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Education and Training

Education

09/1987-06/1992 BSc, BSc/MSc Five Year Program, Biochemistry, University of Havana, Havana, Cuba
09/1992-01/1995 MS, Toxicology, University of Havana, Havana, Cuba
10/2016-04/2018 PhD, Medical Sciences, University of Warwick, Coventry, United Kingdom

Academic, Administrative, Clinical, Research and Military Appointments

Academic Appointments

09/2019-present Research Investigator in Pathology, University of Michigan - Ann Arbor, Ann Arbor, Michigan

Research Positions

09/1992-05/1995 Laboratory Instructor and Teacher Assistant in Biochemistry, University of Havana, Havana, Cuba
05/1995-08/1996 Toxicologist in Supreme Board of Drugs and Medical Appliances, Ministry of Health, Sana'a, Yemen
01/1997-11/2000 Research Assistant II in Nutrition & Food Sciences, Wayne State University, Detroit, MI
11/2000-10/2009 Research Lab Specialist Associate in Internal Medicine, Nephrology, University of Michigan, Ann Arbor, MI
11/2009-08/2019 Research Lab Specialist Senior in Pathology, University of Michigan, Ann Arbor, MI

Research Interests

- Generating a novel mouse model to investigate the roles of Pax2/Pax8 in the pathogenesis of ovarian cancer. Studying the epithelium hemostasis and interchange between secretory cells and ciliated cells in the oviduct.
- Investigating the role of Pax proteins and Catherine 6 in kidney regeneration after acute injury. How surviving tubular epithelial cells first dedifferentiate and proliferate, and then re-differentiate back to epithelial cells to restore the tubule architecture.
- Investigating the potential role of Ferroportin and Heparin in acute kidney injury.

Grants

Current Grants

5 R01 DK054740-24: Pax2 Interacting Proteins in Development and Disease NIH-DHHS-US- 20-PAF02846
Co-I with Effort (Principal Investigator: Gregory R Dressler)
07/2020-05/2025. \$2,923,620 (\$584,724)

Past Grants

The Role of Disrupted Iron Metabolism in Acute Kidney Injury: Targeting Iron Trafficking via the Heparin-Ferroportin Axis in Renal Proximal Tubules University of Sharjah- 20-PAF09130
Abdulsalam Am Soofi, PI
07/2020-01/2021. \$8,409 (\$8,409)

Honors and Awards

International

2021-2022 Fulbright Scholar Grantee to the United Arab Emarate.

Memberships in Professional Societies

2005-2010 Member, American Cancer Association

Editorial Positions, Boards, and Peer-Review Service

Editorial Boards

2020-present Editorial Board Member, Global Journal of Public Health and Health Sciences (GPHS)

Teaching

Graduate Student

1997-2000 Multiple Graduate Students, Wayne State University, Department of Nutrition & Food Sciences, Detroit, MI

2000-2019 Multiple Graduate Students, University of Michigan, Department of Pathology, Ann Arbor, MI

2019 A. Alamari, MS, University of Michigan, Michigan Medicine Volunteer Services, Department of Pathology, Ann Arbor, MI

2021-2022 Anas Kahled Alsuurmi, MD, U of M

Medical Student

2013 Wesam Ostwani, MD, University of Michigan, Michigan Medicine Volunteer Services, Department of Pathology, Ann Arbor, MI

2014 Khaled Darwesh, MD, University of Michigan, Michigan Medicine Volunteer Services, Department of Pathology, Ann Arbor, MI

Postdoctoral Fellow

2000-2019 Postdoctoral Trainees, University of Michigan, Department of Pathology, Ann Arbor, MI

Undergraduate Student

1994-1995 Biochemistry Undergraduate Student, Thesis Mentor, University of Havana, Havana, Cuba

2000-2010 Multiple Undergraduate Students, University of Michigan

2011-2012 Jacinth Kao, BS, University of Michigan

2011-2013 Zein S El-Zein, BS, University of Michigan

2013-2014 Peter Dalack, BS, University of Michigan

2013-2015 Katherine Wolf, BS-MD, University of Michigan

2014-2016 Ana Kutschat, BS, University of Michigan

2016 Faraz Ali, BS, University of Michigan, Michigan Medicine Volunteer Services, Department of Pathology, Ann Arbor, MI

2016-2018 Bradley Clinansmith, BS, University of Michigan

2016-2018 Simranjit Kaur, BA, University of Michigan

2016-2019 Sumaiya Haider, BS, University of Michigan

2017-2018 Nefertia Jones, BS, University of Michigan

2017-present Mohammad Hamza Azam, BS, LS&A, University of Michigan

2019-present Nila Sabet Fakhri, BS, School of Public Health, University of Michigan

