



Daniel P. Kelly, M.D.

Personal Information:

Sex: Male
Date of Birth: October, 1955
Marital status: Married, Therese J. Michelau-Kelly; 3 children (Sean, Maureen, Brendan)

Address and Telephone Numbers:

Work: Burnham Institute *for* Medical Research at Lake Nona
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Education and Training:

1978 B.S. (Biology) University of Illinois
1982 M.D. University of Illinois College of Medicine, Chicago, Illinois
1982 - 1983 Internship in Medicine, Barnes Hospital, St. Louis, Missouri
1983 - 1985 Assistant Resident in Medicine, Barnes Hospital, St. Louis, Missouri
1985 - 1987 Research Postdoctoral Fellowship, Department of Biological Chemistry, Washington University School of Medicine, St. Louis, Missouri
1987 - 1989 Clinical Cardiology Fellow, Washington University School of Medicine, St. Louis, Missouri

Academic Positions/Employment:

1984 - 1985 Chief Medical Resident, Washington University Service, John Cochran V.A. Hospital
1989 - 1990 Instructor of Medicine, Washington University School of Medicine
1990 - 1995 Assistant Professor of Medicine, Washington University School of Medicine
1993 - 1995 Assistant Professor of Molecular Biology and Pharmacology, Washington University School of Medicine
1993 - 2001 Co-Director, Center for Adults with Congenital Heart Disease, Washington University School of Medicine

1995 - 1999	Associate Professor of Medicine and Molecular Biology & Pharmacology, Washington University School of Medicine
1996 - 2008	Director, Center for Cardiovascular Research, Washington University School of Medicine
1999 - 2008	Professor of Medicine and Molecular Biology & Pharmacology, Washington University School of Medicine
2000 - 2008	Professor of Pediatrics, Washington University School of Medicine
2002 - 2006	Co-Director, Cardiovascular Division, Department of Medicine, Washington University School of Medicine
2004 - 2007	Alumni Endowed Professor of Cardiovascular Diseases at Washington University School of Medicine
2006 - 2008	Chief, Cardiovascular Division, Department of Medicine, Washington University School of Medicine
2007 - 2008	Tobias and Hortense Lewin Professor at Washington University
2008 – present	Adjunct Professor of Medicine, Washington University School of Medicine
2008 – present	Scientific Director and Professor, Burnham Institute for Medical Research (BIMR) at Lake Nona
2008 – present	Adjunct Professor of Biomedical Sciences, University of Central Florida College of Medicine
2008 – present	Adjunct Professor of Medicine (Cardiology), University of Florida

Research Interests:

1. Transcriptional control of cellular energy metabolism and mitochondrial biogenesis in striated muscle.
2. Biology and physiology of nuclear receptors in striated muscle.
3. Molecular mechanisms of cardiac hypertrophic growth.
4. Molecular and metabolic basis of diabetic cardiac dysfunction.

Licensure and Certification:

1986	Diplomate, American Board of Internal Medicine
1990	Diplomate, American Board of Cardiovascular Disease

Honors and Awards:

1978	Phi Beta Kappa - University of Illinois
1981	Alpha Omega Alpha Medical Honor Society
1987	Knowlton Incentive for Clinical Excellence Award, Barnes Hospital
1989	Lucille P. Markey Scholar Award, Markey Foundation
1991	Basal O'Connor Scholar Award, March of Dimes
1991	AFCR Henry Christian Award in Genetics
1995	AHA Established Investigator Award
1996	AFCR (Midwest) Outstanding Investigator Award
1997	American Society for Clinical Investigation
2001	Association of American Physicians
2001	Association of University Cardiologists
2005	Pfizer Visiting Professor, University of Utah
2006	Blount Visiting Professor, University of Colorado Health Sciences Center
2006	Association of Professors of Cardiology
2008	AHA, Basic Cardiovascular Sciences (BCVS) Distinguished Achievement Award

Editorial and Peer Review Responsibilities:

Editorial Boards: *Circulation*, *Circulation Research*, *Genes and Development*, *Journal of Clinical Investigation*
 Guest Editor: *Circulation Research*, “Nuclear Receptor Signaling”, 2004; *Cardiovascular Research*, “Spotlight Issue on Signaling in Cardiac Metabolism”, 2007.

Editorial Consultant: *Cell, Cell Metabolism, Science, Nature, Journal of Molecular and Cellular Cardiology, Journal of Lipid Research, Journal of Biological Chemistry, PNAS, Molecular Endocrinology, Molecular and Cellular Biology, Diabetes, Nature Medicine, New England Journal of Medicine, Physiological Genomics.*

1993 - 1995	Chair, Molecular Biology of Muscle Study Section, American Heart Association, Great Plains Affiliate
1994 - 1998	External reviewer, V.A. Merit Awards
1997	Judge, ACC Young Investigator Award (Molecular and Cellular Cardiology)
1997 - 2000	Howard Hughes Medical Institute, Medical Student Fellowship Review Panel
1998 - 2004	Ad-Hoc Member, Cardiovascular A Study Section, NIH
1999	Special Emphasis Review Panel, NIDDK, NIH
2000	Special Emphasis Review Panel, NHLBI, NIH
2000 - present	Abstract grader, Session Builder, National Scientific Sessions of the AHA
2000 - 2002	Faculty/Judge, Astra-Zeneca Young Investigators in Cardiovascular Research
2001 - present	Reviewer, Siteman Cancer Center Grant Program, Washington University
2002 - 2003	Member, AHA National Peer Review Study Group, Basic Cell and Molecular Biology
2002 - 2003	Reviewer, Washington University/Pharmacia Biomedical Research Program
2003	Reviewer, Special Emphasis Committee (PPG), NHLBI, NIH
2004 - 2007	Member, Myocardial Ischemia and Metabolism Study Section, NIH
2008	External Reviewer, Foundation Leducq Transatlantic Network of Excellence
2009	Scientist Review Panel, Howard Hughes Medical Institute

Professional Societies, Committees, Organizations, and Academic Advisory Boards:

Fellow, Council on Basic Cardiovascular Sciences, American Heart Association
American Association for the Advancement of Science
Fellow, American College of Cardiology
International Society for Heart Research
M.D./M.A. Committee, Washington University School of Medicine (1995-2001; Chair, 2001-2005)
American Society for Clinical Investigation
Internal Medicine, "Leadership Award in Scientific Investigation", Selection Committee, Washington University School of Medicine (1999-2001)
Executive Committee for the Clinical Nutrition Research Unit, Washington University
Washington University Academic Freedom and Tenure Hearing Committee (7/2000-2004)
Search Committee, Washington University Pediatric Cardiology Division Director (2000)
Association of American Physicians
Executive Committee, Developmental Cardiology and Pulmonary Training Grant (NHLBI), Washington University School of Medicine (2002-present)
Executive Committee, Cardiovascular System: Function, Regulation & Pharmacology Training Grant (NHLBI) (2000-present)
Association of University Cardiologists
Board Member, American Heart Association, Greater St. Louis Division, (2001-2004)
International Advisory Board, 2nd International Symposium, "PPARs: From Basic Science to Clinical Applications" (2002-2003)
Co-Chair, Working Group, "Nutrition in the Etiology and Amelioration of Cardiomyopathies and Heart Failure", NHLBI, ODS, USDA (2002)
ASCI Council Member (2002-2005)
External Advisory Board Member, NIH Program Project Grant, "Oxidants and Nitric Oxide in Post-Ischemic Heart Injury", John Hopkins University (2002-present)

Scientific Advisory Board, International Academy of Cardiology (2003-2005)
National Steering Committee, NIDDK, Mouse Metabolic Phenotyping Centers (MMPC), (2003-2006)
External Advisory Board, NIH Program Project Grant, “Cardiac Energy Metabolism in Heart Failure”, Case Western University (2003-present)
Executive Advisory Board, Washington University/Pfizer Biomedical Research Program (2003-present)
International Advisory Board, 3rd International Symposium on “PPARs-Efficacy and Safety from Basic Science to Clinical Applications” (2004-2005)
International Task Force for the Development of PPARs (2004)
NIDDK Working Group, “Advances and Emerging Opportunities in Type 1 Diabetes Research” (2005 & 2006)
Internal Advisory Committee Washington University, NHLBI SCCOR on “Metabolic Syndrome and Vascular Disease” (P.I. Clay Semenkovich, M.D.) (2005-present)
AHA Katz Basic Research Prize Selection Committee (2005-2007)
External Advisory Board, Clinical Nutrition Research Unit, Pennington Biomedical Research Center (2006-present)
External Advisory Board, Heart and Lung Institute, The Ohio State University (2006-present)
NHLBI Strategic Planning Working Group on Mechanistic and Pre-Clinical Studies of Diabetic Cardiovascular Disease (2006)
Chair, AHA Katz Basic Research Prize Selection Committee (2006, 2007)
Member, Steering Committee AHA Council on Basic Cardiovascular Sciences (2006-present)
GEMS Masters Training Program Oversight Committee (2007)
Member, Board of Directors, Sarnoff Cardiovascular Research Foundation (2007-present)
NHLBI Working Group, “Modeling Mitochondrial Dysfunction in Cardiovascular Disease” (2007)
External Evaluation Panel, Department of Clinical and Experimental Medicine, University of Padua, Italy (2007)
Co-Organizer, AHA Basic Cardiovascular Sciences Mtg., Keystone Conference Center, Keystone, CO (2008)
NHLBI Mitochondrial Biology Planning Committee (2008)
External Review Board, University of Pittsburgh Medical Center Cardiovascular Institute (2008)
External Advisory Board, NIDDK Nuclear Receptor Signaling Atlas (NURSA) Program (2008-Present)
Co-Chair, NHLBI Workshop on Diabetic Heart Disease (2009)

Consulting Activities and Scientific Advisory Boards (Industry):

2000 - 2003	Scientific Consultant, Merck Research Laboratories
2004 - 2006	Scientific Consultant, Pfizer Global Research Inc.
2004	Scientific Consultant, Novartis
2004	Scientific Consultant, Myogen
2005, 2006	Scientific Consultant, Bristol-Myers-Squibb
2005	Scientific Consultant, Sankyo
2005, 2006	Scientific Consultant, GlaxoSmithKline
2006 - present	Scientific Advisory Board, Phrixus
2007, 2008	Scientific Consultant, Novartis
2008	Scientific Consultant, Johnson & Johnson
2008 - present	Scientific Advisory Board, Atherosclerosis and CV Disease, Eli Lilly
2009 – present	Scientific Advisory Board, Science and Technology, Johnson & Johnson

Teaching:

- 1989 - present Lecturer, Cardiovascular Fellowship Training Program, Washington University School of Medicine
- 1989 - 2008 Attending Physician, Medicine and Cardiology Services, Barnes-Jewish Hospital, St. Louis, MO
- 1993 Physician Mentor, Markey Pathway for Ph.D. postdoctoral trainees
- 1994 - present Lecturer and Workshop Leader, Pharmacology and Pathophysiology (Heart Failure), Washington University School of Medicine, Year 02 medical students
- 1995 – 2005 Lecturer, “Molecular Genetics of Cardiovascular Disease”, Core Curriculum for Cardiovascular Fellowship Program, Washington University
- 2000, 2002 Lecturer, Markey Special Emphasis Pathway (Molecular Basis of Heart Failure), Division of Biology and Biomedical Sciences, Washington University School of Medicine
- 2002, 2004 Lecturer, Markey Special Emphasis Pathway (Molecular Pathogenesis of Diabetes), Division of Biology and Biomedical Sciences, Washington University School of Medicine

Research Support:

Past:

- 1989 - 1995 Lucille P. Markey Scholar Award, 89-25. “Molecular analysis of inherited MCAD deficiency.” Daniel P. Kelly, P.I.
- 1990 - 1992 Basal O’Connor Scholar Award, March of Dimes, 1215. “Molecular genetic analysis of inborn errors in medium chain acyl-CoA dehydrogenase.” Daniel P. Kelly, P.I.
- 1992 - 1996 National Institutes of Health, R29 DK45416. “Medium-chain acyl-CoA dehydrogenase gene expression.” Daniel P. Kelly, P.I.
- 1994 - 1999 Department of Energy, 93004. “Detection and assessment using positron emission tomography of genetically determined defects in myocardial fatty acid utilization.” Steven R. Bergmann, P.I.; Daniel P. Kelly, Co-P.I.
- 1995 - 2000 American Heart Association Established Investigator Award, 95001150. “Characterization of cardiac fatty acid oxidative enzyme gene expression in transgenic mice.” Daniel P. Kelly, P.I.
- 1996 - 2000 National Institutes of Health 2 MO1 RR00036-36. General Clinical Research Center. “Detection and assessment of genetic defects using positron emission tomography.” Philip E. Cryer, P.I., Daniel P. Kelly, Investigator
- 1998 -1999 American Heart Association, Grant-in-Aid, “Development of a mouse model of metabolic cardiomyopathy.” Daniel P. Kelly, P.I.
- 1999 National Institutes of Health, S10 (Shared Instrumentation Grant), “Cardiovascular Ultrasound System.” Daniel P. Kelly, P.I.

