

Biographical and Bibliographic Information

JOSHUA W. KNOWLES

Identifying data:

Address: 1007 Clark Way, Palo Alto, CA, 94304

A. Academic history:

Colleges and universities attended, degrees received, dates.

8/91-5/95	BA	History, Biology (<i>w/honors</i>) University of North Carolina-Chapel Hill, NC
8/95-5/03	MD	Medicine University of North Carolina-Chapel Hill, NC
6/97-8/01	PhD	Genetics and Molecular Biology University of North Carolina-Chapel Hill, NC

Scholarships and honors (pre-MD degree)

1991-1993	Freshman and Sophomore Honors Program, UNC-Chapel Hill, NC
1991-1995	Dean's List several semesters, UNC-Chapel Hill, NC

Post-doctoral and residency training

7/1/03-6/30/05	Internship and Residency, Internal Medicine Stanford University School of Medicine, Stanford, CA
7/1/05-6/30/10	Cardiology Fellow, Division of Cardiovascular Medicine Stanford University School of Medicine, Stanford, CA

Other study and research opportunities

Research Grants (*current*):

01/1/16-12/31/18	Merck Evaluation of FAM13A as in insulin resistance gene Co-Investigator	SPO # 123020 PI: Thomas Quertermous
04/1/16-3/31/20	NIH Molecular Mechanisms of Insulin Resistance Associated Loci Co-Investigator	R01DK107437-01 PI: Thomas Quertermous
7/01/16-6/30-19	Doris Duke Charitable Trust <i>Statin-associated diabetes: Identifying risk factors and physiologic mechanisms</i>	SPO#: 124038

The goal is to understand the mechanism for statin-induced diabetes. We will perform a small clinical trial to assess insulin sensitivity and insulin secretion with gold standard measures before and after statin therapy.

PI

- 7/01/16-6/30/20 NIH 1R01DK106236
Beyond GWAS of insulin resistance: an integrated approach to translate genetic association to function
The goals of this work are to use computational, in vitro and zebrafish models to uncover the function of insulin resistance GWAS variants.
Co-Investigator PIs: Thomas Quertermous, Erik Ingelsson
- 4/01/18-3/31/23 NIH 1R01DK11418301A1 (Assimes)
Proteomic determinants of direct measures of insulin resistance
The goal of this work is to identify proteins and genetic determinants of proteins that are associated with insulin resistance
Co-Investigator PI: Tim Assimes
- 2/20/18-1/31/19 AHA/Brigham and Women's Hospital
Early detection of coronary artery disease in familial hypercholesterolemia
The goal of this work, part of the AHA "One Brave Idea" project is to perform deep phenotyping on patients with familial hypercholesterolemia
Co-Investigator PI: Euan Ashley
- 7/1/18-6/30/23 NIH SPO 128456
PCSK9 Inhibition after Heart Transplantation
The goal of this work is to determine if PCSK9 inhibitors used after heart transplantation will prevent transplant vasculopathy.
Co-Investigator PI: William Fearon

Research Grants (past)

- 07/1/11-6/30/16 NIH 1 U01 HL107388-01
Next Generation Genetic Association Studies (RFA HL11-006)
Identifying the gene networks of insulin resistance: the GENESIPS study
Co-Investigator PI: Thomas Quertermous
- 01/1/15-12/31/17 Amgen SPO #118131
FIND FH: A STRIDE based approach for identification of FH
PI
- 01/1/15-12/31/16 American Heart Association SPO # 116769/15IRG222930034
Summer 2014 Innovative Research Grant
Use of electronic phenotyping and machine learning to identify familial hypercholesterolemia in EHRs

PI

- 04/1/15-3/31/16 The Stanford Data Science Initiative
Use of electronic phenotyping and machine learning algorithms to identify familia hypercholesterolemia patients in electronic health records
Co-PI w/Nigam Shah, MBBS, PhD
- 1/01/15-12/31/15 Stanford 2014 CVI Seed Grant
Exploring the Role of Maternal Insulin Resistance in Congenital Heart Defects
PI
- 7/1/10-6/30/15 American Heart Association 10FTF3360005 SPO # 48273
National Fellow to Faculty Award
Identification and characterization of genetic determinants of insulin resistance
PI
- 12/20/12-1/7/14 Stanford 2012 CVI Seed Grant
Hybrid genotyping of a well-phenotyped healthy control population as a community resource for exome studies
Co-PI w/Jason Merker, MD, PhD (Genetics)
- 10/1/10-9/30/15 Leducq Foundation Network Grant
Molecular mechanisms of novel genes associated with plasma lipids and cardiovascular disease
Contributor PI: Thomas Quertermous
Overall PI: Dan Rader (Penn)
- 10/1/03-9/31/08 NIH RO1 HL075774
Genetic determinants of peripheral arterial disease
Co-Investigator PI: John Cooke, MD, PhD
Co-PI: Thomas Quertermous, MD
- 1/1/06-1/1/07 Dean's Post-Doctoral Fellowship Award, Stanford
Identification of genetic polymorphisms that alter susceptibility to coronary artery disease
PI
- 4/1/06-4/1/07 Cardiovascular Institute Seed Grant CVI Award EAFGS
Genetic determinants of coronary artery disease
Co-Investigator PI: Thomas Quertermous, MD
- 9/1/06-9/1/07 LCIC Grant SPO # 37759
Private Foundation Fellowship Grant
Replication and functional characterization of a polymorphism in the LOX-1 gene that alters susceptibility to coronary disease
PI

9/1/06-9/1/08	American Heart Association Postdoctoral Grant Replication and functional studies of a polymorphism in the LOX-1 gene that alters susceptibility to coronary disease PI	0625154Y
9/25/06-7/31/09	NIH Whole genome association for early coronary artery disease and related phenotypes Co-Investigator	R01 HL087647 PI: Thomas Quertermous, MD
4/1/08-4//109	Cardiovascular Institute Seed Grant, 2008 Genome-wide association study for determinants of insulin sensitivity Co-Investigator	PI: Thomas Quertermous, MD
6/5/08-6/4/09	Rosetta Inpharmatics LLC Genome-wide association study for determinants of insulin sensitivity Co-Investigator	PI: Thomas Quertermous, MD
5/1/10-4/30/11	Stanford CTSA Seed Grant, Innovation Award in Population Science Supported by NIH/NCRR CTSA <i>A pilot randomized trial of personalized genetics in preventive cardiology</i> PI	UL1 RR025744
10/1/11-9/30/12	Stanford CVI Seed Grant <i>A pilot randomized trial of personalized genetics in preventive cardiology</i> PI	1091650-310-GHAKD

Clinical Trials

STUDY: A Pilot Randomized Trial of Personal Genomics for Preventive Cardiology
 Role: Stanford site Principal Investigator SPO# 40262
 Type: Investigator initiated, single site
 Sponsor: Stanford start – stop dates: **10/1/10-5/1/13**
 Subjects: Enrolled 100 of a planned 100 patients at Stanford
 Manuscript under review
 NCT ID: **NCT 00248079**

