

JEFFREY SHOW TRAN

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EDUCATION

University of Arizona, Sarver Heart Center <i>Cardiovascular Medicine Clinical Fellow</i>	Tucson, AZ Jul 2020 – Jun 2024
LAC+USC Medical Center, Department of Internal Medicine <i>Postgraduate Resident Physician</i>	Los Angeles, CA Jun 2017 – Jun 2020
Keck School of Medicine of the University of Southern California <i>Medical Doctorate</i>	Los Angeles, CA Aug 2013 – May 2017
Stanford University, Department of Human Biology <i>Bachelor of Arts, with Honors</i>	Stanford, CA Sep 2007 – Jun 2011

MAJOR WORK EXPERIENCE

Cardiovascular Medicine Fellowship

Jul2020-present with the Sarver Heart Center at the University of Arizona

Clinical Fellow

The cardiovascular medicine clinical fellowship at the Sarver Heart Center comprises of core rotations through consult and primary services at three hospitals: Banner University Medical Center Tucson, Southern Arizona Veterans Affairs Health Care System, and Banner University Medical Center South. Fellows learn core concepts in general, electrophysiology, heart failure, advanced imaging, and interventional cardiology. Procedural skills developed include bedside echocardiography, diagnostic angiograms, and invasive hemodynamic assessments.

Internal Medicine Residency

Jun2017-Jun2020 with the Department of Internal Medicine at the Los Angeles County + University of Southern California (LAC+USC) Medical Center

Postgraduate Resident Physician

The internal medicine residency comprises of rotations at the LAC+USC Medical Center and the tertiary care center Keck Hospital. LAC+USC Medical Center's patient population consists primarily of the underserved, which frequently translates to patients with end stage disease with a vast array of complicating comorbidities. This fosters direct and in-depth patient interaction that requires a great deal of autonomy and critical thinking. Residents rotate through wards, intensive care units, consult services, and outpatient clinics of both hospitals. Procedural skills include bedside ultrasound, central and peripheral line placement, paracentesis, thoracentesis, lumbar puncture, etc. Medical Spanish is required for daily interaction with many patients.

The Association between Modern Metropolitan Center Locations and the Distribution of Natural Resources and Topography in the 17th Century

Aug2012-Jun2013 with the Hoover Institution

Consultant

Under the direction of Stephen Haber, PhD, this project studied how the distribution of natural resources in 17th century North America led to the formation of current metropolitan centers of the United States. By overlying various topological, soil, and water way maps, we were able to predict where city centers were most likely to form. As a consulting analyst, I wrote algorithms based on computational geography to identify sections of coastline that might serve as harbors based on bathymetry and shoreline geography data. Through this project, I was exposed to rigorous study design and developed technical skills in Arc-GIS and python.

Health Policy Analysis and Consulting for the Ryan White Care Act, the AIDS Drug Administration Program, and the Regional Centers of California's Department of Developmental Services

Oct2011-Aug2012 with Mission Analytics Group

Analyst

Mission Analytics Group, Inc. is a health policy analytics firm that provides high powered mixed-method analyses for federal, state, and local government health and human services. As an analyst at Mission Analytics, I was involved in projects requiring risk modeling, policy analysis, and best practices identification. In this position, I was trained in the statistical programming software STATA, introduced to high powered analytic techniques such as autoregressive risk modeling, and exposed peripherally to the large Medicaid database.

ONGOING RESEARCH ACTIVITIES

Long-Term Survival of Patients on Home Inotrope Infusions

Nov2018-Present with the Cardiovascular Thoracic Institute (CVTI) in collaboration with the Schaeffer Center for Health Policy & Economics

Under the supervision of Luanda Grazette, MD, MPH, of the CVTI and in collaboration with Joel W. Hay, PhD, of the Schaeffer Center, this project is studying survival of ambulatory heart failure patients on home inotropes compared to a control cohort not on home inotropes. The study makes use of the Optum Clinformatics Claims database, which contains comprehensive prescription, hospitalization, and death data from over 5 million patients. My unique role on the project is to breakdown the guiding clinical question into actionable technical queries, bridging the divide between clinical medicine and the technical language of big data analytics. I also work directly with the data, coding some of the queries we use to extract and assemble the desired data set. This project has strengthened my technical skills with the querying language SQL and statistical software SAS, and has greatly increased my comfort operating with big data and its surrounding infrastructure.