- 1999 - 2002 Washington University School of Medicine Departmental Research Award, "Mouse Cardiovascular Phenotyping Core Facility." Daniel P. Kelly, Director, P.I.
- 1999 - 2003 National Institutes of Health, Clinical Nutrition Research Unit Center Grant "Animal Model Research Core Laboratory." Daniel P. Kelly, Co-Director, Samuel Klein, P.I.
- 1999 - 2004 National Institutes of Health, P50 HL61006. SCOR in Pediatric Cardiovascular Disease, "Molecular Determinants of Pediatric Heart Disease" ("Mouse models of altered myocardial fatty acid import and utilization", Project #2, Daniel P. Kelly, Project Leader), Daniel P. Kelly, P.I.
- 1999 - 2004 National Institutes of Health, P50 HL61006. SCOR in Pediatric Cardiovascular Disease, "Molecular Determinants of Pediatric Heart Disease" ("Mouse Cardiovascular Physiology Core", Core D, Daniel P. Kelly, Director), Daniel P. Kelly, P.I.
- 1999 - 2004 National Institutes of Health, P50 HL61006. SCOR in Pediatric Cardiovascular Disease, "Molecular Determinants of Pediatric Heart Disease" ("Administrative Core", Core A, Daniel P. Kelly, Director), Daniel P. Kelly, P.I.
- 1996 - 2005 National Institutes of Health, R01 DK45416 "Molecular Control of Mitochondrial Fatty Acid Oxidation." Daniel P. Kelly, P.I.
- 2002 - 2006 National Institutes of Health, R01 HL58493, "Regulation of fatty acid oxidation during cardiac growth." Daniel P. Kelly, P.I.
- 2002 - 2007 National Institutes of Health, P01 HL57278, "Myocardial PPAR in diabetic cardiomyopathy," (Project 2, Daniel P. Kelly, Project Leader) Richard Gross, P.I.
- 2004 - 2008 National Institutes of Health, P20 RR020643, "Planning Interdisciplinary Studies of the Diabetic Heart" (Roadmap-P20 Planning Grant), Daniel P. Kelly, P.I.
- Current:**
- 2005 - 2009 National Institutes of Health, P50 HL077113, "Specialized Center in Clinically Oriented Research (SCCOR) in Diabetic Myocardial Disease", NHLBI, Daniel P. Kelly, P.I.
- 2005 - 2010 National Institutes of Health, R01 DK45416 "Molecular Control of Mitochondrial Fatty Acid Oxidation," Daniel P. Kelly, P.I.
- 2006 - 2010 National Institutes of Health, R01 HL58493 "Probing the Cardiac PGC-1 Regulatory Cascade," Daniel P. Kelly, P.I.

Training Grants:

- 1996 - 2011 NHLBI Research Training Grant, T32 HL07081. "Principles in cardiovascular research training." Anthony J. Muslin, P.I., Daniel P. Kelly, Faculty Mentor and Co-P.I., 6 postdoctoral trainee slots/year.

- 1997 - 2009 NHLBI Research Training Grant, T32 HL07275. "CV system-function/regulation/pharmacology." Faculty Mentor and member of the Executive Committee. Jeanne Nerbonne, P.I., Daniel P. Kelly, Faculty Mentor and Co-P.I., 8 postdoctoral, 4 pre-doctoral trainee slots/year.
- 1975 – 2010 National Institutes of Health Research Training Grant, T32 GM007200. "National Research Service Award – Medical Scientist". Daniel P. Kelly, Faculty Mentor. Daniel E. Goldberg, P.I., 55 predoctoral slots/year.
- 1998 - 2009 NHLBI Research Training Grant, T32 HL07873. "Developmental cardiology and pulmonary training program." Daniel P. Kelly, Faculty Mentor and member of the Executive Committee. Robert Mecham, P.I., 2 predoctoral and 4 postdoctoral slots/year.
- 2000 - 2010 National Institutes of Health Research Training Grant, T32 DK07120. "Diabetes and Related Metabolic Diseases." Daniel P. Kelly, Faculty Mentor. M. Alan Permutt, P.I., 7 postdoctoral trainee slots/year.
- 2005 - 2010 National Institutes of Health, T32HL07776, "Basic Science Research Training: Cardiopulmonary Surgery". Daniel P. Kelly, Faculty Mentor. Ralph Damiano, P.I., 4 postdoctoral trainee slots/year.

Mentored Young Faculty and Senior Visiting Scientist Awards:

- 1995 - 1996 Howard Hughes Medical Institute Postdoctoral Research Fellowship for Physicians, "Isolation and characterization of nuclear receptor transcription factors involved in the regulation of cardiac energy metabolism", Michael N. Sack, M.D., P.I.
- 1996 - 2000 National Institutes of Health, K08 Mentored Clinical Scientist Development Award, K08 HL03568, "Characterization of a hypoxia-regulated gene", Fiona H. Levy, M.D., P.I.
- 1998 - 2002 National Institutes of Health K08 Mentored Clinical Scientist Development Award, K08 HL03829, "The role of a novel immunophilin in retinoid signaling", Martha Clabby, M.D., P.I.
- 1998 - 2003 National Institutes of Health K08 Mentored Clinical Scientist Development Award, K08 HL03808, "Cardiac hypertrophy-induced metabolic gene regulation", Philip M. Barger, M.D., P.I.
- 1998 - 1999 National Institutes of Health, Senior NRSA, "Mitochondrial biogenesis in copper-deficient hearts", Denis M. Medeiros, Ph.D., P.I.
- 1999 - 2004 National Institutes of Health K08 Mentored Clinical Scientist Development Award, K08 HL04075, "The role of PPAR α in cardiac hypertrophic growth", Jon M. Brandt, M.D., P.I., declined.
- 2000 - 2004 National Institutes of Health SERCA-NCRR/K-1 Award, K01 RR00160, "The role of estrogen in fatty acid utilization", David M. Kurtz, D.V.M., Ph.D., P.I.

- 2003 - 2006 National Institutes of Health K01 Award, K01 DK063051, "Regulation and biology of the orphan receptor ERR", Janice M. Huss, Ph.D., P.I.
- 2003 - 2006 National Institutes of Health K01 Award, K01 DK062903, "Regulation of glucose transporter expression by PPAR α ", Brian N. Finck, Ph.D., P.I.
- 2004 - 2006 National Institutes of Health K08, Paul B. Beeson Career Development Awards in Aging, K08 AG024844, "Mitochondrial control by PGC-1 α in young and aging heart", John J. Lehman, M.D., P.I.
- 2004 - 2009 National Institutes of Health K08 Award, K08 HL076452, "Bc13 signaling in the cardiac metabolic stress response", John H.S. Yang, M.D., P.I.
- 2007 - 2012 National Institutes of Health K08 Award, K08 HL084093, "PPAR α signaling in the pathogenesis of diabetic cardiomyopathy", Jennifer Duncan, M.D., P.I.

BIBLIOGRAPHY:

Original Articles:

1. Billadello JJ, Kelly DP, Roman DG, Strauss AW: The complete nucleotide sequence of canine brain B creatine kinase mRNA: Homology in the coding and 3' noncoding regions among species. *Biochem. Biophys. Res. Commun.* 1986;138:392-398.
2. Kelly DP, Kim JJ, Billadello JJ, Hainline BE, Chu TW, Strauss AW: Nucleotide sequence of medium-chain acyl-CoA dehydrogenase mRNA and its expression in enzyme-deficient human tissue. *Proc. Natl. Acad. Sci. USA* 1987;84:4068-4072.
3. Kelly DP, Gordon JI, Alpers R, Strauss AW: The tissue-specific expression and developmental regulation of two nuclear genes encoding rat mitochondrial proteins: medium-chain acyl-CoA dehydrogenase and mitochondrial malate dehydrogenase. *J. Biol. Chem.* 1989;264:18921-18925.
4. Bross P, Engst S, Strauss AW, Kelly DP, Rasched I, Ghisla S: Characterization of wild-type and an active site mutant of human medium chain acyl-CoA dehydrogenase after expression in Escherichia coli. *J. Biol. Chem.* 1990;265:7116-7119.
5. Kelly DP, Whelan AJ, Ogden ML, Alpers R, Zhang Z, Bellus G, Gregersen N, Dorlund L, Strauss AW: Molecular characterization of inherited medium-chain acyl-CoA dehydrogenase deficiency. *Proc. Natl. Acad. Sci. USA* 1990;87:9236-9240.
6. Gregersen N, Andresen BS, Bross P, Winter V, Rudiger N, Engst S, Christensen E, Kelly D, Strauss AW, Kolvraa S, Bolund L, Ghisla S: Molecular characterization of medium-chain acyl-CoA dehydrogenase (MCAD) deficiency: identification of a lys³²⁹ to glu mutation in the MCAD gene and expression of inactive mutant enzyme protein in E. Coli. *Hum. Genet.* 1991;86:545-551.
7. Lewis W, Papoian B, Louie H, Kelly DP, Payne RM, Grody WW: Mitochondrial ultrastructural and molecular changes induced by zidovudine in rat hearts. *Lab. Invest.* 1991;65:228-236.