STUDY: Relationship Between Insulin Resistance and Statin Induced Type 2 Diabetes, and Integrative Personal Omics Profiling
 Role: Stanford site Principal Investigator SPO# 124038
 Type: Investigator initiated, single site
 Sponsor: Stanford start – stop dates: 4/24/15-current
 Subjects: Currently enrolling
 NCT ID: **NCT 02437084**

Medical Board eligibility or boards passed, with date(s) (include licensure)

8/2006 A.B.I.M. Certification, Internal Medicine
10/2010 A.B.I.M. Certification, Cardiovascular Disease
11/2012 Diplomate, American Board of Clinical Lipidology

Licensure

7/2004- California Medical License # A87974
10/2007- Drug Enforcement Agency License # FK0548175

B. Employment history. List all academic and non-academic positions.

Academic positions:

9/14- Present Assistant Professor of Medicine Prevention and Stanford Center for Inherited Cardiovascular Disease
2017- 2018 Associate Program Director, Stanford Cardiovascular Medicine Fellowship program (Program Director, John Giacomini)
2018-Present Program Director, Stanford Cardiovascular Medicine Fellowship program
7/17-Present Co-director (with Joy Wu and Vinicio de Jesus Perez), Stanford Translational Investigator Pathway for Internal Medicine Residents
8/10-7/11 Clinical Instructor, Division of Cardiovascular Medicine, Stanford University School of Medicine, Stanford, CA
7/11-9/11 Instructor, Division of Cardiovascular Medicine Stanford University School of Medicine, Stanford, CA

Non-Academic positions:

C. Public and professional service.

International committees and task forces:

2013-2017. International advisory board: Canadian Familial Hypercholesterolemia (FH) registry. Canadian effort led by Dr. Jacques Genest, McGill University
2013-2015. International advisory board: International FH Foundation
Chair: Gerald Watts, Australia

National committees and task forces:

2012-pres. FH Foundation (Patient-led, advocacy group/charitable organization)
Chief Medical Advisor
The goal of this organization is to improve the diagnosis and treatment of FH and raise awareness through information and advocacy.

Major initiatives include: Designing and implementing a National FH Patient Registry in collaboration with the Duke Clinical Research Institute (CASCADE FH); Participating in the AHA Scientific Statement on FH; Testifying at the FDA in favor of new therapies for homozygous FH (November, 2012) and heterozygous FH (Summer, 2014); Serving as a member of the FH Foundation Board of Directors; Overseeing the scientific content of informational materials; Collaborating with the Scientific Advisory Board of the FH Foundation and other interested groups such as the AHA, National Association of Genetic Counselors, National Lipid Association, Preventive Cardiology Nurses Association. Writing application for a new, FH-specific ICD10 code for FH, which became effective 10/1/16. Pioneering "big data" approaches to identify FH patients in EMRs (FIND FH initiative)

- 2013- Organizing Committee and co-Host
The Familial Hypercholesterolemia Summit: annual event
- 2013-2015 Writing Group, American Heart Association
AHA Scientific Statement on Familial Hypercholesterolemia
Chair of writing group: Sam Gidding
- 2013-2015 Member, Clinical Lipidology, Lipoprotein Metabolism & Thrombosis Committee of the Arteriosclerosis, Thrombosis and Vascular Biology (ATVB) Council & Lifestyle and Cardiometabolic Health (formerly NPAM) Council for the term dates, July 1, 2013 - June 30, 2015,
Chair of Council: Eliot Brinton

Local committees and task forces:

- 2008-2009 Stanford Initiative in Human Genetics and Genomics
Organizer, campus-wide seminar series on human genetics topics
- 2011 Pacific Lipid Association (part of the National Lipid Association) Familial Hypercholesterolemia (FH) working group
- 2013- Stanford Cardiovascular Institute (CVI): Steering Committee
- 2015- Data Safety Monitoring Board, Atrial Fibrillation Clinical Trial (PI: Dr. Sanjiv Narayan)
- 2015-2017 Co-director (with David Maron), inpatient General Cardiology Service
- 2014- Stanford Grant Writing Academy, give critique to postdocs from across the medical school on K applications several times a year

Conference organizing committees

- CARDIA Conference, Stanford CME course (Dr. Euan Ashley, director): Organizing committee (2014, Monterey; 2016, Napa; 2018, Stanford)
- Stanford/Amgen meeting on Genetics and Drug Discovery: Co-director with Dr. Joe Wu, (2017)

- FH Foundation International FH Summit: Organizing committee and co-Host (2013, Annapolis; 2014, New York; 2015; Pasadena, 2016; Dallas; 2017, Miami; 2018, Los Angeles)
- ACC "Think Tank" on lipids, Washington 2017: Organizing committee
- Stanford Diabetes Center Research Symposium: Organizing committee (2017)

Community Service:

- 2006-2010 Arbor Clinic, free clinic operated by Stanford Medical Students:
Attending Physician ~ one-half day per 1-2 mos. (volunteer)
- 2010- Healthy Heart Week (volunteer): Presentation to local elementary school
about the importance of a healthy lifestyle for heart health.
- 10/11-10/12 Mentor for at risk high school students, Woodside High School:
Help to provide mentorship to two high school students who have medical
career goals. At least one-half day per quarter.
- 2016-2017 Mentor to two high school students for Authentic Research Program
organized by Palo Alto City School System

Editorial Experience:

- 2017- Associate Editor, *Circulation Genomic and Precision Medicine*
- Reviewer:* Scientific Journals
- 2008-pres. *Cardiovascular Drugs and Therapy, Diabetes*
- 2008-pres. *Circulation Research*
- 2008-pres. *Journal of Molecular and Cellular Cardiology*
- 2011-pres. *Diabetes Care, Diabetologica*
- 2012-pres. *Circulation: Cardiovascular Genetics, ATVB, European Journal of Clinical Investigation*
- 2013-pres. *BMC-Genetics, Genomics in Medicine, Circulation*
- 2014-pres. *Diabetes, American Heart Journal*
- 2015-pres. *PLoS One, PLoS Genetics*
- 2016-pres. *JAMA, Science*

Assisted with reviews for:

- 2009-pres. *Circulation*
- 2009-pres. *New England Journal of Medicine*
- 2011-pres. *Journal of Clinical Investigation*

Books

- 2016 Assistant Editor, Hurst's the Heart. 50th year/fourteenth edition
Chief Editors: Robert Harrington, Valentin Fuster

D. Post-degree honors and awards if any. Include major invited papers and addresses, memberships in professional associations and learned societies, etc.