Comparing Inotrope-Beta Blocker Combinations Using Time-on-Therapy

Jun2017-Present with the USC Cardiovascular Thoracic Institute (CVTI)

Under the supervision of Luanda Grazette, MD, MPH, of the CVTI, this project is studying the effects of various home inotrope-beta blocker combinations on a surrogate for survival, time-on-therapy. This study makes use of the Option Care pharmaceutical database, which contains data on over 3,000 patients who received home infusions of milrinone, dobutamine, or dopamine with or without a concomitant beta blocker. Death data is not available for these patients, so we are looking at how long patients survive on therapy as a surrogate outcome. Using a Cox regression with a time-interaction component, we identified that patients on milrinone and a beta-blocker tolerate a greater time on therapy than other combinations of therapy. Preliminary results were presented as an oral presentation at the International Society for Heart and Lung Transplantation 38th Annual Meeting and Scientific Sessions. This project demonstrates my expertise with advanced survival analysis and handling larger datasets with the statistical software STATA.

Beta Natriuretic Peptide and Pulmonary Artery Diastolic Pressure Correlations in Advanced Heart Failure Patients

May2018-Present with the USC Cardiovascular Thoracic Institute (CVTI)

Under the supervision of David M. Shavelle, MD, of the CVTI, this project is investigating how pulmonary artery pressure readings obtained through the CardioMEMS device correlate to serial BNP measurements in ambulatory patients. Using a random-effects regression model, we have found that there is a strong correlation between BNP and pulmonary artery diastolic pressure, after controlling for patient-specific effects. Results were presented as a poster at the HFSA Virtual Annual Scientific Meeting 2020, and are being prepared for submission as a manuscript. This project demonstrates my experience in random effects modeling and expertise in statistical software programming with STATA.

SELECTED PAST RESEARCH EXPERIENCES

Patient and Health Care Provider Stewardship of the CardioMEMS System Impacts Patient Outcomes

Apr2016-June2019 with the USC Cardiovascular Thoracic Institute (CVTI)

Under the supervision of David M. Shavelle, MD, of the CVTI, this project is studying how patient and health care provider use of the CardioMEMS™ device impacts patient heart failure hospitalization outcomes. The CardioMEMS sensor is an implantable intra-arterial pulmonary artery pressure monitoring device that enables remote hemodynamic monitoring, but requires data transmission by patients and review of that data by health care providers. Using a zero-inflated negative binomial model, we found that more frequent data transmission by patients and more frequent review of that data by health care providers were associated with fewer days spent hospitalized for heart failure in the one year following CardioMEMS implant. Results were presented as a moderated poster at the 21st Annual Scientific Meeting of the Heart Failure Society of America, and have since been published as a manuscript in *Cardiology Research and Practice* as of June 2019. This project required construction and maintenance of a relational database and demonstrates my expertise in advanced linear regression modeling, relational database management, and statistical software programming with STATA.

Study of the Natural History of and Risk Factors for the Development of Leber's Hereditary Optic Neuropathy

Jun2013-2014 with the Doheny Eye Inst/USC,

2014-2017 with the Doheny Eye Inst/UCLA

Under the supervision of Alfredo Sadun, MD, PhD, of the Doheny Eye Institute and in collaboration with the Dipartimento di Scienze Neurologiche of the Università di Bologna and the Department of Ophthalmology of the Federal University of Sao Paulo, we investigated the natural history and pathophysiology of Leber's Hereditary Optic Neuropathy (LHON). This is an ongoing effort through a variety of studies, including a prospective cohort study of the largest-to-date population of individuals sharing a familial LHON-predisposing mutation. Other studies include physiologic studies assessing retinal ganglionic activity through full field and pattern electroretinography. As part of my efforts on these projects, I designed an electronic data collection platform with an underlying relational database structure to more efficiently and safely manage the longitudinal data surrounding the cohort of interest. I wrote, received, and managed a 15000 USD grant from the International Foundation for Optic Nerve Disease. I then used this grant to lead a small engineering team to implement this platform in DeCafe with an underlying MSSQL database. My participation in other aspects of this large project has largely been to assist in study design and conduct biostatistical analyses as a statistician.

Nicotine Dependence and Psychosis in Bipolar Disorders and Schizoaffective Disorders

Jan2015-Oct2015 with the Dept. of Psychiatry and Behavioral Sciences at the Keck School of Medicine of USC
Statistician

This study assessed the association of bipolar and schizoaffective disorders with nicotine dependence, using data from the largest study population of affected individuals to date. My role on the project was to provide descriptive statistics preliminary testing. Statistical tests used included Chi-squared analysis with appropriate post-hoc testing. Published in American Journal of Medical Genetics Part B: Neuropsychiatric Genetics.