8. Gregersen N, Andresen BS, Bross P, Winter V, Rudiger N, Engst S, Ghisla S, Christensen E, Kelly DP, Strauss AW, Kolvraa S, Bolund L, Blakemore A, Curtis D, Engel P: Characterization of a disease-causing Lys329 to Glu mutation in 16 patients with medium-chain acyl-CoA dehydrogenase deficiency. *J. Inherit. Metab. Dis.* 1991;14:314-316.
9. Zhang Z, Kelly DP, Kim JJ, Zhou Y, Ogden ML, Whelan AJ, Strauss AW: Structural organization and regulatory regions of the human medium-chain acyl-CoA dehydrogenase gene. *Biochemistry* 1992;31:81-89.
10. Kelly DP, Hale DE, Rutledge SL, Ogden ML, Whelan AJ, Strauss AW: Molecular basis of inherited medium-chain acyl-CoA dehydrogenase deficiency causing sudden child death. *J. Inherit. Metab. Dis.* 1992;15:171-180.
11. Wood PA, Farmer SC, Tolwani RJ, Warren JR, Steinkampf MP, Johnson LW, Mountz JD, Kelly DP: Molecular studies of mouse medium- and long-chain acyl-CoA dehydrogenase genes for site-directed mutagenesis of embryonic stem cells. *Prog. Clin. Biol. Res.* 1992;375:151-160.
12. Raisher BD, Gulick T, Zhang Z, Strauss AW, Moore DD, Kelly DP: Identification of a novel retinoid-responsive element in the promoter region of the medium-chain acyl-CoA dehydrogenase gene. *J. Biol. Chem.* 1992;267:20264-20269.
13. Tanaka K, Yokota I, Coates PM, Strauss AW, Kelly DP, Zhang, Z, Gregersen, N, Andresen, BS, Matsubara, Y, Curtis, D, Chen Y-T: Mutations in the medium chain acyl-CoA dehydrogenase (MCAD) gene. *Hum. Mutat.* 1992;1:271-279.
14. Kelly DP, Mendelsohn NJ, Sobel BE, Bergmann SR: Detection and assessment by positron emission tomography of a genetically determined defect in myocardial fatty acid utilization (long-chain acyl-CoA dehydrogenase deficiency). *Am. J. Cardiol.* 1993;71:738-744.
15. Christodoulou J, Clarke JTR, Rupar CA, Gordon BA, Kelly DP: Retrospective diagnosis of medium chain acyl-CoA dehydrogenase deficiency. *J. Pediatr. Child Health* 1993;29:237-238.
16. Carter ME, Gulick T, Raisher BD, Caira T, Ladas JAA, Moore DD, Kelly DP: Hepatocyte nuclear factor-4 activates medium chain acyl-CoA dehydrogenase gene transcription by interacting with a complex regulatory element. *J. Biol. Chem.* 1993;268:13805-13810.
17. Zhang Z, Kolvraa S, Zhou Y, Kelly DP, Gregersen N, Strauss AW: Three RFLPs defining a haplotype associated with the common mutation in human medium-chain acyl-CoA dehydrogenase deficiency occur in Alu repeats. *Am. J. Hum. Genet.* 1993;52:1111-1121.
18. Andresen, BS, Kolvraa S, Bross P, Bolund L, Curtis D, Eiberg H, Zhang Z, Kelly DP, Strauss AW, Gregersen N: A silent A to G mutation in exon 11 of the medium-chain acyl-CoA dehydrogenase (MCAD) gene. *Hum. Mol. Genet.* 1993;2:488.
19. Whelan AJ, Strauss AW, Hale DE, Mendelsohn NJ, Kelly DP: Expression and characterization of human mutant (glutamic acid³⁰⁴) medium-chain acyl-CoA dehydrogenase in mammalian cells. *Pediatr. Res.* 1993;34:694-697.
20. Carter ME, Gulick TG, Moore DD, Kelly DP: A pleiotropic element in the medium-chain acyl-Coenzyme A dehydrogenase gene promoter mediates transcriptional regulation by

- members of the nuclear receptor transcription family and defines novel receptor DNA binding motifs. *Mol. Cell. Biol.* 1994;14:4360-4372.
21. Gulick T, Cresci S, Caira T, Moore DD, Kelly DP: The peroxisome proliferator-activated receptor regulates mitochondrial fatty acid oxidative enzyme gene expression. *Proc. Natl. Acad. Sci. USA* 1994;91:11012-11016.
 22. Marian AJ, Kelly D, Mares A Jr, Fitzgibbons J, Caira T, Yu QT, Hill R, Perryman MB, Roberts R: A missense mutation in the β myosin heavy chain gene is a predictor of premature sudden death in patients with hypertrophic cardiomyopathy. *J. Sports Med. Phys. Fitness* 1994;34:1-10.
 23. Marian AJ, Mares A Jr., Kelly DP, Yu QT, Abchee AB, Hill R, Roberts R: Sudden cardiac death in hypertrophic cardiomyopathy. Variability in phenotypic expression of β -myosin heavy chain mutations. *Eur. Heart J.* 1995;16(3):368-376.
 24. Leone TC, Cresci S, Carter ME, Zhang Z, Lala, DS, Strauss AW, Kelly DP: The human medium chain acyl-CoA dehydrogenase gene promoter consists of a complex arrangement of nuclear receptor response elements and Sp1 binding sites. *J. Biol. Chem.* 1995;270:16308-16314.
 25. Djouadi F, Bastin J, Kelly DP, Merlet-Benichou C: Transcriptional regulation by glucocorticoids of mitochondrial oxidative enzyme genes in the developing rat kidney. *Biochem. J.* 1996;315:555-562.
 26. Hopkins WE and Kelly DP: Angiotensin-converting enzyme inhibitors in adults with cyanotic congenital heart disease. *Am. J. Cardiol.* 1996;77:439-440.
 27. Cresci S, Wright LD, Spratt JA, Briggs FN, Kelly DP: Activation of a novel metabolic gene regulatory pathway by chronic stimulation of skeletal muscle. *Am. J. Physiol.* 1996;270:C1413-C1420.
 28. Tolwani RJ, Farmer SC, Johnson KR, Davisson MT, Kurtz DM, Hinsdale ME, Cresci S, Kelly DP, Wood PA: Structure and chromosomal location of the mouse medium-chain acyl-CoA dehydrogenase-encoding gene and its promoter. *Gene* 1996;170:165-171.
 29. Disch DL, Rader TA, Cresci S, Leone TC, Barger PM, Vega R, Wood PA, Kelly DP: Transcriptional control of a nuclear gene encoding a mitochondrial fatty acid oxidation enzyme in transgenic mice: Role for nuclear receptors in cardiac and brown adipose expression. *Mol. Cell. Biol.* 1996;16:4043-4051.
 30. Sack MN, Rader TA, Park S, Bastin J, McCune SA, Kelly DP: Fatty acid oxidation enzyme gene expression is downregulated in the failing heart. *Circulation* 1996;94:2837-2842.
 31. Barger P and Kelly DP: Identification of a retinoid/chicken ovalbumin upstream promoter transcription factor response element in the human retinoid X receptor γ 2 gene promoter. *J. Biol. Chem.* 1997;272:2722-2728.
 32. Levy FH and Kelly DP: Regulation of ATP synthase subunit e gene expression by hypoxia: Cell differentiation stage-specific control. *Am. J. Physiol.* 1997;41(2):C457-C465.

33. Sack MN, Disch D, Rockman H, and Kelly DP: A role for Sp and nuclear receptor transcription factors in a cardiac hypertrophic growth program. *Proc. Natl. Acad. Sci. USA* 1997;94:6438-6443.
34. Vega R, and Kelly DP: A role for estrogen-related receptor α (ERR α) in the control of mitochondrial fatty acid β -oxidation during brown adipocyte differentiation. *J. Biol. Chem.* 1997;272(50):31693-31699.
35. Sack MN and Kelly DP: The energy substrate switch during development of heart failure: Gene regulatory mechanisms. *Int. J. Mol. Med.* 1998;1:17-24.
36. Brandt J, Djouadi, F, and Kelly DP: Fatty acids activate transcription of the muscle carnitine palmitoyltransferase I gene in cardiac myocytes via the peroxisome proliferator-activated receptor α . *J. Biol. Chem.* 1998;273(37):23786-23793.
37. Djouadi F, Weinheimer CJ, Saffitz JE, Pitchford C, Bastin J, Gonzalez FJ, and Kelly DP: A gender-related defect in lipid metabolism and glucose homeostasis in peroxisome proliferator-activated receptor α -deficient mice. *J. Clin. Invest.* 1998;102(6):1083-1091.
38. Leone TC, Weinheimer CJ, and Kelly DP: A critical role for the peroxisome proliferator-activated receptor alpha (PPAR α) in the cellular fasting response: The PPAR α -null mouse as a model of fatty acid oxidation disorders. *Proc. Natl. Acad. Sci. USA* 1999;96(13):7473-7478.
39. Djouadi F, Brandt J, Weinheimer CJ, Leone TC, Gonzalez FJ, and Kelly DP: The role of the peroxisome proliferator-activated receptor α (PPAR α) in the control of cardiac lipid metabolism. *Prostaglandins Leukot. Essent. Fatty Acids* 1999;60(5&6):339-343.
40. Cresci S, Clabby M, and Kelly DP: Evidence for a cardiac-enriched retinoid X receptor partner. *J. Biol. Chem.* 1999;274 (36):25668-25674.
41. Rogers JH, Tamirisa P, Kovacs A, Weinheimer C, Courtois M, Blumer KJ, Kelly DP, and Muslin AJ: RGS4 causes increased mortality and reduced cardiac hypertrophy in response to pressure overload. *J. Clin. Invest.* 1999;104:567-576.
42. Zhou Y, Kelly DP, Strauss AW, Sims H, Zhang Z: Characterization of the human very- long-chain acyl-CoA dehydrogenase (VLCAD) gene promoter region: A role for activator protein-2 (AP-2). *Mol. Genet. Metab.* 1999;68:481-487.
43. Vega R, Huss, JM, and Kelly DP: The coactivator PGC-1 cooperates with PPAR α in transcriptional control of nuclear genes encoding mitochondrial fatty acid oxidation enzymes. *Mol. Cell. Biol.* 2000;20(5):1868-1876.
44. Barger PM, Brandt J, Leone TC, Weinheimer CJ, and Kelly DP: Deactivation of the peroxisome proliferator-activated receptor α during cardiac hypertrophic growth. *J. Clin. Invest.* 2000;105:1723-1730.
45. Horowitz JF, Leone TC, Feng W, Kelly DP, and Klein S: Effect of endurance training on lipid metabolism in women: a potential role for PPAR α in the metabolic response to training. *Am. J. Physiol. (Endocrinol. Metab.)* 2000;279:E348-E355.