- 2003-2005 Stanford Clinical Investigator Pathway Program
Program designed to mentor candidates with outstanding credentials for research careers.
- 2006-2007 The Future Leaders in CV Medical Research Program Fellowship Award
- 6/2007 Edwin Alderman Award for Excellence in Clinical Research
Awarded to the top research project by a Cardiology Fellow (judged by faculty)
- 6/2008 Edwin Alderman Award for Excellence in Clinical Research
Awarded to the top research project by a Cardiology Fellow (judged by faculty)
- 9/2012 Fellow, American College of Cardiology
- 11/2012 Fellow, American Heart Association
- 2012 Diplomate: American Board of Clinical Lipidology
- 2013 Moderator and Speaker, AHA National Meeting, Dallas
Session: Familial Hypercholesterolemia: Challenges and Opportunities
- 2015 ACCF/Herman K. Gold Young Investigator's Award Finalist in Molecular and Cellular Cardiology: "Nat1 knockdown results in an insulin resistance phenotype in vitro and in vivo"
- 2016 Doris Duke Charitable Trust, Clinical Investigator

E. Publications (81)

E.1. Peer-reviewed articles

E.1.A *Original research* contributions (H-index 36, i10 index 57, Google scholar 7/2017)

1. Li Z, **Knowles JW**, Goyeau D, Prabhakar S, Short DB, Perkins AG, Goy MF. Low salt intake down-regulates the guanylin signaling pathway in rat distal colon. *Gastroenterology* 1996; 111(6):1714-1721.
2. **Knowles JW**, Reddick RL, Jennette JC, Shesely EG, Smithies O, Maeda N. Enhanced atherosclerosis and kidney dysfunction in eNOS(-/-)Apoe(-/-) mice are ameliorated by enalapril treatment. *J Clin Invest* 2000; 105(4):451-458.
3. **Knowles JW**, Esposito G, Mao L, Hagaman JR, Fox JE, Smithies O, Rockman HA, Maeda N. Pressure-independent enhancement of cardiac hypertrophy in natriuretic peptide receptor A-deficient mice. *J Clin Invest* 2001; 107(8):975-984.
4. Goy MF, Oliver PM, Purdy KE, **Knowles JW**, Fox JE, Mohler PJ, Qian X, Smithies O, Maeda N. Evidence for a novel natriuretic peptide receptor that prefers brain natriuretic peptide over atrial natriuretic peptide. *Biochem J* 2001; 358(Pt 2):379-387.
5. Ellmers LJ, **Knowles JW**, Kim HS, Smithies O, Maeda N, Cameron VA. Ventricular expression of natriuretic peptides in Npr1(-/-) mice with cardiac hypertrophy and fibrosis. *Am J Physiol Heart Circ Physiol* 2002; 283(2):H707-714.
6. Hodgin JB, **Knowles JW***, Kim HS, Smithies O, Maeda N. Interactions between endothelial nitric oxide synthase and sex hormones in vascular protection in mice. *J Clin Invest* 2002; 109(4):541-548.

7. **Knowles JW**, Erickson LM, Guy VK, Sigel CS, Wilder JC, Maeda N. Common variations in noncoding regions of the human natriuretic peptide receptor A gene have quantitative effects. *Hum Genet* 2003; 112(1):62-70.
8. Alexander MR, **Knowles JW***, Nishikimi T, Maeda N. Increased atherosclerosis and smooth muscle cell hypertrophy in natriuretic peptide receptor A^{-/-}-apolipoprotein E^{-/-} mice. *Arterioscler Thromb Vasc Biol* 2003;23(6):1077-1082.
9. Caron KM, James LR, Kim HS, **Knowles J**, Uhlir R, Mao L, Hagan JR, Cascio W, Rockman H, Smithies O. Cardiac hypertrophy and sudden death in mice with a genetically clamped renin transgene. *Proc Natl Acad Sci U S A* 2004; 101(9):3106-3111.
10. **Knowles JW**, Wang H, Itakura H, Southwick A, Myers RM, Iribarren C, Fortmann SP, Go AS, Quertermous T, Hlatky MA. Association of polymorphisms in platelet and hemostasis system genes with acute myocardial infarction. *Am Heart J* 2007 154(6):1052-1058.
11. Assimes TL, **Knowles JW**, Priest JR, Basu A, Borchert A, Volcik KA, Grove ML, Tabor HK, Southwick A, Tabibiazar R, Sidney S, Boerwinkle E, Go AS, Iribarren C, Hlatky MA, Fortmann SP, Myers RM, Kuhn H, Risch N, Quertermous T. A near null variant of 12/15-LOX encoded by a novel SNP in ALOX15 and the risk of coronary artery disease. *Atherosclerosis* 2008; 198(1):136-144.
12. **Knowles JW***, Assimes TL, Boerwinkle E, Fortmann SP, Go A, Grove ML, Hlatky M, Iribarren C, Li J, Myers R, Risch N, Sidney S, Southwick A, Volcik KA, Quertermous T. Failure to replicate an association of SNPs in the oxidized LDL receptor gene (OLR1) with CAD. *BMC Med Genet* 2008 Apr; 9:23.
13. Assimes TL, **Knowles JW***, Priest JR, Basu A, Volcik KA, Southwick A, Tabor HK, Hartiala J, Allayee H, Grove ML, Tabibiazar R, Sidney S, Fortmann SP, Go A, Hlatky M, Iribarren C, Boerwinkle E, Myers R, Risch N, Quertermous T. Common polymorphisms of ALOX5 and ALOX5AP and risk of coronary artery disease. *Hum Genet* 2008; 123(4): 399-408.
14. Assimes TL, **Knowles JW**, Basu A, Iribarren C, Southwick A, Tang H, Absher D, Li J, Fair JM, Rubin GD, Sidney S, Fortmann SP, Go AS, Hlatky MA, Myers RM, Risch N, Quertermous T. Susceptibility locus for clinical and subclinical coronary artery disease at chromosome 9p21 in the multi-ethnic ADVANCE Study. *Hum Mol Genet* 2008; 17(15): 2320-2328.
15. Zakharia F, Basu A, Absher D, Assimes TL, Go AS, Hlatky MA, Iribarren C, **Knowles JW**, Li J, Narasimhan B, Sidney S, Southwick A, Myers RM, Quertermous T, Risch N, Tang H. Characterizing the admixed African ancestry of African Americans. *Genome Biol* 2009; 10(12):R141.
16. Ingelsson E, [10 authors], **Knowles JW**, [54 authors], Florez JC; MAGIC Investigators [42 inst]. Detailed physiologic characterization reveals diverse mechanisms for novel genetic Loci regulating glucose and insulin metabolism in humans. *Diabetes* 2010; 59(5):1266-1275. [genotyping and data analysis]
17. Dackor J, Tobacco & Genetics Consortium; Franceschini N, ARIC; Bernardinelli L, ATVB Italian Study Group; **Knowles JW**, ADVANCE; [114 auth, 103 inst]. Genome-wide meta-analyses identify multiple loci associated with smoking behavior. *Nat Genet* 2010 May; 42(5):441-447. [exchange of genotyping data, assistance writing manuscript]
18. Ashley EA, Butte AJ, Wheeler MT, Chen R, Klein TE, Dewey FE, Dudley JT, Ormond KE, Pavlovic A, Morgan AA, Pushkarev D, Neff NF, Hudgins L, Gong L, Hodges LM,

