



Joshua J. Joseph, MD
Curriculum Vitae

DEMOGRAPHIC AND PERSONAL INFORMATION

Current Appointments

2016-present Assistant Professor of Medicine
Division of Endocrinology, Diabetes and Metabolism
The Ohio State University Wexner Medical Center

Personal Data

Division of Endocrinology, Diabetes and Metabolism
The Ohio State University Wexner Medical
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Education and Training

1999-2003 Bachelor of Science, Biology, Morehouse College/Atlanta, *magna cum laude*
2003-2009 Doctor of Medicine, Medicine, Boston University School of Medicine, Boston
2006-2008 Clinical Research Fellowship, National Heart, Lung and Blood Institute, Bethesda,
Primary Mentor: Michael N. Sack, M.D., Ph.D.
2009-2012 Internship and Residency, Department of Medicine, Yale University School of Medicine,
New Haven
2013-2016 Fellowship, Christopher D. Saudek M.D. Fellow in Diabetes Research
Division of Endocrinology, Diabetes and Metabolism, Johns Hopkins University
School of Medicine, Baltimore, Primary Mentor: Sherita H. Golden, M.D., M.H.S.

Professional Experience

2012-2013 Instructor of Medicine, Division of General Internal Medicine, Department of Internal
Medicine, Yale University School of Medicine, New Haven
2012-2013 Founder and Director of the Yale Primary Care Center Weight Management and Wellness
Clinic, Department of Internal Medicine, Yale University School of Medicine, New Haven
2016-present Assistant Professor of Medicine
Division of Endocrinology, Diabetes and Metabolism
The Ohio State University Wexner Medical Center

PUBLICATIONS:

Original Research

1. Ines Pagel-Langenickel, Jianjun Bao, **Joshua J Joseph**, Daniel R Schwartz, Benjamin S Mantell, Xiuli Xu, Nalini Raghavachari, Michael N Sack. PGC-1alpha integrates insulin signaling, mitochondrial regulation and bioenergetic function in skeletal muscle. *Journal of Biological Chemistry*, 2008;283(33):22464-72.
2. Bao J, Lu Z, **Joseph JJ**, Carabenciov D, Dimond CC, Pang L, Samsel L, McCoy JP Jr, Leclerc J, Nguyen P, Gius D, Sack MN. Characterization of the murine SIRT3 mitochondrial localization sequence and comparison of mitochondrial enrichment and deacetylase activity of long and short SIRT3 isoforms. *Journal of Cellular Biochemistry*, 2010;110(1):238-47.
3. **Joshua J. Joseph**, Xu Wang, Elias Spanakis, Teresa Seeman, Gary Wand, Belinda Needham, Sherita Hill Golden. Diurnal Salivary Cortisol, Glycemia and Insulin Resistance: The Multi-Ethnic Study of Atherosclerosis. *Psychoneuroendocrinology*, 2015;62:327-335.
4. **Joshua J. Joseph**, Justin B. Echouffo-Tcheugui, Rita R. Kalyani, Hsin-Chieh Yeh, PhD, Alain G. Bertoni, Valery S. Effoe MD, Ramon Casanova, Mario Sims, Adolfo Correa, Wen-Chi Wu, Gary S. Wand and Sherita H. Golden. Aldosterone, Renin and Diabetes Mellitus in African Americans: The Jackson Heart Study. *J Clin Endocrinol Metab* 2016;101(4):1770–8.
5. **Joshua J. Joseph**, Justin B. Echouffo-Tcheugui, Sherita H. Golden, Haiying Chen, Nancy Swords Jenny, Mercedes R. Carnethon, David Jacobs Jr., Gregory L. Burke, Dhananjay Vaidya, Pamela Ouyang and Alain G. Bertoni. Physical Activity, Sedentary Behaviors and the Incidence of Type 2 Diabetes Mellitus: The Multi-Ethnic Study of Atherosclerosis. *BMJ Open Diabetes Research & Care* 2016; Jun 23;4(1):e000185.
6. **Joshua J. Joseph**, Justin B. Echouffo-Tcheugui, Mercedes R. Carnethon, Alain G. Bertoni, Christina M. Shay, Haitham M. Ahmed, Roger S. Blumenthal, Mary Cushman, and Sherita H. Golden. The Association of Ideal Cardiovascular Health with Incident Type 2 Diabetes Mellitus: The Multi-Ethnic Study of Atherosclerosis. *Diabetologia*. 2016 Sep;59(9):1893-903.
7. **Joseph JJ**, Wang X, Diez Roux AV, Sanchez BN, Seeman TE, Needham BL, Golden SH. Antecedent longitudinal changes in body mass index are associated with diurnal cortisol curve features: The multi-ethnic study of atherosclerosis. *Metabolism*. 2017;68:95–107.
8. Michael Tatusov, **Joshua J. Joseph**, Brian M. Cuneo. A case report of malignant obesity hypoventilation syndrome: A weighty problem in our ICUs. *Respiratory Medicine Case Reports*. 2017; Volume 20:38-41.
9. Effoe VS, Wagenknecht LE, Echouffo Tcheugui JB, Chen H, **Joseph JJ**, Kalyani RR, Bell RA, Wu W-CH, Casanova R, Bertoni AG. Sex Differences in the Association Between Insulin Resistance and Incident Coronary Heart Disease and Stroke Among Blacks Without Diabetes Mellitus: The Jackson Heart Study. *J Am Heart Assoc*. 2017;6.