2020 Kiran Ghotra, BS, Sienna Heights University

2021-2022 Vivie Li, neuroscience, University of Michigan

Visiting Scholars

2019-2020	Jeffrey Beamish, MD, PhD, Nephrology- University of Michigan
2019-2020	Dr. Xiaohua Tan, PhD, Department of Pathology, School of Medicine, Qingdao University

Teaching Activity

Regional

1997-2000	Mentor K-12 students, supervised the after-school educational program, Arab Community Center for Economic and Social Services (ACCESS), Detroit/Dearborn, MI
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Institutional

1992-1994	Toxicology, Laboratory Instructor, University of Havana, Havana, Cuba
1993-1994	Tóxicos Especiales/Alcoholism, Lecturer, University of Havana, Havana, Cuba
1994-1995	Basic Principles of Toxicology & Biochemistry of Stranger Compounds, Lecturer, Department of Biochemistry, University of Havana.

Clinical Track Scholarly Contribution

Clinician-Research Scholar (translational science, clinical research, health services research)

2020-2021 ENG100- Biomedical engineering and human values in the age of COVID-19.

Committee and Administrative Services

Committee Services

Regional

1988-2000	Education Committee, Arab Community Center for Economic and Social Services (ACCESS), Member
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Institutional

2019-2021	University of Michigan VOICES OF THE STAFF, Advancing Diversity, Equity, and Inclusion Team Member /Curriculum and on-boarding subcommittee
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Administrative Services

Volunteer

1988-1992	Volunteer, Legal Medical Institute of Havana, Havana, Cuba, Volunteer at the Legal Medicine Institute of Havana
1993-1994	Volunteer, Mental Health Institute, Psychiatric Hospital, Havana, Cuba, Volunteer at the Mental Health Institute, Psychiatric Hospital

Visiting Professorships and Extramural Invited Presentations

Extramural Invited Presentations

1. KCP Regulate Renal Fibrosis and Metabolic Disease in Mouse Models, Hamad Medical Corporation,, March 2016, Doha, Qatar.

Other

1. April 27-28, 2020: American Association for Cancer Research. Virtual Annual Meeting, American Association for Cancer Research, April 2020, Virtual
2. June 22-24, 2020: AACR Virtual Annual Meeting II., American Association for Cancer Research, June 2020, Virtual

Seminars

1. How Pax2 contributes to renal embryogenesis and the mechanisms of cell fate restriction, University of Michigan, April 2011, Ann Arbor, Michigan
2. KCP attenuate Renal Fibrosis, and Obesity in Mouse Models, University of Michigan, March 2016, Ann Arbor, Michigan

3. Determine whether the PTIP/Pax2 regulatory axis is reactivated after AKI and test the contribution of these epigenetic pathways to renal regeneration, University of Michigan, May 2018, Ann Arbor, Michigan
4. Analyses of Pax2 and Pax8 in maintaining oviduct epithelial homeostasis and fertility, University of Michigan, March 2020, Ann Arbor, Michigan

