

Eric K. Lee, MD, PhD

Curriculum Vitae (12.2019)

Education

08.2019 – 07.2020

Brigham & Women's Hospital
Harvard University
Joint Reconstruction Fellowship



07.2014 – 06.2019

University of Michigan Medicine
Orthopaedic Surgery Resident



08.2007 – 06.2014

University of Pennsylvania
Doctor of Medicine



08.2009 – 11.2012

Doctor of Philosophy, Cellular Biology

08.2002 – 05.2006

University of Pennsylvania
Bachelor of Arts, Biochemistry, Magna Cum Laude

08.2004 – 06.2006

Masters of Science, Chemistry

Examinations

08.2009

USMLE Step 1 – Passed

02.2014

USMLE Step 2 CK/CS – Passed

02.2015

USMLE Step 3 - Passed

Medical Licensure

08.2019 – present

Massachusetts State Medical License - Active

08.2019 – present

Massachusetts State Controlled Substance License - Active

07.2014 – 06.2019

Michigan State Medical License

07.2014 – 06.2019

Michigan State Controlled Substance License

Professional Society Memberships

2014 – 2019

American Academy of Orthopaedic Surgeons
Assembly Delegate

2016 – 2019

Michigan Orthopaedic Society

2011 – 2014

American Physician Scientist Association
Penn Institutional Representative

2011 – 2014

Faculty of 1000
Associate Faculty Member for peer-reviewed research

Honors and Awards

2017	Orthopaedic Department Research Advisory Council
2016	Making a Difference Award Orthopaedic Resident Anatomy Curriculum
2013	John R. Stanley Research Award PhD Dissertation Award
2011-2013	Penn MD/PhD Steering Committee Student Representative
2002-2006	Penn Undergraduate University Scholar Distinction Sub-matriculation with Masters of Science

Sports Coverage Experience

6.2017	Monster Energy NASCAR Firekeepers Casino 400 Michigan International Speedway
6.2017	Xfinity NASCAR Michigan 250 Michigan International Speedway

Research Experience

2014 – present	Department of Orthopaedics, University of Michigan <ul style="list-style-type: none">- 5-year clinical outcomes of acetabular revisions- PROMIS scores as predictors of THA/TKA outcomes- Retrospective review of radiographic TAD parameters- Systematic Review/meta-analysis of acute TKA for distal femur fractures in the elderly
2009 – 2012	Abramson Cancer Center at University of Pennsylvania PhD Thesis Work <ul style="list-style-type: none">- Identified novel human melanoma-derived mutations- Developed an oncogenic melanoma mouse model by inactivating this gene- Demonstrated tumor suppressor function of this gene biochemically
2004-2007	Wistar Institute, Research Specialist <ul style="list-style-type: none">- Investigated role of inflammation in atherosclerosis- Performed aortic harvests from atherosclerotic mice- Maintained mouse colonies- Performed a wide array of biochemical/immunohistochemical experiments
1999-2002	Harvard Institutes of Medicine, Intern <ul style="list-style-type: none">- Independently maintained cell lines- Developed basic biochemical experimental skills

