Mohamed A. Saleh, B.Pharm., M.Sc., Ph.D.

Associate Professor of Pharmacology & Toxicology

Faculty of Pharmacy, Mansoura University, Mansoura, Egypt 35516

+20 12 22 688 422 (Cell)
dr_saleh77@yahoo.com
saleh133@mans.edu.eg

1) EDUCATION

B.Sc. of Pharmacy (B.Pharm.), 2000
Faculty of Pharmacy, Mansoura University, Mansoura, Egypt

M.Sc. in Pharmacology & Toxicology, 2004
Department of Pharmacology and Toxicology, Faculty of Pharmacy, Mansoura University, Mansoura, Egypt

Ph.D. in Biomedical Sciences (December, 10th 2010):
Department of Pharmacology and Toxicology, Augusta University, Augusta, Georgia, USA

2) LICENSES

Registered Pharmacist (Egypt), 2000-Present.

3) ACADEMIC RESEARCH EXPERIENCE

Master Science Research, Mentor: Shehta A. Said, Ph.D. and Nariman Gameil, Ph.D, 2001-2004

Department of Pharmacology and Toxicology, Faculty of Pharmacy, Mansoura University.
Vascular dysfunction in diabetes: I investigated the role of glycated hemoglobin and advanced glycation end-products in STZ-induced type I diabetes.

Doctoral Research, Mentor: David M. Pollock Ph.D., 2006-2010

Department of Pharmacology and Toxicology, Augusta University, Augusta, Georgia, USA.
1- Investigating the role of ET-1 in chronic kidney diseases as diabetic nephropathy.
2- Investigating the role of ET-1 and its receptors (ET_A and ET_B) in glomerular inflammation and permeability in normal and diabetic kidneys.

Post-Doctoral Research, Mentor: David M. Pollock Ph.D., 2010-2011
Department of Pharmacology and Toxicology, Augusta University, Augusta, Georgia, USA.
Renal medullary circadian clock genes in endothelin B deficient rats.

Post-Doctoral Research, Mentors: Meenakshi S. Madhur, M.D., Ph.D. and David G. Harrison, M.D., 2012-2016
Division of Clinical Pharmacology, Vanderbilt University Medical Center, Nashville, Tennessee, USA
1- Investigating the link between LNK, lymphocyte adaptor protein and aortic/renal inflammation in angiotensin II-induced hypertension.
2- Characterization of Cytotoxic Tc17 Cells and Genetics of Interleukin-17 in Hypertension

4) WORK & RESEARCH EXPERIENCE

1- Registered Pharmacist, 2000-2001
Work in retail pharmacy, Port Said, Egypt

2- Hospital Pharmacist, 2001-2002
El-Nasr Hospital, Port Said, Egypt

3- Demonstrator of Pharmacology and Toxicology, 2000-2004
Department of Pharmacology & Toxicology, Mansoura University, Mansoura, Egypt

4- Instructor of Pharmacology and Toxicology, 2004-2006
Department of Pharmacology & Toxicology, Mansoura University, Mansoura, Egypt

5- Ph.D. Graduate Student, 2006-2010
Department of Pharmacology & Toxicology, Augusta University, Augusta, Georgia, USA

6- Post-Doctoral Fellow, 2010-2011
Mentor: David M. Pollock, Ph.D.
Vascular Biology Centre, Augusta University, Augusta, Georgia, USA

7- Assistant Professor, 2011-2016
Department of Pharmacology and Toxicology, Faculty of Pharmacy, Mansoura University, Mansoura, Egypt

8- Post-Doctoral Fellow, 2012-2016
Mentors: Meenakshi S. Madhur, M.D., Ph.D. and David G. Harrison, M.D.
Division of Clinical Pharmacology, Vanderbilt University Medical Center, Nashville, Tennessee, USA

9- Associate Professor, 26th September 2016 – Present.
Department of Pharmacology and Toxicology, Faculty of Pharmacy, Mansoura University, Mansoura, Egypt

5) RESEARCH GRANTS

1- Egyptian Government Scholarship Award (2006-2010). Egyptian Government Scholarship Award to obtain Ph.D. degree from Augusta University (August 2006- August 2010), $23,000 per year.

