CURRICULUM VITAE
A.J. Agopian, Ph.D.

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FACULTY POSITIONS

2018-present **Associate Professor**, UTHSPH, Human Genetics Center, Department of Epidemiology, Human Genetics and Environmental Sciences, Houston, TX

2012-2018 **Assistant Professor**, UTHSPH, Human Genetics Center, Department of Epidemiology, Human Genetics and Environmental Sciences, Houston, TX

TEACHING

• PHD2711. Epidemiology IV. Course Co-Instructor (Responsibility: 50%). University of Texas School of Public Health. 3 units. Spring, 2022.

• PH2610. Fundamentals of Epidemiology/Epidemiology 1. Lead Course Instructor (Responsibility: 100%). University of Texas School of Public Health. 3 units. Spring, 2014-2021.

• PH2830. Clinical Genetics in Epidemiology. Lead Course Instructor (Responsibility: 100%). University of Texas School of Public Health. 3 units. Spring, 2019-present.

• Perinatal Epidemiology Seminar. Coordinator. University of Texas School of Public Health. (Monthly, not for academic credit). 2015-2020.

UNIVERSITY COMMITTEES

2016-present Practice Council, University of Texas SPH, Member

2017-2018 Genomics and Bioinformatics ad hoc Curriculum Committee, University of Texas SPH, Member

2017-2018 Epidemiology I Update ad hoc Curriculum Committee, University of Texas SPH, Member

2017-2018 Practice Council CEPH Subcommittee, Member

2018-2019 Faculty Search Committee (Epidemiology, Human Genetics, and Environmental Sciences), University of Texas SPH, Member

2018-2020 Faculty Search Committee (Human Genetics), University of Texas SPH, Member

2019-2022 Epidemiology Preliminary Exam Committee, Member

2021-present Practice Council, University of Texas SPH, Faculty Chair

2021-present	School of Public Health Executive Council, University of Texas SPH, Member
2021-2022	Tenure and Promotion Department Representative, EHGES Department, University of Texas SPH
2021-present	Faculty Search Committee (2 NTT Teaching Positions, Epidemiology, Human Genetics, and Environmental Sciences), University of Texas SPH, Member
2022-present	UTSPH-Texas DSHS Academic Health Partnership Coordinating Committee, Member
2022-2023	Tenure and Promotion Department Representative, EHGES Department, University of Texas SPH
2022	UTHealth Grants 102 Mentor
2022-present	UTSPH-Texas DSHS Academic Health Partnership Coordinating Committee, Member

BOOK CHAPTERS

1. Lupo PJ, Etheredge AJ, **Agopian A**, Mitchell LE. Epidemiology of Neural Tube Defects. In: Sheiner E, ed., Textbook of Perinatal Epidemiology. Hauppauge, NY: Nova Science Publishing, Inc. 2010.

2. Lupo PJ, Etheredge AJ, **Agopian A**, Mitchell LE. Epidemiology of Neural Tube Defects. In: Sheiner E, ed., Epidemiological Perspectives of Maternal-Fetal Medicine. Hauppauge, NY: Nova Science Publishers, Inc. 2012.

3. **Agopian AJ**, Hashmi SS, Ramakrishnan A. Descriptive Epidemiology of Hypospadias. In: Hypospadias: Risk Factors, Epidemiology and Surgical Outcomes. Hauppauge, NY: Nova Science Publishing, Inc. 2015.

PEER-REVIEWED PUBLICATIONS

**Mentored student/trainee*
†Authors contributed equally

1. **Agopian A**, Marengo L, Mitchell LE. Descriptive Epidemiology of Omphalocele in Texas, 1999-2004. American Journal of Medical Genetics Part A 2009; 149A: 2129-2133.

2. **Agopian AJ**, Mitchell LE. MI-GWAS: a SAS platform for the analysis of inherited and maternal genetic effects in genome-wide association studies using log-linear models. BMC Bioinformatics 2011; 12;117.

