Version: 9/18

CURRICULUM VITAE

NAME: **Luke James Engelking**
Assistant Professor of Internal Medicine & Molecular Genetics
Center for Human Nutrition
UT Southwestern Medical Center

ADDRESS: 5323 Harry Hines Blvd.
Dallas, Texas 75390-9046
Telephone (214) 648-2046
Telefax (214) 648-8804
E-mail: **luke.engelking@utsouthwestern.edu**

EDUCATION:

1996-2000	Texas A&M University	B.S.	Biochemistry and Genetics
2000-2007	UT Southwestern Medical School	M.D., Ph.D.	Biomedical Science

LICENSES & CERTIFICATION:

2009-2011	Massachusetts Board of Registration in Medicine – Medical License
2010-	Texas Medical Board – Medical License
2010-2020	American Board of Internal Medicine – Internal Medicine, Board Certified
2014-2024	American Board of Internal Medicine – Gastroenterology, Board Certified

PRINCIPAL POSITIONS HELD:

2007-2008	Massachusetts General Hospital	Intern	Internal Medicine
2008-2010	Massachusetts General Hospital	Resident	Internal Medicine
2010-2012	UT Southwestern Medical Center	Postdoctoral Fellow	Molecular Genetics
2012-2014	UT Southwestern Medical Center	Clinical Fellow	Gastroenterology
2014-	UT Southwestern Medical Center	Assistant Professor	Internal Medicine

OTHER POSITIONS HELD CONCURRENTLY:

2014-	UT Southwestern Medical Center	Assistant Professor	Molecular Genetics
2014-	University Hospitals	Associate Staff	Internal Medicine
2014-	Parkland Memorial Hospital	Attending Physician	Internal Medicine

HONORS AND AWARDS:

1996	American Association for Lutherans All-College Scholar
1999	Sigma Xi
1999	Gamma Sigma Delta Senior Merit Award, Texas A&M University
2000	College of Agriculture & Life Sciences Senior Merit Award, Texas A&M University
2000	University Honors, Texas A&M University
2000	University Undergraduate Research Fellow, Texas A&M University
2000	*Summa Cum Laude*, Texas A&M University
2000	Portz Scholar, National Collegiate Honors Council
2007	Alpha Omega Alpha Honor Medical Society
2012	AGA-Horizon Pharma Fellow Best Abstract Prize, Digestive Diseases Week
2014	Distinguished Researcher Award, President's Research Council, UT Southwestern

2014	Disease-Oriented Clinical Scholar Award, DOCS Program, UT Southwestern
2015	North American Gilead Sciences Research Scholars in Liver Disease Award
2016	Gurtner Memorial Lectureship, Washington University School of Medicine
2018	K Awardee Award, Central Society for Clinical and Translational Research

PROFESSIONAL ACTIVITIES – CLINICAL:

2014-	Attending Physician	Outpatient Endoscopy	Parkland Memorial Hospital (1 session/week)
2014-	Attending Physician	GI & Liver Clinic	Parkland Memorial Hospital (1 session/month)
2014-	Attending Physician	Inpatient GI consults	Parkland Memorial Hospital (4 weeks/year)

PROFESSIONAL ORGANIZATIONS:

2010-	American Gastroenterological Association, Member
2012-	Dallas County Medical Society, Member
2012-	Texas Medical Association, Member
2014-	American Society for Biochemistry and Molecular Biology, Member

SERVICE TO PROFESSIONAL PUBLICATIONS:

2013-	Ad hoc reviewer for *Journal of Lipid Research*
2016-	Ad hoc reviewer for *Journal of Biological Chemistry*
2016-	Ad hoc reviewer for *Proceedings of the National Academy of Sciences*
2016-	Ad hoc reviewer for *Nature Communications*
2017-	Ad hoc reviewer for *Cell Stem Cell*
2017-	Ad hoc reviewer for *Gastroenterology*
2018-	Ad hoc reviewer for *PLOS Biology*

KEYWORDS/AREAS OF INTEREST:

Metabolism, lipid, cholesterol, obesity, fatty liver, intestinal epithelia, mouse models