2- American Heart Association - Great Southeast Affiliate Pre-Doctoral Fellowship (2009-2011).
$21,770 per year.
09PRE2050253 (**Mohamed A. Saleh**) 07/01/2009 – 6/30/2011
AHA South East Affiliate Pre-Doctoral Fellowship
Role of ET-1 in Glomerular Inflammation and Glomerular Permeability in Normal and Diabetic Kidneys
Role: Principal Investigator.

3- American Heart Association – Great Southeast Affiliate Post-Doctoral Fellowship (2014-2016).
$44,550 per year
14POST20420025 (**Mohamed A. Saleh**) 07/01/2014 – 06/30/2016
AHA South East Affiliate Post-Doctoral Fellowship
Differential Roles for Interleukin 17A and F in Hypertension
Role: Principal Investigator.

6) SCIENTIFIC SOCIETES

American Physiological Society (APS), 2007-present.
American Heart Association (AHA), 2007-present.
American Association for the Advancement of Science (AAAS), 2007-2009.
American Society of Pharmacology and Experimental Therapeutics (ASPET), 2008-2010

7) TEACHING EXPERIENCE

1- Demonstrating Pharmacology, Toxicology, Physiology, and Biostatistics (laboratory experiments) to undergraduate students at Faculty of Pharmacy, Mansoura University, Egypt (2000-2006).
2- Teaching Pharmacology course to dental undergraduate students at Faculty of Dentistry, Mansoura University, Egypt (2011 and 2012).
3- Teaching Physiology, Pharmacology, Toxicology and Forensic Chemistry and Biophysics to clinical undergraduate students at Faculty of Pharmacy, Mansoura University, Egypt – Clinical Program (2011 and 2012).
4- Teaching Receptor Theory Class (PHAR 324) to biomedical graduate students at Graduate School, Vanderbilt University, Nashville, Tennessee, USA (Summer 2015).
5- Teaching Facilitating Open Communication to Understand Science class (FOCUS) to biomedical graduate students at Graduate School, Vanderbilt University, Nashville, Tennessee, USA (Fall 2015).
6- Teaching Advanced Pharmacotherapy-II for PharmD students at Faculty of Pharmacy, Mansoura University, Egypt (Fall 2016).
7- Teaching Biophysics course for undergraduate students, Faculty of Pharmacy, Horus University, New Damietta, Egypt (Fall 2016).
8- Teaching Physiology, Clinical Physiology, Therapeutics and Pharmacology for undergraduate students at Faculty of Pharmacy, Mansoura University, Mansoura, Egypt (Fall 2016).
7- In addition, I established a new series of conferences for my pharmacy students. I took the main responsibility to organize the First Conference for Pharmacy Students (held in March 2012, Faculty of Pharmacy, Mansoura University).
I am currently organizing the Fifth Conference for Pharmacy Students (November 2016).
8- Vice-President for the Research and Teaching Quality Control Unit at Faculty of Pharmacy, Mansoura University, Mansoura, Egypt. (2011-2012).

8) THESIS/DISSERTATION MENTORSHIP:

1- Co-mentor on the PhD Dissertation for Dr. Manar Ahmed Gamal.
Title: The Effect of Green Tea Extract on Liver Fibrosis (Experimental Study)
The Department of Pharmacology and Toxicology, Faculty of Pharmacy, Mansoura University, EGYPT (2012-2015).

9) INVITED PRESENTATIONS

1- **Mohamed A. Saleh**, Erika I. Boesen, Jennifer S. Pollock and David M. Pollock. Chronic ETA Receptor Blockade Attenuates Expression of Inflammatory Mediators in Diabetic Rats. Experimental Biology Meeting, San Diego, CA (2008) (Oral Presentation).

2- **Mohamed A. Saleh**, David I. Stevens, David M. Pollock, Jennifer S. Pollock. Free radical scavenging decreases endothelin-1 (ET-1) excretion and glomerular permeability during diabetes. Experimental Biology Meeting, Anaheim, CA (2011) (Oral Presentation).

3- **Mohamed A. Saleh**, David G. Harrison and Meena S. Madhur. Deficiency of Lymphocyte-Specific Adaptor Protein, LNK, Exacerbates Angiotensin II-Induced Hypertension and Inflammation. High Blood Pressure Research Council. New Orleans, LA (2013) (Oral Presentation).

4- **Mohamed A. Saleh**, William G. McMaster, Samuel A. Funt, Salim R. Thabet, Jing Wu, Liang Xiao, Allison E. Norlander, Wei Chen, Hana A. Itani, Tianxiao Huan, Daniel Levy, David G. Harrison, Meena S. Madhur. Deficiency of LNK (SH2B3) Promotes Hypertension and Renal/Vascular Inflammation. Vanderbilt University Medical Center Post-Doctoral Association and Shared Resources Symposium (2014). First Place Award (Oral Presentation).