- Berlin DS, Thorn CF, Sangkuhl K, Hebert JM, Woon M, Sagreiya H, Whaley R, **Knowles JW**, Chou MF, Thakuria JV, Rosenbaum AM, Zaranek AW, Church GM, Greely HT, Quake SR, Altman RB. Clinical assessment incorporating a personal genome. *Lancet* 2010 May; 375(9725):1525-1535. [assistance with certain design questions, writing manuscript and critical review]
19. Lango Allen H, [51 authors], **Knowles JW**, [239 authors], Hirschhorn JN; GIANT Consortium. Hundreds of variants clustered in genomic loci and biological pathways affect human height. *Nature* 2010 Oct; 467(7317):832-838. [exchange of genotyping data, assistance writing manuscript]
 20. Speliotes EK, [136 authors], **Knowles JW**, [18 authors], Ludwig B; MAGIC, Manunta P, [153 authors], Watkins H; Procardis Consortium, Wilson JF, [33 authors], Loos RJ. Association analyses of 249,796 individuals reveal 18 new loci associated with body mass index. *Nat Genet* 2010 Nov; 42(11):937-948. [collaboration through exchange of genotyping data, assistance writing manuscript]
 21. Heid IM, [39 authors], Wood AR; MAGIC, Estrada K, [24 authors], **Knowles JW**, [232 authors], Lindgren CM. Meta-analysis identifies 13 novel loci associated with waist-hip ratio and reveals sexual dimorphism in the genetic basis of fat distribution. *Nature Genet* 2010 Nov; 42(11):949-960. [exchange of genotyping data]
 22. Assimes TL, [14 authors], **Knowles JW**, [83 authors], Ball SG; Myocardial Infarction Genetics Consortium; Wellcome Trust Case Control Consortium; Cardiogenics, Ouwehand WH, [29 authors], Quertermous T. Lack of association between the Trp719Arg polymorphism in kinesin-like protein 6 and coronary artery disease in 19 case-control studies. *J Am Coll Cardiol* 2010 Nov;56(19):1552-1563. Erratum in: *J Am Coll Cardiol* 2011 Jan;57(4):520. [exchange of genotyping data, assistance writing manuscript]
 23. Reilly MP*, Li M*, [22 authors], **Knowles J**, [25 authors]; †Wellcome Trust Case Control Consortium, Knouff CW, Waterworth DM, Walker MC, Martinelli N, Olivieri O, Girelli D, Quyyumi AA, Muhlestein JB, Anderson JL; †Myocardial Infarction Genetics Consortium, Erdmann J, Schunkert H, Hall AS, Quertermous T, Blankenberg S, Hazen SL, Roberts R, McPherson R, Kathiresan S, Samani NJ, Mooser V, Wilensky R, Hakonarson H, Epstein SE, Rader DJ. Identification of ADAMTS7 as a novel locus for coronary atherosclerosis and association of ABO with myocardial infarction in the presence of coronary athero-sclerosis: two genome-wide association studies. *Lancet* 2011 Jan;377(9763):383-392. [exchange of genotyping data]
 24. Schunkert H, [70 authors], **Knowles JW**, [93 authors], Erdmann J; CARDIoGRAM Consortium, Samani NJ [> 100 authors]. Large-scale association analysis identifies 13 new susceptibility loci for coronary artery disease. *Nat Genet* 2011 Mar;43(4):333-338. [Contributed reagents/exchange of genotyping data, review of manuscript]
 25. Speliotes EK, [24 authors]; NASH CRN [87 authors]; GIANT Consortium, [149 authors], **Knowles JW**, [183 authors]; MAGIC Investigators [273 authors]; GOLD Consortium [24 authors]. Genome-wide association analysis identifies variants associated with nonalcoholic fatty liver disease that have distinct effects on metabolic traits. *PLoS Genet* 2011 Mar;7(3): e1001324. [14 pps.] [Contributed reagents/ materials/analysis tools]
 26. Kraja AT, Vaidya D, Pankow JS, Goodarzi MO, Assimes TL, Kullo IJ, Sovio U, Mathias R, Sun YV, Franceschini N, Absher D, Li G, Zhang Q, Feitosa MF, Glazer NL, Haritunians T, Hartikainen AL, **Knowles JW**, North KE, Iribarren C, Kral B, Yanek L, O'Reilly PF, McCarthy MI, Jaquish C, Couper DJ, Chakravarti A, Psaty BM, Becker LC,

- Province MA, Boerwinkle E, Quertermous T, Palotie L, Jarvelin MR, Becker DM, Kardia SL, Rotter JI, Chen YD, Borecki IB. A bivariate genome-wide approach to metabolic syndrome: STAMPEED Consortium. *Diabetes* 2011 Apr; 60(4):1329-1339. [Helped with design, contributed reagents, exchange of genotyping data, assistance writing manuscript]
27. IBC 50K CAD Consortium; CARDIoGRAM Consortium. Schunkert H, [68 authors], **Knowles JW**, [91 authors], Samani NJ. Large-scale gene-centric analysis identifies novel variants for coronary artery disease. *PLoS Genet* 2011 Sep; 7(9):e1002260.
 28. Dewey FE, Chen R, Cordero SP, Ormond KE, Caleshu C, Karczewski KJ, Whirl-Carrillo M, Wheeler MT, Dudley JT, Byrnes JK, Cornejo OE, **Knowles JW**, Woon M, Sangkuhl K, Gong L, Thorn CF, Hebert JM, Capriotti E, David SP, Pavlovic A, West A, Thakuria JV, Ball MP, Zaranek AW, Rehm HL, Church GM, West JS, Bustamante CD, Snyder M, Altman RB, Klein TE, Butte AJ, Ashley EA. Phased whole-genome genetic risk in a family quartet using a major allele reference sequence. *PLoS Genet* 2011 Sep; 7(9):e1002280. [Critical review of manuscript, assistance with certain design elements]
 29. Heid IM, (67 authors) **Knowles JW**, Kraft P, (> 120 authors), North KE, O'Connell JR, Peltonen L, Schlessinger D, Strachan DP, Hirschhorn JN, Assimes TL, Wichmann HE, Thorsteinsdottir U, van Duijn CM, Stefansson K, Cupples LA, Loos RJ, Barroso I, McCarthy MI, Fox CS, Mohlke KL, Lindgren CM. Meta-analysis identifies 13 new loci associated with waist-hip ratio and reveals sexual dimorphism in the genetic basis of fat distribution. *Nat Genet* 2011 Oct 27;43(11):1164. doi: 10.1038/ng1111-1164a. [Contributed reagents/exchange of genotyping data, assistance writing manuscript]
 30. Witteles RM*, **Knowles JW***, Perez M, Morris WM, Spettell CM, Brennan TA, Heidenreich PA. Overuse of left ventriculography. *Am Heart J* 2012 Apr;163(4): 617-623.
 31. **Knowles JW**, Assimes TL, Kiernan M, Pavlovic A, Goldstein BA, Yank V, McConnell MV, Absher D, Bustamante C, Ashley EA, Ioannidis JP. Randomized trial of personal genomics for preventive cardiology: design and challenges. *Circ Cardiovasc Genet* 2012 June; 5(3):368-376.
 32. **Knowles JW**, Assimes TL, Tsao PS, Natali A, Mari A, Quertermous T, Reaven GM, Abbasi F. Measurement of insulin-mediated glucose uptake: Direct comparison of the modified insulin suppression test and the euglycemic, hyperinsulinemic clamp. *Metabolism* 2012 Nov; doi:pii:S0026-0495(12)00384-8. 10.1016/j.metabol.2012.10.0002.
 33. Xie W, Wood AR, Lyssenko V, Weedon MN, **Knowles JW**, Alkayyali S, Assimes TL, Quertermous T, Abbasi F, Paananen J, Häring H, Hansen T, Pedersen O, Smith U, Laakso M, Dekker JM, Nolan JJ, Groop L, Ferrannini E, Adam KP, Gall WE, Frayling TM, Walker M. Genetic variants associated with glycine metabolism and their role in insulin sensitivity and type 2 diabetes. *Diabetes* 2013 Feb 1. PMID: 23378610. [Contributed reagents/genotyping data, assistance writing manuscript].
 34. Xie W, Fall T, Hao K, Ärnlov J, Abbasi F, Schadt EE, Boran G, Hansen T, Greenawald D, Nolan JJ, Pedersen O, Häring H, Ferrannini E, Syvänen AC, Quertermous T, Smith U, Assimes TL, Laakso M, Walker M, **Knowles JW**, Weedon MN, Frayling TM, Ingelsson E, on behalf of the GENESIS consortium. Mendelian randomization studies do not support a causal effect of plasma lipids on insulin