Review Articles

1. **Joseph JJ**, Golden SH. “Type 2 diabetes and cardiovascular disease: what next?” *Current Opinion in Endocrinology, Diabetes and Obesity*, 2014;21(2):109-20.
2. **Joseph JJ**, Donner TW. “Long-term insulin glargine therapy in type 2 diabetes mellitus: a focus on cardiovascular outcomes.” *Vascular Health and Risk Management*, 2015;11:107-116.

3. **Joseph JJ**, Golden SH. “Cortisol Dysregulation - The Bidirectional Link Between Stress, Depression and Type 2 Diabetes Mellitus.” *Annals of the New York Academy of Sciences*, 2016 Oct 17; doi: 10.1111/nyas.13217.

Book Chapters, Monographs

1. Quinn Capers IV, **Joshua Joseph** and Debabrata Mukherjee. “Chapter 10: Approach to and Management of Renovascular Disease.” *Manual of Vascular Diseases*. 2012, Edited by Sanjay Rajagopalan. Philadelphia, PA: Lippincott Williams & Wilkins 2012.
2. **Joshua J. Joseph**, Sherita H. Golden. Algorithms for Screening and Management of Cardiovascular Risk Factors in Type 2 Diabetes. The Johns Hopkins Diabetes Guide POC-IT Center (Johns Hopkins Point of Care Information Technology Center), Baltimore, MD. October 31, 2014.
3. **Joshua J. Joseph**, Shivam Champaneri, Rita R. Kalyani. Dawn Phenomenon. The Johns Hopkins Diabetes Guide POC-IT Center (Johns Hopkins Point of Care Information Technology Center), Baltimore, MD. August 25, 2015.
4. **Joshua J. Joseph**. Dyslipidemia Management. The Johns Hopkins Diabetes Guide POC-IT Center (Johns Hopkins Point of Care Information Technology Center), Baltimore, MD. August 29, 2015.
5. **Joshua J. Joseph**, Jeanne Clark. Obesity Management. The Johns Hopkins Diabetes Guide POC-IT Center (Johns Hopkins Point of Care Information Technology Center), Baltimore, MD. October 6, 2015.
6. **Joshua J. Joseph**, Simeon Margolis. Lipids. The Johns Hopkins Diabetes Guide POC-IT Center (Johns Hopkins Point of Care Information Technology Center), Baltimore, MD. October 6, 2015.
7. **Joshua J. Joseph**, Sherita H. Golden. Diabetes in Native Populations and Underserved Communities in the United States. *Diabetes Mellitus in Developing Countries and Underserved Communities*. Springer 2016. [In press]

FUNDING

2000-2002	NIH Minority Biomedical Research Support Program National Institutes of Health, Bethesda
2006-2008	Clinical Research Training Program (Pfizer-National Institutes of Health Foundation)
2014-2016	Clinical Research and Epidemiology in Diabetes and Endocrinology Training Grant, National Institute of Diabetes, Digestive, and Kidney Disease T32 DK062707
2016-present	The Ohio State University Wexner Medical Center Startup Grant (salary and research support)

CLINICAL ACTIVITIES

Clinical Focus

Endocrinology with specific focus on Diabetes and Obesity.

