

CURRICULUM VITAE**Evan D. Muse, MD, PhD, MCTI, FACC**

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POSITIONS:

- June 2015 – Current Assistant Professor, **Scripps Translational Science Institute**, La Jolla, CA.
- July 2015 – Current Cardiologist, Assistant Program Director for Research, Division of Cardiovascular Disease, **Scripps Clinic Medical Group / Prebys Cardiovascular Institute**. La Jolla, CA.
- July 2012 – November 2016 Visiting Research Scholar, Cellular and Molecular Medicine, University of California – San Diego

CLINICAL TRAINING:

- July 2012 – June 2015 KL2 Clinical Scholar and Cardiology Fellow, Scripps Translational Science Institute / Division of Cardiology, **The Scripps Research Institute / Scripps Green Hospital**, La Jolla, CA.
- July 2010 – July 2012 Clinical Cardiology Fellow, Division of Cardiology, Department of Medicine. **Johns Hopkins University Medical Center**, Baltimore, MD.
- June 2009 – June 2010 Resident, Department of Internal Medicine. **Columbia University Medical Center** / New York Presbyterian Hospital, New York, NY.
- June 2008 – June 2009 Intern, Department of Internal Medicine. **Columbia University Medical Center** / New York Presbyterian Hospital, New York, NY.

EDUCATION:

- July 2012 – May 2015 M.C.T.I. - Masters of Science in Clinical and Translational Investigation, **The Scripps Research Institute**, La Jolla, CA.
- July 2001 – June 2008 M.D., Ph.D., Medical Scientist Training Program
Albert Einstein College of Medicine of Yeshiva University, Bronx, NY.
- August 1996 – May 2000 B.S., Chemistry *with Honors* (Biochemistry Track)
University of North Carolina at Chapel Hill, NC.

EXPERIENCE & PROFESSIONAL AFFILIATIONS:

- Xprize - Judge for Qualcomm Tricorder Prize (2014 – 2016)
 American Heart Association – Early Career Member, EC Blogger Program, Abstract Review
 American College of Cardiology – Fellow
 Academic Journal Reviewer: The Lancet, Science, Journal of the American Medical Association – Cardiology (JAMA-Cardiology), Journal of the American Medical Association (JAMA), Journal of the American College of Cardiology (JACC), PLOS-One, Atherosclerosis, The American Heart Journal, American Journal of Cardiology, bioRxiv, PeerJ (Academic Editor)

HONORS:

American College of Cardiology – Young Investigator Award Finalist 2017
 California Chapter of the American College of Cardiology – Excellence in Fellowship Award, May 2015
 American College of Cardiology – Henry Russek Fellow Travel Award, NYC Dec. 2012
 American Diabetes Association – Physician Scientist Training Award – July 2004 – Dec. 2006
 Medical School Honors: Cardiovascular Medicine; Rheumatologic/Orthopedic Diseases
 Graduate School Honors: Molecular Genetics
 Undergraduate Honors in Chemistry – May 2000
 Hypercube Scholars Award (Department of Chemistry, UNC-Chapel Hill, NC) – May 2000
 Undergraduate Honors Program

PUBLICATIONS:

1. **E. D. Muse**, P. M. Barrett, S. R. Steinhubl, E. J. Topol, Towards a smart medical home. *Lancet*. 389, 358 (2017).
2. **E. D. Muse**, N. E. Wineinger, B. Schrader, B. Molparia, E. G. Spencer, D. L. Bodian, A. Torkamani, E. J. Topol Moving Beyond Clinical Risk Scores with a Mobile App for the Genomic Risk of Coronary Artery Disease. *bioRxiv* (2017), doi:10.1101/101519.
3. Y. Oishi, N. J. Spann, V. M. Link, **E. D. Muse**, T. Strid, C. Edillor, M. J. Kolar, T. Matsuzaka, S. Hayakawa, J. Tao, M. U. Kaikkonen, A. F. Carlin, M. T. Lam, I. Manabe, H. Shimano, A. Saghatelian, and C. K. Glass, SREBP1 Contributes to Resolution of Pro-inflammatory TLR4 Signaling by Reprogramming Fatty Acid Metabolism. *Cell Metab.* (2016).
4. A. Torkamani, **E. D. Muse**, E. G. Spencer, M. Rueda, G. N. Wagner, J. R. Lucas and E. J. Topol, Molecular Autopsy for Sudden Unexpected Death. *JAMA*. 316, 1492–1494 (2016).
5. S. R. Steinhubl, **E. D. Muse**, P. M. Barrett, E. J. Topol, Off the cuff: rebooting blood pressure treatment. *Lancet* 388, 749 (2016).
6. **E. D. Muse**, Improving medical adherence in cardiovascular disease management with mHealth technologies. *Eur. Hear. J. - Qual. Care Clin. Outcomes*. 2, 231–232 (2016).
7. **E. D. Muse**, S. R. Steinhubl, Interventions for Increasing Physical Activity: From “ingenious Toys” to mHealth. *J. Am. Coll. Cardiol.* 67, 2464–2466 (2016).
8. S. Yu, S. Li, A. Henke, **E. D. Muse**, B. Cheng, G. Welzel, A. K. Chatterjee, D. Wang, J. Roland, C. K. Glass, and M. Tremblay, Dissociated sterol-based liver X receptor agonists as therapeutics for chronic inflammatory diseases. *FASEB J.* 30, 2570–9 (2016).
9. **E. D. Muse**, E. R. Kramer, H. Wang, P. M. Barrett, F. Parviz, M. A. Novotny, R. S. Lasken, T. A. Jatkoa, G. Oliveira, H. Peng, M. C. Connelly, K. M. Schilling, C. Rao, A. Torkamani, and E. J. Topol, A Whole Blood Molecular Signature for Acute Myocardial Infarction. *bioRxiv* (2016).
10. M. S. Albaghdadi, **E. D. Muse**, Vulnerable Plaque: Absence of Evidence or Evidence of Absence. *J. Am. Coll. Cardiol.* 66, 757–8 (2015).
11. S. R. Steinhubl, **E. D. Muse**, E. J. Topol, The emerging field of mobile health. *Sci. Transl. Med.* 7 (2015).
12. S. R. Steinhubl, N. E. Wineinger, S. Patel, D. L. Boeldt, G. Mackellar, V. Porter, J. Redmond, **E. D. Muse**, L. Nicholson, D. Chopra, and E. J. Topol, Cardiovascular and nervous system changes during meditation. *Front. Hum. Neurosci.* 9 (2015).

