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National Human Genome Research Institute  
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### **Current Appointment**

*August 2010:* Postdoctoral Fellow, Center for Research on Genomics and Global Health, National Human Genome Research Institute, National Institutes of Health, Bethesda, MD.

### **Education**

*January to August 2010:* Division of Nutritional Sciences, Cornell University, Ithaca, NY.  
Postdoctoral Associate.

*January 2004 to January 2010:* Cornell University, Ithaca, NY. Doctoral Program in Nutritional Sciences with Minors in Epidemiology and Population Genetics; Dissertation “Oxidant-Antioxidant Balance and Lung Outcomes: The Role of Nutrition, Genetic Susceptibility, and Cigarette Smoking”

*August 2001 to May 2003:* LaSalle University, Philadelphia, PA. BS in Nutrition

*May 2000 to May 2001:* University of Pennsylvania, Philadelphia, PA. Coursework in Chemistry

*August 1992 to May 1995 & August 1996 to May 1997:* Guilford College, Greensboro, NC. BA in English with Minors in Spanish and International Studies

*August to December 1993:* Study Abroad at Beijing University’s Foreign Language Normal College, China

*August to December 1994:* Study Abroad at University of Guadalajara, Mexico

### **Training and Professional Experience**

*June 2012:* Careers in Grants Management, National Institutes of Health, Bethesda, MD

*May 2011:* UNIX 101, National Human Genome Research Institute, Bethesda, MD

*March 2011:* Genetic Association Course, Baylor College of Medicine, Houston, TX

*February 2011:* National Center for Biotechnology Information’s Discovery Workshop, NIH, Bethesda, MD

*January 2005 to December 2006:* Undergraduate Student Mentor, Cornell University, Ithaca, NY

*January 2004 to December 2005: Teaching Assistant, Nutrition/Dietetics Courses, Cornell University, Ithaca NY*

*June 2003 to September 2003: Nutrition Educator, Philadelphia Corporation for the Aging, Philadelphia PA*

*June 2002 to June 2003: Student Nutritionist, Women, Infants, and Children, Philadelphia, PA*

*October 1998 to June 2002: Office Coordinator, English Language Programs, University of Pennsylvania, Philadelphia, PA*

*January 1997 to May 1997: Teaching Assistant, English, Guilford College, Greensboro, NC*

### **Fellowships and Honors**

*June 2011: Full scholarship to attend the Human Genome Variation 2011 meeting to present “GWAS of serum iron concentrations in African Americans”*

*May 2010: Selected to represent all graduating Ph.D. students for May 2010 Commencement Ceremony*

*November 2009: Selected for the NIH’s National Graduate Student Research Festival*

*January 2006 to December 2009: National Institutes of Health Training Grant Recipient*

*May 2003: Top Graduate in Nutrition, LaSalle University, Philadelphia, PA*

*August 2002 to May 2003: American Dietetics Foundation Scholarship*

*August 2001 to May 2003: Founders Scholarship, LaSalle University, Philadelphia, PA*

*August 1992 to May 1997: Full Merit Scholarship, Guilford College, Greensboro, NC*

*August 1992 to May 1997: National Merit Scholarship*

### **Professional Memberships**

*June 2011: American Society of Human Genetics*

*August 2005 to October 2007: Treasurer, Nutrition Graduate Student Organization, Cornell University, Ithaca, NY*

*August 2002 to May 2003: Vice President: Student Nutrition Club, LaSalle University, Philadelphia PA*