5- **Mohamed A. Saleh**, William G. McMaster, Samuel A. Funt, Salim R. Thabet, Jing Wu, Liang Xiao, Allison E. Norlander, Danielle Michell, Annet Kirabo, Wei Chen, Hana A. Itani, Tianxiao Huan, Daniel Levy, David G. Harrison, Meena S. Madhur. Deficiency of LNK (SH2B3) Promotes Hypertension and Renal/Vascular Inflammation. Fifth International Society of Hypertension (ISH) New Investigator Symposium on Hypertension and Cardiovascular Disease. San Francisco, CA (2014) (Oral Presentation).

6- **Mohamed A. Saleh**, Allison E. Norlander, David G. Harrison and Meena S. Madhur. Distinct and overlapping roles of cytokines IL-17A and IL-17F in angiotensin II-induced hypertension and end-organ injury. Council on Hypertension Scientific Sessions. Washington D.C. (2015) (Oral Presentation).

10) HONORS AND AWARDS

1- 28th Southeastern Pharmacology Society, Poster-Presentation Winner-3rd place (2007).
2- APS Travel Award- Experimental Biology Meeting (2008).
3- The Department of Pharmacology Annual Graduate Student Research Award -2nd place (2008).
4- Caroline Tum Suden/Frances A. Hellebrandt Professional Opportunity Award- Experimental Biology Meeting (2009).
5- ASPET Travel Award - Experimental Biology Meeting (2009).
6- The Department of Pharmacology Annual Graduate Student Research Award-3rd place (2009).

7- Water and Electrolyte Homeostasis (WEH) Travel Award - Experimental Biology Meeting (2010).
8- Water and Electrolyte Homeostasis (WEH) Oral Presentation Award - Experimental Biology Meeting (2010).
9- Finalist for the 2010 Renal Section Pre-Doctoral Excellence in Renal Research Award - Experimental Biology Meeting (2010).
10- Award of Excellence in Research – Graduate Research Day, Georgia Regents University, Augusta, GA (2010).
11- O'Brien Fellowship in Indiana Center for Biological Microscopy, Indiana University-Purdue University Indianapolis, IN (2010).
12- Who's Who Among Students in American Universities and Colleges for 2011.
13- Finalist for the 2011 Renal Section Pre-Doctoral Excellence in Renal Research Award - Experimental Biology Meeting (2011).
14- Ranked First abstract submitted to Vanderbilt University Medical Center Post-Doctoral Association and Shared Resources Symposium (2014). First Place Award and Orally Presented.
15- Mansoura University Award for Scientific Publications (2012, 2013, 2014, 2015).

11) SCHOOLS and TRAINING POGRAMS

1- Sixth Hypertension Summer School, Fort Collins, CO July 2007.
2- American Physiological Society (APS) Presentation Skill Training Program, Orlando, FL, January 2008.
3- Training on Intravital Microscopy in the Kidney: O'Brien Fellowship in Indiana Center for Biological Microscopy, Indiana University-Purdue University Indianapolis, IN October 1st, 2010-October 29th 2010.
4- APS Scientific Writing Training Program, Orlando, FL, January 2011.
5- Faculty Administration (2012), Decision Making (2012) and Time Management (2016) Workshops at Faculty of Pharmacy, Mansoura University, Mansoura, Egypt.

12) PUBLICATIONS

I) ABSTRACTS:

1- **Mohamed A. Saleh**, Erika I. Boesen, Jennifer S. Pollock and David M. Pollock. Chronic ET_A receptor blockade attenuates expression of inflammatory mediators in diabetic rats. 28th Southeastern Pharmacology Society (SEPS), Augusta, GA (2007).

2- **Mohamed A. Saleh**, Erika I. Boesen, Jennifer S. Pollock and David M. Pollock. Evidence that endothelin (ET) directly contributes to glomerular inflammation in a rat

model of type 1 diabetes. Nexus Meeting on Diabetes and Kidney, Dublin, Republic of Ireland. (2008).

3- **Mohamed A. Saleh**, Daisuke Nakano, Erika I. Boesen, Jennifer S. Pollock and David M. Pollock. ET-1 directly increases glomerular and systemic expression of inflammatory mediators independently of blood pressure in rats. The 62nd Council of High Blood Pressure, Atlanta, GA (2008).