3. **Agopian AJ**, Marengo LK, Mitchell LE. Predictors of Trisomy 21 in the Offspring of Older and Younger Women. Birth Defects Research Part A: Clinical and Molecular Teratology 2012; 94:31-35.

4. **Agopian AJ**, Canfield MA, Olney RS, Lupo PJ, Ramadhani T, Mitchell LE, Shaw GM, Moore CA; National Birth Defects Prevention Study. Spina bifida subtypes and sub-phenotypes by maternal race/ethnicity in the National Birth Defects Prevention Study. American Journal of Medical Genetics Part A 2012; 158A:109-115.

5. **Agopian AJ**, Lupo PJ, Tinker SC, Canfield MA, Mitchell LE; National Birth Defects Prevention Study. Working towards a risk prediction model for neural tube defects. Birth Defects Research Part A: Clinical and Molecular Teratology 2012; 94:141-146.

6. Lupo PJ, Langlois PH, Reefhuis J, Lawson CC, Symanski E, Desrosiers TA, Khodr ZG, **Agopian AJ**, Waters MA, Duwe KN, Finnell RH, Mitchell LE, Moore CA, Romitti PA, Shaw GM; National Birth Defects Prevention

Study. Maternal occupational exposure to polycyclic aromatic hydrocarbons: effects on gastroschisis among offspring in the National Birth Defects Prevention Study. Environmental Health Perspectives 2012; 120:910-915.

7. **Agopian AJ**, Lupo PJ, Herdt-Losavio ML, Langlois PH, Rocheleau CM, Mitchell LE; National Birth Defects Prevention Study. Differences in Folic Acid Use, Prenatal Care, Smoking, and Drinking in Early Pregnancy by Occupation. Preventive Medicine 2012; 55:341-345.

8. **Agopian AJ**, Eastcott LM, Mitchell LE. Age of onset and effect size in genome-wide association studies. Birth Defects Research Part A: Clinical and Molecular Teratology 2012; 94:908-911.

9. Lupo PJ, Canfield MA, Chapa C, Lu W, **Agopian AJ**, Mitchell LE, Shaw GM, Waller DK, Olshan AF, Finnell RH, Zhu H. Diabetes and Obesity-Related Genes and the Risk of Neural Tube Defects in the National Birth Defects Prevention Study. American Journal of Epidemiology 2012; 176: 1101-1109.

10. Lupo PJ, Symanski E, Langlois PH, Lawson CC, Malik S, Gilboa SM, Lee LJ, **Agopian AJ**, Desrosiers TA, Waters MA, Romitti PA, Correa A, Shaw GM, Mitchell LE; National Birth Defects Prevention Study. Maternal occupational exposure to polycyclic aromatic hydrocarbons and congenital heart defects among offspring in the National Birth Defects Prevention Study. Birth Defects Research Part A: Clinical and Molecular Teratology 2012; 94: 875-881.

11. **Agopian AJ**, Moulik M, Gupta-Malhotra M, Marengo LK, Mitchell LE. Descriptive Epidemiology of Non-syndromic Complete Atrioventricular Canal Defects. Paediatric and Perinatal Epidemiology 2012; 26: 515-524.

12. Lee LJ*, Canfield MA, Hashmi SS, Moffitt KB, Marengo L, **Agopian AJ**, Belmont JW, Freedenberg D, Tanksley SM, Mitchell LE, Lupo PJ. Association between thyroxine levels at birth and choanal atresia or stenosis among infants in Texas, 2004-2007. Birth Defects Research Part A: Clinical and Molecular Teratology 2012; 94: 951-954.

13. **Agopian AJ**, Cai Y, Langlois PH, Canfield MA, Lupo PJ. Maternal Residential Atrazine Exposure and Risk for Choanal Atresia and Stenosis in Offspring. Journal of Pediatrics 2013; 162:581-586.