46. Mao S, Leone TC, Kelly DP, and Medeiros DM: Mitochondrial transcription factor A is increased but expression of ATP synthase β subunit and medium-chain Acyl-CoA dehydrogenase genes are decreased in hearts of copper-deficient rats. *J. Nutr.* 2000;130:2143-2150.
47. Lehman JJ, Barger PM, Kovacs A, Saffitz JE, Medeiros D, and Kelly DP: PPAR γ coactivator-1 (PGC-1) promotes cardiac mitochondrial biogenesis. *J. Clin. Invest.* 2000;106:847-856.
48. Michael LF, Wu Z, Cheatham RB, Puigserver P, Adelmant G, Lehman JJ, Kelly DP and Spiegelman BM: Restoration of insulin-sensitive glucose transporter (GLUT4) gene expression in muscle cells by the transcriptional coactivator PGC-1. *Proc. Natl. Acad. Sci. USA* 2001; 98: 3820-3825.
49. Tordjman K, Bernal-Mizrachi C, Zemany L, Weng S, Feng C, Zhang F, Leone TC, Coleman T, Kelly DP and Semenkovich CF: Peroxisome proliferator-activated receptor α deficiency reduces insulin resistance and atherosclerosis in apoE-null mice. *J. Clin. Invest.* 2001;107:1025-1034.
50. Huss JM, Levy FH and Kelly DP: Hypoxia inhibits the PPAR α /RXR gene regulatory pathway in cardiac myocytes. A mechanism for O₂-dependent modulation of mitochondrial fatty acid oxidation. *J. Biol. Chem.* 2001;276:27605-27612.
51. Barger P, Browning AC, Garner AN, and Kelly DP: p38 MAP kinase activates PPAR α : A potential role in the cardiac metabolic stress response. *J. Biol. Chem.* 2001;276:44495-44501.
52. Bergmann SR, Herero P, Sciacca R, Hartman JJ, Rubin PJ, Hickey KT, Epstein S and Kelly DP: Characterization of altered myocardial fatty acid metabolism in patients with inherited cardiomyopathy. *J. Inher. Metab. Dis.*, 2001;24:657-674.
53. Finck BN, Lehman JJ, Leone TC, Welch MJ, Bennett MJ, Kovacs A, Han X, Gross RW, Kozak R, Lopaschuk G, and Kelly DP: The cardiac phenotype induced by PPAR α overexpression mimics that caused by diabetes mellitus. *J. Clin. Invest.* 2002;109:121-130.
54. Campbell FM, Kozak R, Wagner A, Altarejos JY, Dyck JRB, Belke DD, Severson DL, Kelly DP, and Lopaschuk GD: A role for PPAR α in the control of cardiac Malonyl-CoA levels: Reduced fatty acid oxidation rates and increased glucose oxidation rates in the hearts of mice lacking PPAR α are associated with higher concentrations of Malonyl-CoA and reduced expression of Malonyl-CoA decarboxylase. *J. Biol. Chem.*, 2002;277:4098-4103.
55. Tordjman K, Standley K, Bernal-Mizrachi C, Leone TC, Coleman T, Kelly DP, and Semenkovich CF: Peroxisome proliferator-activated receptor α suppresses insulin secretion and induces UCP2 in insulinoma cells. *J. Lipid Res.*, 2002;43:936-943.
56. Dávila-Román VG, Vedala G, Herrero P, de las Fuentes L, Rogers JG, Kelly DP, and Gropler RJ: Altered myocardial fatty acid and glucose metabolism in idiopathic dilated cardiomyopathy. *J. Am. Coll. Card.*, 2002;40:271-277.
57. Huss JM, Kopp RP, and Kelly DP: PGC-1 α coactivates the cardiac-enriched nuclear receptors estrogen-related receptor- α and - γ . *J. Biol. Chem.*, 2002;277:40265-40274.

58. Baar K, Wende AR, Jones TE, Marison M, Nolte LA, Chen M, Kelly DP, and Holloszy JO: Adaptations of skeletal muscle to exercise: Rapid increase in the transcriptional coactivator PGC-1 α . *FASEB J.*, 2002;16:1879-1886.
59. Finck BN, Han X, Courtois M, Aimond F, Nerbonne JM, Kovacs A, Gross RW, and Kelly DP: A critical role for the PPAR α -mediated lipotoxicity in the pathogenesis of diabetic cardiomyopathy: Modulation of phenotype by dietary fat content. *Proc. Natl. Acad. Sci. USA*, 2003;100:1226-1231.
60. de las Fuentes L, Herrero P, Peterson LR, Kelly DP, Gropler RJ, Dávila-Román VG. Myocardial fatty acid metabolism: Independent predictor of left ventricular mass in hypertension heart disease. *Hypertension*, 2003;41:83-87.
61. Clabby M, Robison TA, Quigley HF, Wilson DB, and Kelly DP: RXR α represses GATA-4-mediated transcription via a retinoid-dependent interaction with the cardiac-enriched repressor FOG-2. *J. Biol. Chem.*, 2003;278:5760-5767.
62. Bernal-Mizrachi C, Weng S, Feng C, Finck BN, Knutsen RH, Leone TC, Coleman T, Mecham RP, Kelly DP, and Semenkovich CF: Dexamethasone induction of hypertension and diabetes is PPAR α -dependent in LDL receptor-null mice. *Nature Med.*, 2003;9:1069-1075.
63. Faury G, Pezet M, Knutsen RH, Boyle WA, Heximer SP, McLean SE, Minkes RK, Blumer KJ, Kovacs A, Kelly DP, Li DY, Starcher B and Mecham RP: Developmental adaptation of the mouse cardiovascular system to elastin haploinsufficiency. *J. Clin. Invest.*, 2003;112: 1419-1428.
64. Erol E, Kumar LS, Cline GW, Shulman GI, Kelly DP, and Binas B: Liver fatty acid-binding protein is required for high rates of hepatic fatty acid oxidation but not for the action of PPAR α in fasting mice. *FASEB J.*, 2004;18:347-349.
65. Russell LK, Mansfield CM, Lehman JJ, Kovacs A, Courtois M, Saffitz JE, Medeiros D, Valencik ML, McDonald JA, and Kelly DP: Cardiac-specific induction of the transcriptional coactivator PGC-1 α promotes mitochondrial biogenesis and reversible cardiomyopathy in a developmental stage-dependent manner. *Circulation Res.*, 2004;94:525-533.
66. Schaeffer PJ, Wende AR, Magee CJ, Neilson JR, Leone TC, Chen F, and Kelly DP: Calcineurin and calcium/calmodulin dependent protein kinase activate distinct metabolic gene regulatory programs in cardiac muscle. *J. Biol Chem.*, 2004;279:39593-39603.
67. Huss JM, Torra IP, Staels B, Giguère V, and Kelly DP: ERR α directs PPAR α signaling in the transcriptional control of energy metabolism in cardiac and skeletal muscle. *Mol. Cell. Biol.*, 2004;24:9079-9091.
68. Harris IS, Treskov I, Rowley MW, Heximer S, Kaltenbronn K, Finck BN, Gross RW, Kelly DP, Blumer KG, and Muslin AJ: G-protein signaling participates in the development of diabetic cardiomyopathy. *Diabetes*, 2004;53:3082-3090.
69. Finck BN, Bernal-Mizrachi C, Han DH, Coleman T, Sambandam N, LaRiviere LL, Holloszy JO, Semenkovich CF, and Kelly DP: A potential link between muscle peroxisome proliferator-activated receptor α signaling and obesity-related diabetes. *Cell Metab.*, 2005;1:133-144.

70. Leone TC, Lehman JJ, Finck BN, Schaeffer PJ, Wende AR, Boudina S, Courtois M, Wozniak DF, Sambandam N, Bernal-Mizrachi C, Chen Z, Holloszy JO, Medeiros DM, Schmidt RE, Saffitz JE, Abel ED, Semenkovich CF, and Kelly DP: PGC-1 α deficiency causes multi-system energy metabolic derangements: Muscle dysfunction, abnormal weight control, and hepatic steatosis. *PLoS Biology*, 2005;3:672-687.
71. Schaeffer PJ, Villarín JJ, Pierotti DJ, Kelly DP, and Lindstedt SL: Cost of transport is increased after cold exposure in *Monodelphis domestica*: training for inefficiency. *J. Exp. Biol.*, 2005;208:3159-3167.
72. You M, Considine RV, Leone TC, Kelly DP, and Crabb DW: Role of adiponectin in the protective action of dietary saturated fat against alcoholic fatty liver in mice. *Hepatology*, 2005;42:568-577.
73. Park S-Y, Cho Y-R, Finck BN, Kim H-J, Higashimori T, Dong J, Lee M-K, Cline G, Kalinowski A, Russell K, Kim Y-B, Kelly DP, and Kim JK: Cardiac-selective overexpression of PPAR α causes insulin resistance in heart and liver. *Diabetes*, 2005;54:2514-2524.
74. Luptak I, Balschi JA, Xing Y, Leone TC, Kelly DP, and Tian R: Decreased contractile and metabolic reserve in PPAR α -null hearts can be rescued by increasing glucose transport and utilization. *Circulation*, 2005;112:2339-2346.
75. Wende AR, Huss JM, Schaeffer PJ, Giguère V, and Kelly DP: PGC-1 α coactivates PDK4 gene expression via the orphan nuclear receptor ERR α : A mechanism for transcriptional control of muscle glucose metabolism. *Mol. Cell. Biol.*, 2005;25:10684-10694.
76. Sambandam N, Morabito D, Wagg C, Finck BN, Kelly DP, and Lopaschuk GD: Chronic activation of PPAR α is detrimental to cardiac recovery following ischemia. *Am J. Phys. Heart Circ. Physiol.*, 2006;290:H87-H95.
77. Finck BN, Gropler MC, Chen Z, Leone TC, Croce MA, Harris TE, Lawrence, Jr. JC, and Kelly DP: Lipin 1 is an inducible amplifier of the hepatic PGC-1 α /PPAR α regulatory pathway. *Cell Metab.*, 2006;4:199-210.
78. Duncan JG, Fong JL, Medeiros DM, Finck BN, and Kelly DP: Insulin-resistant heart exhibits a mitochondrial biogenic response driven by the PPAR α -PGC-1 α gene regulatory pathway. *Circulation*, 2007;115:909-917.
79. Yang J, Sambandam N, Han X, Gross RW, Courtois M, Kovacs A, Febbraio M, Finck BN, and Kelly DP: CD36 deficiency rescues lipotoxic cardiomyopathy. *Circ. Res.*, 2007;100:1208-1217.
80. Dufour CR, Wilson BJ, Huss JM, Kelly DP, Alaynick WA, Downes M, Evans RM, Blanchette M, and Giguère V: Genome-wide orchestration of cardiac functions by the orphan nuclear receptors ERR α and γ . *Cell Metab.*, 2007;5:345-356.
81. Huss JM, Imahashi K, Dufour CR, Weinheimer CJ, Courtois M, Kovacs A, Giguère V, Murphy E, and Kelly DP: The nuclear receptor ERR α is required for the bioenergetic and functional adaptation to cardiac pressure overload. *Cell Metab.*, 2007;6:25-37.

82. Burkart E, Sambandam N, Han X, Gross RW, Courtois M, Gierasch CM, Shoghi K, Welch MJ, Kelly DP: Nuclear receptors PPAR β/δ and PPAR α direct distinct metabolic regulatory programs in the mouse heart. *J. Clin. Invest.*, 2007;117:3930-3939.
83. Wende AR, Schaeffer PJ, Parker GJ, Zechner C, Han D-H, Chen MM, Hancock CR, Lehman JJ, Huss JM, McClain DA, Holloszy JO, Kelly DP: A role for the transcriptional coactivator PGC-1 α in muscle refueling. *J. Biol. Chem.*, 2007;282:36642-36651.
84. Marionneau C, Aimond F, Brunet S, Niwa N, Finck B, Kelly DP, Nerbonne JM: PPAR α -mediated remodeling of repolarizing voltage-gated K⁺ (Kv) channels in a mouse model of metabolic cardiomyopathy. *J. Molec. Cell. Card.*, 2008;44:12002-1015.
85. Lehman JJ, Boudina S, Banke NH, Sambandam N, Han X, Young DM, Leone TC, Gross RW, Lewandowski ED, Abel ED, and Kelly DP: The transcriptional coactivator PGC-1 α is essential for maximal and efficient cardiac mitochondrial fatty acid oxidation and lipid homeostasis. *Am. J. Physiol., (Heart and Circulatory Phys.)*, 2008; 295: H185-96.
86. Lai L, Leone TC, Zechner C, Schaeffer PJ, Kelly SM, Flanagan DP, Medeiros DM, Kovacs A, and Kelly DP: Transcriptional coactivators PGC-1 α and PGC-1 β control overlapping programs required for perinatal maturation of the heart. *Genes & Dev.*, 2008; 22:1948-1961.
87. Cresci S, Jones PG, Marsh S, Lanfear DE, Garsa A, Courtois M, Weinheimer CJ, Wu J, Province MA, Kelly DP, McLeod HL, and Spertus JA: PPARA genotype is associated with differential response to β -blocker therapy in patients following acute coronary syndromes. *Pharmacogenomics*, 2008: Oct;9 (10)1403-17.