- sensitivity. *Diabetes (in press, 2012)*. [Helped with design, writing manuscript, contributed data]
35. Dimas AS*, Lagou V*, Barker A*, **Knowles JW***, Mägi R, Hivert MF, Benazzo A, Rybin D, Jackson AU, Stringham HM, Song C, Fischer-Rosinsky A, Boesgaard TW, Grarup N, Abbasi F, Assimes TL, Hao K, Yang X, Lecoeur C, Barroso I, Bonnycastle LL, Böttcher Y, Bumpstead S, Chines PS, Erdos MR, Graessler J, Kovacs P, Morken MA, Narisu N, Payne F, Stancakova A, Swift AJ, Tönjes A, Bornstein SR, Cauchi S, Froguel P, Meyre D, Schwarz P, Boehnke M, Bergman RN, Collins FS, Mohlke KL, Tuolimehto J, Quertermous T, Lind L, Hansen T, Pedersen O, Walker M, Pfeiffer AFH, Spranger J, Stumvoll M, Meigs JB, Wareham NJ, Kuusisto J, Laakso M, Langenberg C, Dupuis J, Watanabe RM*, Florez JC*, Ingelsson E*, McCarthy MI*, Prokopenko I*. Impact of loci contributing to type 2 diabetes susceptibility on variation in physiologic glycemic traits in healthy individuals. *Diabetes, 2013* PMID: 24296717. Epub ahead of print
 36. CARDIoGRAMplusC4D Consortium, Deloukas P, Kanoni S, Willenborg C, Farrall M, Assimes TL, [45 authors]; DIAGRAM Consortium; CARDIOGENICS Consortium, [16 authors], **Knowles JW**, [15 authors]; MuTHER Consortium, [15 authors]; Wellcome Trust Case Control Consortium, [42 authors], Quertermous T, [43 authors], Samani NJ. Large-scale association analysis identifies new risk loci for coronary artery disease. *Nat Genet* 2013 Jan;45(1):25-33. [Contributed reagents/genotyping data, assistance writing manuscript]
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E.4. Book chapters (3)

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E.5. Book reviews [0]

E.6. Abstracts (26)

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 10. **Knowles JW**, Assimes TL, Tsao PS, Natali S, Mari A, Quertermous T, Reaven G, Abbasi F. Measurement of Insulin-mediated Glucose Uptake: Direct Comparison of the Modified Insulin Suppression Test and the Euglycemic, Hyperinsulinemic Clamp. International Congress on Insulin Resistance. Los Angeles, CA, Nov 2011.
 11. **Knowles JW**, Hao K, Assimes TL, Zhu J, Zhang B, Cordell HJ, Xie W, Weedon MN, Zhong H, Frayling TM, Suver C, Wang IM, Greenawalt DM, Kemp DM, Abbasi F, Reaven G, Ho LT, Chuang LM, Sheu WHH, Shih KC, Wang WC, Ferrannini E, Smith U, Häring H, Pedersen O, Hansen T, Paananen J, Keller M, Attie A, Ingelsson E, Kaplan LM, Tsao PS, Lum P, Schadt EE, Laakso M, Walker M, Hsiung A; The RISC Consortium, Quertermous T, Yang X. Elucidating Gene Pathways and Key Regulators Underlying Insulin Resistance via Integration of Genome-Wide Association Data, Expression QTLs, and Pathway and Network Analysis NHLBI Symposium: Genomics: Gene Discover and Clinical Applications for Cardiovascular, Lung and Blood Diseases, Bethesda, MD, Sep 2011.
 12. Xie W, Weedon M, Wood A, GENESIS Consortium, Frayling TM, Gall W, Walker M. Genetic Variants Associated with Diabetes Related Circulating Metabolite Levels and Their Role in Type 2 Diabetes and Insulin Sensitivity. American Diabetes Association 72nd Scientific Sessions, Philadelphia, PA, Jun 2012. [poster presentation]
 13. Fall T, Xie W, Hao K, Ärnlöv J, Abbasi F, Schadt EE, Boran G, Hansen T, Greenawalt D, Nolan JJ, Pedersen O, Häring H, Ferrannini E, Syvänen AC, Quertermous T, Smith U, Assimes TL, Laakso M, Walker M, **Knowles JW**, Weedon MN, Ingelsson E, Frayling TM, on behalf of the GENESIS Consortium. Mendelian randomisation studies do not support a causal effect of plasma lipids on insulin sensitivity. AHA Scientific Sessions, Los Angeles, CA 2012.
 14. **Knowles JW**, Assimes TL, Kiernan M, Pavlovic A, Goldstein BA, Yank V, McConnell MV, Absher D, Bustamante C, Ashley EA, Ioannidis JPA. Pilot randomized trial of personalized genomics in preventive cardiology. Oral presentation. AHA Scientific Sessions, Los Angeles, CA 2012.
 15. Dimas AS, Lagou V, **Knowles JW**, Mägi R, Barker A, Hivert MF, Benazzo A, Rybin D, Assimes T, Quertermous T, Walker M, Barroso I, Langenberg C, Dupuis J, Watanabe RM, Florez JC, McCarthy M, Ingelsson E, Prokopenko I, on behalf of GENESIS, DIAGRAM, and MAGIC. Impact of variation in type 2 diabetes susceptibility loci on physiologic glycaemic traits in non-diabetic individuals. Oral Presentation. AHA Scientific Sessions, Los Angeles, CA 2012.
 16. Ivan Carcamo-Orive, Paige Cundiff, Sunita D'Souza, Hope Lancero, Qi Huang, Caroline Hendry, Ana Sevilla, Angela Bayot, Fahim Abbasi, Gerald M. Reaven, Eric Schadt, Ihor Lemischka, **Joshua W. Knowles**, Thomas Quertermous. Modeling insulin resistance through iPSC technology. Abstracts at the 11th International Society for Stem Cell Research Annual Meeting, June 12-15, Boston, MA