14. **Agopian AJ**, Tinker SC, Lupo PJ, Canfield MA, Mitchell LE; National Birth Defects Prevention Study. Proportion of Neural Tube Defects Attributable to Known Risk Factors. Birth Defects Research Part A: Clinical and Molecular Teratology 2013; 97: 42-46.

15. **Agopian AJ**, Langlois PH, Cai Y, Canfield MA, Lupo PJ. Maternal Residential Atrazine Exposure and Gastroschisis by Maternal Age. Maternal and Child Health Journal 2013; 17:1768-1775.

16. **Agopian AJ**, Lupo PJ, Canfield MA, Mitchell LE; National Birth Defects Prevention Study. Swimming pool use and birth defect risk. American Journal of Obstetrics and Gynocology 2013; 209: 219e1-219e9.

17. Ramakrishnan A*, Lupo PJ, **Agopian AJ**, Linder SH, Stock TH, Langlois PH, Craft E. Evaluating the effects of maternal exposure to benzene, toluene, ethyl benzene, and xylene on oral clefts among offspring in Texas: 1999-2008. Birth Defects Research Part A: Clinical and Molecular Teratology 2013; 97: 532-537.

18. **Agopian AJ**, Lupo PJ, Canfield MA, Langlois PH. Case-control Study of Maternal Residential Atrazine Exposure and Male Genital Malformations. American Journal of Medical Genetics Part A 2013; 161A: 977-982.

19. **Agopian AJ**, Bhalla AD, Boerwinkle E, Finnell RH, Grove ML, Hixson JE, Shimmin LC, Sewda A, Stuart C, Zhong Y, Zhu H, Mitchell LE. Exon Sequencing of PAX3 and T (Brachyury) in Cases with Spina Bifida. Birth Defects Research Part A: Clinical and Molecular Teratology 2013; 97: 597-601.

20. **Agopian AJ**, Waller DK, Lupo PJ, Canfield MA, Mitchell LE; National Birth Defects Prevention Study. A case-control study of maternal bathing habits and risk for birth defects in offspring. Environmental Health 2013; 12:88.

21. Khodr ZG, Lupo PJ, **Agopian AJ**, Canfield MA, Case AP, Carmichael SL, Shaw GM, Mitchell LE; National Birth Defects Prevention Study. Preconceptional Folic Acid Supplementation in the National Birth Defects Prevention Study. Birth Defects Research Part A: Clinical and Molecular Teratology 2014; 100:472-482.

22. **Agopian AJ**, Langlois PH, Canfield MA, Ramakrishnan A. Epidemiologic Features of Male Genital Malformations and Subtypes in Texas. American Journal of Medical Genetics Part A 2014; 164A:943-949.

23. **Agopian AJ**, Mitchell LE, Glessner J, Bhalla AD, Sewda A, Hakonarson H, Goldmuntz E. Genome-wide Association Study of Maternal and Inherited Loci for Conotruncal Heart Defects. PLOS ONE 2014; 9:e96057.

24. Mitchell LE, **Agopian AJ**, Bhalla A, Glessner J, Kim C, Hakonarson H, Goldmuntz E. Genome-wide association study of maternal and inherited effects on left-sided cardiac malformations. Human Molecular Genetics 2015; 24: 265-273.

25. Arth A, Tinker S, Moore C, Canfield M, **Agopian AJ**, Reefhuis J. Supplement Use and Other Characteristics among Pregnant Women with a Previous Pregnancy Affected by a Neural Tube Defect - United States, 1997-2009 Morbidity and Mortality Weekly Report 2015; 64:6-9.

26. Lim H*, **Agopian AJ**, Whitehead LW, Beasley CW, Langlois PH, Emery RJ, Waller DK, and the National Birth Defects Prevention Study. Maternal occupational exposure to ionizing radiation and major structural birth defects. Birth Defects Research Part A 2015; 103:243-54.

