

CURRICULUM VITAE

Christos S. Katsanos, Ph.D.

Center for Metabolic and Vascular Biology
School of Life Sciences
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EDUCATION

Ph. D., December 2001.

Department of Nutrition, Food and Exercise Sciences
Florida State University, Tallahassee, FL

M. S., May 1998.

Department of Health Promotion and Physical Education
University of Louisville, Louisville, KY

B. S., August 1992.

Department of Physical Education
Democritus University of Thrace, Komotini, Greece

POSITIONS

Adjunct Assistant Professor of Physiology, December 2011 to present.

Mayo Clinic College of Medicine
Mayo Clinic Arizona, Scottsdale, AZ

Assistant Professor, May 2010 to present.

School of Life Sciences and Center for Metabolic and Vascular Biology
Arizona State University, Tempe, AZ

Assistant Professor, August 2006 to May 2010.

Department of Kinesiology
Arizona State University, Tempe, AZ

Research Scientist, November 2005 to August 2006.

Department of Surgery/Metabolism Unit
University of Texas Medical Branch, Galveston, TX

Postdoctoral Research Fellow, November 2001 to October 2005.

Department of Surgery/Metabolism Unit

University of Texas Medical Branch, Galveston, TX

Lecturer, July 2004 to June 2005.

Department of Kinesiology
Rice University, Houston, TX

HONORS AND AWARDS

Mead Johnson Young Investigator Award

XXXV International Congress of Physiological Sciences, San Diego, CA, 2005.

Environmental and Exercise Physiology Recognition Award

Experimental Biology Meeting, Orlando, FL, 2001.

Scholarship for Graduate Studies: January, 1996 to December, 1998

State Scholarships Foundation, Athens, Greece

PUBLICATIONS

Puga GM, Meyer C, Mandarino LJ, **Katsanos CS**. "Increased plasma availability of L-arginine in the postprandial period decreases the postprandial lipemia in older adults". *Nutrition* 29(1):81-88, 2013.

Puga GM, Meyer C, Mandarino LJ, **Katsanos CS**. "Postprandial spillover of dietary lipid into plasma is increased with moderate amounts of ingested fat and is inversely related to adiposity in healthy older men". *J Nutr* 142(10):1806-1811, 2012.

Everman S, Yi Z, Langlais P, Mandarino LJ, Luo M, Roberts C, **Katsanos CS**. "Reproducibility of an HPLC-ESI-MS/MS method for the measurement of stable-isotope enrichment of *in vivo*-labeled muscle ATP synthase beta subunit". *PLoS ONE* 6(10):e26171. doi:10.1371/journal.pone.0026171, 2011.

Puga GM, Meyer C, Everman S, Mandarino LJ, **Katsanos CS**. "Postprandial lipemia in the elderly involves increased incorporation of ingested lipid in plasma free fatty acids and small (Sf 20-400) triglyceride-rich lipoproteins". *Am J Physiol Endocrinol Metab* 301(2):E356-E361, 2011.

Katsanos CS, Mandarino LJ. "Protein metabolism in human obesity: a shift in focus from whole-body to skeletal muscle". *Obesity (Silver Spring)* 19(3):469-475, 2011.

Katsanos CS, Aarsland A, Cree MG, Wolfe RR. "Muscle protein synthesis and balance responsiveness to essential amino acids ingestion in the presence of elevated plasma free fatty acid concentrations". *J Clin Endocrinol Metab* 94(8):2984-2990, 2009.

Katsanos CS. "Whey protein ingestion and muscle protein anabolism in elderly". *Agro Food Industry Hi-tech* 20(5):20-22, 2009.

Katsanos CS, Chinkes DL, Paddon-Jones D, Zhang XJ, Aarsland A, Wolfe RR. "Whey protein ingestion in elderly persons results in greater muscle protein accrual than ingestion of its constituent essential amino acid content". *Nutr Res* 28(10):651-658, 2008.

Katsanos CS, Kobayashi H, Sheffield-Moore M, Aarsland A, Wolfe RR. "A high proportion of leucine is required for optimal stimulation of the rate of muscle protein synthesis by essential amino acids in the elderly". *Am J Physiol Endocrinol Metab* 291(2):E381-E387, 2006.

Katsanos CS. "Prescribing aerobic exercise for the regulation of postprandial lipid metabolism: current research and recommendations". *Sports Med* 36(7):547-560, 2006

Paddon-Jones D, Sheffield-Moore M, Zhang XJ, **Katsanos CS**, Wolfe RR. "Differential stimulation of muscle protein synthesis in elderly humans following isocaloric ingestion of amino acids or whey protein". *Exp Gerontol* 41(2):215-219, 2006.