Certification

Medical, other state/government licensure

- 2012-2013 Connecticut State Medical License (#50981)
2016-2018 Ohio State Medical License (#35.129258)

Boards, other specialty certification

- 8/2013 Diplomate of the American Board of Internal Medicine (#332279)
11/2015 Diplomate, Endocrinology, Diabetes and Metabolism, American Board of Internal Medicine (#332279)

Clinical (Service) Responsibilities

- 2012-2013 Yale Department of Medicine Primary Care Center, six internal medicine primary care and weight management clinic sessions per week
2012-2013 Yale Department of Medicine Faculty, Supervised internal medicine interns and residents on the clinical wards (six weeks/academic year)
2012-2013 Yale Department of Medicine Faculty, Supervised medical students in a once per week evening clinic
2013-2014 Clinical Consulting Endocrinology Fellow, Fellow on the inpatient service at Johns Hopkins East Baltimore Campus and Bayview Campus with call responsibilities. Managed 5-10 new consults per day and saw patients in clinic in the morning clinics.
2013-2016 Endocrinology Continuity Clinic, one-half clinic day per week
2016-present Diabetes clinic, one day of clinic per week and 6 weeks of inpatient service

Clinical Productivity

- 2012 -2013 Yale Department of Medicine Primary Care Center, six internal medicine primary care and weight management clinic sessions per week with 8-12 patients per session.

Clinical Program Building / Leadership

- 2005-2006 Boston University School of Medicine Class of 2007 Representative, Associate Provost of Diversity Search Committee, Boston University School of Medicine, Boston
2010-2011 Member, Internal Medicine ACGME Restructuring Committee, Yale New-Haven Hospital/Yale University School of Medicine, New Haven
2012-2013 Founder and Director of the Yale Primary Care Center Weight Management and Wellness Clinic, Department of Internal Medicine, Yale University School of Medicine, New Haven

EDUCATIONAL ACTIVITIES

Educational Focus

Teaching

Classroom instruction

2013-2015 Lecturer, Medical Students, Interns and Residents, Endocrinology Elective-Morning Lecture Series, 12-16 one-hour lectures/year on topics in Endocrinology.

Clinical instruction

11/2015 Presenter, Internal Medicine Interns and Residents, Adrenal Disorders in Internal Medicine, Johns Hopkins Bayview Noon Conference.

RESEARCH ACTIVITIES

Research Focus

My research focus is to understand risk factors for the development of obesity and type 2 diabetes in diverse populations. Our group examines the role of adrenal hormones and the hypothalamic-pituitary-adrenal axis, specifically aldosterone and cortisol, in the development of diabetes and obesity using data from the Multi-Ethnic Study of Atherosclerosis and other longitudinal observational cohorts. We have also been working to shed light on racial/ethnic differences in the association of physical activity and other lifestyle factors in the development of diabetes using large multi-ethnic observational cohorts including the Multi-Ethnic Study of Atherosclerosis (MESA) and the Jackson Heart Study. The hypotheses generated using epidemiological approaches is used to design and execute detailed metabolic clinical studies to uncover explanatory mechanisms as potential targets for preventive interventions for diabetes and obesity.

SYSTEM INNOVATION AND QUALITY IMPROVEMENT ACTIVITIES

System Innovation and Quality Improvement efforts within Johns Hopkins Medical Institute

2013-2014 Chairperson; Johns Hopkins Endocrinology Fellowship Quality Improvement Project: Creating a Diabetes Profile in EPIC, the diabetes profile is currently in use among providers serving patients with diabetes

System Innovation and Quality Improvement efforts within The Ohio State University Wexner Medical Center

2016-2017 Developing a Division of Endocrinology, Diabetes and Metabolism Registry Database for quality improvement projects and clinical research to improve the quality of care.

ORGANIZATIONAL ACTIVITIES

Journal peer review activities

2015-present *Psychoneuroendocrinology*
2016-present *Journal of the Renin-Angiotensin-Aldosterone System*
2016-present *Journal of Clinical Endocrinology & Metabolism*
2016-present *Endocrine*
2016-present *BMJ Open*
2016-present *Diabetes Research and Clinical Practice*

Other peer review activities

2015-present Review manuscript proposals, abstracts and manuscripts for The Jackson Heart Study

Advisory Committees, Review Groups/Study Sections

2013-present Member, The Jackson Heart Study: Obesity and Diabetes Working Group
2013-present Member, The Multi-Ethnic Study of Atherosclerosis: Stress Working Group
2015-present Member, The Jackson Heart Study: Nutrition and Physical Activity Working Group

