

**EAST TENNESSEE STATE UNIVERSITY
JAMES H. QUILLEN COLLEGE OF MEDICINE
SUMMARY OF SCHOLARLY ACTIVITIES
DEPARTMENT OF SURGERY**

July 1, 2015 through June 30, 2016

I. PUBLICATIONS

A. Journal Publications

Elder MJ, Webster SJ, Williams DL, Gaston JSH, Goodall JC. TSLP production by dendritic cells is modulated by IL-1 β and components of the endoplasmic reticulum stress response. *European Journal of Immunology*, 46: 455-463, 2016.

Gao M, Wang X, Zhang X, Ha T, Ma H, Liu L, Kalbfleisch JH, Gao X, Kao RL, Williams DL, Li C. Attenuation of Cardiac Dysfunction in Polymicrobial Sepsis by MicroRNA-146a Is Mediated via Targeting of IRAK1 and TRAF6 Expression. *Journal of Immunology* 195(2):672-682, 2015.

Hadebe S, Kirstein F, Fierens K, Chen K, Drummond RA, Vautier S, Sajaniemi S, Murray G, Williams DL, Redelinguys P, Reinhard TA, Fallert Junecko BA, Kolls JK, Lambrecht BN, Brombacher F, Brown GD. Microbial Ligand Costimulation Drives Neutrophilic Steroid-Refractory Asthma. *PLoS ONE*, 10(8): 30134219, 2015.

Heinsbroek SEM, Williams DL, Welting O, Meijer SL, Gordon S, de Jonge WJ. Orally delivered β -glucans aggravate dextran sulfate sodium (DSS)-induced intestinal inflammation. *Nutrition Research* 35(2015): 1106-1112; 2015.

Lu C, Wang X, Ha T, Hu Y, Liu L, Zhang X, Yu H, Miao J, Kao R, Kalbfleisch J, Williams D, Li C. Attenuation of cardiac dysfunction and remodeling of myocardial infarction by microRNA-130a is mediated by suppression of PTEN and activation of PI3K dependent signaling. *Journal of Molecular and Cellular Cardiology*, 89 (Pt A): 87-97, 2015. PMC4689647

Noss I, Ozment TR, Graves BM, Kruppa MD, Rice PJ, Williams DL. Cellular and molecular mechanisms of fungal β -(1 \rightarrow 6)-glucan in macrophages. *Innate Immunity*, 21(7):759-769, 2015.

She X, Calderone R, Kruppa M, Lowman D, Williams D, Zhang L, Gao Y, Khamooshi K, Liu W, Li D. Cell Wall N-Linked Mannoprotein Biosynthesis Requires Go α 1p, a Putative Regulator of Mitochondrial Complex I in *Candida albicans*. *PLOS One* 11(1):e0147175, 2016.

Skibba AA, Evans JR, Hopkins SP, Yoon R, Katras T, Kalbfleisch JH, Rush DS. JVS: Re-think Current Practice Guidelines for AAA Intervention. *Vascular Specialist* 11(12):14-16 , 2015.

B. Books or Chapters

C. Proceedings

II. PAPERS, ABSTRACTS, AND/OR PRESENTATIONS

A. Regional and National

Alexander C, Ramseyer M, Beatty J. Missed Extravasation Injury From Peripheral Infusion of Norepinephrine Resulting in Forearm Compartment Syndrome and Amputation. Poster presented at the Southeastern Surgical Congress, Feb. 21-24, 2016, Atlanta, GA.

Banach A, Wienczkowski J, Albalbissi A, Ozment TR, Kalbfleisch J, Moorman J, Williams DL. Scavenger Receptor A Expression is Increased in Septic Patients. Poster presented at 2016 Appalachian Student Research Forum, April 6-7, 2016, Johnson City, TN.

Guthrie M, Graves B, Williams D, Ozment T. Toll Like Receptor 4 stimulation increases scavenger receptor A expression on murine macrophages. Poster presented at 2016 Appalachian Student Research Forum, April 6-7, 2016, Johnson City, TN.

Hart S, Beatty J. Latrogenic and Traumatic Injury of the Gallbladder: A Two Patient Series. Poster presented at Southeastern Surgical Congress, Feb. 20-23, 2016, Atlanta, GA.

