### Curriculum Vitae Omayma Alshaarawy, MBBS, Ph.D.

### DATE: October 2, 2020

- 1. **CONTACT INFORMATION:** Room B113, 788 Service Road, East Lansing, MI, USA, 48824. Phone number: 517-884-0420. Email: <u>alshaara@msu.edu</u>
- 2. **CURRENT POSITION**: Assistant Professor (tenure-track), Department of Family Medicine, College of Human Medicine, Michigan State University

### 3. EDUCATION

2013	PhD in Public Health Sciences - Epidemiology
	School of Public Health, West Virginia University
2006	MBBS (Bachelor of Medicine, Bachelor of Surgery)
	School of Medicine, Cairo University, Cairo, Egypt

#### 4. EMPLOYMENT

- **2016-2018** Research Associate: Department of Epidemiology and Biostatistics, Michigan State University
- **2015-2016** Visiting Scholar: Department of Epidemiology and Biostatistics Indiana University-Bloomington
- **2013-2015** Postdoctoral fellow: Department of Epidemiology and Biostatistics Michigan State University
- **2010- 2013** Research Assistant: Department of Epidemiology, School of Public health West Virginia University, Morgantown, WV
- **2008-2010** Resident of Clinical Pathology, Almounira General Hospital, Cairo, Egypt
- 2007-2008 House Officer: Cairo university Hospitals, Cairo, Egypt

### 5. PROFESSIONAL MEMBERSHIP

- College on Problems of Drug Dependence
- American Diabetes Association
- International Cannabinoid Research Society

### 6. AWARDS AND HONORS

- Michigan State University Postdoctoral Excellence in Research Award 2018
- NIDA Director's Travel Award 2015
- Michigan State University Postdoctoral Association Travel Award 2014
- Selected for appointment to the National Institute on Drug Abuse T32 postdoctoral Training Grant (T32DA021129) 2013-2015

- American Diabetes Association's Young Investigator Travel Grant 2012
- Selected for appointment to the NIH Cardiovascular and Pulmonary Disease Training Grant (T32HL090610) 2012

# 7. REFREE/REVIEWER

**2019-2020** Diabetes Care, Hypertension, Circulation, Journal of American Heart Association, British Journal of Clinical Pharmacology, Drug and Alcohol Review, Drug and Alcohol Dependence, Environmental Pollution, International Journal of Hygiene and Environmental Health, Environmental Research, Environment International, Science of the Total Environment, American Journal of Preventive Medicine, JCI Insight, Women's Health, BMC

### 8. RESEARCH SUPPORT

### a. Ongoing

- **2018-2021** Principal Investigator: Using pre-clinical biomarkers and epidemiological models to assess the effects of cannabinoids on disease, funded by NIH/NCCIH through R00 mechanism.
- **2020-2021** Principal Investigator: Cannabis use during pregnancy and maternal and in-utero inflammation, funded by Michigan Environmental Influences on Child Health Outcomes (ECHO) VP award.
- **2020-2021** Principal Investigator: A feasibility study to assess recruitment, follow-up and retention of pregnant women who regularly use cannabis, funded by MSU Department of Family Medicine Faculty Scholarship award.

# b. Completed

- **2016-2018** Principal Investigator: Using pre-clinical biomarkers and epidemiological models to assess the effects of cannabinoids on disease, funded by NIH/NCCIH through K99 mechanism.
- **2013-2015** Postdoctoral fellow: Training program in drug dependence epidemiology, funded by NIH/NIDA through T32 mechanism.
- **2012** Predoctoral fellow: Research training in cardiovascular and pulmonary diseases, funded by NIH/NHLBI through T32 mechanism.

# 9. ONGOING SERVICES

- Chair of dissertation committee: Alyssa Vanderziel (Epidemiology doctoral candidate)
- Chair of Human Research Committee, College on Problems of Drug
  Dependence
- Member of Student Competence Committee, Michigan State University College of Human Medicine