RESEARCH AND CREATIVE ACTIVITIES:

Research Support - Current

K08DK102652 (PI) 09/01/2014-06/30/2019
NIH National Institute of Diabetes and Digestive and Kidney Diseases
'SREBP-Mediated Lipid Regulation in the Intestine'

Disease-Oriented Clinical Scholar (DOCS) Award (PI) 09/01/2014-08/30/2018
UT Southwestern DOCS Program
'Molecular Regulation of Metabolism in the Intestine'

Research Support - Past

T32-DK-007745-16 (Ezra Burstein, PI) 07/01/2010 - 6/30/2012
NIH National Institute of Diabetes and Digestive and Kidney Diseases
Training Program in Gastroenterology

Distinguished Researcher's Award 05/20/2014-12/31/2015
UT Southwestern President's Research Council
'Regulation of Nutrient Metabolism in the Intestine'

N. American Gilead Sciences Research Scholars in Liver Disease Award 08/24/2015-08/23/2017
Gilead Sciences, Inc.
'Site-2 Protease and Fatty Liver Disease'

Research Support - Pending

NIH Research Project Grant R01 (PI)
NIH National Institute of Diabetes and Digestive and Kidney Diseases
'SREBP-mediated regulation of intestinal homeostasis' Submission 10/5/2018, under review

Individual Investigator Research Award (PI)
Cancer Prevention & Research Institute of Texas
'Lipid regulation of intestinal homeostasis and neoplasia' Submission 6/5/2018, under review

Clinical Trial Activities

NCT01728116 (Co-Investigator) 07/2014 - 06/2015
GI Dynamics, Inc.
'A Randomized, Multi-Center, Pivotal Efficacy and Safety Study Comparing the EndoBarrier Gastrointestinal Liner System vs. Sham for Glycemic Improvement in Inadequately Controlled Obese Type 2 Diabetic Subjects on Metformin and/or Sulfonylurea Anti-Diabetes Agents'

Peer Reviewed Publications

1. Braunagel, S. C., Guidry, P. A., Rosas-Acosta, G., **Engelking, L.**, & Summers, M. D. (2001). Identification of BV/ODV-C42, an Autographa californica nucleopolyhedrovirus orf101-encoded structural protein detected in infected-cell complexes with ODV-EC27 and p78/83. *J. Virol*., 75(24), 12331-12338.
2. **Engelking, L. J.**, Kuriyama, H., Hammer, R. E., Horton, J. D., Brown, M. S., Goldstein, J. L., & Liang, G. (2004). Overexpression of Insig-1 in the livers of transgenic mice inhibits SREBP processing and reduces insulin-stimulated lipogenesis. *J. Clin. Invest.*, 113(8), 1168-1175.
3. Kuriyama, H., Liang, G., **Engelking, L. J.**, Horton, J. D., Goldstein, J. L., & Brown, M. S. (2005). Compensatory increase in fatty acid synthesis in adipose tissue of mice with conditional deficiency of SCAP in liver. *Cell Metab.*, 1(1), 41-51.
4. **Engelking, L. J.**, Liang, G., Hammer, R. E., Takaishi, K., Kuriyama, H., Evers, B. M., Li, W.P., Horton, J.D., Goldstein, J.L. & Brown, M. S. (2005). Schoenheimer effect explained–feedback regulation of cholesterol synthesis in mice mediated by Insig proteins. *J. Clin. Invest*., 115(9), 2489-2498.
5. **Engelking, L. J.**, Evers, B. M., Richardson, J. A., Goldstein, J. L., Brown, M. S., & Liang, G. (2006). Severe facial clefting in Insig-deficient mouse embryos caused by sterol accumulation and reversed by lovastatin. *J. Clin. Invest*., 116(9), 2356-2365.
6. **Engelking, L. J.***, McFarlane, M. R., Li, C. K., & Liang, G. (2012). Blockade of cholesterol absorption by ezetimibe reveals a complex homeostatic network in enterocytes. *J. Lipid Res.*, 53(7), 1359-1368. * corresponding author
7. McFarlane, M.R., Liang, G., **Engelking, L.J.** (2014). Insig proteins mediate feedback inhibition of cholesterol synthesis in the intestine. *J. Biol. Chem.* 289(4):2148-56.
8. McFarlane, M.R., Cantoria, M.J., Linden, A.G., January, B.A., Liang, G., **Engelking, L.J**. (2015). Scap is required for sterol synthesis and crypt growth in intestinal mucosa. *J. Lipid Res.* 56(8):1560-71.
9. Hwang, S., Hartman, I.Z., Calhoun, L.N., Garland, K., Young, G.A., Mitsche, M.A., McDonald, J., Xu, F., **Engelking, L**., DeBose-Boyd, R.A. (2016) Contribution of Accelerated Degradation to