13. **E. D. Muse**, D. I. Feldman, M. J. Blaha, Z. Dardari, R. S. Blumenthal, M. J. Budoff, K. Nasir, M. H. Criqui, M. Cushman, R. L. McClelland, M. A. Allison, The association of resistin with cardiovascular disease in the Multi-Ethnic Study of Atherosclerosis. *Atherosclerosis*. 239, 101–8 (2015).
14. S. S. Martin, M. J. Blaha, **E. D. Muse**, A. N. Qasim, M. P. Reilly, R. S. Blumenthal, K. Nasir, M. H. Criqui, R. L. McClelland, J. M. Hughes-Austin, M. A. Allison, Leptin and incident cardiovascular disease: the Multi-ethnic Study of Atherosclerosis (MESA). *Atherosclerosis*. 239, 67–72 (2015).
15. S. R. Steinhubl, **E. D. Muse**, E. J. Topol, Can mobile health technologies transform health care? *JAMA*. 310, 2395–6 (2013).
16. R. Komatireddy, P. M. Barrett, **E. D. Muse**, Medical emergencies on commercial airline flights. *N. Engl. J. Med.* 369, 876–7 (2013).
17. R. Tota-Maharaj, M. J. Blaha, J. W. McEvoy, **E. D. Muse**, R. S. Blumenthal, M. J. Budoff, L. J. Shaw, D. S. Berman, J. S. Rana, K. Nasir Coronary artery calcium for the prediction of mortality in young adults <45 years old and elderly adults >75 years old. *Eur. Heart J.* 33, 2955–62 (2012).
18. W. K. J. Skinner, **E. D. Muse**, R. Yarpalvi, C. Guha, M. K. Garg, S. Kalnicki, Obtaining normal tissue constraints using intensity modulated radiotherapy (IMRT) in patients with oral cavity, oropharyngeal, and laryngeal carcinoma. *Med. Dosim.* 34, 279–84 (2009).
19. C. Buettner, **E. D. Muse**, A. Cheng, L. Chen, T. Scherer, A. Poci, K. Su, B. Cheng, X. Li, J. Harvey-White, G. J. Schwartz, G. Kunos, L. Rossetti, Leptin controls adipose tissue lipogenesis via central, STAT3-independent mechanisms. *Nat. Med.* 14, 667–75 (2008).
20. R. Ross, P. Y. Wang, M. Chari, C. K. Lam, L. Caspi, H. Ono, **E. D. Muse**, X. Li, R. Gutierrez-Juarez, P. E. Light, G. J. Schwartz, L. Rossetti, T. K. Lam, Hypothalamic protein kinase C regulates glucose production. *Diabetes*. 57, 2061–5 (2008).
21. **E. D. Muse**, T. K. T. Lam, P. E. Scherer, L. Rossetti, Hypothalamic resistin induces hepatic insulin resistance. *J. Clin. Invest.* 117, 1670–8 (2007).
22. C. Buettner, A. Poci, **E. D. Muse**, A. M. Etgen, M. G. Myers, L. Rossetti, Critical role of STAT3 in leptin's metabolic actions. *Cell Metab.* 4, 49–60 (2006).
23. A. Poci, T. K. Lam, S. Obici, R. Gutierrez-Juarez, **E. D. Muse**, A. Arduini, L. Rossetti, Restoration of hypothalamic lipid sensing normalizes energy and glucose homeostasis in overfed rats. *J. Clin. Invest.* 116, 1081–91 (2006).
24. A. Poci, **E. D. Muse**, L. Rossetti, Did a muscle fuel gauge conquer the brain? *Nat. Med.* 12, 50–1 (2006).
25. C. Buettner, R. Patel, **E. D. Muse**, S. Bhanot, B. P. Monia, R. McKay, S. Obici, L. Rossetti, Severe impairment in liver insulin signaling fails to alter hepatic insulin action in conscious mice. *J. Clin. Invest.* 115, 1306–13 (2005).
26. **E. D. Muse**, S. Obici, S. Bhanot, B. P. Monia, R. McKay, M. W. Rajala, P. E. Scherer, L. Rossetti, Role of resistin in diet-induced hepatic insulin resistance. *J. Clin. Invest.* 114, 232–9 (2004).
27. Y. Jiang, A. M. Cypess, **E. D. Muse**, C. Wu, C. G. Unson, R. B. Merrifield, T. P. Sakmar, Glucagon receptor activates extracellular signal-regulated protein kinase 1/2 via cAMP-dependent protein kinase. *Proc. Natl. Acad. Sci. U. S. A.* 98, 10102–7 (2001).
28. H. Jurevics, J. Hostettler, **E. D. Muse**, D. W. Sammond, G. K. Matsushima, A. D. Toews, P. Morell, Cerebroside synthesis as a measure of the rate of remyelination following cuprizone-induced demyelination in brain. *J. Neurochem.* 77, 1067–76 (2001).