## Publications

Hancock DB\*, Soler Artigas M\*, Gharib SA\*, Henry A\*, Manichaikul A\*, Ramasamy A\*, Loth DW\*, Imboden M, Koch B, McArdle WL, Smith AV, Smolonska J, Sood A, Tang W, Wilk JB, Zhai G, Zhao JH, Aschard H, Burkart KM, Curjuric I, Eijgelsheim M, Elliott P, Gu X, Harris TB, Janson C, Homuth G, Hysi PG, Liu JZ, Loehr LR, Lohman K, Loos RJF, Manning AK, Marciante KD, Obeidat M, Postma DS, Aldrich MC, Brusselle GG, Chen T-H, Eiriksdottir G, Franceschini N, Heinrich J, Rotter JI, Wijmenga C, Williams OD, **Bentley AR**, Hofman A, Laurie CC, Lumley T, Morrison AC, Joubert BR, Rivadeneira F, Couper DJ, Kritchevsky SB, Liu Y, Wjst M, Wain LV, Vonk JM, Uitterlinden AG, Rochat T, Rich SS, Psaty BM, O'Connor GT, North KE, Mirel DB, Meibohm B, Launer LJ, Khaw K-T, Hartikainen A-L, Hammond CJ, Gläser S, Marchini J, Kraft P, Wareham NJ, Völzke H, Stricker BHC, Spector TD, Probst-Hensch NM, Jarvis D, Jarvelin M-R, Heckbert SR, Gudnason V, Boezen HM, Barr RG, Cassano PA<sup>†</sup>, Strachan DP<sup>†</sup>, Fornage M<sup>†</sup>, Hall IP<sup>†</sup>, Dupuis J<sup>†</sup>, Tobin MD<sup>†</sup>, and London SJ<sup>†</sup>. Genome-wide joint meta-analysis of SNP and SNP-by-smoking interaction identifies novel loci for pulmonary function. *PLoS Genetics*. 2012; 8(12): e1003098. \*These authors contributed equally to this work. <sup>†</sup>These authors jointly directed the work.

**Bentley AR** and Rotimi CN. Interethnic Variation in Lipid Profiles: Implications for Under-identification of African-Americans at-risk for Metabolic Disorders. *Expert Review of Endocrinology and Metabolism*. 2012 Nov; 7(6): 659-69.

Adeyemo A, **Bentley AR [co-first author]**, Meilleur KG, Doumatey AP, Chen G, Zhou J, Shriner D, Huang H, Herbert A, Gerry NP, Christman MF, Rotimi CN. Transferability and Fine Mapping of genome-wide associated loci for lipids in African Americans. *BMC Med Genet*. 2012 Sep; 13(1): 88.

**Bentley AR**, Doumatey AP, Chen G, Huang H, Zhou J, Shriner D, Jiang C, Zhang Z, Liu G, Fasanmade O, Johnson T, Oli J, Okafor G, Eghan BA Jr, Agyenim-Boateng K, Adeleye J, Balogun W, Adebamowo C, Amoah A, Acheampong J, Adeyemo A, Rotimi CN. Variation in APOL1 Contributes to Ancestry-Level Differences in HDLc-Kidney Function Association. *Int J Nephrol*. 2012 [epub 2012 Sep 2]

Wilk JB, Shrine NRG, Loehr LR, Zhao JH, Manichaikul A, Lopez LM, Smith AV, Heckbert SR, Smolonska J, Tang W, Loth DW, Curjuric I, Hui J, Cho MH, Latourelle JC, Henry AP, Aldrich M, Bakke P, Beaty TH, **Bentley AR**, Borecki IB, Brusselle GG, Burkart KM, Chen T, Couper D, Crapo JD, Davies G, Dupuis J, Franceschini N, Gulsvik A, Hancock DB, Harris TB, Hofman A, Imboden M, James AL, Khaw K, Lahousse L, Launer LJ, Litonjua A, Liu Y, Lohman KK, Lomas DA, Lumley T, Marciante KD, McArdle WL, Meibohm B, Morrison AC, Musk AW, Myers RH, North KE, Postma DS, Psaty BM, Rich SS, Rivadeneira F, Rochat T, Rotter JI, Soler Artigas M, Starr JM, Uitterlinden AG, Wareham NJ, Wijmenga C, Zanen P, Province MA, Silverman EK, Deary IJ, Palmer LJ, Cassano PA, Gudnason V, Barr RG, Loos RJF, Strachan DP, London SJ, Boezen HM, Probst-Hensch N, Gharib SA, Hall IP, O'Connor GT, Tobin MD, Stricker BH. Genome wide association studies identify *CHRNA5/3* and *HTR4* in the development of airflow obstruction. *Am J Respir Crit Care Med*. 2012 Jul 26 [epub ahead of print]