4- **Mohamed A. Saleh**, Erika I. Boesen, Jennifer S. Pollock and David M. Pollock. Chronic ET_A Receptor Blockade Attenuates Expression of Inflammatory Mediators in Diabetic Rats. Experimental Biology Meeting, San Diego, CA (2008).

5- Victor Vitorino Lima, Fernanda R.C. Giachini, Fernando S. Carneiro, Zidonia N. Carneiro, **Mohamed A. Saleh**, David M. Pollock, R. Clinton Webb and Rita C. Tostes Augmented vascular reactivity induced by ET-1 is associated with increased O-GlcNAcylation. Experimental Biology Meeting, New Orleans, LA (2009).

6- **Mohamed A. Saleh**, Jennifer S. Pollock, Virginia J. Savin and David M. Pollock. ET_A receptor dependent increases in glomerular permeability in experimentally induced diabetic rats. Experimental Biology Meeting, New Orleans, LA (2009).

7- **Mohamed A. Saleh**, Jennifer S. Pollock, Virginia J. Savin and David M. Pollock. Endothelin (ET-1) increases albumin permeability of isolated rat glomeruli. Montreal, Canada (2009).

8- **Mohamed A. Saleh**, Jennifer S. Pollock, Virginia J. Savin and David M. Pollock. Endothelin (ET-1) induces glomerular inflammation and increases glomerular permeability to albumin *via* the ET_A receptor in the rat. The 63rd Council of High Blood Pressure, Chicago, IL (2009).

9- Ahmed A. Elmarakby, **Mohamed A. Saleh**, Mahmood S. Mozaffari, Jennifer C. Sullivan. Reno-protective mechanisms of hemeoxygenase-1 induction in diabetic spontaneously hypertensive rats. The 63rd Council of High Blood Pressure, Chicago, IL (2009).

10- **Mohamed A. Saleh**, David I. Stevens, David M. Pollock, Jennifer S. Pollock. Free radical scavenging decreases endothelin-1 (ET-1) excretion and glomerular permeability during diabetes. Experimental Biology Meeting, Anaheim, CA (2010).

11- **Mohamed A. Saleh**, Jennifer S. Pollock and David M. Pollock. Differential Effects of Endothelin A and B receptor antagonism on diabetes-induced proteinuria, glomerular permeability, and inflammation. Experimental Biology Meeting, Anaheim, CA (2010).

12- Ahmed A. Elmarakby, Jessica Faulkner, **Mohamed A. Saleh**, Jennifer C. Sullivan. Induction of hemeoxygenase-1 reduces glomerular injury and apoptosis in diabetic spontaneously hypertensive rat. The 64th Council of High Blood Pressure, Washington, D.C. (2010).

13- **Mohamed A. Saleh**, Ruben M. Sandoval, George J. Rhodes, Sil*via* B. Campos, Bruce A. Molitoris, David M. Pollock. Increased proximal tubular uptake prevents albuminuria in chronic endothelin-1-infused rats as determined by intravital 2-photon microscopy. Experimental Biology Meeting, Washington, D.C. (2011).

14- Joshua S. Speed, **Mohamed A. Saleh** and David M. Pollock. Renal Medullary Circadian Clock Genes are Altered in Endothelin B Deficient Rats. Experimental Biology Meeting, San Diego, CA (2012).

15- **Mohamed A. Saleh**, David G. Harrison and Meena S. Meenakshi. Lymphocyte-specific adaptor protein, LNK, inhibits angiotensin II-induced hypertension and inflammation. Experimental Biology Meeting, Boston, MA (2013).

16- William G. McMaster, **Mohamed A. Saleh**, Hana A. Itani, David G. Harrison, Meena S. Madhur. Loss of lymphocyte-specific adaptor protein, LNK, aggravates endothelial dysfunction in angiotensin II-induced hypertension. Experimental Biology Meeting, San Diego, CA (2014).

17- Allison E. Norlander, **Mohamed A. Saleh**, David G. Harrison, and Meena S. Madhur. Interleukin 17A induces renal SGK1 expression in hypertension. Experimental Biology Meeting, San Diego, CA (2014).