17. Paige Cundiff, Sunita D'Souza, Caroline Hendry, Ivan Carcamo-Orive, Ana Sevilla, Hope Lancero, Fahim Abbasi, Angela Bayot, Gaurav Pandey, Thomas Quertermous, Josh W. Knowles, Eric Schadt, Ihor R. Lemischka. The GENESiPS Study: Identifying the Genetics of Insulin Resistance. Abstracts at the 11th International Society for Stem Cell Research Annual Meeting, June 12-15, Boston, MA.
18. Indumathi Chennamsetty, Qi Huang, Ivan Carcamo-Orive, Hope Lancero, Keller MP, Attie AD, Thomas Quertermous, **Joshua W. Knowles**. *Nat1* deficiency impairs mitochondrial function and promotes insulin resistance Insulin Resistance, Diabetes, Cardiovascular Disease World Congress, November 2013, Los Angeles, CA.
19. Zahid Ahmad, MD, Connie Newman, Emily O'Brien, Peter Shrader, Emil M deGoma, Catherine D Ahmed, Patrick M Moriarty, MD, Mac Rae F Linton, Michael D Shapiro, Paul Barton Duell, Christie M Ballantyne, William A Neal, Danielle Duffy, Lisa Hudgins, Linda C Hemphill, James A Underberg, Karol E Watson, Samuel S Gidding, Seth Baum, Katherine Wilemon, Dave Pickhardt, Iris Kindt, Daniel J Rader, Matthew Roe, **Joshua W Knowles**. Diagnosing Familial Hypercholesterolemia (FH) in the United States: Results from the Cascade FH Patient Registry. Oral Presentation. The Endocrine Society's 97th Annual Meeting, San Diego, CA 2015.
20. Emily C. O'Brien, Emil M. deGoma, Patrick M. Moriarty, MacRae F. Linton, Michael D. Shapiro, P. Barton Duell, Christie M. Ballantyne, William A. Neal, Zahid S. Ahmad, Danielle Duffy, Lisa C. Hudgins, Linda C. Hemphill, James A. Underberg, Karol E. Watson, Samuel S. Gidding, Seth J. Baum, Katherine Wilemon, Dave Pickhardt, Iris Kindt, Daniel J. Rader, Matthew T. Roe, **Joshua W. Knowles**. Initial Results from the CASCADE-FH Registry: CAscade SCReening for Awareness and Detection of Familial Hypercholesterolemia. Abstract at the American College of Cardiology 64th Annual Scientific Sessions, San Diego, CA 2015.
21. Payal Kohli, David Waters, Rana Fayyad, Rachel Laskey, David DeMicco, **Joshua W. Knowles**, Gerald Reaven. Incidence of New-Onset Diabetes on Statin Therapy Increases with Increasing Baseline Triglycerides: Data from TNT. Abstract at the American College of Cardiology 64th Annual Scientific Sessions, San Diego, CA, 2015.
22. Indumathi Chennamsetty, Qi Huang, Ivan Carcamo-Orive, Thomas Quertermous, **Joshua W. Knowles**. *Nat1* knockdown results in an insulin resistance phenotype in vitro and in vivo. Finalist for the ACC Young Investigator Award. Abstract at the American College of Cardiology 64th Annual Scientific Sessions, San Diego, CA, 2015.
23. Payal Kohli, **Joshua W. Knowles**, Rana Fayyad, Gerald M. Reaven, Benoit Arsenault, Pierre Amarenco, Rachel Laskey, David Waters. TG/HDL Ratio Predicts Incident Diabetes and CV Events in Prediabetics and Non-Prediabetics in TNT and SPARCL. Abstract at the European Society of Cardiology, London 2015.
24. E.M. deGoma, Z.S. Ahmad, E. O'Brien, I. Kindt, P. Shrader, C.B. Newman, Y. Pokharel, D.J. Rader, P.M. Moriarty, S.S. Gidding, P. Duell, M.D. Shapiro, M.F. Linton, C.M. Ballantyne, D. Duffy, S.J. Baum, L.C. Hemphill, W.A. Neal, L.C. Hudgins, C.D. Ahmed, K.A. Wilemon, M.T. Row, **J.W. Knowles**. LDL-C Levels and Treatment patterns Among Adults with Heterozygous Familial Hypercholesterolemia in the United States: Data from the CASCADE-FH Registry. Abstract at the American Heart Association Scientific Session, Orlando, FL 2015.
25. Colleen Caleshu, Nadine Kasparian, Katherine Edwards, Laura Yeates, Christopher Semsarian, Marco Perez, Euan Ashley, **Joshua Knowles**, Allysonne Smith, Jodie Ingles.

An Interdisciplinary Approach to Psychosocial Care for Families with Inherited Cardiovascular Disease. Abstract at the American Heart Association Scientific Session, Orlando FL 2015.

26. I. Chennamsetty, M. Coronado, K. Contrepolis, M. Keller, I. Carcamo-Orive, J. Sandin, G. Fajardo, G. Reaven, A. Attie, D. Bernstein, T. Quertermous, **J. Knowles**. *Nat1* deficiency is associated with mitochondrial dysfunction and exercise intolerance in mice. Abstract at the Deuel Conference on Lipids, Napa Valley, CA 2016.

E.7. Invited presentations (91)

1. *Enhanced atherosclerosis and kidney dysfunction in eNOS^{-/-}Apoe^{-/-} mice are ameliorated by enalapril treatment.*
National MD/PhD Student Conference
Aspen, CO 2000
2. *Natriuretic peptide receptor A knockout mice have an enhanced response to hypertrophic stimuli in the heart.*
Keystone Meeting
Snowbird, UY 2000
3. *Genome Wide Association Study for Early Onset Coronary Disease and Related Phenotypes.*
Cold Spring Harbor Meeting on Clinical Cardiovascular Genetics
Cold Spring Harbor, NY November, 2007
4. *Genome Wide Association Studies of Cardiovascular Disease*
Stanford Biostatistics Seminar
Stanford, CA January, 2008
5. *The Athlete's Heart*
Senior Games of California
Stanford, CA April, 2010
6. *Genetics of Cardiovascular Disease*
Stanford School of Medicine, Introductory Epidemiology Course [Instructor: Rita Popat]
Stanford, CA March, 2010
7. Panelist, Speed Science
Stanford Cardiovascular Institute Member Retreat
Stanford, CA September, 2010
8. *Genome wide association study for determinants of insulin sensitivity*
Vanderbilt University, Cardiology Special Seminar
Nashville, TN December, 2010
9. *Genome wide association study for determinants of insulin sensitivity*
University of Pennsylvania, Cardiology Special Seminar
Philadelphia, PA December, 2010
10. *Personalized medicine and genomics*
Stanford School of Medicine, Introductory Epidemiology Course (*GENE210*)
Stanford, CA April, 2011
11. *A pilot randomized trial of personal genomics for preventive cardiology*
Stanford Medical School Lecture (*MED223*)
Stanford, CA June, 2011