### 10. TEACHING

Spring 2020 Epidemiology intersession

- Human Medicine students
- Role: Small group preceptor
- Fall 2019ASK IV 654 -Cannabinoids: Basic Science and Clinical Science, Michigan<br/>State University
  - Human Medicine students
  - Role: Co-developed and presented an online module on the latest clinical evidence on cannabinoids.
- Spring 2016 E-311 Introduction to Epidemiology. Indiana University-Bloomington
  - Undergraduate course
  - Role: Sole instructor
- Summer 2014, 2015 EPI 495 Epidemiology and Behavioral Health. Michigan State University
  - Undergraduate/Graduate course
  - Role: Teaching Assistant
- Spring 2012 CHPR 170 Health of the Individual. West Virginia University
  - Undergraduate course
  - Role: Teaching Assistant
- Fall 2012 EPID 610 Principles of Epidemiology. West Virginia University
  - Graduate course
  - Role: Teaching Assistant

# 11. BIBLIOGRAPHY

- a. Peer- reviewed manuscripts (\* indicate student mentee)
  - Alshaarawy O, Vanderziel A\*. Visit-to-visit variability in blood pressure among cannabis users participating in the Third National Health and Nutrition Examination Survey. Journal of Hypertension. In press.
  - Vanderziel A\*, Parker MA, Alshaarawy O. Trends in heroin use among women of reproductive age in the United States, 2004-2017. Addict Behav. 2020;110:106518. doi:10.1016/j.addbeh.2020.106518
  - Sexton TR\*, Alshaarawy O. Cannabis use prevalence among individuals with diabetes: The National Survey on Drug Use and Health, 2005-2018. Drug Alcohol Depend. 2020;212:108035. doi:10.1016/j.drugalcdep.2020.108035
  - Wiener RC, Waters C, Bhandari R, Trickett Shockey AK, Alshaarawy O. The Association of Sleep Duration and the Use of Electronic Cigarettes, NHANES, 2015-2016. Sleep Disordoders. 2020:8010923. doi: 10.1155/2020/8010923.
  - Alshaarawy O, Anthony JC. Cannabis use among women of reproductive age in the United States: 2002-2017. Addictive Behaviors. 2019;99:106082. doi: 10.1016/j.addbeh.2019.106082.

- Alshaarawy O. Total and differential white blood cell count in cannabis users: results from the cross-sectional National Health and Nutrition Examination Survey, 2005–2016. Journal of Cannabis Research. 2019; 2(1). doi: 10.1186/s42238-019-0007-8.
- Alshaarawy O, Sidney S, Auer R, Green D, Soliman EZ, Goff DC, Anthony JC. Cannabis Use and Markers of Systemic Inflammation: The Coronary Artery Risk Development in Young Adults Study. The American Journal of Medicine. 2019. doi: 10.1016/j.amjmed.2019.04.045..
- Alshaarawy O, Anthony JC. Are cannabis users less likely to gain weight? Results from a national three-year prospective study. International Journal of Epidemiology. 2019. doi: 10.1093/ije/dyz044. \*Widely covered by the media. Altmetric attention score of 606, in the top 5% of all research tracked by Altmetric.
- Alshaarawy O, Kurjan E\*, Truong N, Olson LK. Diet-Induced Obesity in Cannabinoid-2 Receptor Knockout Mice and Cannabinoid Receptor 1/2 Double-Knockout Mice. Obesity. 2019. doi:10.1002/oby.22403
- 10. Anthony JC, Lopez-Quintero C, **Alshaarawy O**. Cannabis Epidemiology: A Selective Review. Current Pharmaceutical Design. 2017; 22(42):6340-6352. doi:10.2174/1381612822666160813214023.
- 11. **Alshaarawy O,** Anthony JC. The replicability of cannabis use prevalence estimates in the United States. International Journal on Methods of Psychiatric Research. 2017;26(2). doi: 10.1002/mpr.1524.
- Cheng HG<sup>+</sup>, Alshaarawy O<sup>+</sup>, Cantave MD<sup>\*</sup>, Anthony JC. Inverse association linking serum levels of potential antioxidant vitamins with C-reactive protein levels using a novel analytical approach. British Journal of Nutrition. 2016; 116(7):1256-1264. doi: 10.1017/S0007114516003159 \*Equal contribution
- 13. **Alshaarawy O**, Elbaz HA. Cannabis use and blood pressure levels: United States National Health and Nutrition Examination Survey, 2005-2012. Journal of Hypertension. 2016;34(8):1507-12. doi: 10.1097/HJH.00000000000990.
- 14. **Alshaarawy O**, Breslau N, Anthony JC. Monthly Estimates of Alcohol Drinking During Pregnancy: United States, 2002-2011. Journal on Studies of Alcohol and Drugs. 2016;77(2):272-6. doi: 10.15288/jsad.2016.77.272.
- 15. **Alshaarawy O**, Elbaz HA, Andrew ME. The association of urinary polycyclic aromatic hydrocarbon biomarkers and cardiovascular disease in the US population. Environmental International. 2016;89-90:174-8. doi: 10.1016/j.envint.2016.02.006.
- Alshaarawy O, Elbaz HA. Serum cotinine levels and diabetes mellitus in never smokers. Journal of Diabetes and its Complications. 2015;29(8):1032-6. doi: 10.1016/j.jdiacomp.2015.08.018