18- **Mohamed A. Saleh**, William G. McMaster, Samuel A. Funt, Salim R. Thabet, Jing Wu, Liang Xiao, Allison E. Norlander, Danielle Michell, Annet Kirabo, Wei Chen, Hana A. Itani, Tianxiao Huan, Daniel Levy, David G. Harrison, Meena S. Madhur. Deficiency of LNK (SH2B3) Promotes Hypertension and Renal/Vascular Inflammation. High Blood Pressure Research Council. San Francisco, CA (2014).

19- Allison E. Norlander, Annet Kirabo, Juan Gnecco, Nikhil Kamat, **Mohamed A. Saleh**, Alicia McDonough, David G. Harrison and Meena S. Madhur. Interleukin 17-A regulates

salt and water retention through Enhanced SGK1 and NHE3 expression in the renal proximal tubule. High Blood Pressure Research Council. San Francisco, CA (2014).

20- Jing Wu, **Mohamed A. Saleh**, Annet Kirabo, Hana Itani, Wei Chen, Meena S. Madhur and David G. Harrison. Vascular oxidative stress promotes aortic stiffening in hypertension. High Blood Pressure Research Council. San Francisco, CA (2014).

21- Liang Xiao, Annet Kirabo, Jing Wu, **Mohamed A. Saleh**, Linjue Zhu and David G. Harrison. Renal denervation prevents dendritic cell activation and renal T cell infiltration and subsequent renal damage in mice with angiotensin II-induced hypertension. High Blood Pressure Research Council. San Francisco, CA (2014).

22- Rafal Nazarewicz, **Mohamed A. Saleh**, Jing Wu, Sergey Dikalov and David Harrison. Mitochondrial hydrogen peroxide in T cell activation in hypertension. High Blood Pressure Research Council. San Francisco, CA (2014).

23- William G. McMaster, **Mohamed A. Saleh**, Annet Kirabo, Hana A. Itani, David G. Harrison, Meena S. Madhur. Deficiency of LNK/SH2B3 promotes hypertension, endothelial dysfunction, and aortic dissection. North American Vascular Biology Organization (NAVBO) Vascular Biology. Monterey, CA (2014).

24- Allison Norlander, **Mohamed A. Saleh**, David G. Harrison, Meena Madhur. Role of T cell SGK1 in the development of angiotensin II mediated hypertension. North American Vascular Biology Organization (NAVBO) Vascular Biology. Monterey, CA (2014).

25- Allison Norlander, Nikhil Kamat, Benjamin Ko, Annet Kirabo, Juan Gnecco, **Mohamed A. Saleh**, Robert Hoover, David G Harrison, Alicia McDonough, and Meena Madhur. Interleukin 17A regulates salt and water retention through modulation of renal proximal and distal tubule sodium transporters. The American Society of Hypertension (ASH). New York, NY (2015).

26- William G. McMaster, Jr., **Mohamed A. Saleh**, Hana A. Itani, Allison E. Norlander, Cornelia M. Weyand, Meena S. Madhur, Daniel J. Moore, David G. Harrison. Hypertension leads to end organ inflammation in humanized mice. The American Society of Hypertension (ASH). New York, NY (2015).

27- Hana A. Itani, Liang Xiao, Jing Wu, **Mohamed A. Saleh**, Danielle Michell, Wei Chen, Kenneth E. Bernstein, David G. Harrison. The role of immunological memory In hypertension. The American Society of Hypertension (ASH). New York, NY (2015).

28- **Mohamed A. Saleh**, Allison E. Norlander, David G. Harrison and Meena S. Madhur. Distinct and overlapping roles of cytokines IL-17A and IL-17F in angiotensin II-induced hypertension and end-organ injury. Council on Hypertension Scientific Sessions. Washington D.C. (2015).

II- BOOK CHAPTERS, EDITORIALS, and INTERNET RESOURCES:

1. **Mohamed A. Saleh** and David M. Pollock. Endothelin in Renal Inflammation and Hypertension. *Contributions to Nephrology*. 2011;172:160-70. (Epub August 30, 2011).

2. Allison E. Norlander, **Mohamed A. Saleh**, Meena S. Madhur. CXCL16: A Chemokine Causing Chronic Kidney Disease. *Hypertension* 62:1008-1010, 2013 (Epub September 23, 2013).