Original Manuscripts (submitted):

88. Schaeffer PS, DeSantiago J, Yang J, Flagg T, Kovacs A, Weinheimer C, Courtois M, Leone TC, Nichols C, Bers DM, Kelly DP: Impaired contractile function and calcium handling in hearts of cardiac-specific calcineurin b1-deficient mice.
89. Yang J, Williams RS, Kelly DP: Bcl3 interacts cooperatively with PGC-1 α to coactivate nuclear receptors ERR α and PPAR α .

Invited Reviews, Book Chapters, Editorials, and Proceedings:

90. Kelly DP, Strauss AW: Tissue-specific expression and developmental regulation of rat medium-chain acyl-CoA dehydrogenase. *In: Fatty Acid Oxidation: Clinical, Biochemical, and Molecular Aspects.* Edited by K. Tanaka and P. M. Coates, Alan R. Liss, New York, pp. 599-608, 1990.
91. Strauss AW, Duran M, Zhang Z, Alpers R, Kelly DP: Molecular analysis of medium chain acyl-CoA dehydrogenase deficiency. *In: Fatty Acid Oxidation: Clinical, Biochemical, and Molecular Aspects.* Edited by K. Tanaka and P. M. Coates, Alan R. Liss, New York, pp. 609-623, 1990.
92. Kelly DP, Fry ETA: Heart Failure. *In: Manual of Medical Therapeutics.* Edited by A. J. Whelan and M. Woodley, Little Brown and Co., Boston, pp. 105-115, 1992.

93. Kelly DP, Whelan AJ, Hale DE, Rinaldo P, Rutledge SL, Zhang Z, Strauss AW: Molecular characterization of medium chain acyl-CoA dehydrogenase deficiency causing sudden death. In: New Developments in Fatty Acid Oxidation. Edited by K. Tanaka and P.M. Coates, Wiley-Liss, New York, pp. 463-472, 1992.
94. Kelly DP, Zhang Z, Raisher BD, Ogden ML, Strauss AW: Identification and characterization of the 5' regulatory regions of the human medium chain acyl-CoA dehydrogenase (MCAD) gene. In: New Developments in Fatty Acid Oxidation. Edited by K. Tanaka and P.M. Coates, Wiley-Liss, New York, pp. 143-150, 1992.
95. Workshop on Molecular Aspects of MCAD Deficiency. Mutations causing medium-chain acyl-CoA dehydrogenase deficiency: A collaborative compilation of the data from 172 patients. In: New Developments in Fatty Acid Oxidation. Edited by K. Tanaka and P.M. Coates, Wiley-Liss, New York, pp. 499-506, 1992.
96. Kelly DP and Strauss AW: Inherited Cardiomyopathies. *N. Engl. J. Med.* 1994;330:913-919.
97. Kelly DP: Current concepts of the molecular basis of heart failure. *Coron. Artery Dis.* 1994;5:873-875.
98. Strauss AW and Kelly DP: The molecular basis of cardiomyopathies due to genetic deficiencies of mitochondrial proteins. In: Advances in Organ Biology. Heart Metabolism in Failure. Edited by Ruth A. Altschuld and Robert A. Haworth. JAI Press, Inc., Vol. 4B, pp. 323-340, 1998.
99. Sack MN and Kelly DP: Molecular approaches to evaluate the role of genes involved in metabolic control in cardiac hypertrophy and heart failure. In: Cardiology at the Limits II. Edited by Lionel H. Opie and Derek M. Yellon. The Rustica Press, South Africa, pp. 79-93, 1998.
100. Barger P and Kelly DP: Fatty acid utilization in the hypertrophied and failing heart: Molecular regulatory mechanisms. *Am. J. Med. Sci.* 1999;318(1):36-42.
101. Djouadi F, Weinheimer CJ and Kelly DP: The role of PPAR α as a lipostat transcription factor. In: Current Views of Fatty Acid Oxidation and Ketogenesis. Edited by Simon Eaton and Patti Quant. *Adv. Exp. Med. Biol.* 1999; 466:211-220.
102. Barger P and Kelly DP: PPAR signaling in the control of cardiac energy metabolism. *Trends in Cardiovas. Med.* 2000;10:238-245.
103. Kelly DP: The pleiotropic nature of the vascular PPAR gene regulatory pathway (Editorial). *Circulation Res.* 2001;89:935-937.
104. Kelly DP: PPAR α as a genetic determinant of cardiac hypertrophic growth: culprit or innocent bystander? (Editorial) *Circulation*, 2002;105:1025-1027.
105. Lehman JJ and Kelly DP: Gene regulatory mechanisms governing energy metabolism during cardiac hypertrophic growth. *Heart Failure Reviews*, 2002;7:175-185.

106. Lehman JJ and Kelly DP: Transcriptional activation of energy metabolic switches in the developing and hypertrophied heart. *Clin. and Exper. Pharm. and Phys.*, 2002;29:339-345.
107. Finck BN and Kelly DP: Peroxisome Proliferator-Activated Receptor α (PPAR α) signaling in the gene regulatory control of energy metabolism in the normal and diseased heart. *J. Mol. Cell. Card.*, 2002;34:1249-1257.
108. Finck BN, Lehman JJ, Barger PM, and Kelly DP: Regulatory Networks Controlling Mitochondrial Energy Production in the Developing, Hypertrophied, and Diabetic Heart. **Cold Spring Harbor Symposium on Quantitative Biology, "The Cardiovascular System"**, 2002;67:371-382.
109. Kelly DP: PPARs of the Heart: Three is a Crowd. *Circulation Res.*, 2003;92:482-484.
110. Finck BN and Kelly DP: PPARs: At the Limits of Diabetes? **"Cardiology at the Limits"**, 2003, Chapter 5, pg 77-93.
111. Kelly DP and Scarpulla RC: Transcriptional Regulatory Circuits Controlling Mitochondrial Biogenesis and Function. *Genes and Dev.*, 2004;18:357-368.
112. Huss JM and Kelly DP: Nuclear Receptor Signaling and Cardiac Energetics. *Circ. Res.*, 2004;95:568-578.
113. Alberti SG, Barter P, Carmena R, Catapano A, Charbonnel B, Cohen S, Davignon J, Després J-P, De Fronzo R, Farnier M, Fruchart JC, Haffner S, Kastelein J, Kelly DP, Peters J, Plutzky J, Southgate J, Staels B, Taskinen M-R, Heuvel JV, Wahli W, Williams G, and Yki-Jarvinen H: White Paper on the Development of PPAR Agonists. **International Task Force for the Development of PPARs**, 2004.
114. Russell LK, Finck BN, and Kelly DP: Mouse Models of Mitochondrial Dysfunction and Heart Failure. *J. Molec. Cell. Card.*, 2005;38:81-91.
115. Huss JM and Kelly DP: Mitochondrial Energy Metabolism in Heart Failure: A Question of Balance. *J. Clin. Invest.*, 2005;115:547-555.
116. Finck BN and Kelly DP: PGC-1 Coactivators: Inducible Regulators of Energy Metabolism in Health and Disease. *J. Clin. Invest.*, 2006;116:615-622.
117. Diabetes Mellitus Interagency Coordinating Committee, Advances and Emerging Opportunities in Type 1 Diabetes Research: A Strategic Plan Vision Statement, NIDDK, 2006.
118. Finck BN and Kelly DP: Peroxisome Proliferator-Activated Receptor γ Coactivator-1 (PGC-1) Regulatory Cascade in Cardiac Physiology and Disease. *Circulation*, 2007;115:2540-2548.
119. Kelly DP: Hypoxic reprogramming. *Nature Genetics*, 2008;40:132-134.
120. Lopaschuk GD and Kelly DP: Signaling in Cardiac Metabolism. *Cardiovascular Research*, 2008; 79:205-207.
121. Madrazo J and Kelly DP: The PPAR Trio: Regulators of Myocardial Energy Metabolism in Health

and Disease. *J. Molec. Cell. Card.*, 2008; Jun; 44(6): 968-75.

Invited Lectureships:

1. Meeting of the Missouri Chapter of the American College of Cardiology, “*Inherited Cardiomyopathies*,” Lake of the Ozarks, Missouri, September 1994.
2. University of Vermont, Department of Molecular Physiology Seminar, “*Cardiac Fatty Acid Oxidation in the Failing Heart: Gene Regulatory Mechanisms*,” September 1994.
3. University of Alabama, Departments of Comparative Medicine and Pathology Seminar, “*Control of Cardiac Fatty Acid Oxidation*,” November 1994.
4. University of Texas-Southwestern, Division of Cardiology Seminar, “*Transcriptional Regulation of Genes Involved in Cardiac Energy-Production*,” November 1994.
5. University of Chicago, Division of Cardiology Seminar, “*Molecular Regulatory Mechanisms of Cardiac Energy Production*,” January 1995.
6. Society for Cardiovascular Pathology, 10th Anniversary Symposium. Regulatory Cells and Molecules in Cardiovascular Disease. “*Inherited Cardiomyopathies: Genotype-phenotype Correlations*,” Toronto, March 1995.
7. XVII Annual Meeting of the International Society for Heart Research, “*Inherited Cardiomyopathies: Genotype-Phenotype Correlations*,” Orange Beach, Alabama, June 1995.
8. 2nd International Workshop on Fatty Acid Oxidation, “*Mitochondrial β -Oxidation: Molecular Regulatory Mechanisms*,” Arhus, Denmark, June 1995.
9. Case Western Reserve Medical School, Departments of Medicine and Pharmacology, “*A Novel Cardiac Energy Metabolic Gene Regulatory Pathway*,” October 1995.
10. The Ohio State University, “*Energy Metabolic Gene Regulatory Pathways in the Normal and Failing Heart*,” May 1996.
11. Midwestern AFCR Outstanding Investigator Award, “*A Gene Regulatory Pathway Involved in the Energy Substrate Switch During Development of Heart Failure*,” Chicago, IL, September 1996.
12. 6th Midwest Clinical-Molecular Cardiology Conference, “*Molecular Basis of Congestive Heart Failure: Lessons from Genetic Disorders*,” St. Louis, MO, October 1996.
13. University of Toronto, Cardiology Grand Rounds, “*A Role for Sp and Nuclear Receptor Transcription Factors in the Cardiac Hypertrophy Program*”; “*Inherited Cardiomyopathies: Molecular Determinants of Clinical Expression*”, Toronto, Canada, December 1996..
14. 7th International Congress of Inborn Errors of Metabolism, “*Transcriptional Regulation of the Acyl-CoA Dehydrogenase Gene Family*,” Vienna, Austria, May 1997.
15. Gladstone Institute, UCSF, “*A Molecular Regulatory Pathway Involved in Myocardial Lipid Utilization*,” San Francisco, CA, October 1997.
16. Saint Louis University, Department of Biochemistry, “*Molecular Regulation of Cardiac Fatty Acid Utilization in the Hypertrophied and Failing Heart*,” St. Louis, MO, March 1998.
17. 4th Fatty Acid Oxidation and Ketogenesis Conference, “*The Role of Peroxisome Proliferator Activated Receptor α (PPAR α) as a 'Lipostat' Transcription Factor*,” London, England, April 1998.
18. 4th International Roundtable Conference of Fatty Acids in Cell Signaling, “*Control of Fatty Acid Oxidation during Development and Cellular Differentiation: Transcriptional Regulatory Mechanisms*,” Cape Cod, MA, June 1998.

