

CURRICULUM VITAE  
The Johns Hopkins University School of Medicine

(Signature):



(Date of this version): **8/6/2018**

(Typed Name): **Matthews Chacko**

## DEMOGRAPHIC AND PERSONAL INFORMATION

### Current Appointments

Assistant Professor of Medicine, Johns Hopkins University

### Personal Data

Johns Hopkins Hospital  
Division of Cardiology  
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### Education and Training

1993	B.A. Biology	Azusa Pacific University (Azusa, CA)
1998	M.D.	University of Kansas School of Medicine (Kansas City, KS)
2001	Internal Medicine	Johns Hopkins Hospital (Baltimore, MD)
2005	Cardiology	Cleveland Clinic (Cleveland, OH)
2007	Interventional Cardiology	Cleveland Clinic (Cleveland, OH)

### Professional Experience

2007 – Present	Johns Hopkins University Division of Cardiology Assistant Professor of Medicine Director, Peripheral Vascular Interventions Co-Director, Advanced Structural and Vascular Interventional Fellowship Program Faculty, Interventional Cardiology and Coronary Care Unit Faculty, Thayer Firm of the Osler Medical Service
2015 – Present	Food and Drug Administration (FDA), Cardiac and Renal Drug Advisory Committee (CRDAC) Member
2017 – Present	Medical Advisor, Johns Hopkins Comprehensive Transplant Center

## PUBLICATIONS

Original Research [OR]

1. **Chacko M**, White RD, Hobbs RE. Anomalous left main trunk from the right coronary sinus: coronary angiography is no longer the gold standard. *Catheter Cardiovasc Interv* May 2004; 62(1): 85-6 A-9.
2. **Chacko M**, Lincoff AM, Wolski KE, Cohen DJ, Bittl JA, Lansky AJ, Tsuchiya Y, Betriu A, Yen MH, Chew DP, Cho L, Topol EJ. Ischemic and bleeding outcomes in women treated with bivalirudin during percutaneous coronary intervention (PCI): A subgroup analysis of the REPLACE-2 trial. *Am Heart J* May 2006; 151(5):1032.e1-1032.e7.
3. Ellis SG, Penn MS, Bolwell B, Garcia M, **Chacko M**, Wang T, Brezina KJ, McConnell G, Topol EJ. Granulocyte colony stimulating factor in patients with large acute myocardial infarction: results of a pilot dose-escalation randomized trial. *Am Heart J* Dec 2006;152(6):1051e 9-14.
4. Zhang M, Mal N, Kiedrowski M, **Chacko M**, Askari AT, Popovich ZB, Koc ON, Penn MS. SDF-1 expression by mesenchymal stem cells results in trophic support of cardiac myocytes after myocardial infarction. *FASEB J* 2007;21:3197-3207.
5. Taydas E, Malik MU, Dhingra A, Russell S, **Chacko M**, Cameron AM, Alqahtani S, Gurakar A. Role of Coronary Artery Calcium Score in Identifying Occult Coronary Artery Disease in Patients Evaluated for Deceased Donor Liver Transplant – A Preliminary Report. *Experimental and Clinical Transplantation* 2015; Suppl 1:30-32.
6. Shafi T, **Chacko M**, Berger ZD, Wilson L, Gayleard J, Bass EB, Sozio SM. Renal Denervation in the Medicare Population. A technical brief prepared for Agency for Healthcare and Research and Quality (AHRQ) and the U.S. Department of Health and Human Services. July 2016. (<https://www.cms.gov/Medicare/Coverage/DeterminationProcess/downloads/id102TA.pdf>)
7. Malik MU, Russell SD, Pustavoitau A, **Chacko M**, Cosar AM, Thompson AB, Trilinos P, Dagher AA, Cameron AM, Gurakar A. The Predictors of Post-Transplant Coronary Events among Liver Transplant Recipients. *Hepatology International* 2016, DOI 10.1007/s12072-016-9742-5.
8. Crawford TC, Magruder JT, Grimm JC, Mandal K, Price J, Resar J, **Chacko M**, Hasan RK, Whitman GJ, Conte JV. Phase of Care Mortality Analysis: A Unique Method for Comparing Mortality Differences Among TAVR and Surgical AVR Patients. *Semin Thorac Cardiovasc Surg* 2016 [in press; <http://dx.doi.org/10.1053/j.semtcv.2016.06.008>].
9. McEvoy J, Ibrahim K, Kickler T, Clarke W, Hasan R, Czarny M, Kerami A, Goli R, Gratton T, **Chacko M**, Hwang C, Brinker J, Johnston P, Trost J, Miller J, Herzog W, Blumenthal R, Thiemann D, Resar JR, Schulman S. Effect of Intravenous Fentanyl on Ticagrelor Absorption and Platelet Inhibition among Patients Undergoing Percutaneous Coronary Intervention: The PACIFY Randomized Clinical Trial. *Circulation* 2017; CIRCULATIONAHA.117.031678
10. Mazumder NR, Russell SD, Pustavoitau A, **Chacko M**, Rizkalla N, Saberi B, Philosophe B, Cameron AM, Gurakar A, Naqvi FF. Pre-operative echocardiographic differences and transplantation outcomes among patients receiving Simultaneous Liver-Kidney (SLK) versus Liver Transplant (LT). *Experimental and Clinical Transplantation* 2018, Suppl 1:9 – 13.
11. Krishnan A, Suarez-Pierre A, Zhou X, Lin CT, Fraser CD, Crawford TC, Hsu J, Hasan R, Resar JR, **Chacko M**, Baumgartner WA, Conte JV, Mandal K. Sarcopenia Provides Additional Long-Term Risk Prognostication and Outperforms Modified Frailty Index in Predicting Outcomes after Transcatheter Aortic Valve Replacement, *American Heart Journal* 2018 (submitted).