III- JOURNAL PUBLICATIONS:

1- Erika I. Boesen, Jennifer M. Sasser, **Mohamed A. Saleh**, William A. Potter, Mandy Woods, Timothy D. Warner, Jennifer S. Pollock, David M. Pollock. Interleukin-1beta, but not Interleukin-6, Enhances Renal and Systemic Endothelin Production *in-vivo*. *American Journal of Physiology-Renal Physiology* 2008 Aug; 295(2):F446-53.

2- Victor V. Lima, Fernanda R. Giachini, Fernando S. Carneiro, Zidonia N. Carneiro, **Mohamed A. Saleh**, David M. Pollock, Zuleica B. Fortes, Maria Helena C. Carvalho, Adviye Ergul, R. Clinton Webb, Rita C. Tostes. O-GlcNAcylation Contributes to Augmented Vascular Reactivity Induced by Endothelin-1. *Hypertension* 2010 Jan;55(1):180-8.

3- **Mohamed A. Saleh**, Erika I. Boesen, Jennifer S. Pollock, Virginia J. Savin, and David M. Pollock. Endothelin-1 Increases Glomerular Permeability and Inflammation Independent of Blood Pressure in the Rat. *Hypertension* 2010 Nov;56(5):942-9.

4- **Mohamed A. Saleh**, Erika I. Boesen, Jennifer S. Pollock, Virginia J. Savin, and David M. Pollock. ET_A Receptor Specific Stimulation of Glomerular Inflammation and Injury in Streptozotocin-Induced Diabetic Rats. *Diabetologia* 2011 Apr;54(4):979-88.

5- **Mohamed A. Saleh**, Jennifer S. Pollock, and David M. Pollock. Distinct Involvement of Endothelin-A and Endothelin-B Receptors in Intervention with Incipient Diabetic Nephropathy in Streptozotocin-Induced Hyperglycemic Rats. *Journal of Pharmacology and Experimental Therapeutics* 2011 Jul;338(1):263-70.

6- **Mohamed A. Saleh**, Ruben M. Sandoval, George J. Rhodes, Sil*via* B. Campos-Bilderback, Bruce A. Molitoris, and David M. Pollock. Chronic Endothelin-1 Infusion Elevates Glomerular Sieving Coefficient and Proximal Tubular Albumin Reuptake in the Rat. *Life Sciences* 2012 Oct 15;91(13-14):634-7.

7- Ahmed A. Elmarakby, Jessica Faulkner, **Mohamed A. Saleh**, and Jennifer C. Sullivan. Induction of Hemeoxygenase-1 Reduces Glomerular Injury and Apoptosis in Diabetic Spontaneously Hypertensive Rats. *American Journal of Physiology-Renal Physiology* 2012 Apr 1;302(7):F791-800.

8- Jing Wu, Salim R. Thabet, Annet Kirabo, Danniel W Trott, **Mohamed A. Saleh**, Liang Xiao, Meena S. Madhur, Wei Chen and David Harrison. Inflammation and Mechanical Stretch Promote Aortic Stiffening in Hypertension through Activation of p38 MAP Kinase. *Circulation Research* 2014 Feb:114(4):616-25

9- Daniel W. Trott, Salim R. Thabet, Annet Kirabo, **Mohamed A. Saleh**, Hana Itani, Allison E. Norlander, Jing Wu, Anna Goldstein, William J Arendshorst, Meenakshi S Madhur, Wei Chen, Chung-I Li, Yu Shyr, David G. Harrison. Oligoclonal $CD8^+$ T Cells Play a Critical Role in the Development of Hypertension. *Hypertension* 2014 Nov;64(5):1108-15.

10- Mohammed Soutto, Zheng Chen, **Mohamed A. Saleh**, Ahmed Katsha, Shoumin Zhu, Alexander Zaika, Abbes Belkhiri and Wael El-Rifai. TFF1 activates p53 through down-regulation of miR-504 in gastric cancer. *Oncotarget* 2014 Jul 30:5 (14):5663-5673.

11- Annet Kirabo, Ana Faria, Roxana Loperena, Cristi Galindo, Jing Wu, Alfiya Bikineyeva, Sergey Dikalov, Liang Xiao, Wei Chen, **Mohamed A. Saleh**, Antony Vinh, Hana Itani, Venkataraman Amarnath, Daniel Trott, Kalyani Amarnath, Tomasz Guzik, Kenneth E. Bernstein, Xiao Shen, Sean Davies, Yu Shyr, Sheau-chiann Chen, Cheryl Laffer, Raymond Mernaugh, Fernando Elijovich, Heitor Moreno, Meena Madhur, L. Jackson Roberts II, David G. Harrison. DC isoketal-modified proteins activate T cells and promote hypertension. *The Journal of Clinical Investigation* 2014 Oct;124(10):4642-56.