19. Vanderbilt University, Department of Medicine Seminar, "*The Role of PPAR α as a Molecular 'Lipostat' in the Developing, Hypertrophied, and Failing Heart*," Nashville, TN, September 1998.
20. 2nd International Symposium on Pathophysiology of Stunning, Hibernation, and Preconditioning. "*Molecular Response to Alterations in Mitochondrial Fatty Acid Oxidative Flux: Implications for the Ischemic and Failing Heart*." Taormina, Italy, October 1998.
21. Rhone-Poulenc-Rorer, Cardiovascular Biology Research Department. "*The Role of PPAR α in the Control of Cardiac Lipid and Energy Metabolism*." Philadelphia, PA, January 1999.
22. University of Texas, Houston, Mini Symposium on New Aspects of Cardiac Metabolism and Gene Expression. "*The role of PPAR α in the transcriptional control of genes involved in cellular fatty acid utilization*." Houston, TX, March 1999.
23. University of Wisconsin, Department of Medicine. "*Molecular 'switches' governing myocardial energy metabolism in the developing and failing heart*." Madison, WI, May 1999.
24. Conjoint Session of the International Radiopharmaceutical Symposia. "*Use of genetically engineered mice in cardiac research*." St. Louis, MO, June 1999.
25. Merck Co., Special Seminar "*The role of PPAR in the control of cardiac metabolism*." Rahway, NJ, July 1999.
26. American Heart Association, Scientific Conference on Molecular, Cellular, and Physiological Approaches to the Failing Heart. "*PPAR signaling in the control of cardiac energy metabolism*." Snowbird, Utah, August 1999.
27. Third Annual Scientific Meeting of the Heart Failure Society of America. "*Transcriptional switches controlling mitochondrial function in the failing heart*." San Francisco, CA, September 1999.
28. Bristol Meyers Squibb Pharmaceutical Research "*The role of PPAR in the control of cardiac metabolism*." Lawrenceville, NJ, October 1999.
29. 72nd Scientific Sessions of the American Heart Association, Evening Seminar (Metabolic Regulation of Cardiac Gene Expression). "*The role of PPAR α in the control of myocardial energy metabolism*." Atlanta, GA, November 1999.
30. Indiana University School of Medicine, Biochemistry Department Seminar, "*The role of PPAR α in the transcriptional control of cellular lipid and energy homeostasis*" Indianapolis, IN, December 1999.
31. Parke-Davis Pharmaceutical Research, Signal Transduction Seminar Series, "*PPAR signaling in the control of cardiac metabolism*" Ann Arbor, MI, January 2000.
32. 2nd Annual Update in the Management of Hypertension, "*Molecular mechanisms governing cardiac metabolism in the normal and hypertrophied heart*" Eric P. Newman Education Center, St. Louis, MO, February 2000.
33. NASPE 21st Annual Scientific Sessions, "*Molecular screening for inherited cardiomyopathies*", Washington, DC, May 2000.
34. MitoKor, "*The role of the PPAR α /PGC-1 transcriptional regulatory complex in the control of cardiac mitochondrial function*", San Diego, CA, June 2000.
35. Merck Co. National Health Science Associates Preceptorship Workshop, "*PPARs in the control of lipid metabolism*", Washington University School of Medicine, August 2000.
36. Eli Lilly Co. "*PPAR signaling in the control of cardiac energy metabolism*", Indianapolis, IN, August 2000.
37. University of Michigan School of Medicine, Cardiology Division Seminar, "*PPAR signaling in the normal and diseased heart*", Ann Arbor, MI, September 2000.

38. 73rd Scientific Sessions of the American Heart Association, State-of-the-Art Talk, "*The multiple functions of PPAR in cardiac metabolism and disease*", New Orleans, LA, November 2000.
39. Mount Sinai School of Medicine, "*PPAR signaling in the control of cellular lipid and energy metabolism*", Department of Cell Biology and Anatomy, New York, NY, December 2000.
40. Albert Einstein School of Medicine, Cardiology Division Seminar, "*PPAR signaling in the normal and diseased heart*", Cardiology Division, New York, NY, December 2000.
41. Astra-Zeneca Workshop on Cardiovascular Disease. "*Energy metabolic switches in the hypertrophied and failing heart: Focus on PPAR*". St. Louis, MO, December 2000.
42. Case Western Reserve Medical School, Cardiology Division Grand Rounds, "*PPAR signaling in the normal and diseased heart*". Cleveland, OH, January 2001.
43. Keystone Symposium, *The PPARs - A Transcription Odyssey* (Chair, Plenary Session). "*The role of PPAR α in the control of cardiac energy metabolism*", Keystone, Colorado, February 2001.
44. FASEB Symposium, "*Mitochondria and energy metabolism in heart failure, hypertrophy, and remodeling*", Orlando, FL, April 2001.
45. Tulane School of Medicine, "Pump Club" Seminar, "*PPAR and Cardiac Function*", New Orleans, LA, April 2001.
46. Ochsner Clinic and Hospital Cardiology Grand Rounds, "*Alterations of cardiac metabolism in the hypertrophied and failing heart*", New Orleans, LA, April 2001.
47. UCLA School of Medicine, Endocrine Division, Seminar, "*PPAR signaling in the normal and diseased heart*", Los Angeles, CA, May 2001.
48. Satellite Meeting of the XVII World Congress ISHR Meeting, Speaker in session on "*Regulation of Energy Metabolism in the Heart and Vasculature*" Banff, Alberta, Canada, July 2001.
49. University of Texas Southwestern, Seminar, "*PPAR signaling and energy metabolic switches in the hypertrophied and failing heart*" Dallas, TX, July 2001
50. 5th Annual Scientific Meeting of the Heart Failure Society, Speaker in Symposium on "*Novel therapeutic approaches in heart: Methods and targets*", Washington, DC, September 2001.
51. Baylor University, Winters Center for Heart Failure Research Conference, "*The role of the PPAR gene regulatory pathway in the normal and hypertrophied heart*", Houston, Texas, March 2002.
52. American College of Cardiology 51st Annual Scientific Session, Speaker, Mini-Course on Basic Mechanisms of Heart Failure, "*Changes in substrate metabolism in the failing heart*", Atlanta, GA, March 2002.
53. Institute for Clinical Research of Montreal, Seminar, Pfizer Lecture Series, "*PPAR signaling in the developing and diseased heart*", Montreal Canada, April 2002.
54. Boston University, Seminar, Whitaker Cardiovascular Institute, "*PPAR signaling in the normal and diseased heart*", Boston, Massachusetts, April 2002.
55. New York University, Cardiology Grand Rounds, "*PPAR signaling in the cardiac hypertrophic growth program*", April 2002.
56. Columbia University College of Physicians & Surgeons, Seminar, "*Altered PPAR signaling in the development of cardiac lipotoxicity: Relevance to the diabetic heart*", April 2002.
57. University of Iowa, "*PPAR signaling and the cardiac hypertrophic growth program*", Cardiovascular Research Seminar, May 2002.
58. 67th Cold Spring Harbor Symposium on Quantitative Biology "*Transcriptional control of mitochondrial function in the developing, hypertrophied, and diabetic heart*", Cold Spring Harbor,

- New York, May 2002.
59. Washington University School of Medicine/Pharmacology Science Symposium “*Nuclear receptor signaling in the normal and diseased heart*”, St. Louis, May 2002.
 60. Cardiac Regulatory Gordon Conference “*PPAR and transcriptional control of cardiac fatty acid oxidation*”, Connecticut College, July 2002.
 61. AHA Conference on Advances in the Molecular and Cellular Mechanisms of Heart Failure, “*The role of the transcriptional coactivator, PGC-1, in the control of cardiac mitochondrial function*”, Snowbird, Utah, August 2002.
 62. Workshop on Nutrition in the Etiology and Amelioration of Cardiomyopathies and Heart Failure, “*Derangements in myocardial lipid metabolism in the hypertrophied, diabetic, and failing heart: Does diet make a difference?*”, Bethesda, MD, September 2002.
 63. University of Arkansas, Biochemistry Departmental Seminar, “*Regulation of mitochondrial function by the transcriptional coactivator PPAR γ coactivator 1 (PGC-1)*”, October 2002.
 64. American Heart Association, Scientific Session, “*Transcriptional control of mitochondrial metabolism*”, Chicago, IL, November 2002.
 65. 2003 Keystone Symposia on PPARs: Transcriptional regulators of metabolism and metabolic disease, “*PPAR α /PGC-1 in the developing, hypertrophied, and diabetic heart*”, February 2003.
 66. Second International Symposium on “PPARs: From Basic Science to Clinical Applications”, “*PPAR α : Regulator of energy and lipid metabolism in the normal and diseased heart*”, Florence, Italy, March 2003.
 67. 6th Annual “Cardiology at the Limits” Symposium, “*PPARs: at the limits of diabetes?*”, University of Cape Town, South Africa, April 2003.
 68. 5th Annual International Motor City Diabetes Symposium, “*Control of mitochondrial function by the PPAR α /PGC-1 axis in the developing and diseased heart*”, Detroit, MI, May 2003.
 69. Bristol-Myers Squibb Pharmaceutical Research Institute, “*The role of PPAR α /PGC-1 in the developing and diseased heart*”. New Jersey, May, 2003.
 70. The Canadian Federation of Biological Sciences, Plenary lecture, “*The role of the PPAR α /PGC-1 complex in the control of energy metabolism in the developing and diseased heart*”, Ottawa, Canada, June 2003.
 71. First Meeting of the Society for Heart and Vascular Metabolism Targeting Metabolism in Cardiovascular Disease from Gene Expression to Clinical Practice, Keynote Speaker “*Nuclear receptor regulatory networks in the transcriptional control of cardiac energy metabolism*”, Freiburg, Germany, June 2003.
 72. Snowbird Molecular Mechanisms of Growth, Death and Regeneration in the Myocardium: Basic Biology and Insights into Ischemic Heart Disease and Heart Failure Conference 2003, “*The role of the PGC-1 transcriptional regulatory cascade in the control of cardiac/mitochondrial function*”, Snowbird, UT, August 2003.
 73. FASEB Summer Conference - Nutrient Regulation and Gene Expression, “*The PPAR regulatory pathway in the normal and diseased heart*”, Snowmass, CO, August 2003.
 74. 7th Annual Scientific Meeting of the Heart Failure Society of America, Plenary lecture, “*Fatty acid and glucose metabolic dysregulation in heart failure*”, Las Vegas, NV, Sept 2003.
 75. Hot Topics in Endocrinology (Endocrine Society). The Role of Nuclear Receptors in Cardiovascular Disease Symposium, Plenary lecture, “*PPARs in the heart*”, San Diego, CA, October 2003.
 76. American Heart Association, Scientific Session, “*Metabolic signals controlling cardiac function and gene expression*”, Orlando, FL, November 2003.