#### Review Articles [RA]

1. Horne A, **Chacko M**. “Thrombectomy Devices in Coronary Intervention”. Kapadia S and Krishnaswamy A (eds): *Interventional Cardiology Clinics*, Elsevier Publishers. Philadelphia, PA, 2013.
2. Horne A, Reineck E, Hasan R, Resar J, **Chacko M**. “Trans-catheter aortic valve replacement: historical perspectives, current evidence, and future directions”. *Am Heart J* 2014;168:414-23.
3. Shafi T, **Chacko M**, Berger ZD, Wilson L, Gayleard J, Bass EB, Sozio SM. “Renal Denervation for Resistant Hypertension: A Systematic Review”. Manuscript in review *JAMA Internal Medicine*.

#### Case Reports [CR]

1. **Chacko M**, Marrouche NF, Bhatt DL. Asymptomatic inferior ST elevation myocardial infarction from thermal injury complicating radiofrequency ablation for AVNRT. *J Invas Cardiol* Sept 2004;16(9):504-5.
2. **Chacko M**, Lytle BW, White RD, Hobbs RE. A “Mickey Mouse” coronary anomaly: aorto-left atrial fistula with aneurysm. *Circulation* 2005;111:e162-163.
3. Campbell CY, Shah AS, **Chacko M**. Inducible left ventricular obstruction following apical-conduit aortic valve bypass surgery. *J Thorac Cardiovasc Surg* 2010;140:e62-e63.

4. Blaha M, Panjrath G, **Chacko M**, Schulman S. "Localized calcific constrictive pericarditis masquerading as a basal aneurysm". *Images in Cardiology, Journal of American College of Cardiology* 2011;57(18):e65.

#### Book Chapters, Monographs [BC]

1. **Chacko M**, Field M, Kasper E. "Heart Failure". *The Osler Medical Handbook*. Mosby Publishers, Philadelphia, PA, 2003.
2. **Chacko M**, Penn MS. "Cardiac Biochemistry". *The Cleveland Clinic Board Review Manual*. Lippincott, Williams & Wilkins, Philadelphia, PA 2006.
3. **Chacko M**, Topol EJ. "Chapter 13: Thrombolytic Therapy". Topol E (ed): *Textbook of Interventional Cardiology*, 5<sup>th</sup> Edition. Elsevier Publishers, Philadelphia, PA 2006.
4. **Chacko M**, Hasan R. "Chapter 11: Thrombolytic Intervention". Topol E and Teirstein P (eds): *Textbook of Interventional Cardiology*, 6<sup>th</sup> Edition. Elsevier Publishers. Philadelphia, PA, 2011.
5. Kakouros N, Gkizas S, Smith L, **Chacko M**. "Basics of Peripheral Angiography", *Beginners Guide to Cardiac Catheterization*, Gurm H and Menees D (eds), Gourock House International, 2011.
6. **Chacko M**, Hasan R, Czarny M. "Chapter 13: Thrombolytic Intervention". Topol E and Teirstein P (eds): *Textbook of Interventional Cardiology*, 7<sup>th</sup> Edition. Elsevier Publishers. Philadelphia, PA, 2015.
7. Sidhu S, **Chacko M**. "Transcatheter Aortic Valve Replacement". *A Color Atlas of Interventional Cardiology*. Baliga R and Lilly S (eds). McGraw-Hill Publishers. New York, NY, 2018.
8. **Chacko M**, Ibrahim K. "Thrombolytic Intervention". Topol E and Teirstein P (eds): *Textbook of Interventional Cardiology*, 8<sup>th</sup> Edition. Elsevier Publishers. Philadelphia, PA, 2018.

