Curriculum Vitae

Last Updated: 03/31/2021

PERSONAL DATA

Name: Eric C. Tuday, M.D., Ph.D.

Citizenship: United States

EDUCATION

Years	Degree	Institution (Area of Study)
2015 - 2019	Fellow	Johns Hopkins Medicine (Cardiology)
		Baltimore, MD
2012 - 2015	Resident	Virginia Mason Medical Center (Internal
		Medicine)
		Seattle, WA
2008 - 2012	M.D.	Northwestern University Feinberg School of
		Medicine (Medicine)
		Chicago, IL
2004 - 2008	Ph.D.	Johns Hopkins University School of Medicine
		(Biomedical Engineering)
		Baltimore, MD
2003 - 2004	M.S.	University of Utah (Biomedical Engineering)
		Salt Lake City, UT
2000 - 2003	B.S.	University of Utah (Biomedical Engineering)
		Salt Lake City, UT

BOARD CERTIFICATIONS

12/31/2015 -	American Board of Internal Medicine (Internal Medicine), Current
12/31/2025	
07/20/2019 -	National Board of Echocardiography (Advanced Perioperative TEE), Current
12/31/2029	
07/18/2019 -	American Board of Internal Medicine (Sub: Cardiovascular Disease), Current
12/31/2029	

CURRENT LICENSES/CERTIFICATIONS

2020 - 2022	Idaho State Board of Medicine: State License (ID) - Physician (MD)
2020 - 2022	Wyoming State Board of Pharmacy: State License (WY) - Physician (MD)
2019 - 2022	DOPL: Controlled Substance (UT) - Physician (MD)
2019 - 2022	DOPL: State License (UT) - Physician (MD)
2019 - 2021	DEA: DEA Certificate (UT) - Physician (MD)
2021	Nevada State Board of Medical Examiners: State License (NV) - Physician (MD)
2020 - 2021	Wyoming State Board of Medicine: State License (WY) - Physician (MD)
2019 - 2021	The Johns Hopkins Hospital - AHA: Basic Life Support (MD) - Physician (MD)
2019 - 2021	Johns Hopkins Hospital AHA: Advanced Cardiovascular Life Support Training
	Center Faculty (MD) - Physician (MD)

UNIVERSITY OF UTAH ACADEMIC HISTORY

Internal Medicine (Cardiovascular Medicine), 07/16/2019 - Present

PROFESSIONAL EXPERIENCE

Full-Time Positions

2019 - Present Assistant Professor of Medicine, University of Utah, Salt Lake City, UT

SCHOLASTIC HONORS

2019 - 2020	Northwestern University. Northwestern Cardiovascular Young Investigators' Forum Selectee
2019 - 2020	Johns Hopkins University. W. Leigh Thompson Excellence in Research Award Finalist
2018 - 2019	Mid-Atlantic Capital Cardiology Symposium. Young Investigator Research Award
2017	How to Become a Cardiovascular Investigator Selectee, American College of Cardiology
2009	Summer Intern Scholarship, American Association for Thoracic Surgery
2008	Merit Scholarship, Northwestern University Feinberg School of Medicine, Chicago, IL
2008	Young Investigators' Research Award, European Space Agency
2001 - 2004	Advanced Dual Degrees Award, Department of Biomedical Engineering, University of Utah, Salt Lake City, UT

SERVICE AT PREVIOUS INSTITUTIONS

2012	Participant, Northwestern University Feinberg School of Medicine, and Makerere Universities, Global Health Initiative, Mulago National Referral Hospital and Arua Regional Referral Hospital, Uganda
2011	Student Tutor, Northwestern University Feinberg School of Medicine, Tutor for Cardiovascular Physiology
2008	Medical Volunteer, Northwestern University, Alliance for International Development, Blue Mountain Project, Hagley Gap, Jamaica

CURRENT MEMBERSHIPS IN PROFESSIONAL SOCIETIES

American College of Cardiology
American Heart Association
American Physiological Society
American Society of Echocardiography
Tau Beta Pi Engineering Honor Society

FUNDING

Pending Grants

05/01/21 - 04/30/22 The Role of MicroRNA 181b in the Development of Vascular Stiffness with Age -

University of Utah Seed Grant

Role: PI

Past Grants

01/01/19 - 06/30/19 The degradation of microRNA-181b by Translin/Trax, its contribution to age related increases in vascular stiffness, and potential for therapeutic intervention. Role: PD/PI

07/01/17 - 06/30/19 T32 Grant Investigating the vascular biology that takes place during the aging process
Principal Investigator(s): Wendy Post

