1992) Deciphering proline biosynthesis pathways in plants by direct, *trans*- and co-complementation in bacteria. In "**Biosynthesis and Molecular Regulation of Amino Acids in Plants**," B. K. Singh, H. E. Flores, and J. C. Shannon, eds. pp. 128-138. American Society of Plant Physiologists.

#### INVITED PRESENTATIONS:

1. **Invited Speaker**, OMM in Human Disorders. Semi-annual CME Conference, Kansas Association of Osteopathic Medicine (KAOM), Wichita, KS, November 01, 2024
2. **Invited Speaker**, Regulated Cell Death in Gut Health. Wuhan Forum and Green Feeds and Animal Product Safety Conference, Wuhan, Hubei, China, August 6, 2019.
3. **Invited Speaker**, Necroptosis and Ferroptosis in Animal Health. Wuhan Polytechnic University, Wuhan, Hubei, China, July 19, 2019.
4. **Invited Speaker**, ApoL1 CKD Risk Alleles in New Mexico African American and American Indian Populations: Racial Disparity. Mountain West (MW) Center of Translational Research (CTR) Infrastructure Network (IN) Annual Meeting, Las Vegas, NV, June 10, 2019.
5. **Foreign Expert Speaker**, Inflammation and Necroptosis in Humans and Animals. School of Animal Science and Nutritional Engineering, Wuhan Polytechnic University, Wuhan, Hubei, China, July 4, 2018.
6. **Invited Speaker**, PUMA in Inflammation and Necroptosis in Humans and Animals. Institute of Life Sciences, Hunan Normal University, Changsha, Hunan, China, June 1, 2018.
7. **Foreign Expert Speaker**, Necroptosis in Diseases. School of Animal Science and Nutritional Engineering, Wuhan Polytechnic University, Wuhan, Hubei, China. July 6, 2017.
8. **Invited Speaker**, Necroptosis in Diseases. Institute of Life Sciences, Hunan Normal University, Changsha, Hunan, China. June 5, 2017.
9. **Invited Speaker**, Gut Microbiota in Health and Disease. The 10<sup>th</sup> National Congress of Animal Nutrition Branch of Chinese Association of Animal Science and Veterinary Medicine and the 12<sup>th</sup> Animal Nutrition Symposium, Wuhan, China. October 22, 2016.
10. **Keynote Speaker**, Animal Models in Disease. Frontiers in Animal Health: Nutritional Metabolism and Intestinal Health. Institute of Subtropical Agriculture, Chinese Academy of Sciences, Changsha, Hunan, China. October 20, 2016.
11. **Invited Speaker**, Apoptosis and Autophagy in Human Diseases. Institute of Life Sciences, Hunan Normal University. October 17, 2016.
12. **Foreign Expert Awardee Seminar**, Gut Microbiota and Microbiome in Health and Disease. School of Animal Science and Nutritional Engineering, Wuhan Polytechnic University, Wuhan, China, May 16, 2016.
13. **Evergreen Scholarship Lecture (III): Proline-P5C Cycle in Cell Growth and Proliferation**. School of Animal Science and Nutritional Engineering, Wuhan Polytechnic University, Wuhan, China, December 17, 2015.
14. **Foreign Expert**, **Hubei One Hundred-Talent Program**. Wuhan, Hubei, December 16, 2015.