#### Books, Textbooks [BK]

1. **Chacko M**. Section Editor, "Cardiovascular". *Signs and Symptoms...In a Page* (2nd Ed). Editors Kahan S, Ashar B. Lippincott, Williams & Wilkins, Philadelphia PA 2008.
2. **Chacko M**. Section Editor, "Cardiovascular". *Medicine...In a Page* (2nd Ed). Editors Kahan S, Miller R, Smith EG. Lippincott, Williams & Wilkins, Philadelphia PA. 2008.

### CLINICAL ACTIVITIES

#### Clinical Focus

1. Performance of catheter-based coronary, peripheral vascular, and structural heart disease angiography and interventions.
2. Critical care cardiology.
3. Cardiology consultation.

#### Certification

1996	USMLE Step I
1997	USMLE Step 2
1999	USMLE Step 3

#### Medical, other state/government licensure

2007 – Present	Maryland medical license
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#### Boards, other specialty certification

2001	American Board of Internal Medicine
2005, 2015	Cardiovascular Diseases
2006, 2016	Interventional Cardiology

#### Clinical (Service) Responsibilities

2007 – Present	Coronary Care Unit Attending Physician (1 month/year)
2007 – Present	Interventional Cardiology Faculty (11 months/year)
2007 – Present	Cardiology/Valve Clinic (1 full-day/week)
2007 – Present	Covering ACS for the Thayer Firm (5 -7 days/year)

Clinical Program Building / Leadership

2007 – Present	Peripheral Vascular Disease Program, Division of Cardiology Director, Peripheral Vascular Interventions
2009 – 2012	Faculty, Hopkins-Trinidad Cardiology Fellowship Program
2012	Co-Director, Cardiology Nurse Practitioner Service
2013 – Present	Structural Heart Disease Interventional Program Co-Director, Advanced Structural and Vascular Interventional Fellowship Program
2013 – Present	Hypertension Center Faculty
2017 – Present	Medical Advisor, Johns Hopkins Comprehensive Transplant Center

**EDUCATIONAL ACTIVITIES**

**Educational Focus**

1. Education and mentorship as a teaching attending physician for medical students and medical Housestaff on the Thayer Firm of the Osler Medical Service.
2. Education and mentorship as a teaching attending physician for the medical students, medical Housestaff, and the Cardiology Fellows in the Coronary Care Unit (CCU).
3. Education and mentorship as a teaching attending interventional cardiologist for the Cardiology Fellows in the cardiac catheterization laboratory performing coronary, peripheral vascular, and structural heart disease angiography and interventions.

**Teaching**

Classroom instruction

2008 – Present	<i>“Introduction to the Cath Lab”</i> Cardiology Fellows Lecture Series, Johns Hopkins Hospital
2008 – Present	<i>“Peripheral Artery Disease”</i> Cardiology Fellows Lecture Series, Johns Hopkins Hospital
2010 – 2013	<i>“Peripheral Artery Disease”</i> , Genes to Society Lecture, Johns Hopkins University School of Medicine

Clinical instruction

2007 - Present	Thayer Firm Faculty Student Teaching Attending Physician (1 month/year)
2007 - Present	CCU Attending Physician (1 month/year)
2007 - Present	Interventional Cardiology Attending Physician (11 months/year)

CME instruction

2008	<i>“How to Evaluate Patients with Peripheral Arterial Disease (PAD)”</i> Topics in Cardiology Conference, Johns Hopkins Hospital
2008	<i>“The Cardiopath is Always a Vasculopath...and Vice Versa”</i> Charm City Echo Course, Baltimore, MD
2010	<i>“Peripheral Artery Disease”</i>