Katsanos CS, Kobayashi H, Sheffield-Moore M, Aarsland A, Wolfe RR. "Aging is associated with diminished accretion of muscle proteins after the ingestion of a small bolus of essential amino acids". *Am J Clin Nutr* 82(5):1065-1073, 2005.

Katsanos CS, Chinkes DL, Sheffield-Moore M, Aarsland A, Kobayashi H, Wolfe RR. "Method for the determination of the arteriovenous muscle protein balance during non-steady-state blood and muscle amino acid concentrations". *Am J Physiol Endocrinol Metab* 289(6):E1064-E1070, 2005.

Katsanos CS, Moffatt RJ. "Reliability of heart rate responses at given ratings of perceived exertion in cycling and walking". *Res Q Exerc Sport* 76(4):433-439, 2005.

Cree MG, Newcomer BR, **Katsanos CS**, Sheffield-Moore M, Chinkes D, Aarsland A, Urban R, Wolfe RR. "Intramuscular and liver triglycerides are increased in the elderly". *J Clin Endocrinol Metab* 89(8):3864-3871, 2004.

Katsanos CS. "Lipid-induced insulin resistance in the liver: role of exercise". *Sports Med* 34(14):955-965, 2004.

Katsanos CS, Moffatt RJ. "Acute effects of premeal versus postmeal exercise on postprandial hypertriglyceridemia". *Clin J Sport Med* 14(1):33-39, 2004.

Katsanos CS, Grandjean PW, Moffatt RJ. "Effects of low and moderate exercise intensity on postprandial lipemia and postheparin plasma lipoprotein lipase activity in physically active men". *J Appl Physiol* 96(1):181-188, 2004.

Simoes HG, Campbell CS, Kushnick MR, Nakamura A, **Katsanos CS**, Baldissera V, Moffatt RJ. "Blood glucose threshold and the metabolic responses to incremental exercise tests with and without prior lactic acidosis induction". *Eur J Appl Physiol* 89(6):603-611, 2003.

Katsanos CS, Cheuvront SN, Haymes EM. "Energy expenditure relative to perceived exertion: stationary cycling versus treadmill walking". *Res Q Exerc Sport* 72(2):176-181, 2001.

RECENT PRESENTATIONS AT PROFESSIONAL MEETINGS (*last four years*)

Mosher KM, Kline J, Coletta D, Mandarino L, **Katsanos CS**. "Differences in Blood Gene Expression between Trained and Non-trained Individuals". Annual Meeting of the Arizona Physiological Society, Tucson, AZ, 2012.

Katsanos CS, Meyer C, Mandarino LJ, Everman S. "Plasma triglyceride clearance following an intravenous fat tolerance test in the presence of increased plasma insulin concentrations and with/without nitric oxide inhibition in healthy humans ". Obesity Society's Annual Scientific Meeting, San Antonio, TX, 2012.

Katsanos CS, Meyer C, Puga GM. "Effects of an L-Arginine infusion on postprandial fat metabolism in healthy young subjects". Annual Experimental Biology Meeting, San Diego, CA, 2012.

Garcia Y, Puga G, Everman S, Meyer C, Mandarino LJ, **Katsanos CS**. "Increased postprandial lipemia with aging is associated with greater "spillover" of dietary fat into the plasma free fatty acid pool". Annual Meeting of the Arizona Physiological Society, Glendale, AZ, 2010.

Katsanos CS, Puga GM, Everman S, Meyer C, Mandarino LJ. "Effects of fat meal ingestion on lipid-associated metabolic responses with aging". Obesity Society's Annual Scientific Meeting, San Diego, CA, 2010.

Everman S, Mandarino LJ, Puga GM, Meyer C, **Katsanos CS**. "Branched chain amino acid inhibition of insulin-mediated whole-body glucose disposal is not reversed by increased plasma insulin concentration". American Diabetes Association's 70th Scientific Sessions, Orlando, FL, 2010.

Everman S, Mandarino LJ, Puga GM, Meyer C, **Katsanos CS**. "Effects of branched chain amino acids infusion on whole-body plasma glucose disposal: a pilot study". *FASEB J* 24: 783.7, 2010.

Everman S, Yi Z, Mandarino LJ, Luo M, Christ-Roberts CY, **Katsanos CS**. "Determination of stable isotope-labeled muscle mitochondrial ATP synthase beta subunit enrichment using HPLC-ESI-MS/MS". Annual Meeting of the Arizona Physiological Society, Tucson, AZ, 2009.

Puga GM, Meyer C, Mandarino L, Everman S, **Katsanos CS**. "Oxidation of ingested fat and plasma triacylglyceride concentration in elderly: a dose-response study". *Obesity* 17 (Suppl 2): S105, 2009.

Puga GM, Meyer C, Alexander J, Mandarino L, Everman S, **Katsanos CS**. "L-Arginine infusion attenuates postprandial lipemia in healthy elderly". *FASEB J* 23: 991.12, 2009.