15. **Invited Speaker:** *ApoL1 in autophagy and end-stage kidney disease.* Guangzhou Institutes for Stem Cell Biology and Regenerative Medicine, Chinese Academy of Sciences, Guangzhou, July 17 and 15, 2015.
16. **Invited Speaker:** *Autophagy and tight junction proteins in intestinal cells.* In "2015 China Engineering Science and Technology Forum - Animal Nutrition and Aquaculture Environmental Control," Chinese Academy of Sciences and Institute of Subtropical Agriculture, Changsha, China. July 14, 2015.
17. **Evergreen Scholarship Lecture (II):** *Autophagy and tight junction barriers in humans and animals.* School of Animal Science and Nutritional Engineering, Wuhan Polytechnic University, Wuhan, China, July 8, 2015.
18. **Invited Speaker:** *Proline and tryptophan in apoptosis and autophagy.* Institute of Subtropical Agriculture, Chinese Academy of Sciences, Changsha, Hunan, China. November 3, 2014.
19. **Evergreen Scholarship Lecture (I):** *Proline metabolism in humans and animals.* School of Animal Science and Nutritional Engineering, Wuhan Polytechnic University, Wuhan, China, October 30, 2014.
20. **Invited Speaker:** *Amino acids and autophagy.* Department of Animal Sciences, Texas A&M University, College Station, TX. June 6, 2014.
21. **Invited speaker:** *ApoL6 and ApoL1 in human disease.* Guangzhou Institute of Traumatic Surgery, Guangzhou Red Cross Hospital, Medical College, Jinan University, Guangzhou, China. February 27, 2014.
22. **Invited speaker:** *ApoL6, ApoL1, and amino acids in disease.* China Agricultural University, Beijing, China. February 25, 2014.
23. **Invited faculty speaker:** *ApoL1, autophagy, and the kidney.* Kidney Week 2013, American Society of Nephrology, Atlanta, GA. November 10, 2013.
24. **Invited speaker:** *Amino acids and autophagy.* The 13th International Congress on Amino Acids, Peptides and Proteins (ICAPP), Galveston, TX, October 5, 2013.
25. **Seminar speaker:** *Autophagy and apoptosis in health and disease.* Taipei Medical University, Taipei, Taiwan, May 30, 2013.
26. **Seminar speaker:** *Functions of apolipoprotein L6 (ApoL6) and ApoL1 in atherosclerosis.* Lovelace Respiratory Research Institute, Albuquerque, NM, August 23, 2011.
27. **Seminar speaker:** *Functions of ApoL6 in atherosclerosis.* University of New Mexico, College of Pharmacy, Albuquerque, NM, October 18, 2010.
28. **Seminar speaker:** *Personalized medicine in cancer therapeutics.* Eastern New Mexico University, Portales, NM, November 3, 2008.
29. **Seminar speaker:** *Novel phospholipid-binding proteins in apoptosis and autophagy.* Department of Biology, Kansas State University, Manhattan, KS, October 15, 2008.
30. **Seminar speaker:** *Novel phospholipid-binding proteins in apoptosis and autophagy.* Department of Biochemistry and Molecular Biology, University of Nebraska School of Medicine and Cancer Center, Omaha, NE, October 13, 2008.
31. **Guest Lecturer:** *Proline metabolism in health and disease.* Guest Lecture, Texas A&M University, College Station, TX, March 20, 2008.
32. **Invited speaker:** *Human Δ<sup>1</sup>-pyrroline-5-carboxylate synthase.* Proline Symposium: Proline Metabolism in Health and Disease, National Cancer Institute, National Institutes of Health, Frederick, MD, September 10-11, 2007.
33. **Invited speaker:** *Apolipoprotein L1, a BH3 domain-containing lipid-binding protein, induces autophagic cell death in cancer cells.* 6<sup>th</sup> New-Mexico INBRE Annual Meeting, University of New Mexico, NM, May 17-18, 2007.
34. **Invited speaker:** *Functions of apolipoprotein Ls in cancer cell death and human disease.* Research Seminar, Post-Baccalaureate Research Education Program (PREP), University of New Mexico, Albuquerque, NM, September 28, 2006.

35. **Invited speaker:** *Apolipoprotein L1, a BH3-only pro-death protein and Trypanosome lytic factor, induces autophagic cell death in human cells.* North Rocky Mountain Conference on Infectious Disease & Environmental Health, Big Sky, Montana, September 20-23, 2006.

36. **Invited speaker:** *Apolipoprotein L1, a BH3 domain-containing lipid-binding protein, induces autophagic cell death in cancer cells.* 5<sup>th</sup> New-Mexico INBRE Annual Meeting, New Mexico Technology University, Socorro, NM, June 1-3, 2006.