- 2011 Topics in Cardiology Conference, Johns Hopkins Hospital  
 “Peripheral Artery Disease: Non-Invasive Diagnosis and Medical Management”  
<http://www.mycme.com/pages/Activity.aspx?activityid=694&pagetypeid=36&publishDate=False&timestamp=634504950958752844>
- 2011 “Renovascular Hypertension”  
<http://www.mycme.com/pages/Activity.aspx?activityid=695&pagetypeid=36&publishDate=False&timestamp=634504950075292728>
- 2012, 2013 Baltimore Trans-Radial Cardiac Catheterization Summit  
 Course Co-Director
- 2014 “Renal Denervation for Hypertension: Hope or Hype?”  
 Topics in Cardiology Conference, Johns Hopkins Hospital

## RESEARCH ACTIVITIES

### Research Focus

1. Leadership and participation in coronary, peripheral vascular, and structural heart disease interventional trials
  - 2014 Role of coronary artery calcium Score in identifying occult coronary artery disease in patients evaluated for deceased donor liver transplant.
  - 2015 Predictors of post-transplant coronary events among liver transplant recipients.
  - 2015 - 2016 Renal denervation for resistant hypertension.
  - 2016 - 2017 Effect of intravenous fentanyl on Ticagrelor absorption and platelet inhibition among patients undergoing percutaneous coronary intervention.
  - 2017 Pre-operative echocardiographic differences and transplantation outcomes among patients receiving Simultaneous Liver-Kidney (SLK) versus Liver Transplant (LT).
  - 2018 Racial disparities in utilization and outcomes of transcatheter aortic valve replacement in Maryland.
  - 2018 Comprehensive assessment and prediction of atrioventricular conduction abnormalities warranting permanent pacemaker implantation after transcatheter aortic valve replacement.
  - 2018 Prospective study on changes of valvular abnormalities after kidney transplantation.

## SYSTEM INNOVATION AND QUALITY IMPROVEMENT ACTIVITIES

### System Innovation and Quality Improvement efforts within JHMI:

- 2017 – Present Medical Advisor, Johns Hopkins Comprehensive Transplant Center

### System Innovation and Quality Improvement efforts outside of JHMI:

- 2013 Agency for Healthcare Research and Quality (AHRQ): Contrast-Induced Nephropathy  
 Johns Hopkins University Evidence-based Practice Center  
 PI: Eric Bass  
 Role: Consultant/Advisor
- 2015 Agency for Healthcare Research and Quality (AHRQ): Renal Denervation in the Medicare Population  
 Johns Hopkins University Evidence-based Practice Center  
 PI: Eric Bass  
 Role: Consultant/Advisor

## ORGANIZATIONAL ACTIVITIES

### Institutional Administrative Appointments

2007 – Present	Director, Peripheral Vascular Interventions, Division of Cardiology
2013 – Present	Co-Director, Advanced Structural and Vascular Interventional Fellowship Program
2017 – Present	Medical Advisor, Johns Hopkins Comprehensive Transplant Center

#### Editorial Activities

1. **Chacko M.** Section Editor, “Cardiovascular”. *Signs and Symptoms...In a Page* (2nd Ed). Editors Kahan S, Ashar B. Lippincott, Williams & Wilkins, Philadelphia PA 2008.
2. **Chacko M.** Section Editor, “Cardiovascular”. *Medicine...In a Page* (2nd Ed). Editors Kahan S, Miller R, Smith EG. Lippincott, Williams & Wilkins, Philadelphia PA. 2008.

#### Advisory Committees, Review Groups/Study Sections

2011 – 2015	Global Advisory Board, Medtronic® Vascular
2015 – Present	Food and Drug Administration (FDA), Cardiac and Renal Drug Advisory Committee Member (CRDAC)

#### Conference Organizer

##### National

2014	Society of Hospital Medicine National Meeting; Las Vegas, NV Cardiology Pre-Course, Course Director
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##### International

2009	Kamakura Live International Trans-Radial Conference; Yokohama, Japan Moderator, “Ambitious Physicians” Session,
2012 – 2013	Trans-Radial Cardiac Catheterization Course; Baltimore, MD Course Co-Director

## RECOGNITION

#### Awards, Honors

1993	NAIA Academic and Athletic Honorable Mention All-American (Soccer)
1997	ΑΩΑ inductee (3 <sup>rd</sup> year medical student) and Chapter Vice President
1997	American College of Physicians National Meeting Medical Student Finalist for National Abstracts Competition
2003	American Heart Association (AHA) Laennec Society Young Clinician Award Finalist
2004	Cleveland Clinic Cardiology Fellows Research Day First Place Award Winner
2013	Azusa Pacific University Alumnus of the Year