National Institutes of Health Role: Cardiology Fellow

RESEARCH EXPERIENCE

2015 - Present	Post-Graduate Researcher: Johns Hopkins University - Researching causes of pathologic increases in vascular stiffness primarily in aging models. PI: Dan Berkowitz M.D.
2013 - 2015	<u>Resident Researcher</u> : Virginia Mason Medical Center – Evaluated and improved the appropriate use of cardiac stress testing. PI: Elizabeth Gold, M.D.
2011 - 2012	Graduate Researcher: Northwestern University – Investigated if statin use in patients with end stage renal disease reflects the best current evidence. PI: Neil J. Stone M.D.
2008 - 2012	Graduate Researcher: Northwestern University – Evaluated the impact of transcatheter aortic valve implantation on adults with severe, symptomatic aortic stenosis. PI: S. Chris Malaisrie M.D.
2005	Summer Intern: NSBRI / NASA Johnson Space Center - Investigated the effects of simulated microgravity on the human cardiovascular system. PI: Janice Meck Ph.D. and Steve Platts Ph.D.
2004 - 2008	Graduate Researcher: Johns Hopkins University - Researched causes of microgravity and age induced increases in vascular stiffness and evaluated the effectiveness of treatments. PI: Artin Shoukas Ph.D. and Dan Berkowitz M.D.
2003 - 2004	Graduate Researcher: University of Utah - Researched methods to control neural impulses in humans using transdermal magnetic stimulation. PI: Ken Horch Ph.D.
2001 - 2003	<u>Undergraduate Research Assistant:</u> University of Utah - Researched methods to control neural impulses in humans using transdermal magnetic stimulation. PI: Ken Horch Ph.D.

TEACHING RESPONSIBILITIES/ASSIGNMENTS

Course Lectures

2006 - 2008 Teaching Assistant, Systems Bioengineering I, Johns Hopkins University, Assisted

in teaching an undergraduate course, for two semesters focusing on integrating

engineering principles with human cardiovascular physiology

Trainee Supervision

Faculty

2019 - Present Mentor, University of Utah School of Medicine, Mentor Jr. Faculty with the

GRECC, University of Utah School of Medicine

Undergraduate

2015 - 2019 Mentor, Johns Hopkins University, Currently mentoring 2 undergraduate students.

I provide experimental teaching as well as offering clinical shadowing as part their

rotations.

2006 - 2008 Mentor, Johns Hopkins University, Mentored five undergraduate students in my

research lab, taught them laboratory and experimental skills and helped them to

develop their own research projects.

Didactic Lectures

2020 Echo in Systemic Diseases, Imaging Conference, University of Utah, Salt Lake

City, UT

PEER-REVIEWED JOURNAL ARTICLES

1. **Tuday** E, Nomura Y, Ruhela D Nakano M, Fu X, Shah A, Roman B, Yamaguchi A, An SS, Steenbergen C, Baraban JM, Berkowitz DE, Das S. (2019). Deletion of the microRNA-degrading nuclease, translin/trax, prevents pathogenic vascular stiffness. *Am J Physiol Heart Circ Physiol*, *1* (317), H1116-H1124.

- 2. Arvanitis M, **Tuday E**, Florido R, Hsu S, Choi CW, Sharma K, Schulman SP. (2019). Systemic Capillary Leak Syndrome Presenting With Fulminant Recurrent Cardiogenic Shock. *Circ Heart Fail*, *12*(8), e006097.
- 3. Khan M, Steppan J, Schuleri KH, Ryoo S, **Tuday E**, Bugaj L, Santhanam L, Berkowitz T, Nyhan D, Shoukas AA, Berkowitz DE (2012). Upregulation of arginase-II contributes to decreased age-related myocardial contractile reserve. *Eur J Appl Physiol*, *112*(8), 2933-41.
- 4. **Tuday EC**, Platts SH, Nyhan D, Shoukas AA, Berkowitz DE (2011). A retrospective analysis on gender differences in the arterial stiffness response to microgravity exposure. *Gravit Space Biol Bull*, 25(1), 51-3.
- 5. Malaisrie SC, **Tuday** E, Lapin B, Wang E, Lee R, McGee EC, Davidson C, McCarthy PM (2011). Transcatheter aortic valve implantation decreases the rate of unoperated aortic stenosis. *Eur J Cardiothorac Surg*, 40(1), 43-8.
- 6. White AR, Ryoo S, Bugaj L, Attarzadeh DO, Thiyagarajan S, Chen K, Attwater S, Abbot B, Li D, Champion HC, Shoukas AA, Nyhan D, Hare JM, Berkowitz DE, **Tuday EC** (2010). Early changes in vasoreactivity after simulated microgravity are due to an upregulation of the endothelium-dependent nitric oxide/cGMP pathway. *Eur J Appl Physiol*, *110*(2), 395-404.
- 7. Santhanam L, **Tuday EC**, Webb AK, Dowzicky P, Kim JH, Oh YJ, Sikka G, Kuo M, Halushka MK, Macgregor AM, Dunn J, Gutbrod S, Yin D, Shoukas A, Nyhan D, Flavahan NA, Belkin AM, Berkowitz DE (2010). Decreased S-nitrosylation of tissue transglutaminase contributes to age-related increases in vascular stiffness. *Circ Res*, *107*(1), 117-25.
- 8. **Tuday EC**, Nyhan D, Shoukas AA, Berkowitz DE (2009). Simulated microgravity-induced aortic remodeling. *J Appl Physiol*, *106*(6), 2002-8.
- 9. Ryoo S, Gupta G, Benjo A, Lim HK, Camara A, Sikka G, Lim HK, Sohi J, Santhanam L, Soucy K, **Tuday E**, Baraban E, Ilies M, Gerstenblith G, Nyhan D, Shoukas A, Christianson DW, Alp NJ, Champion HC, Huso D, Berkowitz DE (2008). Endothelial arginase II: a novel target for the treatment of atherosclerosis. *Circ Res*, *102*(8), 923-32.
- 10. **Tuday EC**, Meck JV, Nyhan D, Shoukas AA, Berkowitz DE (2007). Microgravity-induced changes in aortic stiffness and their role in orthostatic intolerance. *J Appl Physiol*, *102*(3), 853-8.