- Chen G, Yuan A, Zhou Y, Chen W, **Bentley AR**, Shriner D, Adeyemo A, Rotimi CN. Simultaneous Analysis of Common and Rare Variants in Complex Traits: Application to SNPs (SCARVA<sub>snp</sub>). *Bioinform Biol Insights*. 2012; 6: 177-185.
- Chen G, **Bentley A**, Adeyemo A, Shriner D, Zhou J, Doumatey A, Huang H, Ramos E, Erdos M, Gerry N, Herbert A, Christman M, Rotimi CN. Genome-wide association study identifies novel loci association with fasting insulin and insulin resistance in African Americans. *Hum Mol Gen*. 2012; 21(20):4530-6.
- Chen G, Yuan A, Zhou J, **Bentley AR**, Adeyemo A, Rotimi C. Simple F test reveals Gene-Gene interactions in Case-Control Studies. *Bioinform Biol Insights*. 2012; 6: 169-176.
- Bentley AR**, Kritchevsky SB, Harris TB, Newman AB, Bauer DC, Meibohm B, Clark AG, Cassano PA; for the Health, Aging, Body Composition Study. Genetic variation in antioxidant enzymes and lung function. *Free Radic Biol Med*. 2012 May 1; 52 (9): 1577-83.
- Bentley AR**, Kritchevsky S, Harris T, Holvoet P, Jensen R, Crapo R, Newman A, Bauer D, Lee JS, Tolley E, Yende S, Cassano PA, for the Health ABC Study. Dietary Antioxidants and FEV<sub>1</sub> Decline: the Health Aging and Body Composition Study. *Eur Respir J*. 2012 Apr;39(4):979-84.
- Chen G, Ramos E, Adeyemo A, Shriner D, Zhou J, Doumatey AP, Huang H, Erdos MR, Gerry NP, Herbert A, **Bentley AR**, Xu H, Charles BA, Christman MF, Rotimi CN. UGT1A1 is a major locus influencing bilirubin levels in African Americans. *Eur J Hum Genet*. 2012 Apr; 20(4):463-8.
- Yuan A, Chen G, Zhou Y, **Bentley A**, Rotimi C. A novel approach for the simultaneous analysis of common and rare variants in complex traits. *Bioinform Biol Insights*. 2012; 6: 1-9.
- Doumatey AP, **Bentley AR**, Zhou J, Huang H, Adeyemo A, Rotimi CN. Paradoxical Hyperadiponectinemia is Associated with the Metabolically Healthy Obese (MHO) Phenotype in African Americans. *J Endocrinol Metab*. 2012; 2(2): 51-65.
- Bentley AR**, Raiszadeh F, Stover PJ, Hunter DJ, Hankinson SE, Cassano PA. No association between *cSHMT* genotypes and risk of breast cancer in the Nurses' Health Study. *Eur J Clin Nutr* 2010; 64(1): 108-110.
- Bentley AR**, Emrani P, Cassano PA. Genetic Variation and Gene Expression in Antioxidant-Related Enzymes and Risk of Chronic Obstructive Pulmonary Disease: A Systematic Review. *Thorax* 2008; 63 (11): 956-61.

## Presentations

- Bentley AR**, Shriner D, Doumatey A, Zhou J, Huang H, Mullikin J, Blakesley R, Hansen N, Bouffard G, Cherukuri P, Maskeri B, Young A, Adeyemo A, Rotimi CN. Sequence-based analysis identifies variants associated with serum lipids in African Americans. American Society of Human Genetics Meeting, November 2012.

**Bentley AR**, Ethnic differences in lipid distribution: Implications for disease risk and response to treatment. Concurrent Symposium on Health Disparities: Advances in translational, clinical, and population sciences. National Institutes of Health Research Festival, October 2012.

**Bentley AR**, Doumatey A, Chen G, Huang H, Zhou J, Shriner D, Zhang Z, Jiang CQ, Adebamowa C, Adeyeye J, Balogun W, Adeyemo A, Rotimi C. *APOLI* variant modifies the HDLc-kidney function relationship in African Americans. Poster: International Congress of Human Genetics, October 2011.

**Bentley AR**, Doumatey A, Huang H, Chen G, Zhou J, Shriner D, Rotimi C, Adeyemo A. Genome-Wide Association Studies of Serum Ion Concentrations in African Americans. Poster: Human Genome Variation Conference, September 2011.

**Bentley AR**, Kritchevsky S, Harris T, Holvoet P, Jensen R, Crapo R, Newman A, Bauer D, Tolley E, Yende S, Cassano PA. Biomarkers of Oxidative Stress and Inflammation and Rate of FEV<sub>1</sub> Decline in the Health Aging and Body Composition (Health ABC) Study. Poster: American Thoracic Society International Conference 2007.

**Bentley AR**, Kritchevsky S, Harris T, Holvoet P, Jensen R, Crapo R, Newman A, Bauer D, Lee JS, Tolley E, Yende S, Cassano PA. Oxidative Stress, Antioxidants, and Rate of FEV<sub>1</sub> Decline in the Health Aging and Body Composition (Health ABC) Study. Presentation: American Thoracic Society International Conference 2007.