Hu Y, Wang X, Ha T, Kalbfleisch J, Kao R, Williams D, Li C. Poly (i:c) Attenuates Myocardial I/R injury Via Glycolytic Dependent Yap Activation and by Suppression of Mir-143. Abstract submitted to AHA BCVS 2016 meeting.

Kruppa M, Kwofie K, Lowman D, Rosler B, Graves B, Rice P, Greene R, van de Veerdonk F, Netea M, Williams D. *C. Albicans* Yeast and Hyphal Mannans: High Affinity Interactions with Human Dectin-2 and Induction of TH17-Cytokines (IL-17, Il-22) in Human PBMCS. Abstract submitted to 2016 American Society for Microbiology Candida and Candidiasis Annual Meeting, Seattle, WA.

Li C, Williams D, Lowman D, Kruppa M, Calderone R. Cell wall synthesis, Mitochondrial complex one subunits and signal transduction. Abstract submitted to 2016 American Society for Microbiology Candida and Candidiasis Annual Meeting, Seattle, WA.

Li C, Wang X, Ha T, Hu Y, Ma H, Kalbfleisch J, Kao R, Williams D. MicroRNA-125B preserves cardiac function in polymicrobial sepsis by targeting TRAF6 and P53 mediated apoptotic signaling. Abstract accepted for presentation to 8th Congress of the International Federation of Shock Societies, Tokyo, Japan.

Ozment TR, Banach A, Wienszkowski J, Albalbissi A, Moorman J, Kalbfleisch J, Williams D.

Blood Monocyte Scavenger Receptor A (CD204) Expression is Increased in Septic Patients. Poster presentation to the 39th Shock Society Annual Meeting, June 11-14, 2016, Austin TX.

Pham H, Taylor M, Rush D. Percutaneous Treatment of SFA Stenosis Secondary to Radiation Arteritis. Poster presented to Southeastern Surgical Congress, Feb 2-23, 2016, Atlanta, GA.

Prior D, Joyner A, Beatty J. Abdominoperineal Resection as Salvage Treatment for Severe Blunt Anorectal Trauma Resulting from a Mining Accident. Poster presented at Southeastern Surgical Congress, Feb. 20-23, 2016, Atlanta, GA.

Ramos T, Beatty J. Pancreas transplant necrosis causes hemorrhagic shock. Posted accepted for presentation at Southeastern Surgical Congress, Feb. 20-23, 2016, Atlanta, GA.

Ramos T, Rush D, Skibba A, Evans J, Hopkins S.P., Yoon, H.R. Endovascular Repair of Pseudoaneurysms Following Open Aorto-Iliac Operation. Oral presentation given at Tennessee ACS Meeting, July 31-Aug 2, 2016, Knoxville, TN.

Ramos T, Beatty J. Multiple Fistulas. Oral presentation given at Clinical Congress of the American College of Surgeons, Oct. 4-8, 2016, Chicago, IL.

Ramseyer M, Rush D. Axillary Artery Aneurysm Presenting In Upper Extremity Ischemia. Poster Presented at Southeastern Surgical Congress, Feb. 20-23, 2016, Atlanta, GA.

Taylor M, Ramos T, Beatty J. Subacute necrotizing cholecystitis masquerading as malignancy – an unusual clinical and radiographic presentation. Poster presented at Southeastern Surgical Congress, Feb. 20-23, 2016, Atlanta, GA.

Vance J, Scharfstein B. A Rare Cause of Bowel Obstruction, an Incarcerated Obturator Hernia: A Case Report. Accepted as Poster presentation at Southeastern Surgical Congress, Feb. 20-23, 2016, Atlanta, GA.

Wang X, Ha T, Hu Y, Ma H, Zhang X, Zheng Z, Kalbfleisch J, Kao R, Williams D, Li C. MicroRNA-125B Preserves Cardiac Function in Polymicrobial Sepsis by Targeting TRAF6 and P53 Mediated Apoptotic Signaling. Poster presentation to the 39th Shock Society Annual Meeting, June 11-14, 2016, Austin TX.

Wang X, Hu Y, Ha T, Ma H, Liu L, Kalbfleisch J, Kao R, Williams D, Li C. Toll-like Receptor 3 is Required for Neonatal Heart Repair and Regeneration Following Myocardial Infarction Via Glycolysis Dependent Yap/taz Activation. Poster presented at American Heart Association Scientific Sessions, Nov. 7-11, 2015, Orlando, Florida.