11. **Tuday EC**, Olree KS, Horch KW (2006). Differential activation of nerve fibers with magnetic stimulation in humans. *BMC Neurosci*, 7, 58.

ADDITIONAL PUBLICATIONS

Editorials

1. **Tuday EC**, Berkowitz DE (2007). Microgravity and cardiac atrophy: no sex discrimination. *J Appl Physiol* (1985), 103(1), 1-2.

POSTER PRESENTATIONS

2019	The Role of the Degradation of miRNA-181b by the Translin/Trax Complex in the Pathologic Process of Vascular Stiffening with Aging. 2019 ACC Scientific Session & Expo, New Orleans.
2013	Tuday E . <i>Not Everything that Crackles is Heart Failure</i> . Poster session presented at American College of Physicians Washington Chapter Conference, Seattle, WA.
2008	Tuday E , Platts S. Nyhan D, Shoukas A, Berkowitz D. <i>Gender Differences in the Arterial Stiffness Response to Microgravity</i> . Poster session presented at European Space Agency Life Science Symposium, Angers, France.
2007	Tuday E , Nyhan D, Shoukas A, Berkowitz D. <i>Simulated Microgravity Induced Aortic Remodeling</i> . Poster session presented at Biomedical Engineering Society, Los Angeles, CA.
2006	Tuday EC , Meck JV, Shoukas AA, Berkowitz DE. <i>Microgravity Induced Changes in Aortic Stiffness and Their Role in Orthostatic Intolerance</i> . Poster session presented at American Society for Gravitational and Space Biology, Arlington, VA.
2004	Tuday E , Horch K. <i>Magnetic Stimulation of Peripheral Nerves</i> . Poster session presented at the Hill, Utah State Capital, Salt Lake City, UT.

ORAL PRESENTATIONS

Meeting Presentations

National	
2012	Okwuosa I, Tuday E, Stone, N. Statin Use in Dialysis Patients: Does the Evidence Support the Practice? National Lipid Association Conference, Scottsdale, AZ
2010	Malaisrie SC, Kubasiak J, Bonow RO, McGee EC, Lee R, Maganti K, Tuday E , Lapin B, McCarthy PM. Aortic Valve Replacement is Associated with Increased Survival in Asymptomatic Patients with Severe Aortic Stenosis. American Heart Association Conference, Chicago, IL
2010	Malaisrie SC, Tuday E, Lapin B, Lee R, McGee E, Davidson C, Bonow R, McCarthy P. Transcather Aortic Valve Implantation Decreases the Rate of Unoperated Aortic Stenosis. European Association for Cardio-Thoracic Surgery Conference, Geneva, Switzerland
2008	Tuday EC , Kim JH, Dowzicky P, Cortes H, Ryoo S, Vandegaer K, Nyhan D, Halushka M, Flavahan NA, Berkowitz DE, Santhanam L. Decreased S-Nitrosylation of Tissue Transglutaminase Contributes to Age-Related Increases in Vascular Stiffness. American Heart Association Conference, New Orleans, LA

2008 Tuday E, Platts S. Nyhan D, Shoukas A, Berkowitz D. Gender Differences in the

Arterial Stiffness Response to Microgravity.

Preliminary results report at the NASA Human Research Program Investigators'

Workshop, League City, TX

Tuday EC, Meck JV, Shoukas AA, Berkowitz DE. Microgravity Induced Changes

in Aortic Stiffness and Their Role in Orthostatic Intolerance. Final results report at the NASA Human Research Program Investigators' Workshop, League City, TX

Local/Regional

Tuday E, Nomura Y, An S, Berkowitz DE, Das S. The Role of MicroRNA

Degradation in the Development of Vascular Stiffness. Mid-Atlantic Capital

Cardiology Symposium, Washington, DC

Tuday E, Lapin B, Lee R, McGee E, Davidson C, Bonow R, McCarthy P,

Vanecko R, Malaisrie SC. The Impact of Transcatheter Aortica Valce Implantation on the Problem of Unoperated Aortic Stenosis. Chicago Surgical Society, Chicago,

IL

Grand Rounds Presentations

2020 "MicroRNA, vascular stiffness and aging." Division of Geriatrics. University of

Utah, Salt Lake City, UT

2018 Tuday EC. Cardiac Imaging for Primary Care. Family Medicine Grand Rounds,

Medstar Franklin Square Hospital, Baltimore, MD

2013 Tuday E. Not Everything that Crackles is Heart Failure. Grand Rounds at Virginia

Mason Medical Center, Seattle, WA