27. Ramakrishnan A*, Lee LJ, Mitchell LE, **Agopian AJ**. Maternal Hypertension During Pregnancy and the Risk of Congenital Heart Defects in Offspring: A Systematic Review and Meta-analysis. Pediatric Cardiology 2015; 36: 1442-1451.

28. O'Brien JL, Langlois PH, Lawson CC, Scheuerle A, Rocheleau CM, Waters MA, Symanski E, Romitti PA, **Agopian AJ**, Lupo PJ, and the National Birth Defects Prevention Study. Maternal occupational exposure to polycyclic aromatic hydrocarbons and craniosynostosis among offspring in the national birth defects prevention study. Birth Defects Research Part A: Clinical and Molecular Teratology 2016; 106: 55-60.

29. Lim H*, Beasley CW , Whitehead LW, Emery RJ, **Agopian AJ**, Langlois PH, Waller DK, and the National Birth Defects Prevention Study. Maternal exposure to radiographic exams and major structural birth defects. Birth Defects Research Part A: Clinical and Molecular Teratology 2016; 106:563-572.

30. Kim J*, Langlois PH, Herdt-Losavio ML, **Agopian AJ**. A case-control study of maternal occupation and the risk of orofacial clefts. Journal of Occupational and Environmental Medicine 2016; 58: 833-839.

31. **Agopian AJ**, Hoang TT, Mitchell LE, Morrison AC, Tu D, Nassar N, Canfield MA. Maternal Hypertension and Risk for Hypospadias in Offspring. American Journal of Medical Genetics Part A 2016; 170: 3125-3132.

32. Simeone RM, Tinker SC, Gilboa SM, **Agopian AJ,** Oster ME, Devine OJ, Honein MA. Proportion of selected congenital heart defects attributable to recognized risk factors. Annals of Epidemiology 2016; 26: 838-845.

33. Rocheleau CM, Bertke SJ, Lawson CC, Romitti PA, Desrosiers TA, **Agopian AJ**, Bell E, Gilboa SM, and the National Birth Defects Prevention Study. Factors associated with employment status before and during pregnancy: implications for studies of pregnancy outcomes. American Journal of Industrial Medicine 2017; 60: 329-341.

34. **Agopian AJ**, Kim J*, Langlois PH, Lee L, Whitehead LW, Symanski E, Herdt ML, Delclos GL. Maternal occupational physical activity and risk for orofacial clefts. American Journal of Industrial Medicine 2017; 60: 627-634.

35. Hoang TT*, Marengo LK, Mitchell LE, Canfield MA, **Agopian AJ**. Original findings and updated meta-analysis for the association between maternal diabetes and risk for congenital heart disease phenotypes. American Journal of Epidemiology 2017; 186: 118-128.

36. **Agopian AJ**, Goldmuntz E, Hakonarson H, Sewda A, Taylor D, Mitchell LE, and the Pediatric Cardiac Genomics Consortium. Genome-wide Association Studies and Meta-Analyses for Congenital Heart Defects. Circulation: Cardiovascular Genetics 2017; 10: e001449.

37. Kim J*, Swartz MD, Langlois PH, Romitti PA, Weyer P, Mitchell LE, Luben TJ, Ramakrishnan A*, Malik S, Lupo PJ, Feldkamp ML, Meyer RE, Winston JJ, Reefhuis J, Blossom SJ, Bell E, and **Agopian AJ** and the National Birth Defects Prevention Study. Estimated maternal pesticide exposure from drinking water and heart defects in offspring. International Journal of Environmental Research and Public Health 2017; 14:889.