2016-present Member, REGARDS: Diabetes Working Group

Professional Societies

2001-2003 Student National Medical Association, Pre-Medical Member
2003-2009 Student National Medical Association, Member, Boston University Chapter President (2003-2005), Northeast Region VII Board Member (2003-2005)
2013-2014 American College of Physicians
2013-present Endocrine Society, Member, Research Affairs Core Committee Member (2015-2016), Clinical Affairs Core Committee Member (2017-2020)
2014-present American Heart Association, Member
2014-present The Obesity Society, Member
2014-present Network of Minority Health Research Investigators, Member
2015-present American Diabetes Association, Member

Conference Organizer

11/2004 Chairperson, Student National Medical Association Region VII, 2004-2005 Regional Conference: “Balancing the Scale: Closing the Gap between Physicians and Patients”

RECOGNITION

Awards, Honors

Undergraduate

1998-1999 Dean’s List, The Ohio State University
(Post-secondary option for gifted high school students), Columbus
1999-2003 Dean’s List, Morehouse College, Atlanta
2000-2002 Minority Biomedical Research Support Fellow, Morehouse School of Medicine, Atlanta
2001 Boston University Early Medical School Selection Program Recipient, Boston University School of Medicine, Boston
2002 Alpha Epsilon Delta, Morehouse College, Atlanta
2002 Beta Kappa Chi, Morehouse College, Atlanta
2002 Golden Key International Honour Society, Morehouse College, Atlanta
2003 Phi Beta Kappa, Morehouse College, Atlanta

Medical School

2003-2009 Boston University, Martin Luther King, Jr., Fellow, Boston University, Boston, Provided Scholarship for Medical School Tuition and Stipend
2006-2008 National Institutes of Health, Clinical Research Training Program Fellow, National Institutes of Health, Bethesda

Residency

- 2011 Samuel D. Kushlan M.D. Award, Yale University School of Medicine/Yale-New Haven Hospital, New Haven, Honoring the Junior Admitting Resident who has contributed most to patient care at Yale-New Haven Hospital
- 2011-2012 Johnson & Johnson Global Health Scholar, Yale University School of Medicine, New Haven, Program provided funding to travel to Kampala, Uganda and provide care in the Endocrinology Ward
- Fellowship**
- 2014-2016 Christopher D. Saudek M.D. Fellowship in Diabetes Research, Division of Endocrinology, Diabetes and Metabolism, Johns Hopkins University School of Medicine, Baltimore
- 2014-2016 Appointment to Clinical Research and Epidemiology in Diabetes and Endocrinology Training Grant, National Institute of Diabetes, Digestive, and Kidney Diseases, Johns Hopkins University School of Medicine
- 2016 The American Heart Association's Council on Epidemiology and Prevention: Epidemiology Minority Travel Grant
- 2016 American Diabetes Association 3rd Annual Focus on Fellows Awardee
- 2016 Endocrine Society Early Career Forum Travel Award

OTHER PROFESSIONAL ACCOMPLISHMENTS

Poster Presentations

- 2001 **Joseph J**, Simelton B, Eatman D, Bayorh M. The Role of Gender in the Actions of Enalapril in Dahl Salt-sensitive Rats. Annual Biomedical Research Conference for Minority Students, Orlando, Florida. Awarded "Best poster in physiological sciences"
- 2007 **Joseph JJ**, Pagel-Langenickel I, Bao J, Xu X, Sack MN. PPAR-gamma Agonist Pioglitazone Restores the Mitochondrial Biogenesis Regulatory Program and Augments Respiratory Function in Insulin Resistant C2C12 Myotubes.
 1. National Heart, Lung and Blood Institute Fellows Retreat, Gettysburg, Pennsylvania
 2. Pfizer Pharmaceuticals Global Research and Development Facility Scientific Poster session, Groton, Connecticut
- 2015 **Joshua J. Joseph**, MD, Steven Xu Wang, MS, Elias Spanakis, MD, Ana Diez Roux, MD, PhD, Teresa Seeman, PhD, Gary Wand, MD, Belinda Needham, PhD, MA, Sherita Hill Golden, MD, MHS. "Diurnal Salivary Cortisol is associated with Increased Glycemia and Insulin Resistance: The Multiethnic Study of Atherosclerosis". The American Heart Association Epi/Lifestyle Scientific Sessions, Baltimore, Maryland
- 2015 Jane L. Harman, Haiying Chen, Michael C. Sachs, Kristin G. Hairston, Sherita H. Golden, **Joshua J. Joseph**, Alain G. Bertoni. Serum Vitamin D is Not Associated with Risk of Incident Diabetes in African Americans: The