77. American Society of Nephrology, Evolving mechanisms of cellular injury, Plenary lecture, "*Nuclear receptor transcription factors in cell injury*", San Diego, CA, November 2003.
78. Congestive Heart Failure Update, Keynote Address, "*The Molecular Biology of Congestive Heart Failure: From Bench to Bedside*", Newman Educational Center, St. Louis, MO, December 2003.
79. Association of University Cardiologists. "*PPAR α signaling in the protection against cardiac lipotoxicity*", Longboat Key, FL, January 2004.
80. University of California, Los Angeles, Division of Molecular Medicine and Cardiovascular Research Laboratory. "*Derangements in lipid metabolism leading to cardiac dysfunction: Implications for obesity and diabetes*", Los Angeles, CA, March 2004.
81. Cardiovascular Cell and Gene Therapy Conference II. "*The PPAR transcriptional complex as a potential target for myocardial directed therapeutics*", Boston/Cambridge, MA, April 2004.
82. Annual Metabolism Symposium. "*PPAR signaling in the regulation of myocardial metabolism*", Dallas, TX, April 2004.
83. NIH Workshop on Lipids and the Pathophysiology of Obesity. "*Derangements in PPAR signaling leading to lipotoxic cardiomyopathy*", Washington, D.C., May 2004.
84. American Society of Hypertension (ASH). "*PPARs in the heart*", New York City, May 2004.
85. Yale University School of Medicine. "*The influence of PPAR α signaling on the diabetic heart and skeletal muscle phenotype*", New Haven, CT May 2004.
86. American Diabetes Association 64th Scientific Sessions. "*The PPAR α regulatory pathway in the diabetic heart*", Orlando, Florida June 2004.
87. Gordon Research Conference on Cardiac regulatory processes. "*Metabolic plasticity of the normal and failing heart*", Colby Sawyer, NH June 2004.
88. AHA Council on Basic Cardiovascular Sciences Symposium. "*Stress signals, molecular targets, and the genome*", Stevenson, WA, July 2004.
89. 2nd Annual Meeting of Society for Heart and Vascular Metabolism. "*Paradoxical role of lipids in the heart: From PPARs to patient care*", Quebec, Canada, Sept 2004.
90. Heart Failure Society of America. "*PGC-1 and regulation of mitochondrial metabolism*", Toronto, Ontario, Canada, Sept 2004.
91. Brigham and Women's Hospital. "*Control of cardiac metabolism by the PPAR/PGC-1 transcriptional regulatory circuit*", Cardiovascular Research Seminar Series, Boston, MA, Oct 2004.
92. Tufts Molecular Cardiovascular Research Institute 6th Annual Scientific Retreat. "*Transcriptional regulatory circuits controlling energy metabolism in the developing and diseased heart*", Woods Hole, MA, Oct 2004.
93. Mid-America Heart Institute, Kansas City Grand Rounds. "*Diabetic Cardiovascular Disease: Bridging the Translational Divide*", Kansas City, MO, Oct 2004.
94. Third International Symposium on PPARs, PPARs-Efficacy and Safety from Basic Science to Clinical Applications, "*PPARs and the heart: The good and the bad*", Monte Carlo, Monaco, March 2005.
95. The International Union of Physiological Sciences Quadrennial Congress, "*PPAR signaling in the control of cardiac metabolism*", San Diego, CA, April 2005.
96. Keystone Symposium, "*PPAR signaling in the normal and diseased heart*", British Columbia, April 2005.

97. Seminar at NIEHS, "*Control of cardiac metabolism and function by the PPAR/PGC-1 transcriptional regulatory axis*", Research Triangle Park, NC, April 2005.
98. First International Symposium on The Role of Mitochondria in Cardiac Dysfunction, "*Transcriptional regulatory circuits driving mitochondrial biogenesis*", New Orleans, LA, May 2005.
99. Fatty Acid Oxidation Symposium, Keynote Speaker: "*Fatty acids, nuclear hormones, and the complex route to diabetes*", Holland, June 2005.
100. UMDF Mitochondria 2005 Symposium Plenary Lectures, "*PGC-1 α : A versatile integrator of the mitochondrial biogenic program*" and "*Mitochondrial dysfunction in the diabetic heart*", St. Louis, MO, June 2005.
101. 2005 AHA Basic Science Council Conference on Heart Disease, "*The role of PGC-1/PPAR α signaling in the development of diabetic cardiac dysfunction*", Keystone, CO, July, 2005.
102. UT-Southwestern Symposium on Obesity and Non-Esterified Fatty Acids, "*Regulation of muscle energy metabolism by the PGC-1/PPAR axis*", Dallas, TX, Sept. 2005.
103. 9th Annual Heart Failure Society of America Meeting, "*PPAR-driven switches in fatty acid metabolism during the development of heart failure*", Boca Raton, FL, Sept. 2005.
104. International Conference on the Bioscience of Lipids, "*Cardiac lipid metabolism in diabetes*", Ajaccio, Corsica, Sept. 2005.
105. Whitaker Cardiovascular Institute at Boston University School of Medicine, "*Nuclear receptor signaling in the normal and failing heart*", Boston, MA, Oct. 2005.
106. 5th Annual Diabetes Summit: Linking Science to Medicine, "*Diabetic myocardial metabolism*", Dallas, TX Nov. 2005.
107. Eli Lilly and Company Atherosclerosis Advisory Board, "*The control of cardiac and skeletal muscle energy metabolism: therapeutic opportunities*", Indianapolis, IN, Nov. 2005.
108. Pennington Biomedical Research Center, "*The role of the PGC-1/PPAR regulatory cascade in the control of mitochondrial function*", Baton Rouge, LA, Dec. 2005.
109. University of Utah, Pfizer Visiting Professor, "*The PGC-1 regulatory cascade: A critical link between physiologic stimuli and mitochondrial function*", "*Diabetic cardiovascular disease: Bridging the translational divide*", and "*Molecular regulation of striated muscle glucose metabolism*", Utah, Jan. 2006.
110. Keystone Symposium on Diabetes Mellitus and the Control of Cellular Energy Metabolism, Plenary Lecture, "*Mitochondrial adaptation in cardiac and skeletal muscle*", Vancouver, British Columbia, Canada, Jan. 2006.
111. 50th Deuel Conference on Lipids, "*The role of lipotoxic remodeling in diabetic cardiac dysfunction*", Monterey, CA, March 2006.
112. University of Pennsylvania Cardiology Grand Rounds Seminar Series, "*The diabetic heart: Bridging the translational divide*", Philadelphia, PA, March 2006.
113. Annual Blount Lectureship, University of Colorado, "*Nuclear receptor signaling in the normal and failing heart*", Boulder, CO, April 2006.
114. Seminar at Duke University, "*Metabolic shifts in heart failure: A new target for pharmacotherapy*", Durham, NC, April 2006.
115. Massachusetts General Hospital, Cardiovascular Cell and Gene Therapy Conference III, "*Nuclear receptors as novel targets for cardiovascular therapeutics*", Cambridge, MA, April 2006.
116. University of Cincinnati - Genomics Research Center, "*Nuclear receptor signaling in the normal and failing heart*", Cincinnati, OH, May 2006.

117. 3rd Annual Symposium of the AHA Council on Basic Cardiovascular Sciences – Translation of Basic Insights into Clinical Practice, “*Cardiac nuclear receptor signaling*”, Keystone, CO, July 31-Aug. 3, 2006.
118. Kern Aspen Lipid Conference, “*Regulation of energy metabolism by the PGC-1/PPAR axis*”, Aspen, CO, Aug. 2006.
119. Cardiac Energy Metabolism in Heart Failure: From Concepts to Therapies Meeting, “*PPAR regulation of metabolic phenotype*”, Semiahmoo, WA, Sept. 2006.
120. Cold Spring Harbor Symposium on Nuclear Receptors from Bench to Bedside, “*PPARs in the heart*”, Cold Spring Harbor, New York, Nov. 2006.
121. University of Louisville, Cardiology Grand Rounds, “*PPAR signaling in the heart*”, Louisville, KY, Jan. 2007.
122. Keystone Symposium on Molecular Pathways in Cardiac Development and Disease, “*Metabolic Pathways for Cardiomyopathy*”, Beaver Run Resort, Breckenridge, CO, Jan. 2007.
123. Keystone Symposium on Nuclear Receptor Pathways to Metabolic Regulation, “*PPARs and Striated Muscle Lipid Metabolism*”, Steamboat Springs, CO, March 2007.
124. Albert Einstein College of Medicine, Division of Cardiology, seminar, “*Feeding the Failing Heart: Concepts and New Therapeutic Targets*”, Bronx, New York, April 2007.
125. University of Pennsylvania, Institute for Diabetes, Obesity and Metabolism, “*PGC-1: A “Booster” in the Transcriptional Control of Striated Muscle Metabolism*”, May 2007.
126. AHA Scientific Forum on Quality of Care and Outcomes Research, “*The Role of Outcomes in Translational Research*”, Washington, D.C., May 2007.
127. 76th European Atherosclerosis Society Congress, “*PPARs and the Heart: The Good and the Bad*”, Helsinki, Finland, June 2007.
128. XIX ISHR World Congress, “*Mitochondrial Energy Metabolism in Heart Failure: A question of Balance*”, Bologna, Italy, June 2007.
129. NIH-NHLBI Working Group, “*Modeling Mitochondrial Dysfunction in Cardiovascular Disease*”. Moderator of Session 3, “*Focus on Fundamentals Shared across Disciplines and Diseases*”, Bethesda, MD, July 2007.
130. 11th Annual Scientific Meeting, Heart Failure Society of America, “*Cardiac Nuclear Receptor Signaling*”, Washington, D.C., Sept. 2007.
131. Burnham Institute for Medical Research Seminar, “*PGC-1 Coactivators: Inducible Regulators of Energy Metabolism in Health and Disease*”, San Diego, CA, Sept. 2007.
132. Scientific Sessions, American Heart Association, “*Regulation of Mitochondrial Biogenesis in Cardiac Hypertrophy and Heart Failure*”, Orlando, FL, Nov. 2007.
133. Scientific Sessions, American Heart Association, “*Basic Metabolic Mechanisms of the Diabetic Heart*”, Orlando, FL, Nov. 2007.
134. Scientific Sessions, American Heart Association, “*Transcription Factors as Therapeutic Targets for CV Disease*”, Orlando, FL, Nov. 2007.
135. Keystone Symposium on Pathological and Physiological Regulation of Cardiac Hypertrophy, “*PGC-1 Coactivators in Heart and Skeletal Muscle*”, Copper Mountain Resort, CO, Jan. 2008.
136. Gladstone Institute of Cardiovascular Disease, University of California, San Francisco, seminar entitled, “*Transcription Factors as Therapeutic Targets for Cardiovascular Disease*”. Jan. 2008.