Engineering an Experimental Web-Based Patient Log for Clinical Research

Jun2014-Aug2014 with the Massachusetts Eye and Ear Infirmary
Web Designer

As part of its mission statement, Massachusetts Eye and Ear Infirmary (MEEI) seeks to be on the cutting edge of translational and bench research. As part of a summer internship at the Vavvas Lab, I engineered an experimental web-based patient log to enable providers at MEEI to input and track cases of interest. I designed and implemented the user interface as well as the underlying relational database structure. The service was hosted on an EC2 instance of Amazon Web Services, the database was built on Amazon's relational database service using MySQL, and the user interface was built primarily on PHP/HTML. Providers were given individual password-protected accounts, and each account was capable of tracking multiple patient visits with associated image uploads. Extensive efforts were made to maintain HIPAA compliance.

Vision Loss and Recovery after Baerveldt Aqueous Tube Shunt

Jun2013-2014 with the Doheny Eye Inst/USC
2014-Present with the Doheny Eye Inst/UCLA
Statistician

The Francis Lab at the Doheny Eye Inst/UCLA, in collaboration with Department of Ophthalmology at Massachusetts Eye and Ear Infirmary, seeks to determine the incidence of long-term vision loss after Baerveldt tube shunt placement and to identify potential risk factors associated with permanent visual loss. As statistician, I provided descriptive statistics of the study population and constructed a logistic regression model to identify risk factors associated with long-term vision loss. Published in Journal of Ophthalmology.

Implementing a Self-Sustaining First Responder Program for Under-Resourced Communities in Cape Town, South Africa

Feb2010-Jun2011 with the Emergency First Aid Responder Project

The Emergency First Aid Responder (EFAR) Project under the Dept. of Emergency Medicine of the Western Cape Province seeks to increase the presence of emergency medical services (EMS) in resource-limited communities as a stopgap measure against preventable trauma-related mortality while official EMS systems expand. The project trains community members to be designated first responders for their communities through a sustainable teach-the-teacher approach with training oversight and resources provided by the provincial EMS services.

Research Assistant

My role as the research lead was to identify metrics to assess the efficacy of EFAR project given limited resources invested into data collection. Key emphasis was placed on number of trainees receiving training over time, self-reported use of training at the 5-year interval, and number of patients receiving care from a community first responder based on emergency room triage. Published in the Emergency Medical Journal.

SELECTED OTHER EXPERIENCES

Statistics Consulting and Lecturing at the Keck School of Medicine of USC

Nov2014-Feb2015 with the Keck School of Medicine of USC

Lecturer, Consultant

As part of the required curriculum for the MD program at the Keck School of Medicine, students are required to participate in a research project throughout their four years. In collaboration with the curriculum office, I offered an 8-lecture class on introductory statistics and data management to assist students with their research projects. The class, called "Introduction to Statistics and Data Management" reviewed the set-up, implementation, and interpretation of basic statistical tests including Pearson's correlation coefficient, Chi-squared test, T-test, and ANOVA. The class focused on the use of statistical programming software STATA 13.1, and I also wrote sample code and practice activities. Additionally, I provided statistical consultation to medical students designing or conducting their mandatory research projects.

TECHNICAL SKILLS

Programming Languages: STATA; SAS; SQL; R; PHP; HTML; Python; Arc-GIS 10; AWS EC2

AWARDS

Jun 2004: 15000USD grant recipient from the International Foundation for Optic Nerve Disease. The grant sponsored the construction of a data collection platform capable of offline data collection with upload to a secure, cloud-based relational database once internet connection was available. As the grant recipient, I was responsible for designing the database forms and relational database structure as well as communicating with the sponsor. I lead a small engineering team to construct the platform in DeCafe.

ACCEPTED PUBLICATIONS

Tran, J.S.; Havakuk, O.; McLeod, J.; Hwang, J.; Kwong, H.Y.; Shavelle, D.M.; Zile, M.R.; Elkayam, R.; Fong, M.; Grazette, L.; Pulmonary Pressure Change Following Transition to Sacubitril/Valsartan in Ambulatory Patients with Heart Failure with Reduced Ejection Fraction - an Observational Case Series Using the CardioMEMS System. *ESC Heart Failure*. 2021. doi:10.1002/ehf2.13225

Gong, CL; Zawadzki, NK; Zawadzki R; Tran JS; Hay JW. Letter to the Editor: Unprocessed Red Meat and Processed Meat Consumption. *Ann Intern Med*. 2020 May 5;172(9):637-638. doi: 10.7326/L20-0125.

