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## Education and Training

Education

1995 **A.A.S.** Cellular Biotechnology, State University of New York College of Technology at Alfred, Alfred, New York

1997 **B.S.** Biology with a Concentration in Genetics and Development, Cornell University, College of Agriculture and Life Sciences, Ithaca, New York

2002 **Ph.D.** Human Genetics, University of Pittsburgh, Graduate School of Public Health, Pittsburgh, Pennsylvania

Post Graduate Education and Training

2002-2005 Postdoctoral Fellow, T32 Training Grant in Biology of Exercise, Metabolism and Aging, Department of Medicine, Division of Endocrinology, Diabetes, and Nutrition, University of Maryland School of Medicine

# Biosketch

My laboratory studies the genetics and molecular basis of complex diseases including obesity, type 2 diabetes and cardiovascular disease. I use a variety of approaches including candidate gene, linkage disequilibrium mapping, genome wide association studies and more recently exome and whole genome sequencing to identify genes and/or variants involved in disease susceptibility. These variants provide the basis for designing and executing follow up studies to investigate the physiological consequences of the genetic variation to gain a greater understanding of both normal and pathophysiology with the goal of translating our finding to personalized disease prevention and treatment. In particular, I have played key roles as both a lead and co-investigator using these techniques in studies involving the Lancaster Old Order Amish since 2002.

In January of 2014 I was appointed as the director of the University of Maryland Medicine (UMM) Biorepository an initiative established by the Program for Personalized and Genomic Medicine (PPGM) to empower basic and clinical researchers to make discoveries in genomics and 'omics' science and to translate these discoveries to more effective diagnostics and therapeutics. It is a resource building effort that includes banking of blood samples from UMMS patients as well as collections of various biospecimens from collaborating UM researchers. State-of-the-art robotic freezer and liquid-handling equipment offers a secure and managed environment for biospecimen processing, storage and distribution. Data connected to the samples is obtained through the electronic health record and/or study-specific data collection, allowing for multi-disciplinary research that can impact a range of health issues.

# Research/Clinical Keywords

diabetes, cardiovascular disease, genetics, genomics, biobanking, personalized medicine, precision medicine

# Highlighted Publications

1. Pollin TI, **Damcott CM**, Shen H, Ott SH, Shelton J, Horenstein RB, Post W, McLenithan JC, Bielak LF, Peyser PA, Mitchell BD, Miller M, O'Connell JR, Shuldiner AR (2008) A null mutation in human APOC3 confers a favorable plasma lipid profile and apparent cardioprotection. *Science*, 322(5908):1702-5. PMCID: PMC2673993.
2. Shen H, **Damcott CM**, Rampersaud E, Pollin TI, Horenstein RB, McArdle PF, Peyser PA, Bielak LF, Post WS, Chang YP, Ryan KA, Miller M, Rumberger JA, Sheedy PF 2nd, Shelton J, O'Connell JR, Shuldiner AR, Mitchell BD (2010) Familial defective apolipoprotein B-100 and increased low-density lipoprotein cholesterol and coronary artery calcification in the old order amish. *Arch Intern Med*, 170(20):1850-5. PMCID: PMC3587042.

3. Albert JS, Yerges-Armstrong LM, Horenstein RB, Pollin TI, Sreenivasan UT, Chai S, Blaner WS, Snitker S, O'Connell JR, Gong DW, Breyer RJ 3rd, Ryan AS, McLenithan JC, Shuldiner AR, Sztalryd C, **Damcott CM** (2014) Null mutation in hormone-sensitive lipase gene and risk of type 2 diabetes. *N Engl J Med*, 370(24):2307-15. PMCID: PMC4096982.


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