Bibliography

Peer-Reviewed Journals and Publications

1. Vidal Nova A, **Soofi A**, et al: Concentraciones séricas de Calcio y Magnesio en alcohólicos durante el tratamiento de desintoxicación. *Rev Cubana Aliment Nutr* 12(1): 29-34, 1989.
2. Raffoul JJ, Guo Z, **Soofi A**, Heydari AR: Caloric restriction and genomic stability. *J Nutr Health Aging* 3 (2): 102-10, 1999. PM10885805
3. Moeller MJ, Sanden SK, **Soofi A**, Wiggins RC, Holzman LB: Two gene fragments that direct podocyte-specific expression in transgenic mice. *J Am Soc Nephrol* 13(6): 1561-7, 2002. PM12039985
4. Cabelof DC, Yanamadala S, Raffoul JJ, Guo Z, **Soofi A**, Heydari AR: Caloric restriction promotes genomic stability by induction of base excision repair and reversal of its age-related decline. *DNA Repair (Amst)* 2(3): 295-307, 2003. PM12547392
5. Moeller MJ, Sanden SK, **Soofi A**, Wiggins RC, Holzman LB: Podocyte-specific expression of cre recombinase in transgenic mice. *Genesis* 35(1): 39-42, 2003. PM12481297
6. Moeller MJ, **Soofi A**, Braun GS, Li X, Watzl C, Kriz W, Holzman LB: Protocadherin FAT1 binds Ena /VASP proteins and is necessary for actin dynamics and cell polarization. *EMBO J* 23(19): 3769-79, 2004. PM15343270/PMC522787
7. Moeller MJ, **Soofi A**, Hartmann I, Le Hir M, Wiggins R, Kriz W, Holzman LB: Podocytes populate cellular crescents in a murine model of inflammatory glomerulonephritis. *J Am Soc Nephrol* 15(1): 61-7, 2004. PM14694158
8. Moeller MJ, **Soofi A**, Sanden S, Floege J, Kriz W, Holzman LB: An efficient system for tissue-specific overexpression of transgenes in podocytes in vivo. *Am J Physiol Renal Physiol* 289(2): F481-8, 2005. PM15784842
9. Verma R, Kovari I, **Soofi A**, Nihalani D, Patrie K, Holzman LB: Nephron ectodomain engagement results in Src kinase activation, nephrin phosphorylation, Nck recruitment, and actin polymerization. *J Clin Invest* 116(5): 1346-59, 2006. PM16543952/PMC1401486
10. Garg P, Verma R, Cook L, **Soofi A**, Venkatareddy M, George B, Mizuno K, Gurniak C, Witke W, Holzman LB: Actin-depolymerizing factor cofilin-1 is necessary in maintaining mature podocyte architecture. *J Biol Chem* 285(29): 22676-88, 2010. PM20472933/PMC2903407
11. Zhang P, Cai Y, **Soofi A**, Dressler GR: Activation of Wnt11 by transforming growth factor- β drives mesenchymal gene expression through non-canonical Wnt protein signaling in renal epithelial cells. *J Biol Chem* 287(25): 21290-302, 2012. PM22556418/PMC3375550
12. **Soofi A**, Levitan I, Dressler GR: Two novel EGFP insertion alleles reveal unique aspects of Pax2 function in embryonic and adult kidneys. *Dev Biol* 365(1): 241-50, 2012. PM22410172/PMC3322280
13. George B, Verma R, **Soofi AA**, Garg P, Zhang J, Park TJ, Giardino L, Ryzhova L, Johnstone DB, Wong H, Nihalani D, Salant DJ, Hanks SK, Curran T, Rastaldi MP, Holzman LB: Crk1/2-dependent signaling is necessary for podocyte foot process spreading in mouse models of glomerular disease. *J Clin Invest* 122 (2): 674-92, 2012. PM22251701/PMC3266791
14. Blattner SM, Hodgin JB, Nishio M, Wylie SA, Saha J, **Soofi AA**, Vining C, Randolph A, Herbach N, Wanke R, Atkins KB, Gyung Kang H, Henger A, Brakebusch C, Holzman LB, Kretzler M: Divergent functions of the Rho GTPases Rac1 and Cdc42 in podocyte injury. *Kidney Int* 84(5): 920-30, 2013. PM23677246/PMC3815690
15. **Soofi A**, Zhang P, Dressler GR: Kielin/chordin-like protein attenuates both acute and chronic renal injury. *J Am Soc Nephrol* 24(6): 897-905, 2013. PM23539757/PMC3665392
16. George B*, Fan Q*, Dlugos CP*, **Soofi AA***, Zhang J, Verma R, Park TJ, Wong H, Curran T, Nihalani D, Holzman LB (***Equal contribution**): Crk1/2 and CrkL form a hetero-oligomer and functionally complement each other during podocyte morphogenesis. *Kidney Int* 85(6): 1382-1394, 2014. PM24499776 /PMC4040156

17. Whiteman EL, Fan S, Harder JL, Walton KD, Liu CJ, **Soofi A**, Fogg VC, Hershenson MB, Dressler GR, Deutsch GH, Gumucio DL, Margolis B: Crumbs3 is essential for proper epithelial development and viability. *Mol Cell Biol* 34(1): 43-56, 2014. PM24164893/PMC3911272
18. Hatahet W, **Soofi A**, Ntekim OE, Fungwe TV: Plasma Lipid Profiles of Transgenic Mice Expressing the *Human Apob100xctep* are Altered Differentially by Diets Enriched With Defined Fatty Acids *Curr Res Nutr Food Sci Jour* 3(3): 207-218, 2015.
19. **Soofi A**, Wolf KI, Ranghini EJ, Amin MA, Dressler GR: The kielin/chordin-like protein KCP attenuates nonalcoholic fatty liver disease in mice. *Am J Physiol Gastrointest Liver Physiol* 311(4): G587-G598, 2016. PM27514479/PMC5142198
20. **Soofi A**, Wolf KI, Emont MP, Qi N, Martinez-Santibanez G, Grimley E, Ostwani W, Dressler GR: The kielin /chordin-like protein (KCP) attenuates high-fat diet-induced obesity and metabolic syndrome in mice. *J Biol Chem* 292(22): 9051-9062, 2017. PM28424263/PMC5454091
21. Ihermann-Hella A, Hirashima T, Kupari J, Kurtzeborn K, Li H, Kwon HN, Cebrian C, **Soofi A**, Dapkunas A, Miinalainen I, Dressler GR, Matsuda M, Kuure S: Dynamic MAPK/ERK Activity Sustains Nephron Progenitors through Niche Regulation and Primes Precursors for Differentiation. *Stem Cell Reports* 11(4): 912-928, 2018. PM30220628/PMC6178244
22. **Soofi A**, Kutschat AP, Azam M, Laszczyk AM, Dressler GR: Regeneration after acute kidney injury requires PTIP-mediated epigenetic modifications. *JCI Insight* 5(3): 130204, 2020. PM31917689
23. Laszczyk AM, Higashi AY, Patel SR, Johnson CN, **Soofi A**, Abraham S, Dressler GR.: Pax2 and Pax8 Proteins Regulate Urea Transporters and Aquaporins to Control Urine Concentration in the Adult Kidney *JASN* 31: 2019090962, 2020. 32381599
24. Bernadett Bosze, Julissa Suarez-Navarro, **Abdul Soofi**, James D. Lauderdale, Gregory R. Dressler and Nadean L. Brown*: Multiple roles for Pax2 in the embryonic mouse eye *Developmental Biology* 472: 1-126, 2021.