Tran, J.S.; Wolfson, A.M.; O'Brien, D.; Yousefian, O.; Shavelle, D.M.; A Systems-based Analysis of Patient and Health Care Provider Use of the CardioMEMS Device and Heart Failure Hospitalization Outcomes. *Cardiology Research and Practice*. 2019 Jul. 17;2019:7979830. doi: 10.1155/2019/7979830.

Chang, J.; Tran, J.S.; Dina, K.; Basu, A.; "Nivolumab-Induced Hypophysitis Leading to Hypopituitarism and Secondary Empty Sella Syndrome in a Patient with Non-Small Cell Lung Cancer." *BMJ Case Reports*. 2019 Mar 7;12(3). pii: e228135. doi: 10.1136/bcr-2018-228135

Karanjia, R.; Berezovsky, A.; Sacai, P.Y.; Cavascan, N.N.; Liu, H.Y.; Nazarali, S.; Moraes-Filho, M.N.; Anderson, K.; Tran, J.S.; Watanabe, S.E.; Moraes, M.N.; Sadun, F.; DeNegri, A.M.; Barboni, P.; Ramos, C.V.F.; Morgia, C.L.; Carelli, V.; Belfort Jr, R.; Coupland, S.G.; Salomao, S.R., Sadun, A.A. The Photopic Negative Response; An Objective Measure of Retinal Ganglion Cell Function in Patients with Leber's Hereditary Optic Neuropathy. *Investigative Ophthalmology & Visual Science*. 2017; 58(6):300-306; DOI: 10.1167/iovs.17-21773.

Irvine, A.; Tian, J.; Anderson, K.; Rostami, B.; Tran, J.S.; Coupland, S.; Sadun, A.A.; Liu, K.; Karanjia, R.; Pattern Electroretinogram as an Objective Measure of Contrast Sensitivity in Diffractive Multifocal Intraocular Lenses. DOI: 10.33552/WJOVR.2019.02.000538

Estrada, E.; Hartz, S.M.; Tran, J.S.; Hilty, D.M.; Pamela, S.; Smoller, J.W.; Pato, C.N.; Pato, M.T.; Nicotine dependence and psychosis in bipolar disorders and Schizoaffective disorder, bipolar type; *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics*; 15 Oct 2015; DOI: 10.1002/ajmg.b.32385.

Hwang T., Karanjia R., Moraes-Filho M., Gale J., Tran J.S., Chu E., Salomao S., Berezovsky A., Belfort R., Moraes M., Sadun F., DeNegri A., La Morgia C., Barboni P., Ramos C., Chicani F., Quiros P., Carelli V., Sadun A. Natural History of Conversion of Leber's Hereditary Optic Neuropathy, a Prospective Case Series. *Ophthalmology*. 2017; 124(6):843-850. DOI: 10.1016/j.ophtha.2017.01.002.

Karanjia, R.; Hwang, T.J.; Chen, A.F.; Pouw, A.; Tian, J.J.; Chu, E.R.; Wang, M.Y.; Tran, J.S.; Sadun, A.A.; Correcting Finger Counting to Snellen Acuity; *Journal of Neuro-Ophthalmology, Letter to the Editor*. 2016; 40(5):219-221. DOI: 10.1080/01658107.2016.1209221.

Kim, E.L.; Tran, J.S.; Moshfeghi, A.; Self-reported characteristics of medical retina specialists in the United States. *Ophthalmology*, 123(2): 438-440. DOI: 10.1016/j.ophtha.2015.08.025

Kim, E.L.; Tran, J.S.; Toeteberg-Harms, M.; Chahal, J.S.; Rhee, D.; Chopra, V.; Vision loss and recovery after Baerveldt Aqueous Tube Shunt Implantation; *Journal of Ophthalmology*. 2017:4140305. DOI: 10.1155/2017/4140305. Epub 2017 Jan 18.

Sun, J.H.; Twomey, M.; Tran, J.S.; Wallis, L.A.; The need for a usable assessment tool to analyse the efficacy of emergency care systems in developing countries: proposal to use the TEWS methodology. *Emerg Med J* 2012; (29)882-886. DOI:10.1136/emered-2011-200619.