- 17. **Alshaarawy O**, Anthony JC. Cannabis Smoking and Diabetes Mellitus: Results from Meta-analysis with Eight Independent Replication Samples. Epidemiology. 2015;26(4):597-600. doi: 10.1097/EDE.00000000000314.
- 18. **Alshaarawy O**, Anthony JC. Cannabis smoking and serum C-reactive protein: a quantile regressions approach based on NHANES 2005-2010. Drug and Alcohol Dependence. 2015;147:203-7. doi: 10.1016/j.drugalcdep.2014.11.017.
- 19. **Alshaarawy O**, Anthony JC. Month-wise estimates of tobacco smoking during pregnancy for the United States, 2002-2009. Maternal and Child Health Journal. 2015;19(5):1010-5. doi: 10.1007/s10995-014-1599-4.
- Alshaarawy O, Zhu M, Ducatman AM, Conway B, Andrew ME. Urinary polycyclic aromatic hydrocarbon biomarkers and diabetes mellitus. Occupational and Environmental Medicine. 2014;71(6):437-41. doi: 10.1136/oemed-2013-101987.
- 21. Innes KE, **Alshaarawy O**, Goins RT. Association between self-reported type 2 diabetes mellitus and physical function in older American Indians. Journal of American Geriatric Society. 2014;62(2):380-2. doi: 10.1111/jgs.12673.
- 22. **Alshaarawy O**, Zhu M, Ducatman A, Conway B, Andrew ME. Polycyclic aromatic hydrocarbon biomarkers and serum markers of inflammation. A positive association that is more evident in men. Environmental Research. 2013; 126:98-104. doi: 0.1016/j.envres.2013.07.006.
- 23. **Alshaarawy O**, Xiao J, Andrew ME, Burchfiel C, Shankar A. Serum cotinine levels and prehypertension in never smokers. International Journal of Hypertension. 2013; 2013:284524. doi: 10.1155/2013/284524.
- 24. Alshaarawy O, Xiao J, Shankar A. Association of serum cotinine levels and hypertension in never smokers. Hypertension 2013; 61(2):304-8. doi: 10.1161/HYPERTENSIONAHA.112.198218.
- 25. **Alshaarawy O**, Teppala S, Shankar A. Markers of Sleep-Disordered Breathing and Prediabetes in US Adults. International Journal of Endocrinology. 2012; 2012:902324. doi:10.1155/2012/902324.

### b. Chapters

Anthony JC, **Alshaarawy O**, Lopez-Quintero C. International Trends in Marijuana Use. In Winters K, Sabet K (Eds), Contemporary Health Issues on Marijuana. New York, NY: Oxford University Press, 2018

c. **Presentations** (\* indicate student mentee)

# <u>Oral</u>

 Vanderziel A\*, Alshaarawy O. Cannabis and Gastrointestinal tract Illness: a paradox? College on Problems of Drug Dependence 82<sup>st</sup> Scientific Session, 2020, Virtual.