Wang X, Hu Y, Ha T, Kalbfleisch J, Kao R, Williams D, Li C. TLR3 Mediates Neonatal Heart Repair and Regeneration through Glycolysis-Dependent YAP/TAZ mediated miR-152 expression. Abstract submitted to AHA BCVS 2016 Meeting.

Zhang X, Zheng Z, Ma H, Wang X, Ha T, Hu Y, Kalbfleisch J, Kao R, Williams D, Li C. Glycolytic Metabolism Contributes to Septic Cardiomyopathy Involving Regulation of mitochondrial Function and Apoptosis. Poster presentation to the 39th Shock Society Annual Meeting, June 11-

14, 2016, Austin TX.

Zhang X, Wang X, Ha T, Liu L, Ma H, Kalbfleisch J, Kao R, Williams D, Li C. Exosomes Loaded with Microrna-126 Prevents Sepsis-Induced Cardiac Dysfunction in Endothelial Cell Hspa12b Deficient Mice. Poster presented at American Heart Association Scientific Sessions, Nov. 7-11, 2015, Orlando, Florida.

B. International

III. INVITED PRESENTATIONS

A. Grand Rounds

B. National or International Meetings

IV. OTHER

National and International Peer-review Committees

2

Journal Reviewers:

4

V. VISITING PROFESSORS

IV. OTHER

VI. EXTRAMURAL FUNDING

Number of PI's on Funded Grants: 2

VI EXTRAMURAL FUNDING

Peer Review (NIH, AHA, etc.)

Faculty	Agency	Project Period	Current Year Award	Total Award
Li	NIH-R01 ¹	7/1/14 – 6/30/18	365,000.00	\$1,460,000.00
Williams	NIH-R01 ²	12/1/14 – 11/30/16	1 Yr Unfunded Extension	
Li & Williams	NIH-R01 ³	1/1/15-12/31/16	\$210,000 DC \$96,600 IC	\$1,226,400.00
Williams & Sherwood ⁴	NIH-R01	4/1/16-1/31/20	465,001 DC 102,589 IC	\$2,193,405
Total Funding Received				
Total for Multi-Year Commitments				

¹Li, C. Role of Toll-Like Receptor Signaling in Cardiac Ischemia. NIH-R01HL071837-09A1, Total Award: \$1,460,000.

²Williams, DL. Amelioration of Sepsis in Macrophage Activation.

³Li & Williams, Co-PIs. Innate Immunity and Cardiovascular

⁴Williams & Sherwood. Training innate immunity. 1R01 GM119197-01

Other Sponsored Activities – Current (Chair of Carroll Long, RDC, etc.)

Faculty	Agency	Project Period	Current Year Award	Total Award
D.L. Williams	NIH – U. New Mexico*	5/15/15 – 4/30/17	DC \$32,278 IC \$14,848	\$94,252
D.L. Williams	Corixa – d.b.a. GSK	10/1/14 – 9/30/20	DC \$400,238 IC \$184,109	\$3,674,406
Total Funding Received				
Total for Multi-Year Commitments				

*Nano and Microscale Molecular Machines for Innate Immune Sensing of Candida (Consortium

Agreement) with Aaron Neumann of Univ. of New Mexico.

VII PENDING EXTRAMURAL APPLICATIONS

(Means proposed but unfunded.)

Faculty	Agency	Project Period	Current Year Award	Total Award
Xiaohui Wang	AHA – Graduate fellowship	6/1/16 – 5/31/18	\$26,000	\$52,000
D.L. Williams	NIH ¹	7/1/16-6/30/17	127,430.00	127,430.00
C. Li	NIH ¹	7/1/16-6/30/17	38,229.00	38,229.00
RL Kao	NIH R15	7/1/16 – 6/30/19	\$150,368	\$444,000
RL Kao	AHA	7/1/16-6/30/18	77,000	154,000
R.L. Kao	NIH R15*	9/1/16 – 8/31/19	141,001	\$425.845
Total Funding Received				
Total for Multi-Year Commitments				

*Innate Immunity in Stroke

¹Equipment supplement request for a BD LSR Fortessa Flow Cytometer