29. **E. D. Muse**, H. Jurevics, A. D. Toews, G. K. Matsushima, P. Morell, Parameters related to lipid metabolism as markers of myelination in mouse brain. *J. Neurochem.* 76, 77–86 (2001).

PRESENTATIONS / ABSTRACTS

A Prospective Evaluation of a Genetic Risk Score for Atrial Fibrillation. American Heart Association – Annual Scientific Sessions, New Orleans, LA. November 2016. *Oral Presentation*

How Mobile Health Technology Is Changing Medicine. Oasis Technology Fair – San Diego, CA. October 2016. *Invited Presentation.*

Reaching New Heights Through mHealth Research: Challenges & Opportunities. eHealth in Revolution – Dublin, Ireland. September 2016. *Invited Presentation.*

Genome Editing of 9p21 CAD Risk Allele in Vascular Smooth Muscle Cells. Leducq CAD Genomics Meeting – Lübeck, Germany. June 2016. *Invited Presentation*

Piloting through New Space in Science and Medicine. Keynote Address: Project Lead The Way – 5th Regional Conference. Riverside, CA. January 2016. *Invited Keynote Address*

Digital Medicine: Implications for Primary Care. 32nd Annual Primary Care Summer Conference. Coronado, CA. August 2015. *Invited Presentation*

Circulating Endothelial Cells and Acute Myocardial Infarction. Scripps Clinic / Scripps Green Hospital – Grand Rounds – La Jolla, CA. May 2015. *Invited Presentation*

Bridging the Evidence Gap in mHealth: Moving Beyond the Hype. Association for Clinical and Translational Science 2015 Conference. Washington, DC. April 2015. *Invited Presentation and Panelist.*

Circulating Endothelial Cells and Acute Myocardial Infarction. The Future of Genomic Medicine VIII – La Jolla, CA. March 2015. *Invited Presentation*

A Molecular Signature for Myocardial Infarction Without Reliance on Cardiac Myonecrosis. Leducq CAD Genomics Meeting – La Jolla, CA. February 2015. *Invited Presentation*

A Molecular Signature with the Potential for Identifying Impending Acute Myocardial Infarction. American Heart Association – Annual Scientific Sessions, Chicago, IL. November 2014. *eAbstract Oral Poster Presentation*

Age-Related Cardiovascular Disease. Navy Marine Mammal Clinical Research Workshop. October 2014. *Invited Presentation.*

The Association of Human Resistin and Cardiovascular Disease in the Multi-Ethnic Study of Atherosclerosis (MESA). American College of Cardiology Annual Scientific Sessions, San Francisco, CA. March 2013. *Poster Presentation.*

Central Administration of Recombinant Resistin Induces Hepatic Insulin Resistance. AECOM Medical Scientist Training Program Retreat (Mohonk Mountain House), New Paltz, NY, May 2006. *Oral Presentation.*

Novel Mechanisms of Cross-Talk Between Adipose Tissue and the Hypothalamus. AECOM Department of Molecular Pharmacology (Work in Progress Seminar), Bronx, NY, May 2006. *Oral Presentation.*

Resistin Induces Hepatic Insulin Resistance via Hypothalamic and Extra-Hypothalamic Mechanisms. Keystone Symposium. Vancouver, BC, January 2006. *Poster Presentation*

Central Administration of Recombinant Resistin Induces Hepatic Insulin Resistance. American Diabetes Association 65th Annual Scientific Sessions, San Diego, CA, June 2005. *Oral Presentation*

Role of Resistin in Diet-Induced Hepatic Insulin Resistance. American Diabetes Association 64th Annual Scientific Sessions, Orlando, FL, June 2004. *Poster Presentation.*