PENDING PUBLICATIONS

Grazette, L.; Tran, J.S.; Zawadzki, N.; Zawadzki, R.; McLeod, J.; Fong, M.; Wilson, M.; Havakuk, O.; Hay, J.; Regional Patterns of Use of Continuous Outpatient Inotrope Infusion Therapy. Under Review as Manuscript.

Song, C.; Tran, J.S.; Shavelle, D.M.; Comparison of Basic Natriuretic Peptide and Pulmonary Artery Pressure in Patients with Congestive Heart Failure. Pending submission.

SELECTED ABSTRACTS AND PRESENTATIONS

Song, C.; Tran, J.S.; Wolfson, A.M.; Shavelle, D.M.; Association Of B-type Natriuretic Peptide with Pulmonary Artery Pressures In Ambulatory Heart Failure Patients. HFSA Virtual Annual Scientific Meeting 2020. Sep, 2020. USA.

Lee, R. Jr.; Pizula, J; Tran JS; Yousaf, H; Mehra, Anilkumar; Cardiac Catheterization for out of Hospital Ventricular Fibrillation Arrest Leads to Hypertrophic Obstructive Cardiomyopathy Diagnosis Influencing Optimal Vasopressor Choice. 69th Annual Scientific Session & Expo of the American College of Cardiology. Mar, 2020. USA.

Chau, E; Tran, JS; Malini, N; Fong, M; Grazette, L; Shavelle, D. Readmission Rates of Heart Failure in a Safety Net Hospital. Heart Failure Society of America, Scientific Meeting, Sep 2019. Philadelphia, Pennsylvania, USA.

McLeod, JM.; Raj, L.; Tran, J.S.; Grazette, L.; Regional Variation in Chronic Inotrope Infusion in Advanced Heart Failure. 68th Annual Scientific Session & Expo of the American College of Cardiology, Mar 2019. New Orleans, LA, USA.

Tran, J.S.; Gertsvolf, N.; Allam, S.; Sarcon, A.; Laughrun, D.; Management of a Woman with Uncorrected Tricuspid Atresia. 68th Annual Scientific Session & Expo of the American College of Cardiology, Mar 2019. New Orleans, LA, USA.

Patel, S.; Hwang, J.D.; Tran, J.S.; Narayanasamy, H.; Wan, J.; Cohen, P.; Grazette, L.; Association of Humanin a Novel Mitochondrial Protein with Human Heart Failure: An Assessment of Mortality and Clinical Biomarkers. 68th Annual Scientific Session & Expo of the American College of Cardiology, Mar 2019. New Orleans, LA, USA.

Frousiakis, S.E.; Tran, J.S.; Asanad, S.; Karanjia, R.; Gale, J.; Tian, J.; Pouw, A.E.; Chen, A.; Huang, T.; Conrad, G.L.; Moraes Filho, M.; Salomao, S.R.; Belfort R.; Chicani, F; Quiros, P.A.; Carelli, V.; Sadun, A.A.; Cardiac Comorbidity in Leber's Hereditary Optic Neuropathy mtDNA 11778. The Association for Research in Vision and Ophthalmology, 2018. Honolulu, Hawaii, USA.

Havakuk, O.; Tran, J.S.; Artig-Brown, T.; Yoon, A.; Fong, M.W.; Meaux, N.; Grazette, L. Intravenous Inotropes, Beta Blockers, and Survival in Ambulatory Heart Failure Patients – A Contemporary Analysis of 3,311 Patients. International Society for Heart and Lung Transplantation 38th Annual Meeting and Scientific Sessions, Apr 2018. Nice, France.

Tran, J.S.; Wolfson, A.M.; O'Brien, D.; Yousefian, O.; Shavelle, D.M.; Patient and Health Care Provider Utilization Practices of a Remote Hemodynamic Monitoring Device are Major Determinants of Patient Outcomes: A Single Center Experience with the CardioMEMS HF Device. Heart Failure Society of America, 21st Annual Scientific Meeting, Sep 2017. Dallas, Texas, USA.

McLeod, J.; Tran, J.S.; Grazette, L.; Soluble ST2 Levels Show Promising Trend with Increasing Left Ventricular Mass in an Ambulatory Heart Failure Cohort. 67th Annual Scientific Session & Expo of the American College of Cardiology, 2018. Orlando, Florida, USA.