12. *Genetics of Cardiovascular Disease*
Stanford SIMR Summer Research Program
Stanford, CA June, 2011
13. *Atherogenesis*
Stanford EXPLORE Summer Research Program
Stanford, CA June, 2011
14. *Health and Wellness for the Busy Executive*
Stanford Executive Program, Stanford Graduate School of Business
Stanford, CA June, 2011
15. *The Heart*
Stanford School of Medicine, Lecture for 1st year medical students
Stanford, CA July, 2011
16. *Atherogenesis*
Stanford Cardiology Fellow Educational Lecture Series
Stanford, CA Fall, 2011
17. *Genetics of Cardiovascular Disease*
CME talk for Stanford Internal Medicine group
Stanford, CA July, 2011
18. *Elucidating Gene Pathways and Key Regulators Underlying Insulin Resistance via Integration of Genome-Wide Association Data, Expression QTLs, and Pathway and Network Analysis*
NHLBI Symposium: Genomics: Gene Discover and Clinical Applications for Cardiovascular, Lung and Blood Diseases
Bethesda, MD September, 2011
19. *Impacts of Genomics on Disease Treatment*
SAMMS Panel Discussion (School of Medicine initiative to foster cross disciplinary collaboration)
Stanford, CA December, 2011
20. *Randomized trial of personal genomics in preventive cardiology*
Stanford Cardiology Grand Rounds
Stanford, CA January, 2012
21. *Genetics of Cardiovascular Disease*
Stanford School of Medicine, Introductory Epidemiology Course [Instructor: Rita Popat]
Stanford, CA February, 2012
22. *Cardiovascular Genetics*
Apple Computers, Health Series
Cupertino, CA March, 2012
23. *A randomized trial of personal genomics for preventive cardiology: design and challenges*
American Heart Association National Meeting
Los Angeles, CA November, 2012
24. *Genetics of Cardiovascular Disease*
Stanford SIMR Summer Research Program
Stanford, CA June, 2012
25. *Alcohol ablation or myectomy: Which for Whom* (Panel discussion)
CARDIA (Cardiac arrhythmias, sudden death, inherited cardiovascular disease, athletes
Joshua W. Knowles, David Lee, Iocopo Olivoto, Martin Maron

- Monterey, CA June 2012
26. *Focus on FH*
Stanford Cardiology Grand Rounds
Stanford, CA September, 2012
 27. *Focus on FH*
Kaiser Permanente San Francisco
San Francisco, CA October, 2012
 28. *Focus on FH*
Stanford Internal Medicine Noon Conference
Stanford, CA October, 2012
 29. *Approach to the Statin Intolerant Patient*
Stanford CME program
Stanford, CA October, 2012
 30. *Focus on FH*
Medical Genetics Grand Rounds, Stanford
Stanford, CA November, 2012
 31. *Cardiovascular Genetics*
Stanford School of Medicine, Introductory Epidemiology Course [Instructor: Rita Popat]
Stanford, CA February, 2013
 32. *FH Roundtable, hosted by the National Lipid Association*
Discussion of the role of the FH Foundation in the future of FH care in the US
New Orleans, LA February, 2013
 33. *Approach to the Statin Intolerant Patient*
Stanford Cardiology Grand Rounds, Stanford
Stanford, CA March, 2013
 34. *Pre-hypertension and hypertension in the young adult*
Stanford Vaden Health, CME, Stanford
Stanford, CA April, 2013
 35. *FH: Genetics, screening and treatment*
Preventive Cardiology Nurses Association National Meeting
Las Vegas, NV May, 2013
 36. *FH: What we don't know can hurt us!*
Why we can't wait: Conference to eliminate health disparities in genomic medicine
San Francisco, CA May, 2013
 37. *Approach to the Statin Intolerant Patient*
Stanford Internal Medicine Resident lecture series, Stanford and Palo Alto VA
Stanford, CA August, 2013
 38. *What is it like to be a cardiologist?*
Stanford Explore Series (High school students)
Stanford, CA August, 2013
 39. *Nuts and Bolts of Genetic Testing for FH*
National Lipid Association Regional Meeting
Baltimore, MD September, 2013
 40. *CASCADE FH registry: Announcing the launch of the national patient registry for FH*
FH Foundation's First Annual National FH Summit
Annapolis, MD September, 2013

41. *CASCADE FH registry*
Canadian Cardiology Society Meeting, FH registry working group
Montreal, Canada October, 2013
42. *FH: A public Health Perspective*
American Heart Association National Meeting
Dallas, TX November, 2013
43. *Genetic and Functional Analyses Identify NAT2 as an Insulin Sensitivity Locus*, presented
on behalf of the GENESIS consortium
American Heart Association National Meeting
44. *AHA/ACC 2013 Guidelines on Lipids*
Stanford Cardiology Fellows Talk
Stanford, CA December, 2013
45. *Insulin resistance: Genes and Model Systems*
Stanford Endocrinology Grand Rounds
Stanford, CA January, 2014
46. *AHA/ACC 2013 Guidelines on Lipids*
Stanford Internal Medicine
Stanford, CA January, 2014
47. *AHA/ACC 2013 Guidelines on Lipids*
Stanford Medical Students
Stanford, CA January, 2014
48. *How we can (and will) use genetics to improve cardiovascular health*
International Symposium: Genomics and Personalized Preventive Health
G enome Qu ebec, Canada February, 2014
49. *Lipoprotein (a): An emerging causal risk factor for CVD*
Stanford Cardiology Grand Rounds, Stanford
Stanford, CA March 2014
50. *iPSCs as model systems for insulin resistance*
Cardiovascular and Pulmonary Breakout Session, Stanford
Stanford, CA April 2014
51. *New Lipid Guidelines*
8th Annual Cardiology for the Primary Care Practitioner
Stanford, CA October, 2014
52. *FIND FH Initiative*
2014 FH Foundation 2nd Annual International FH Summit
New York, NY October, 2014
53. *FH: Integrating Genetic Information into Clinical Care*
American Heart Association National Meeting
Chicago, IL November, 2014
54. *How genetics can improve cardiometabolic health*
12th Annual World Congress on Insulin Resistance, Diabetes & CVD
Los Angeles, CA November, 2014
55. *FH: Challenges and Opportunities*
Regeneron Familial Hypercholesterolemia Symposium
Tarrytown, NY December, 2014
56. *How We Can (and will) Use Genetics to Improve Cardiac Health*

- Stanford Heart Fair
Palo Alto, CA February, 2015
57. *ACC.15 Young Investigator Awards Competition: ACC Herman Investigator Awards in Molecular and Cellular Cardiology*
2nd Place: Nat1 Knowckdown Results in an Insulin Resistance Phenotype in Vitro and in Vivo
American College of Cardiology
San Diego, CA March, 2015
 58. *SDSI Flagship Project Presentation: "Use of electronic phenotyping and machine learning algorithms to identify familial hypercholesterolemia patients in electronic health records"*
Data Science Workshop
Stanford, CA April, 2015
 59. *A Patient-Centered Approach to Lipid Management in the Complicated Patient*
Preventive Cardiology Nurses Association National Meeting
Anaheim, CA April, 2015
 60. *Identification and characterization of NAT2 as an insulin resistance gene*
CEHG Genetics and Society Symposium 2015
Stanford, CA April, 2015
 61. *Modeling insulin resistance using induced pluripotent stem cells*
12th Stem Cell Summit 2015
Boston, MA April, 2015
 62. *Preventive Cardiology: Review of the New Cholesterol Treatment Guidelines, A Farewell to LDL Targets? Really?*
Panel: Joshua Knowles, David Maron, Michael McConnell, Sandra Tsai and Mary Ann Champagne
Stanford Cardiovascular Spring Series
San Jose, CA June, 2015
 63. *Familial Hypercholesterolemia: Hidden in Plain Sight*
Stanford Internal Medicine Noon Conference
Stanford, CA August, 2015
 64. *CASCADE FH*
FH Foundation Global Summit
Pasadena, CA September, 2015
 65. *Advances in Identifying and Treating Familial Hyperlipidemia: What's new in Familial Hypercholesterolemia Guidelines*
American Heart Association National Meeting
Orlando, FL November, 2015
 66. *Insulin Resistance: It's In Your Genes*
13th World Congress on Insulin Resistance, Diabetes, and Cardiovascular Disease
Washington, DC November 2015
 67. *MED 223 course: Cardiovascular Research & Medicine Lectures*
Stanford, CA January 2016
 68. *Having a healthy heart now and into the future*
The Office of Planned Giving for Stanford Medicine Luncheon
Menlo Park, CA February 2016
 69. *Heart Disease Prevention: What You Need to Know*
Stanford Heart Month Community Talk
Stanford, CA February, 2016
 70. *FIND FH Initiative: Finding Undiagnosed Familial Hypercholesterolemia Patients in the US*