38. Guo T, Repetto G, McDonald McGinn DM, Chung JH, Nomaru H, Campbell CL, Blonska A, Bassett AS, Chow EWC, Mlynarski EE, Swillen A, Vermeesch J, Devriendt K, Gothelf D, Carmel M, Michaelovsky E, Schneider M, Eliez S, Antonarakis SE, Coleman K, Tomita-Mitchell A, Mitchell ME, Digilio MC, Dallapiccola B, Marino B, Philip N, Busa T, Kushan L, Bearden CE, Piotrowicz M, Hawuła W, Roberts AE, Tassone F, Simon TJ, van Duin E, van Amelsvoort TA, Kates WR, Zackai E, Johnston HR, Cutler DJ, **Agopian AJ**, Mitchell LE, Goldmuntz E, Wang T, Emanuel BS, Morrow BE on behalf of the International 22q11.2 Consortium/Brain and Behavior Consortium. Genome-wide association study to find modifiers for tetralogy of Fallot in 22q11.2DS identifies variants in the GPR98 locus on 5q14.3. Circulation: Cardiovascular Genetics 2017; 10: e001690.

39. Lupo PJ, **Agopian AJ**, Castillo H, Castillo J, Clayton GH, Dosa NP, Hopson B, Joseph DB, Rocque BG, Walker WO, Wiener JS, Mitchell LE. Genetic Epidemiology of Neural Tube Defects. Journal of Pediatric Rehabilitation Medicine 2017; 10: 189-194.

40. Kim J*, Langlois PH, Mitchell LE, **Agopian AJ**. Maternal occupation and the risk of neural tube defects in offspring. Archives of Environmental and Occupational Health 2018; 73: 304-312.

41. **Agopian AJ**, Evans JA, Lupo PJ. Analytic Methods for Evaluating Patterns of Multiple Congenital Anomalies in Birth Defect Registries. Birth Defects Research 2018; 110: 5-11.

42. Hoang TT*, **Agopian AJ**, Mitchell LE. Maternal Use of Weight Loss Products and the Risk of Neural Tube Defects in Offspring: A Systematic Literature Review. Birth Defects Research 2018; 110: 48-55.

43. Hoyt AT, Canfield MA, Langlois PH, Waller DK, **Agopian AJ**, Shumate C, Hall NB, Marengo LK, Ethen MK, Scheuerle AE. Pre-Zika Descriptive Epidemiology of Microcephaly in Texas, 2008-2012. Birth Defects Research 2018; 110: 395-405.

44. Suhl J, Romitti PA, Cao Y, Rocheleau CM, Burns TL, Conway K, Rajaraman P, **Agopian AJ**, Stewart P, and the National Birth Defects Prevention Study. Maternal Occupational Cadmium Exposure and Nonsyndromic Orofacial Clefts. Birth Defects Research 2018; 110: 603-609.

45. Hoang TT*, Goldmuntz E, Roberts AE, Chung WK, Kline JK, Deanfield JE, Giardini A, Aleman A, Gelb BD, Mac Neal M, Porter GA, Kim R, Brueckner M, Lifton RP, Edman S, Woyciechowski S, Mitchell LE, **Agopian AJ**. The Congenital Heart Disease Genetic Network Study Cohort Description. PLoS ONE 2018; 13: e0191319.

46. Chambers TM, **Agopian AJ**, Lewis RA, Langlois PH, Danysh HE, Mitchell LE, and Lupo PJ. Epidemiology of Anophthalmia and Microphthalmia: Prevalence and Patterns in Texas, 1999-2009. American Journal of Medicine Genetics 2018; 176: 1810-1818.

47. **Agopian AJ**, Salemi JL, Tanner JP, Kirby RS. Using Birth Defects Surveillance Programs for Population-based Estimation of Sibling Recurrence Risks. Birth Defects Research 2018; 110: 1383-1387.

48. Raut JR*, Simeone RM, Tinker SC, Canfield MA, Day RS, **Agopian AJ**. Proportion of Orofacial Clefts Attributable to Recognized Risk Factors. The Cleft Palate-Craniofacial Journal 2019; 56: 151-158.

49. Hoang TT*, Lei Y, Mitchell LE, Sharma SV, Swartz MD, Waller DK, Finnell RH, Benjamin RH, Browne ML, Canfield MA, Lupo PJ, McKenzie P, Shaw G, **Agopian AJ**, The National Birth Defects Prevention Study. Maternal lactase polymorphism (rs4988235) is associated with neural tube defects in offspring in the National Birth Defects Prevention Study. The Journal of Nutrition 2019; 149: 295-303.