37. **Invited speaker:** *Apolipoprotein L6, a novel proapoptotic BH3-only protein, induces mitochondria-mediated apoptosis.* 4<sup>th</sup> New-Mexico INBRE Annual Meeting, New Mexico Highlands University, Las Vegas, NM, May 19-21, 2005.

38. **Seminar Speaker:** *Bcl-2 family proteins in cancer apoptosis.* Biomedical Seminar Series, Department of Physics and Astronomy, University of New Mexico, November 17, 2004.

39. **Invited speaker:** *Human  $\Delta^1$ -pyrroline-5-carboxylate synthase and proline oxidase in apoptosis.* Proline Symposium: Proline Metabolism and Human Diseases, National Cancer Institute, National Institutes of Health, Frederick, MD, October 12, 2004.

40. **Invited speaker:** *Apoptosis is in neurological disorders.* Division of Neurology, Tri-Service General Hospital and National Defense University, Taipei, Taiwan, July 26, 2002.

41. **Invited speaker:** *Cancer: biology, research, and treatment.* Relay for Life 2002, American Cancer Society, Hobbs, NM. March 31, 2002.

42. **Seminar speaker:** *P53, reactive oxygen species, and cancer.* Center for Advanced Studies, University of New Mexico, Albuquerque, NM. February 14, 2002.

43. **Invited speaker:** *Cancer: biology, research, and treatment.* Relay for Life 2002, American Cancer Society, Los Alamos, NM. January 31, 2002.

44. **Invited speaker:** *P53 targets, ROS generation, and apoptosis in cancer.* National Center for Genomic Resource (NCGR), Santa Fe, NM, September 4, 2001.

45. **Platform presentation:** *Molecular enzymology of mammalian  $\Delta^1$ -pyrroline-5-carboxylate synthase: exon sliding generates isoforms with different sensitivity to ornithine inhibition.* 48th Annual Meeting of the American Society of Human Genetics, Denver, CO. October 31, 1998.

46. **Invited speaker:** *Molecular genetics of proline and ornithine metabolism in mammals.* National Cancer Institute, National Institutes of Health, Frederick, MD. February 20, 1998.

47. **Invited speaker:** *Human proline and ornithine metabolism: genetic defects and yeast models.* Shriner Burns Institute, Massachusetts General Hospital, Boston, MA. January 27, 1997.

48. **Platform presentation:** *Cloning, characterization, and expression in yeast of human cDNAs encoding enzymes involved in proline and ornithine metabolism.* Society for Pediatric Research, Annual Meeting, Washington, D.C. 1997.

49. **Platform presentation:** *Type II hyperprolinemia: cloning and expression of cDNAs encoding human  $\Delta^1$ -pyrroline-5-carboxylate (P5C) dehydrogenase and delineation of mutations responsible for type II hyperprolinemia (HP II).* Society for Pediatric Research, Annual Meeting, Washington, D.C. 1996.

## SELECTED PEER-REVIEWED ABSTRACTS (From 2005)

1. K. White, S. Torres, T. Thompson, **CA Hu**, and M. Berwick. Variants in autophagy-related genes and clinical characteristics in melanoma: a population-based study [At the 2016 American Association for Cancer Research Annual Meeting, April 16-20, 2016, New Orleans, LO].
2. S. Zhaorigetu, **CA Hu**, W. Laskey, and B. Walton. Function of ApoL6 in atherosclerosis. [At the American Heart Association (AHA) Annual Meeting. November 11-15, 2015, Orlando, FL].