137. Burnham Diabetes Symposium, "*Transcriptional Control of Mitochondrial Function in the Diabetic Heart*", La Jolla, CA, April, 2008.
138. University of Central Florida seminar, "*Transcription factors as therapeutic targets for cardiovascular disease*", Orlando, FL, May, 2008.
139. 2008 Center for Integrative Genomics (CIG) Symposium, Metabolism in Health and Disease, "*Cardiac Nuclear Receptor Signaling in Health and Disease*", Lausanne, Switzerland, June 2008.
140. International Society for Heart Research, "*Myocardial PPAR Signaling*", Cincinnati, OH, June, 2008.
141. Co-Organizer, AHA Basic Cardiovascular Sciences Mtg., Keystone Conference Center, Keystone, CO, July 2008.
142. Cold Spring Harbor Nuclear Receptors; Bench to Bedside Meeting, "*Cardiac Nuclear Receptors as Therapeutic Targets for Metabolic Modulation*", Cold Spring Harbor, Aug., 2008.
143. Keystone Symposium on Metabolism and Cardiovascular Risk, "*PGC-1, Mitochondria and Cardiac Dysfunction in Insulin Resistance and Diabetes*", Breckenridge, CO, Sept. 2008.
144. Annual Scientific Meeting, The Obesity Society, Phoenix, AZ, Oct., 2008.
145. 11th Annual BioFlorida Conference, "*Individualized Medicine Session*", Amelia Island, Jacksonville, Florida, Oct. 2008.
146. NHLBI Mitochondrial Biology Meeting, "*Cardiac Mitochondrial Biogenesis in Health and Disease*", Bethesda, MD, Oct. 2008.
147. McKnight Brain Institute, "*Nuclear Receptors as Therapeutic Targets for Cardiovascular & Metabolic Disease*", University of Florida, February 2009.
148. 14th International Conference on the Biochemistry of Exercise, "*Muscles as Molecular & Metabolic Machines Conference*", University of Guelph, Ontario Canada, June 2009.
149. American Heart Association Basic Cardiovascular Science Conference, "*Molecular Mechanisms of Cardiovascular Disease*", Las Vegas, NV, July 2009.
150. Heart Failure Society of America-13th Annual Scientific Meeting, "*Nuclear Receptor Regulation of Cardiac Mitochondria*", Boston, MA, Sept. 2009.
151. Society of Heart & Vascular Metabolism-7th Annual Scientific Sessions for Heart & Vascular Metabolism, "*Cardiac Metabolism in Health & Disease: Mitochondria and Oxidative Stress*", Pavoda, Italy, August 2009.
152. Baylor Medical College, Dept. of Cell Biology, Seminar Series, Houston, TX, November 2009.

Trainees Mentored in the Kelly Laboratory.

Trainee	Years	Support	Project Title	Current Position
Predoctoral				
Richard Vega	95-99	NIH, Cell Biology Training Grant	Role of nuclear receptors in brown adipocyte differentiation	Scientist, Novartis Co.
Michael Kappelman	97 (summer)	WUMS Student Research Fund	Characterization of a metabolic gene regulatory pathway involved in the cardiomyocyte hypertrophic growth response	Pediatric Resident Training, Boston Children's Hospital
Jane Bowen	97 (summer)	AHA Summer Fellowship	Identification of cardiac-specific retinoid receptor interacting proteins	Medical Student, University of North Carolina
Clovis Pitchford	98 (summer)	HHMI Summer Fellowship Award	Molecular basis of gender-specific death of PPAR α -/- mice	Residency in Pathology, Vanderbilt University
Trevor Robison	98-00 (summer)	AHA Summer Fellowship	Retinoid signaling in heart	Residency in Anesthesiology- Northwestern University
Angela Raigans	98 (summer)	AHA Summer Fellowship	Is PPAR α a compensatory factor in inborn errors in FAO?	Student, St. Louis College of Pharmacy
Carolyn Magee	01-02	Division of Biology and Biomedical Sciences Training Grant, Washington University	Signal transduction pathways controlling nuclear receptor coactivator/corepressor function	Research Technician, Center for Cardiovascular Research, Washington University
Adam Wende	01-06	Division of Biology and Biomedical Sciences; and CV Training Grant, Washington University	Regulation of the transcriptional coactivator, PGC-1 in the hypertrophied heart	Postdoctoral Research Associate, University of Utah
Tim Peterson	02 summer	WUMS Student Research Fund	Regulation of GLUT4 gene transcription by PPAR α	Graduate Assistant, MIT, Department of Biology
Lauren Kim	03-05	WUMS Student Research Fund; HHMI Fellowship Award	Mapping the interaction between PGC-1 α and NRF-1	Medical Student, Washington University
Lori L. LaRiviere	03-04	MSTP Training Grant, Washington University	The influence of dietary fat content on diabetic cardiac dysfunction	Medical Scientist Training Program, Washington University
Jacqueline Siljee	05-06	Departmental Funds	Mechanism of mitochondrial lipotoxicity relevant to diabetic cardiomyopathy	Undergraduate Research Scholar, Washington University
Postdoctoral				
M. Eric Carter, MD	91-93	Merck-ACC Fellowship	Characterization of a complex hormone responsive transcriptional regulatory element	Clinical Practice, Boise ID
Sharon Cresci, MD	92-96	Individual NRSA, NHLBI	Isolation and characterization of a novel cardiac-enriched nuclear receptor	Instructor of Medicine, Washington University
Fiona H. Levy, MD	93-01	K08 Award, NHLBI	Hypoxia-induced gene expression	Associate Prof, Pediatrics, UT Southwestern

Dennis Disch, MD	93-95	AHA Fellowship	Development of a transgenic mouse system to study the regulation of cardiac fatty acid oxidation	Clinical Practice, St. Louis, MO
Philip M. Barger, MD	93-01	NIH, Cardiovascular Pharmacology Training Grant; AHA; AHA Scientist Development Award, K08 Award, NHLBI	Retinoid X receptor γ gene expression in cardiac development; MAPK signaling in the heart	Assistant Professor of Medicine, Baylor University School of Medicine
Michael N. Sack, MD, PhD	94-97	HHMI Postdoctoral Research Fellowship	Regulation of oxidative energy enzyme gene expression in the hypertrophied failing heart	Clinician/Scientist, Cardiovascular Branch, National Heart, Lung and Blood Institute
Martha Clabby, MD	95-01	Pediatric Scientist Development Program Award; K08 Award, NHLBI	Role of retinoids in cardiac development and growth	Assistant Professor of Pediatrics, Emory University
Jon Brandt, MD	96-99	Individual NRSA, NHLBI	Characterization of M-CPT I expression during cardiac hypertrophic growth and development	Clinical Practice (Pediatric Hem-Onc) Green Bay, WI
Attila Kovacs, MD	95-96	Departmental Funds; AHA Scientist Development Award	Molecular basis of diabetic cardiomyopathy	Assistant Professor of Medicine, Washington Univ.
John Lehman, MD	98-05	CV Training Grant; Paul B. Beeson Career Development Awards in Aging	Control of cardiac mitochondrial biogenesis by PPAR γ coactivator protein 1 (PGC-1)	Assistant Professor of Medicine, Center for Cardiovascular Research, Department of Medicine, Washington University
David Kurtz, DVM, PhD	98-03	NIH KO1 Award	The role of estrogen in the control of cardiac and hepatic lipid metabolism	Veterinarian, National Exposure Research Laboratory (NERL) of the U.S. Environmental Protection Agency Research Triangle Park, NC
Suresh Narayanan, MD	98-99	CV Training Grant	Characterization of altered lipid metabolism in the failing heart	Clinical Practice
Janice Huss, PhD	99-05	Individual NRSA, NHLBI; KO1 Award, NIDDK	PGC-1 as a coactivator of mitochondrial fatty acid oxidation	Research Assistant Professor, City of Hope National Medical Center
Brian Finck, PhD	00-05	Individual NRSA, NHLBI; KO1 Award, NIDDK	Development of a mouse model of diabetic cardiomyopathy	Research Assistant Professor of Medicine, Washington University
Paul Schaeffer, PhD	00-06	Individual NRSA	Investigation of molecular signatures of physiologic cardiac hypertrophy	Research Assistant Professor, University of Miami, Ohio
K. George Thampy, MD	00-01	Diabetes Research Training Grant	Characterization of the role of PPAR α and PGC-1 in the insulin signaling pathway	Clinical Practice
Laurie K. Russell, PhD	01-04	CV Pharmacology Training Grant	Development of inducible murine expression systems for PPAR α and PGC-1	Assistant Professor, St. Louis University
Carl E. Clay, PhD	02-03	Developmental Cardiology and Pulmonary Training Program	PPAR/RXR signaling in the hypertrophic heart	Senior Medical Writer, Complete Healthcare Communications, Inc. Glen

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Eileen M. Burkart, Ph.D.	03-07	CV Pharmacology Training Grant; AHA Fellowship Award	The role of PPAR β in the cardiovascular system	Senior Research Scientist, Abbott Global Pharmaceutical Research & Development, Abbott Park, IL
Michael Brown, M.D.	05-07	CV Training Grant, ACC Merck Training Fellowship Award	Exploring the functional role of genetic variants influencing the PGC-1 complex	Cardiology Fellow, Washington University
John H. S. Yang, MD	02-08	K08 Award NHLBI	Molecular pathogenesis of diabetic cardiomyopathy	Assistant Professor, Center for Cardiovascular Research, Department of Medicine, Washington University
Lisa de las Fuentes, MD	02-03	CV Training Grant, Robert Wood Johnson Foundation Award (#048875)	Genetic determinants of left ventricular hypertrophy: correlates with myocardial fatty acid metabolism	Instructor, Cardiovascular Division, Washington University
Jennifer Duncan, M.D.	04 - 07	K08 HL084093 Award NHLBI	Molecular studies of the diabetic heart	Instructor, Department of Pediatrics and Center for Cardiovascular Research, Washington University
Christoph Zechner, M.D.	05-present	R01-DK45416; German Research Foundation Scholarship	Molecular physiology of PGC-1 in skeletal muscle	Postdoctoral Research Associate, Burnham Institute for Medical Research
Jose A. Madrazo, M.D.	05-07	CV Pharm. Training Grant	PGC-1-driven glucose metabolism in the ischemic heart	Cardiology Fellow, Washington University
Ling Lai, M.D., Ph.D.	04-present	AHA Fellowship Award; R01 HL058493; R01 DK045416	Exploring the biologic role of the coactivator PGC-1 β in heart	Postdoctoral Research Scholar, Burnham Institute for Medical Research
Steven Ewer, M.D.	06-08	CV Training Grant	Molecular approvals to activate energy production in the failing heart	University of Madison, Assistant Professor, Cardiology
Kari Chambers, Ph.D.	07-present	CV Pharmacology Training Grant	Characterizing cardiac glucotoxicity	Postdoctoral Research Scholar, Center for Cardiovascular Research, Washington University
Joel Schilling, M.D.	07-present	CV Training Grant	Exploring the myocardial metabolism/inflammation interface	Cardiology Fellow, Center for Cardiovascular Research, Washington University
Manya Warriar, Ph.D.	08-Present	Burnham Institutional Funds	Characterization of NT-PGC-1 α : An alternatively spliced form	Postdoctoral Associate, Burnham Institute for Medical Research
Zhenji Gan, Ph.D.	08-Present	RO1 DK045416	Molecular Physiology of PPARs in skeletal muscle	Postdoctoral Associate, Burnham Institute for Medical Research
Ola Martin, Ph.D.	08-Present	Burnham Institutional Funds	PGC-1-mediated regulation of mitochondrial dynamics	Postdoctoral Associate, Burnham Institute for Medical Research
Visiting Senior Scientists		Home Institution		Current Primary Position
Daniel Hale, MD	92-93 sabbatical	University of Pennsylvania	Substrate control of fatty acid oxidation enzyme expression	Associate Professor University of Texas Medical School, San Antonio

Fatima Djouadi, PhD	96-97 sabbatical	INSERM, Paris	A mouse model of metabolic cardiomyopathy	Scientist, INSERM, University of Paris
Denis Medeiros, PhD	98-99 sabbatical	The Ohio State University NRSA Senior Fellowship	Mitochondrial biogenesis in the hypertrophied heart	Professor, Chair, Dept. of Nutrition, Kansas State University
Michael Brame	03 summer	Division of Biology & Biomedical Science Young Scientist Program	Metabolic characterization of a transgenic mouse model of insulin resistance	Teacher, Roosevelt High School, St. Louis, Missouri