50. Castillo J, Lupo PJ, Tu DD, **Agopian AJ**, Castillo H. The National Spina Bifida Patient Registry: A Decade's Journey. Birth Defects Research 2019; 111: 947-957.

51. Shewale JB*, Ganduglia Cazaban CM, Waller KD, Mitchell LE, Langlois PH, **Agopian AJ**. Microcephaly Inpatient Hospitalization and Potential Zika Outbreak in Texas: A Cost and Predicted Economic Burden Analysis. Travel Medicine and Infectious Disease 2019; 30: 67-72.

52. Kousa1 YA, Zhu H, Fakhouri WD, Lei Y, Kinoshita A, Roushangar RR, Patel NK, **Agopian AJ**, Yang W, Leslie EJ, Busch TD, Mansour T, Li1 X, Smith AL, Li EB, Sharma DB, Williams TJ, Chai Y, Amendt BA, Liao EC, Mitchell LE, Bassuk AG, Gregory S, Ashley-Koch A, Shaw GM, Finnell RH, Schutte BC. The TFAP2A–IRF6–GRHL3 genetic pathway is conserved in neurulation. Human Molecular Genetics 2019; 28: 1726-1737.

53. Lopez A*, Benjamin RH, Raut JR, Ramakrishnan A, Mitchell LE, Tsao K, Johnson A, Langlois PH, Swartz MD, **Agopian AJ**. Mode of Delivery and Mortality among Neonates with Gastroschisis: A Population-Based Cohort in Texas. Paediatric and Perinatal Epidemiology 2019; 33: 204-212.

54. Waller DK, Tark JY, **Agopian AJ**, Shewale J, Ganduglia-Cazaban C, Hoyt AT, Scheuerle AE, Langlois PH. Temporal Trends in Diagnoses of Congenital Microcephaly, Texas Hospital Discharge Diagnoses, 2000-2015. Birth Defects Research 2019; 111: 584-590.

55. **Agopian AJ** and Cabrera R. Summary of the 10th International Conference on Neural Tube Defects. Birth Defects Research 2019; 111: 945-946.

56. Sewda A*, **Agopian AJ**, Goldmuntz E, Hakonarson H, Morrow BE, Taylor D, Mitchell LE, and the Pediatric Cardiac Genomics Consortium. Gene-based genome-wide association studies and meta-analyses of conotruncal heart defects. PLoS One 2019; 14: e0219926.

57. Hoang TT*, Lei Y, Mitchell LE, Sharma SV, Swartz MD, Waller DK, Finnell RH, Benjamin RH, Browne ML, Canfield MA, Lupo PJ, McKenzie P, Shaw GM, **Agopian AJ**, The National Birth Defects Prevention Study. Maternal Genetic Markers for Risk of Celiac Disease and their Potential Association with Neural Tube Defects in Offspring. Molecular Genetics & Genomic Medicine 2019; 7: e688.

58. Kaplinski M*, Goldmuntz E, Mitchell LE, Hammond D, Taylor D, **Agopian AJ**. The association of elevated maternal genetic risk scores for hypertension, type 2 diabetes and obesity and having a child with a congenital heart defect. PLOS ONE 2019; 14: e0216477.

59. Hoang TT*, Manso PH, Edman S, Mercer-Rosa L, Mitchell LE, Sewda A, Swartz MD, Fogel MA, **Agopian AJ**, Goldmuntz. Genetic Variants of HIF1α are associated with Right Ventricular Fibrotic Load in Repaired Tetralogy of Fallot Patients. Journal of Cardiovascular Magnetic Resonance 2019; 21: 51.