12- Nikhil V. Kamat, Salim R. Thabet, Liang Xiao, **Mohamed A. Saleh**, Annet Kirabo, Meena S. Madhur, Eric Delpire, David G. Harrison, Alicia A. McDonough. Renal Transporter Activation during Angiotensin-II Hypertension is Blunted in Interferon-$\gamma^{-/-}$ and Interleukin-$17A^{-/-}$ Mice. *Hypertension* 2015 Mar;65(3):569-76.

13- **Mohamed A. Saleh**, William G. McMaster, Samuel A. Funt, Salim R. Thabet, Jing Wu, Liang Xiao, Allison E. Norlander, Danielle Michell, Annet Kirabo, Wei Chen, Hana A. Itani, Tianxiao Huan, Daniel Levy, David G. Harrison, Meena S. Madhur. Lymphocyte adaptor protein LNK deficiency exacerbates hypertension and end-organ inflammation. *The Journal of Clinical Investigation* 2015 Mar 2;125(3):1189-202.

14- Tianxiao Huan, Qingying Meng, **Mohamed A. Saleh**, Allison E. Norlander, Roby Joehanes, Jun Zhu, Brian H. Chen, Bin Zhang, Andrew D. Johnson, Saixia Ying, Paul Courchesne, Nalini Raghavachari, Richard Wang, Poching Liu, The International Consortium for Blood Pressure GWAS (ICBP), Christopher J. O'Donnell, Ramachandran Vasan, Peter J. Munson, Meena S. Madhur, David G. Harrison, Xia Yang, and Daniel Levy. Integrative Network Analysis Reveals Molecular Mechanisms of Blood Pressure Regulation. *Molecular Systems Biology* 2015 Apr 16;11:799.

15- Liang Xiao, Annet Kirabo, Jing Wu, **Mohamed A. Saleh**, Linjue Zhu, Feng Wang, Takamune Takahashi, Roxana Loperena, Jason D Foss, Raymond L Mernaugh, Wei Chen, Jackson Roberts, John W Osborn, Hana A Itani, David G Harrison. Renal Denervation Prevents Immune Cell Activation and Renal Inflammation in Angiotensin II-Induced Hypertension. *Circulation Research* 2015 Aug 28;117(6):547-57.

16- Jing Wu, Kim Montaniel, **Mohamed A. Saleh**, Liang Xiao, Wei Chen, Gary Owens, Jay Humphrey, Mark Majesky, Antonis Hatzopoulos, Meena S Madhur, and David G. Harrison. The Origin of Matrix-Producing Cells that Contribute to Aortic Fibrosis in Hypertension. *Hypertension* 2016 Feb;67(2):461-8.

17- Daniel S. Perrien, **Mohamed A. Saleh**, Keiko Takahashi, Meena S. Madhur, David G. Harrison, Raymond C. Harris, and Takamune Takahashi. Novel Methods for microCT-Based Analyses of Vasculature in the Renal Cortex Reveal a Loss of Arterioles and Perfusable Glomeruli in eNOS$^{-/-}$ Mice. *BMC Nephrology* 2016 Mar 2;17(1):24.

18- Jing Wu, **Mohamed A. Saleh**, Annet Kirabo, Hana Itani, Liang Xiao, Wei Chen, Raymond Mernaugh, Hua Cai, Kenneth E. Bernstein, Jörg J. Goronzy, Cornelia M. Weyand, Sean Davies, L. Jackson Roberts II, Meena Madhur, David G. Harrison. Immune activation caused by vascular oxidation promotes fibrosis and hypertension. *The Journal of Clinical Investigation* 2016 Apr 1;126(4):1607.

19- Hana A. Itani, Liang Xiao, **Mohamed A. Saleh**, Jing Wu, Mark A. Pilkinton, Bethany L. Dale, Nataliya R. Barbaro, Jason D. Foss, Annet Kirabo, Kim R. Montaniel, Wei Chen, Ryosuke Sato, L. Gabriel Navar, Fernando Elijovich, Cheryl L. Laffer, Simon A. Mallal,

Kenneth E. Bernstein and David G. Harrison. The Role of Immunological Memory in Hypertension. *Circulation Research* 2016 May;67(5):890-6.