3. K. White, S. Torres, T. Thompson, **CA Hu**, and M. Berwick. LC3 protein expression associates with UV exposure in melanoma histopathology. [At the 2015 American Association for Cancer Research Annual Meeting, April 18-22, 2015, Philadelphia, PA].
4. S. Zhaorigetu, **CA Hu**, W. Laskey, and B. Walton. Function of ApoL6 in Atherosclerosis. [At the American College of Cardiology Annual Meeting. March 20, 2015, San Diego, CA].
5. K. White, S. Torres, **CA Hu**, and M. Berwick. Differential Inhibition of Autophagic Pathways in Melanoma is Oncogene Dependent. [At the 2014 American Association for Cancer Research Annual Meeting, April 5-9, 2014, San Diego, CA].
6. **CA Hu**, and S. Pan. Integrative proteomics and functional analysis in the identification of regulatory proteins in oxidative stress-induced apoptosis in cancer cells. [At the 2013 Taiwan Proteomics Society International Conference "Recent Advances in Translational Medicine," May 24-25, 2013].
7. S. Zhaorigetu, Z. Yang, T.A. McCaffrey, and **CA Hu**. ApoL6 in the crosstalk between autophagy and apoptosis in atherosclerosis. [At the Gordon Research Conference "Autophagy in Stress, Development, and Disease," March 11-16, 2012, Ventura, CA].
8. M. Candelaria-Lyons, C. Mobarak, V. Severns, and **CA Hu**. Proteomic profiling and characterization of autophagosomal membrane proteins in prostate cancer cells. [At the IMSD/MARC Research Symposium, UNM, August 12, 2008, Albuquerque, NM].
9. **CA Hu**, G. Wan, Z. Siqin, Z. Liu, and Z. Jiang. Apolipoprotein L1, a novel BH3-only pro-death protein, induces autophagic cell death. [At Gordon Research Conference "Autophagy in Stress, Development, and Disease," January 6-11, 2008, Ventura, CA]
10. X. Sun, Q. Li, G. Wan, and **CA Hu**. Interactive role of POX and P66shc in oxidative stress-induced apoptosis in cancer cells. [At 2<sup>nd</sup> International Proline Symposium: Proline Metabolism in Health & Disease, September 10-11, 2007, NCI-Frederick, MD]
11. G. Wan, Z. Siqin, C. Farrell, Q. Li, and **CA Hu**. Synergistic killing effect of apolipoprotein L1 and L2 in cancer cells. [At American Association for Cancer Research Annual Meeting, April 14-18, 2007, Los Angeles, CA]
12. Z. Siqin, G. Wan, R. Kaini, and **CA Hu**. Upregulation of apolipoprotein L6 and L1, two BH3-only pro-death proteins, by p53 in cancer cells. [At American Association for Cancer Research Annual Meeting, April 14-18, 2007, Los Angeles, CA]
13. **CA Hu**, Z. Liu, G. Wan, and Z. Jiang. Apolipoprotein L1, a BH3-only pro-death protein and Trypanosome lytic factor, induces autophagic death in prostate cancer cells. [At AACR "Innovations in Prostate Cancer Research Meeting", December 6-9, 2006, San Francisco, CA]
14. **CA Hu**, Z. Liu, G. Wan, and Z. Jiang. Apolipoprotein L1, a BH3-only pro-death protein and Trypanosome lytic factor, induces autophagic cell death in human cells. [At North Rocky Mountain Conference on Infectious Disease & Environmental Health, September 20-23, 2006, Big Sky, MT]
15. **CA Hu**, Z. Liu, G. Wan, C. Farrell, M. R. Roth, and R. Welti. Quantitative lipidomic profiling and characterization of lipid second messengers in cancer apoptosis. [At American Association for Cancer Research Annual Meeting, April 1-5, 2006, Washington, DC]
16. Z. Liu, G. Wan, Y. Duan, and **CA Hu**. Apolipoprotein L1, a BH3 domain-containing lipid-binding protein, induces autophagic cell death in cancer cells. [At American Association for Cancer Research Annual Meeting, April 1-5, 2006, Washington, DC]
17. Z. Liu, H. Lu, Z. Jiang, A. Pastuszyn, and **CA Hu**. Apolipoprotein L6, a novel pro-apoptotic BH3-only protein, induces mitochondria-mediated apoptosis in cancer cells. [At American Association for Cancer Research Annual Meeting, April 16-20, 2005, Orange County, CA]

18. **CA Hu.** Quantitative proteomic profiling and characterization of apoptosis in cancer. [At AACR Regulation of Cell Death in Oncogenesis Meeting, January 25-30, 2005, Waikoloa, HI]