Presenters: Joshua Knowles and Kelly Myers
CMHC West, Cardiometabolic Health Congress
San Francisco, CA March 2016

71. *Putting it all in Perspective: Panel Discussion and Q&A*
Discussants: J. Knowles, M. Budoff, S. Fazio, K. Myers, J. Underberg
CMHC West, Cardiometabolic Health Congress
San Francisco, CA March 2016
72. *FH: The present and future*
Invitae meeting attached to Cardiometabolic Health Congress
San Francisco, CA March 2016
73. *How we can (and will) use genetics to improve Cardiovascular Health*
Duke Medicine: Genomic and Precision Medicine Forum Presentation
Durham, NC April 2016
74. *USA Cascade FH One Year Data/Find FH/New Recommendations*
National Lipid Association Meeting
New Orleans, LA May 2016
75. *Molecular Diagnosis of FH: An Ever Expanding Spectrum of Mutations*
2016 ASPC Congress on Atherosclerotic Cardiovascular Disease Prevention
Boca Raton, FL September 2016
76. *ASPC Congress on ASCVD Prevention: FH Foundation: Clinical Initiatives Update*
2016 Congress on Atherosclerotic Cardiovascular Disease Prevention
Boca Raton, FL September 2016
77. *Landscape of FH: CASCADE FH™*
2016 FH Global Summit
Dallas, Texas October 2016
78. *Familial Hypercholesterolemia: The Present and the Future*
The Ohio State University
Columbus, OH November 2016
79. *Genetic Variants Underlying Cardiovascular Disease*
The Cooper Institute
Dallas, Texas November 2016
79. *Leveraging Big Data for Precision Health*
2016 American Heart Association Conference
New Orleans, Louisiana November 2016
80. *Precision Public Health in Action: Preventing Heart Disease and Cancer from Inherited Mutations*
NCI Webinar
December 2016
81. *Heart Teams in Action: Complex Coronary Revascularization*
American College of Cardiology 66th Annual Scientific Session & Expo
Washington, DC March 2017
82. *New Perspectives on CAD Risk Factors*
American College of Cardiology 66th Annual Scientific Session & Expo
Washington, DC March 2017
83. *How Heart Doctors Stay Heart Healthy*
Health Matters @ Stanford
Palo Alto, CA May 2017

84. *NAT2 as an insulin resistance gene*
2017 Duke-Stanford Cardiovascular Research Symposium
Durham, North Carolina May 2017
85. *New Lipid Trial—LPA Antisense*
Vascular Surgery Conference
Stanford, CA July 2017
86. *Distinguishing FH from non-FH: Right Therapy, Right Patient, Right Time*
American College of Cardiology: Address the Risk Think Tank
Washington, DC September 2017
87. *CASCADE FH Registry: Data on Ethnic and Racial Disparities*
2017 FH Global Summit
Miami, Florida September 2017
88. *Familial Hypercholesterolemia: The epitome of personalized medicine*
Kaiser San Francisco Cardiology Fellowship Program
San Francisco, CA October 2017
89. *International Perspectives on FH*
Canadian Collaborative Research Network: FH Canada
Vancouver, BC October 2017
90. *Insulin Resistance: Insight from genetic studies*
UC Berkeley Seminar
Berkeley, CA November 2017
91. *Lipids*
Stanford Internal Medicine Resident Ambulatory
Stanford, CA November 2017

E.8. Patents N/A

F. Trainees

Panjamaporn “Pam” Sangwung, Postdoctoral researcher
9/17-

Pam is a postdoctoral scholar that came from Case Western Reserve University where she completed her PhD. She is studying the molecular mechanisms of *Nat1* induced insulin resistance.

Vander Harris, BA
7/17-6/18

Vander is a Stanford Undergraduate student who is working to help coordinate our trial of statins and diabetes while he applies to medical school.

Chelsea Harris, BA
10/16-7/17

Chelsea is a Stanford Undergraduate student who is working to help coordinate our trial of statins and diabetes while she applies to medical school.

Left to matriculate at Duke Medical School

Mohsen Fathzadeh, PhD, Postdoctoral researcher

9/15-

Mohsen came to use from a very nice PhD at Yale where he examined *DRK1B* (NEJM publication). He worked on the hepatic specific effects of *NAT2* deficiency as well as on another promising candidate IR locus, *FAM13A*.

Ivan Carcamo-Orive, PhD, Postdoctoral researcher

8/12-2/18

Ivan worked on the GENESIPS project, a large-scale effort to use human induced pluripotent stem cells to create model systems for the study of insulin resistance. In our lab he pioneered multiple techniques related to iPSC biology including endothelial cell differentiation and characterization. Co-mentored with Thomas Quertermous

Indumathi Chennamsetty, PhD, Postdoctoral researcher

9/12-7/17

Indu worked on the functional characterization of *NAT2* as an insulin sensitivity locus mostly using in vitro assays. Co-mentored with Thomas Quertermous
Left to take a job at Bayer

Qi Huang, MD, Visiting scholar

2/13-1/14

Qi is a trained endocrinologist from China who had returned to Wuhan University to get a PhD. She earned a prestigious scholarship to come to Stanford for a year to study insulin resistance. She worked in tandem with other lab members on projects related to the pathways underlying the effect of *NAT2* on insulin resistance.
Returned to China as MD

Mohammad Shahbazi, PhD, Postdoctoral researcher

9/13-5/16

Mohammad came to Stanford with a PhD in stem cell biology from Stanford. His project focused on the differentiation and characterization of iPSCs to adipocytes as well as understanding the role of insulin on iPSC growth, development and differentiation
Took another Postdoc at Stanford

Emily Youngblom, BA, Public Health Genomics Practicum

6/13-8/13

Emily came to Stanford to complete her “Practicum” as part of her curriculum to obtain a Master’s degree in Public Health Genomics at the University of Washington. She worked on several projects related to Familial Hypercholesterolemia (FH) including drafting a “GeneReview” and a survey of schools of public health to determine if FH is a part of their curriculum.
Returned to genetic counseling school

Cynthia Li, High School Student, Summer Internship

June 2012

Cynthia was a rising high school junior that worked getting a “first lab experience”. She learned from other members of the lab how to do basic techniques like RNA extraction, protein lysis, cell culture and Western blots.