#### Invited Talks

##### JHMI/Regional

2004	“ <i>Stem Cells for Myocardial Regeneration</i> ” Featured lecture in the “Future of Cardiology”. Session of the Florida Chapter ACC Meeting, Miami, FL
2007	“ <i>PAD: From Endothelium to Endovascular Intervention</i> ” Medicine Grand Rounds, Johns Hopkins Hospital
2007	“ <i>PAD: From Endothelium to Endovascular Intervention</i> ” Cardiology Grand Rounds. Johns Hopkins Hospital
2008	“ <i>The Cardiopath is Always a Vasculopath...and Vice Versa</i> ” Charm City Echo Course, Baltimore, MD

- 2008 *"How to Evaluate Patients with Peripheral Arterial Disease (PAD)"*  
Topics in Cardiology Conference, Johns Hopkins Hospital
- 2009 *"The Cardiopath is Always a Vasculopath and Vice Versa..."*  
Bellin Health Cardiovascular Conference, Green Bay, WI
- 2010 *"Peripheral Artery Disease"*  
Topics in Cardiology Conference, Johns Hopkins Hospital
- 2014 *"Renal Denervation for Hypertension: Hope or Hype?"*  
Topics in Cardiology Conference, Johns Hopkins Hospital
- 2015 *"Renal Denervation: Fool's Gold or Diamond in the Rough?"*  
Cardiology Grand Rounds, Johns Hopkins Hospital
- 2016 *"New Concepts in Acute PCI Care: Do We Finish the Job or Just Treat the Culprit Lesion?"*  
Cardiovascular Disease Management, 4<sup>th</sup> Annual Symposium, Phoenix, AZ
- 2016 *"Update in CV Disease: A Case-Based Practicum"*  
Medstar Academic Half-Day, Franklin Square Hospital, Baltimore, MD
- 2017 *"Acute Coronary Syndromes: Reviewing evidence and clinical decision making"*  
Grand Rounds, Frederick Memorial Hospital
- 2017 *"High Risk PCI"*  
Cardiovascular Symposium at Suburban Hospital, Bethesda, MD
- National
- 2004 *"Anomalous Left Main Trunk from the Right Coronary Sinus: Coronary Angiography is No Longer the Gold Standard"*.  
Society of Cardiac Angiography and Interventions (SCAI) National Meeting, San Diego, CA
- 2014 *"Acute Coronary Syndromes: Making the Big One Smaller"*  
Society of Hospital Medicine (SHM) National Meeting, Las Vegas, Nevada
- 2014 *"Peripheral Artery Disease"*  
Society of Hospital Medicine (SHM) National Meeting, Las Vegas, Nevada
- 2014 *"Unstable Angina/NSTEMI: Managing Cardiac Risk Post-Rule Out and Post-MI"*  
Society of Hospital Medicine (SHM) National Meeting, Las Vegas, Nevada
- 2015 *"Advances in the Clinical Cardiology: From the Cardiac Catheterization Laboratory and Cardiac Pharmacy"*  
American Association of Cardiovascular and Pulmonary Rehabilitation National Meeting, Washington, DC
- International
- 2009 *"Intravascular Ultrasound Assessment of Atherosclerosis"*  
Grand Rounds, Eric Williams Medical Sciences Center, Trinidad and Tobago
- 2012 *"Peripheral Artery Disease"*  
Caribbean Cardiac Society Meeting, St. Lucia, West Indies
- 2013 *"Advances in Cardiovascular Medicine"*  
International Cardiac Symposium, St. Matthew's University, George Town, Cayman Islands
- 2013 *"Update in Trans-catheter Aortic Valve Replacement"*  
Caribbean Cardiac Society Meeting, Curacao
- 2015 *"Trans-catheter Aortic Valve Replacement for Severe Aortic Stenosis"*  
Frontiers in Medicine Symposia, Porto Alegre, Brazil
- 2015 *"Peripheral Artery Disease: The Cardiopath is Almost Always a Vasculopath...and Vice Versa"*  
Frontiers in Medicine Symposia, Porto Alegre, Brazil
- 2016 *"Percutaneous Coronary Intervention (PCI): Reviewing Evidence and Participating in the Therapeutic Choices"*  
Video-conference, Cardiology Symposium at Hospital Moinhos de Vento, Porto Alegre, Brazil
- 2017 *"Trans-catheter Aortic Valve Replacement"*  
Frontiers in Medicine Symposia, Porto Alegre, Brazil
- 2017 *"Contemporary Assessment of Coronary Ischemia"*  
Frontiers in Medicine Symposia, Porto Alegre, Brazil