Feedback Regulation of 3-Hydroxy-3-methylglutaryl Coenzyme A Reductase and Cholesterol Metabolism in the Liver. *J Biol Chem.* 291(26):13479-94.

10. Hwang, S., Nguyen, A.D., Jo, Y., **Engelking, L.J.**, Brugarolas, J., DeBose-Boyd, R.A. (2017) Hypoxia-inducible factor-1α activates insig-2 transcription for degradation of HMG CoA reductase in the liver. *J Biol. Chem*. 292(22):9382-9393.
11. **Engelking, L.J.***, Cantoria, M.J., Xu, Y., Liang, G. (2017) Developmental and extrahepatic physiological functions of SREBP pathway genes in mice. *Semin. Cell Dev. Biol.* pii: S1084-9521(17)30289-6. doi: 10.1016/j.semcdb.2017.07.011. * corresponding author
12. Rong, S., McDonald, J., **Engelking, L.** (2017) Cholesterol auxotrophy and intolerance to ezetimibe in mice with SREBP-2 deficiency in the intestine. *J. Lipid Res.* 58(10)-1988-1998.
13. Linden, A.G., Li, S.L., Choi, H.Y., Fang, F., Fukasawa, M., Uyeda, K., Hammer, R.E., Horton, J.D., **Engelking, L.J.***, and Liang, G. (2018) Interplay between ChREBP and SREBP-1c coordinate postprandial glycolysis and lipogenesis in livers of mice. *J. Lipid Res.* 59(3):475-487.* co-corresponding author

Proceedings of Meetings

1. **Engelking, L.J.**, Liang, G., McFarlane, M.R., Li, C. (2012). 1102 Pharmacologic blockage of cholesterol absorption with ezetimibe reveals a novel homeostatic network in enterocytes. *Gastroenterology*, 142(5), S-199.
2. **Engelking, L.J.**, Liang, G., McFarlane, M.R., Li, C. (2013). 942 Insig-Mediated Regulation of Intestinal Lipogenesis. *Gastroenterology*, 144(5), S-169.
3. **Engelking, L.J.**, McFarlane, M.R. (2014). 580 Ezetimibe modulates endogenous LXR ligands to Regulate intestinal LDLR receptors via IDOL. *Gastroenterology*, 146(5), S-108.
4. Rong, S.R., Horton, J.D., **Engelking, L.J.** Dietary Cholesterol Supplementation is essential for the Survival of Intestinal SREBP-2 Deficient Mice. Kern Lipid Conference 2016.
5. Xu, X., Calderon, R., **Engelking, L.J.** Site-2 protease and non-alcoholic fatty liver disease. CSCTR-MWAFMR Annual Meeting 2018.
6. **Engelking, L.J.**, Li, S., Linden, A.G., Horton, J.D., Liang, G. (2018). 1-Interplay between CHREBP and SREBP-1c Coordinates Postprandial Hepatic Glycolysis and Lipogenesis. *Gastroenterology*, 154(6), S-1.
7. Xu, X., Calderon-Rodriguez, A., **Engelking, L.J.** (2018). Site-2 protease controls hepatic lipogenesis and PNPLA3 expression, key determinants of non-alcoholic fatty liver disease. Gilead Research Scholars 10th Anniversary Conference 2018.
8. Xu, X., Calderon-Rodriguez, A., **Engelking, L.J.**. (2018). Ablation of Site-2 protease reduces hepatic lipogenesis. Kern Lipid Conference 2018.