Published Peer-reviewed Articles

1. Cholok D1, **Lee E**, Lisiecki J, Agarwal S, Loder S, Ranganathan K, Qureshi AT, Davis TA, Levi B. Traumatic muscle fibrosis: From pathway to prevention. *J Trauma Acute Care Surg.* 2017 Jan;82(1):174-184.
2. Yoshida A, **Lee EK**, Diehl JA. Induction of Therapeutic Senescence in Vemurafenib-Resistant Melanoma by Extended Inhibition of CDK4/6. *Cancer Res.* 2016 May 15;76(10):2990-3002.
3. Lian Z, **Lee EK**, Bass AJ, Wong KK, Klein-Szanto AJ, Rustgi AK, Diehl JA. FBXO4 loss facilitates carcinogen induced papilloma development in mice. *Cancer Biol Ther.* 2015;16(5):750-5.
4. **Lee EK**, Lian Z, D'Andrea K, Letrero R, Sheng W, Liu S, Diehl JN, Pytel D, Barbash O, Schuchter L, Amaravaradi R, Xu X, Herlyn M, Nathanson KL, Diehl JA. The FBXO4 tumor suppressor functions as a barrier to BRAFV600E-dependent metastatic melanoma. *Mol Cell Biol.* 2013 Nov;33(22):4422-33.
5. **Lee EK**, Namdari S, Hosalkar HS, Keenan MA, Baldwin KD. Clinical results of the excision of heterotopic bone around the elbow: a systematic review. *J Shoulder Elbow Surg.* 2013 May;22(5):716-22.
6. Vaites LP, **Lee EK**, Lian Z, Barbash O, Roy D, Wasik M, Klein-Szanto AJ, Rustgi AK, Diehl JA. The Fbx4 Tumor Suppressor Regulates Cyclin D1 Accumulation and Prevents Neoplastic Transformation. *MCB.* 2011 Nov;31(22):4513-23.
7. **Lee EK** and Diehl JA. Breast cancer go sMAD: Cyclin towards aggressive phenotypes. *Cell Cycle.* 2011 Jan 15;10(2):187.
8. Barbash O*, **Lee EK***, Diehl JA. Phosphorylation-dependent regulation of SCFFbx4 dimerization and activity involves a novel component, 14-3-3ε. *Oncogene.* 2011 Apr 28;30(17):1995-2002. PMC3084329
9. Zhu L, Stalker TJ, Fong KP, Jiang H, Tran A, Crichton I, **Lee EK**, Neeves KB, Maloney SF, Kikutani H, Kumanogoh A, Pure E, Diamond SL, Brass LF. Disruption of SEMA4D ameliorates platelet hypersensitivity in dyslipidemia and confers protection against the development of atherosclerosis. *Arterioscler Thromb Vasc Biol.* 2009 Jul;29(7):1039-45.
10. Zhao L, **Lee E**, Zukas AM, Middleton MK, Kinder M, Acharya PS, Hall JA, Rader DJ, Puré E. CD44 expressed on both bone marrow-derived and non-bone marrow-derived cells promotes atherogenesis in ApoE-deficient mice. *Arterioscler Thromb Vasc Biol.* 2008 Jul;28(7):1283-9. Epub 2008 Apr 17. (No PMID)
11. Wang M, **Lee E**, Song W, Ricciotti E, Rader DJ, Lawson JA, Puré E, FitzGerald

GA. Microsomal prostaglandin E synthase-1 deletion suppresses oxidative stress and angiotensin II-induced abdominal aortic aneurysm formation. *Circulation*. 2008 Mar 11;117(10):1302-9.

12. Kothapalli D, Zhao L, Hawthorne EA, Cheng Y, **Lee E**, Puré E, Assoian RK. Hyaluronan and CD44 antagonize mitogen-dependent cyclin D1 expression in mesenchymal cells. *J Cell Biol*. 2007 Feb 12;176(4):535-44. PMC2063987

13. Zhao L, Hall JA, Levenkova N, **Lee E**, Middleton MK, Zukas AM, Rader DJ, Rux JJ, Puré E. CD44 regulates vascular gene expression in a proatherogenic environment. *Arterioscler Thromb Vasc Biol*. 2007 Apr;27(4):886-92.

*indicates co-authorship.

Publications in Process

1. 5-year Outcomes of Paprosky 3A/3B Acetabular Revisions with Highly Porous Tritanium Acetabular Cups. M. Masini. Submitted.
2. Predictors of Mental and Physical Well-being Using the PROMIS Global Health Scale. J. Maratt.
3. A Visual Alternative to TAD in Lag Screw Fixation of Intertrochanteric Fractures. M. Hake.
4. A Systematic Review of Distal Femur Fractures in the Elderly Treated with Acute TKA. A. Urquhart.

Presentations

2017	Poster Presentation - PROMIS Health Organization Annual Meeting PROMIS Global Health Scale in Patients Undergoing Total Joint Arthroplasty
2017	Case Conference - Primary TKA for Acute Tibial Plateau Fractures in the Elderly - Patellofemoral Arthroplasty
2016	- Primary TKA for Distal Femur Fractures in the Elderly
2012	Delaware Valley Orthopaedic Trauma Symposium Clinical Results of HO Excision Around the Elbow
2012	National MD/PhD Conference, Keystone, Colorado Model of Melanoma Mouse Model Poster Presentation
2010, 2012	Cold Spring Harbor Laboratories Mechanisms and Models of Cancer Poster Presentation

Research Grants

2010-2013

R25 Pharmacology of Cancer Signaling

Extracurricular Interests

Giant-scale radio-controlled war planes

NASCAR

World War II military history