Puga GM, Meyer C, Alexander J, Mandarino L, Everman S, **Katsanos CS**. "Effects of arginine infusion on postprandial lipemia in elderly". Annual Meeting of the Arizona Physiological Society, Tucson, AZ, 2008.

INVITED PRESENTATIONS

Brazilian Physiological Society Annual Meeting – "Lipid Metabolism and Cardiometabolic Diseases: Effects of Diet". Gramado, Brazil; September, 2012.

Universidade Estadual Paulista (UNESP)-Rio Claro – "Exploring Macronutrient Metabolism in Humans with the Use of Stable Isotope Tracers". Rio Claro, Brazil; August, 2012.

Mayo Clinic Arizona, Science of Medicine Research Lecture Series – "Postprandial Lipid Metabolism in Elderly". Scottsdale, AZ; November 2011.

TM's 1st World Cardiovascular, Diabetes, and Obesity – "Age-related Changes in Postprandial Lipid Metabolism". Online conference; August, 2011.

Arizona Physiological Society Annual Meeting – Symposium Chairman: "Insulin Resistance and Diabetes: Mechanisms and Clinical Aspects". Tucson, Arizona; November, 2009.

Catholic University of Brasilia, II International Congress of Physical Education and Life Quality – "Lipids, Lipoproteins and Physical Exercise". Brasilia, Brazil; April, 2009.

Penn State University – "Stable Isotopes in Metabolic Research with Reference to Protein and Fat Metabolism". State College, PA; March, 2006.

University of Kentucky – "Role of Dietary Protein in the Prevention of Sarcopenia in the Elderly". Lexington, KY; February, 2005.

GRANTS

Funded/in progress:

2012 – 2016 NIH – NIDDK
R01 DK094062-01A1 "Regulation of muscle ATP synthase beta subunit metabolism in obesity" (Role: PI)

2012 – 2015 American Diabetes Association
7-12-CT-40 "Regulation of the plasma triglyceride extraction in muscle in insulin resistance" (Role: PI)

Funded/completed:

2009 – 2011 NIH – NIDDK
R21 DK082820 "Adipocyte mitochondrial dysfunction in insulin resistance" (Role: Co-PI; PI: Christian Meyer, M.D)

2007 – 2008 Milheim Foundation
No. 2007-16 "Muscle protein metabolism in patients with cancer cachexia" (Role: PI)

2000 Life Fitness Academy
 Michael L. Pollock Memorial Research Grant (Role: PI)

2000 Gatorade Sports Science Institute (Role: PI; Student Research Grant)

PATENTS

"Amino Acid-containing Composition for Preventing or Remediating Decrease in the Skeletal Muscle of Aged People". Inventors: Hisamine Kobayashi, Hiromi Suzuki, Robert R. Wolfe, Christos S. Katsanos, PCT/US2006/011325, 2006.

TEACHING AND MENTORING

Arizona State University

BIO 360 – Animal Physiology (2012 - present)
BIO 494/598 – Special Topics: Nutrition, Exercise, Chronic Diseases, and Society (Fall 2012)
BIO 181 – General Biology I (Spring 2012)
KIN 499 – Individualized Instruction (various semesters)
KIN 494/598 – Special Topics: Advanced Topics in Clinical Exercise Physiology (2007 – 2011)
KIN 340 – Physiology of Exercise (2007 – 2010)

Rice University (2004 – 2005)

KINE 300 – Human Anatomy
KINE 341 – Exercise Management of Chronic Diseases
KINE 421 – Advanced Exercise Physiology
KINE 498 – Sports Nutrition

Fellows

Lee Tran, PhD, Postdoctoral Fellow, 2013 – present.
Guilherme Puga, MS, Research Fellow, 2008 – 2009.

Doctoral Students

Katon Kras – Committee Chair, School of Life Sciences, Arizona State University, 2012 – present.
Sarah Everman – Dissertation Committee Co-Chair – Department of Kinesiology, Arizona State University, 2006 – 2010 (currently an Assistant Professor at A.T. Still University, Mesa, AZ).

Undergraduate Honors Students

John Kline (Barrett Honors Student – Thesis title: Differences in blood gene expression between trained and untrained individuals), Kinesiology Program, Arizona State University,

May 2010 – May 2012 (Mr. Kline received the “Douglas L. Conley Memorial Scholarship” for his research work in this Thesis).

Nathan Coury (Barrett Honors Student – Thesis title: Fat oxidation efficiency as a performance indicator for ultramarathon foot races), Kinesiology Program, Arizona State University, Feb 2010 – May 2011.

PROFESSIONAL SOCIETY MEMBERSHIPS (*current*)

American Physiological Society
American College of Sports Medicine
American Society for Nutrition
Obesity Society
American Diabetes Association
Arizona Physiological Society