- Alshaarawy O. Cannabinoids, Inflammation, and Metabolic Health. "NCCIH at 20: A Catalyst for Integrative Health Research" a research symposium celebrating NCCIH's 20th anniversary, 2019, Bethesda, MD
- Alshaarawy O. Cigarette and cannabis use among new mothers. College on Problems of Drug Dependence 81<sup>st</sup> Scientific Session, 2019, San Antonio, TX
- Alshaarawy O, Kurjan E\*, Truong N, Olson LK. Weight Gain and Insulin Resistance in Mice Lacking Cannabinoid-2 Receptor. College on Problems of Drug Dependence 80<sup>th</sup> Late Breaking Scientific Session, 2018, San Diego, CA
- Alshaarawy O. Cannabis use and changes in body weight studied prospectively: New estimates for the United States. MPHA Epidemiology Section 17<sup>th</sup> Conference. 2018. Ann Arbor, MI
- Alshaarawy O, Anthony JC. Cannabis Use during Pregnancy for the United States, 2005-2013. College on Problems of Drug Dependence 78<sup>th</sup> Scientific Sessions, 2016, Palm Springs, CA. \*Also selected for presentation in the meeting Media Forum known as "What's Hot!"
- Alshaarawy O, Anthony JC. Diabetes mellitus outcomes: Is cannabis smoking protective? College on Problems of Drug Dependence 76<sup>th</sup> Scientific Sessions, 2014, San Juan, PR
- Alshaarawy O, Xiao J, Shankar A. The association of serum cotinine level and diabetes mellitus in never smokers. American Diabetes Association's 72<sup>nd</sup> Scientific Sessions, 2012, Philadelphia, PA
- Alshaarawy O, Xiao J, Shankar A. Perfluoroalkyl chemicals and prediabetes in US adults. Spotlight Session, the 45<sup>th</sup> Annual SER Meeting, 2012, Minneapolis, MN
- 10. Innes KE, **Alshaarawy O**, Goins RT. The association of physical function to selfreported diabetes in a population of older American Indians. The OPHA 67<sup>th</sup> Annual Meeting, 2011, Corvallis, OR

# Poster

- 1. **Alshaarawy O**. The Impact of Cannabis Use on Glucose Tolerance. American Diabetes Association's 80<sup>th</sup> Scientific Sessions, 2020, Virtual.
- Alshaarawy O. Trends in Cannabis Use among Patients with Diabetes—The National Survey on Drug Use and Health, 2005-2017. American Diabetes Association's 79<sup>th</sup> Scientific Sessions, 2019, San Francisco, CA
- 3. **Alshaarawy O**. Opioid Use Among Women of Reproductive Age in the United States. MPHA Epidemiology Section 18th Conference. 2019. Ann Arbor, MI
- Alshaarawy O, Kurjan E\*, Truong N, Olson LK. Mice Lacking Both Cannabinoid-1 and Cannabinoid-2 Receptors Are Resistant to Diet-Induced Obesity. American Diabetes Association's 78th Scientific Sessions, 2018, Orlando, FL

- 5. **Alshaarawy O**, Anthony JC. Cannabis use and changes in body weight studied prospectively. New estimates for the United States. College on Problems on Drug Dependence 80th Scientific Sessions, 2018. San Diego, CA
- Alshaarawy O. Total and Differential Leukocyte Counts among Cannabis Users. The National Health and Nutrition Examination Survey, 2005-2014. International Cannabinoid Research Society 27th Annual Symposium, 2017. Montreal, Canada
- Alshaarawy O, Anthony JC. Mortality from cardiovascular disease and diabetes among cannabis users. College on Problems on Drug Dependence 79th Scientific Sessions, 2017. Montreal, Canada
- Fairman BJ, Alshaarawy O. Elevated cotinine levels in recently active cannabis users absent recent cigarette or other tobacco exposure: Unmeasured blunt or environmental sources? College on Problems on Drug Dependence 78th Scientific Sessions, 2016. Palm Springs, CA
- 9. **Alshaarawy O**, Anthony JC. Cannabis smoking, cardiometabolic health, and cardiovascular disease: United States NHANES, 2005-2010. College on Problems on Drug Dependence 77th Scientific Sessions, 2015, Phoenix, AZ
- Zhou G\*, Alshaarawy O. Estimated prevalence of extra-medical drug use among women aged 12-44 Years by pregnancy status in the United States, NSDUH 2002-2011. Annual Conference of the Michigan State University Women's Health Research, 2014, East Lansing, MI
- 11. Brosig R\*, **Alshaarawy O**. Energy drinks consumption. Data for the United States based on the National Health and Nutrition Examination Survey 2001-2010. Michigan Epidemiology Conference, 2014, East Lansing MI
- 12. **Alshaarawy O**, Xiao J, Shankar A. The association of serum cotinine level and diabetes mellitus in never smokers," the 45th Annual SER Meeting, 2012, Minneapolis, MN
- Alshaarawy O, Xiao J, Shankar A. Perfluoroalkyl chemicals and prediabetes in US adults. American Diabetes Association's 72nd Scientific Sessions, 2012, Philadelphia, PA