20- Allison E. Norlander, **Mohamed A. Saleh**, Nikhil V. Kamat, Benjamin Ko, Juan Gnecco, Linjue Zhu, Bethany Dale, Yoichiro Iwakura, Robert S. Hoover, Alicia McDonough, Meena S. Madhur. Interleukin-17A Promotes Hypertension through the Induction of Proximal and Distal Renal Sodium Transporters *via* an SGK1 Dependent Pathway. *Hypertension*. 2016 Jul ;68:167-174

21- Hana A. Itani, William G. McMaster Jr, **Mohamed A. Saleh**, Rafal R. Nazarewicz, Tomasz P. Mikolajczyk, Anna Kaszuba, Anna Konior, Aleksander Prejbisz, Andrzej Januszewicz, Allison E. Norlander, Wei Chen, Rachel H. Bonami, Andrew F. Marshall, Greg Poffenberger, Cornelia M. Weyand, Meena S. Madhur, Daniel J. Moore, David G. Harrison, Tomasz J. Guzik. Activation of human T cells in angiotensin II-induced hypertension: Studies of humanized mice. *Hypertension*. 2016 Jul ;68:123-132

22- Lehanna N. Sanders, John A. Schoenhard, **Mohamed A. Saleh**, Amrita Mukherjee, Sergey Rhyzov, William G. McMaster Jr., Kristof Nolan, Richard J. Gumina, Thomas B. Thompson, David G. Harrison and Antonis K. Hatzopoulos. The BMP signaling antagonist Grem2 limits inflammation after myocardial infarction. *Circulation Research*. Published online before print June 9, 2016, doi: 10.1161/CIRCRESAHA.116.308700

23- **Mohamed A. Saleh**, Allison E. Norlander and Meena S. Madhur. Inhibition of Interleukin-17A, But Not Interleukin-17F, Signaling Lowers Blood Pressure, and Reduces End-Organ Inflammation in Angiotensin II–Induced Hypertension. *Journal of the American College of Cardiology (JACC): Basic to Translational Science*. Published online before print November 16, 2016, doi: 10.1016/j.jacbts.2016.07.009

24- **Mohamed A. Saleh**, David I. Stevens, Carmen De Miguel, Pamela K. Carmines, David M. Pollock and Jennifer S. Pollock. Free radical scavenging decreases endothelin-1 excretion and glomerular albumin permeability during type 1 diabetes. *Physiological Reports* (In-Press).

25- Joshua S. Speed, Jonathan B. Heimlich, **Mohamed A. Saleh**, Kelly A. Hyndman, Jennifer S. Pollock, David M. Pollock. Novel Role of Renal Endothelin-1 in Circadian Blood Pressure Variation. *American Journal of Physiology-Renal Physiology* (submitted/in-review).

13) REFERENCES

1- Meenakshi S. Madhur, M.D., Ph.D. (my post-doctoral mentor)
Assistant Professor of Medicine
Vanderbilt University
Department of Medicine, Division of Clinical Pharmacology.
2200 Pierce Avenue
536 Robinson Research Building
Nashville, Tennessee 37215
Telephone: 615-875-3273
Email: meenakshi.s.madhur@vanderbilt.edu

2- David G. Harrison, M.D. (my post-doctoral co-mentor)
Betty and Jack Bailey Professor of Medicine and Pharmacology
Vanderbilt University
Director, Division of Clinical Pharmacology
Director of the Center for Vascular Biology
2200 Pierce Avenue
536 Robinson Research Building
Nashville, Tennessee 37215
Telephone: 615-875-3049
Email: david.g.harrison@vanderbilt.edu

3- David M. Pollock, Ph.D. (Regents' Professor) (my doctoral mentor)
President, American Physiological Society
Director, Cardio-Renal Physiology and Medicine
Division of Nephrology
UAB | The University of Alabama at Birmingham
KAUL 802 | 720 20th St S | Birmingham, AL 35233
P: 205.975.7526 | F: 205.975.7520
dpollock@uab.edu

4- Jennifer S. Pollock, Ph.D (Professor of Biochemistry) (my doctoral co-mentor).
Co-Director, Cardio-Renal Physiology and Medicine
Division of Nephrology
UAB | The University of Alabama at Birmingham
KAUL 802 | 720 20th St S | Birmingham, AL 35233
P: 205.975.7525 | F: 205.975.7520
pollockj@uab.edu