Kim, Y.J.; Tung, S.; Tran, J.S.; Daly, J.; Chavira, C.; Botello, T.; Improving Access to Family Planning at an Inpatient Psychiatric Facility. International Association of Women's Mental Health, Mar 2017. Dublin, Ireland.

Kim, E.L.; Tran, J.S.; Toeteberg-Harms, M.; Chahal, J.S.; Rhee, D.; Chopra, V.; Vision Loss and Recovery After Baerveldt Glaucoma Implant Surgery. PA027, American Academy of Ophthalmology, 2015. Las Vegas, NV, USA.

Estrada, E.; Pato, M.; Tran, J.; Smoking Dependence and Psychosis in Schizoaffective Bipolar and Bipolar I patients. The American Psychiatric Association, May 18th 2015. Toronto, Canada.

Saloom, Saati; Tran, J.S.; Berry, J.; Ocular and systemic complications after resident intravitreal injection of bevacizumab (Avastin) at Los Angeles County + University of Southern California (LAC+USC) Medical Center. The Association for Research in Vision and Ophthalmology, 2015. Denver, CO, USA

Frousiakis, S.E.; Karanjia, R.; Tran, J.S.; Pouw, A.E.; La Morgia, C.; Moraes, M; Salomao, S.R.; Quiros, P.; Carelli, V.; Sadun, A.A.; Clinically-Significant Cardiac Pathology in Leber's Hereditary Optic Neuropathy. 3856 - C0261, The Association for Research in Vision and Ophthalmology, 2015. Denver, CO, USA.

Chen, A.F.; Ganti, A.; Zhang, Y.; Hwang, T.; Berezovsky, A.; Moraes, M.; Tran, J.S.; Wagschal, T.; Karanjia, R.; Sadun, A.A.; Evaluation of visual field metrics in patients with central scotomas from LHON. 3859 - C0264, The Association for Research in Vision and Ophthalmology, 2015. Denver, CO, USA.

Ammar, M.; Chahal, J.S.; Ganti, A.; Tran, J.S.; Chu, E.R; Chen, A.F.; Hwang, T. J.; Karanjia, R., Sadun, A.A.; Functional Visual Outcome of 1st vs 2nd Affected Eye in Treated LHON Patients at 1 Year. 3860 - C0265, The Association for Research in Vision and Ophthalmology, 2015. Denver, CO, USA.

Estrada, E.; Lagomasino, I.; Tran, J.; Camacho, D.; Dwight Johnson, M.; Hay J.; Improving Depression Treatment for Older Latino Adults in Public Sector Care. American Association for Geriatric Psychiatry Annual Conference, March 28th 2015. New Orleans, LA, USA.

Tran, J.; Zhang Y,; Karanjia, R.; La Morgia, C.; Salomao, S.R.; Berezovsky, A.; Chicani, F.; Moraes, M.; Moraes-Filho, M.; Belford Jr., R.; Sadun, A.A.; Carelli, V.; How Does Exogenous ROS Effect LHON Conversion? Poster 69, 41st Annual Meeting North American Neuro-Ophthalmology Society, 2015, Del Coronado. San Diego, CA, USA

Ganti A. K.; Chu E. R.; Karanjia R.; Tran J.; Belfort, Jr. R.; Moraes M.; Berezovsky A.; Sadun A. A.; Miller G.; Chicani F.; EPI-743 May Improve Visual Acuity in LHON: Data from a Brazilian Cohort. 6201-B0120, The Association for Research in Vision and Ophthalmology, 2014. Orlando, FL, USA

Pouw, A.; Gale J.; Karanjia, R.; Tran, J.S.; Moraes, M.; Salomao, S.R.; Berezovsky, A.; Chicani, F.; Quiros, P. A.; Sadun, A. A., Perimetric parameters in unaffected carriers of Leber's Hereditary Optic Neuropathy (LHON). 6202-B0121, The Association for Research in Vision and Ophthalmology, 2014. Orlando, FL, USA.

Karanjia R.; Tran J.; Chu E. R; Gale J.; S. E. Frousiakis; A. Pouw; C. A. Wa; M. Moraes; S. R. Salomao; V. Carelli, Although smoking and alcohol are known to increase incidence of Leber's Hereditary Optic Neuropathy (LHON) only smoking increases severity of LHON. 6203-B0122, The Association for Research in Vision and Ophthalmology, 2014, Orlando, FL, USA.