Other Media

Other

1. **Soofi A**: Biochemical Markers of Alcoholism, BSc/MSc Thesis Title, University of Havana, 1992.
2. **Soofi A**: Biochemical Markers of Chronic Alcoholism, Diagnostics, and Treatments, MSc Thesis, University of Havana, 1995.
3. **Soofi A**: Pathways that Regulate Renal Development Fibrosis, and Metabolic Disease in Mouse Model, PhD Thesis, Coventry, University of Warwick, 2017.

Abstracts

1. Yanamadala S, Raffoul JJ, **Soofi A**, Ganir C, Heydari AR: Effect of age and caloric restriction on base excision repair pathway in mice and rats, *FASEB J*, 13, 4, A234, 1999.
2. Cabelof DC, Yanamadala S, Ganir C, **Soofi A**, Raffoul JJ, Richardson A, Heydari AR: Up-regulation of base excision repair in response to oxidative damage in mice, *FASEB J*, 14, 4, A516, 2000.
3. Hatahet W, **Soofi A**, Cole L, Fungwe T: Differential expression of HDL in human apoB100xCETP transgenic mice fed defined fatty acid diets, *FASEB J*, 15, 4, A292, 2001.
4. Verma R, Kovari I, **Soofi A**, Patrie K, Holzman LB: Nephron Ectodomain Engagement Induces Src Activity and Nephron Y1208 Phosphorylation During Podocyte Differentiation, ASN Kidney Week Annual Meeting, Poster Presentation, St. Louis, MO, *J Am Soc Nephrol*, 15, SU-PO782, 2004.
5. **Soofi A**: The Kielin/chordin-like Protein Kcp Can Attenuate High Fat Diet-Induced Obesity and Metabolic Syndrome, Qatar Foundation Annual Research Conference, Poster Presentation, Doha, Qatar, 2014, 1, HBPP0200, 2014.
6. **Soofi A**, Zhai Y, Cho KR, Dressler GR: **Platform Presentation**: Analyses of Pax2 and Pax8 in maintaining oviduct epithelial homeostasis and fertility, AACR Advance Ovarian Cancer Conference, Atlanta, GA, 2019.
7. **Soofi A**, Dressler GR: PTIP deletion in renal proximal tubules may cause epigenetic change and prevent recovery after acute kidney injury, ASN Kidney Week Annual Meeting, Washington, DC, 2019.
8. **Soofi A**, Zhai Y, Cho KR and Dressler GR.: Roles of Pax2/Pax8 in maintaining oviduct epithelial homeostasis and fertility, 18th Annual Pathology Research Symposium, University of Michigan, Ann Arbor, 2020.

9. **Soof A** and Dressler GR: Regulation of Oviduct Homeostasis and Fertility by Pax2 and Pax8 Genes, American Society for Reproductive Medicine 2020 Scientific Congress, Portland, Oregon, 2020.
10. Soof, A; Beamish, J; Drssler, GR; Hamad, M.: The Role of Disrupted Iron Metabolism in Acute Kidney Injury: Targeting Iron Trafficking via the Hepcidin-Ferroportin Axis in Renal Proximal Tubules., American Society of Nephrology, Kidney week, San Diego, USA, ASN, 2021.
11. Abdul SOofi and Greg Dressler: REGULATION OF OVIDUCT HOMEOSTASIS AND FERTILITY BY Pax2 AND Pax8 GENES, Virtual Geriatrics Center Research Symposium, University of Michigan, 2021.