Jackson Heart Study. The American Heart Association Epi/Lifestyle Scientific Sessions. Baltimore, Maryland

- 2015 **Joshua J. Joseph**, Clare J. Lee, Nowella Durkin, Nisa M. Maruthur, Janelle W. Coughlin, Thomas Magnuson, Michael Schweitzer, Kimberley Steele, Jeanne M. Clark. Expectation of Improvement in Quality of Life with Remission of Diabetes Predicts Improvement in Quality of Life with Weight Loss Interventions. The Obesity Society Annual Meeting. Los Angeles, California
- 2016 Alain G. Bertoni, Haiying Chen, Valery S. Effoe, Adolfo Correa, Mercedes Carnethon, Rita R. Kalyani, Justin B. Echouffo-Tcheugui, **Joshua J. Joseph**, Sherita H. Golden, Glucometabolic State Transitions: The Jackson Heart Study. The American Heart Association Epi/Lifestyle Scientific Sessions, Phoenix, AZ
- 2016 Valery S. Effoe, Lynne E. Wagenknecht, Justin B. Echouffo-Tcheugui, Haiying Chen, **Joshua J. Joseph**, Rita R. Kalyani, Ronny A. Bell, Wen-Chih Wu, Ramon Casanova, Alain G. Bertoni. Insulin Resistance is Associated with Incident Coronary Heart Disease but not Stroke Among African Americans: The Jackson Heart Study. The American Heart Association Epi/Lifestyle Scientific Sessions, Phoenix, AZ
- 2017 Joseph JJ, Echouffo-Tcheugui JB, Talegawkar S, Effoe VS, Okhominina V, Carnethon MR, Hsueh WA, Golden SH. An Optimal Modifiable Lifestyle Risk Factor Score is Associated with Lower Risk of Type 2 Diabetes Mellitus in African Americans: The Jackson Heart Study. The American Heart Association Epi/Lifestyle Scientific Sessions, Portland, OR

Oral Presentations

- 2007 **Joseph JJ**, Gladwin MT, Sack MN. "A Model of Transient Endothelial Dysfunction". NIH Clinical Research Training Program for Medical and Dental Students 2006-2007: Oral Scientific Presentations, Bethesda, MD
- 2008 **Joseph JJ**, Bao JJ, Lu X, Sack MN. "Sirt3 as a model of Acetylation - Deacetylation of mitochondrial proteins and the potential role in mitochondrial biology". National Heart Lung and Blood Institute: Mitochondrial Meeting, Bethesda, MD
- 2014 **Joseph JJ**, Golden SH. "Diurnal Cortisol Profile as a Predictor of Weight Change over 6 years: The Multiethnic Study of Atherosclerosis Stress Study" Welch Center for Prevention, Epidemiology, and Clinical Research - Johns Hopkins University: Introduction to Clinical Research Presentation Series, Baltimore, MD
- 2016 **Joseph JJ**, Echouffo-Tcheugui JB, Carnethon MR, Bertoni AG, Shay CM, Ahmed HM, Blumenthal RS, Cushman M, Golden SH. "The Association of Ideal Cardiovascular Health with Incident Type 2 Diabetes Mellitus: The Multi-Ethnic Study of Atherosclerosis." Multi-Ethnic Study of Atherosclerosis Steering Committee Meeting, Bethesda, MD
- 2016 Effoe VS, Carnethon MR, Echouffo-Tcheugui JB, Chen H, **Joseph JJ**, Norwood AR, Bertoni AR. "The American Heart Association Ideal Cardiovascular Health and Incident Type 2 Diabetes Mellitus among African Americans: The Jackson

Heart Study". The American Diabetes Association Scientific Sessions, New Orleans, LA

2017 **Joseph JJ**, Echouffo-Tcheugui JB, Effoe VS, Hsueh WA, Allison MA, Golden SH. Aldosterone Is Associated with Higher Glucose, Insulin Resistance and Incident Diabetes Among Community Dwelling Adults: The Multi-Ethnic Study of Atherosclerosis. Endocrine Society Meeting, Orlando, FL