60. Yu X*, Nassar N, Mastroiacovo P, Canfield M, Groisman M, Bermejo-Sánchez E, Ritvanen A, Kiuru-Kuhlefelt S, Benavides A, Sipek A, Pierini A, Bianchi F, Källén K, Gatt M, Morgan M, Tucker D, Canessa MA, Gajardo R, Mutchinick OM, Szabova E, Csáky-Szunyogh M, Tagliabue G, Cragan JD, Nembhard WN, Rissmann A, Goetz D, Bower C, Baynam G, Lowry RB, Leon JA, Luo W, Rouleau J, Zarante I, Fernandez N, Amar E, Dastgiri S, Contiero P, Martínez-de-Villarreal LE, Borman B, Bergman JEH, de Walle HEK, Hobbs CA, Nance AE, **Agopian AJ**. Hypospadias Prevalence and Trends in International Birth Defects Surveillance Systems, 1980 to 2010. European Urology 2019; 76: 482-490.

61. Benjamin RH*, Yu X, Navarro Sanchez ML, Chen H, Mitchell LE, Langlois PH, Canfield MA, Swartz MD, Scheuerle AE, Scott DA, Northrup H, Schaaf CP, Ray JW, McLean SD, Lupo PJ; **Agopian AJ**. Co-Occurring Defect Analysis (CODA): a platform for analyzing birth defect co-occurrence in registries. Birth Defects Research; 2019: 1356-1364.

62. Benjamin RH*, Lopez A, Mitchell LE, Tsao K, Johnson A, Langlois PH, Swartz MD, **Agopian AJ**. Mortality by mode of delivery among infants with spina bifida in Texas. Birth Defects Research 2019; 111: 1543-1550.

63. Zaganjor I, Carmichael S, **Agopian AJ**, Olshan AF, Desrosiers TA, and The National Birth Defects Prevention Study. Differences in pre-pregnancy diet quality by maternal occupation. Public Health Nutrition; 2020; 23: 1974-1981.

64. **Agopian AJ**, Hoang TT*, Goldmuntz E, Hakonarson H, Musfee FI, Mitchell LE, and the Pediatric Cardiac Genomics Consortium. X chromosome-wide association studies of congenital heart defects. American Journal of Medical Genetics; 2020; 182: 250-254.

65. Zhao Y, Diacou A, Johnston HR, Musfee FI, McDonald-McGinn DM, McGinn D, Crowley TB, Repetto GM, Swillen A, Breckpot J, Vermeesch JR, Kates WR, Digilio MC, Unolt M, Marino B, Pontillo M, Armando M, Di Fabio F, Vicari S, van den Bree M, Moss H, Owen MJ, Murphy KC, Murphy CM, Murphy D, Schoch K, Shashi V, Tassone F, Simon TJ, Shprintzen RJ, Campbell L, Philip N, Heine-Suñer D, García-Miñaúr S, Fernández L, International 22q11.2 Brain and Behavior Consortium, Bearden CE, Vingerhoets C, van Amelsvoort T, Eliez S, Schneider M, Vorstman JAS, Gothelf D, Zackai E, **Agopian AJ**, Gur RE, Bassett AS, Emanuel BS, Goldmuntz E, Mitchell LE, Wang T, Morrow BE. Complete Sequence of the 22q11.2 Allele in 1,053 Subjects with 22q11.2 Deletion Syndrome Reveals Modifiers of Conotruncal Heart Defects. American Journal of Human Genetics; 2020; 106: 26-40.

66. Ludorf KL*, Salemi JL, Kirby RS, Tanner JP, **Agopian AJ**. Perspectives on challenges and opportunities for birth defects surveillance programs during and after the COVID-19 era. Birth Defects Research; 2020; 112; 1039-1042.

67. Sewda A*, **Agopian AJ**, Goldmuntz E, Hakonarson H, Morrow BE, Musfee F, Taylor D, Mitchell LE, Pediatric Cardiac Genomics Consortium. Gene-based analyses of the maternal genome implicate maternal effect genes as risk factors for conotruncal heart defects. PLoS One; 2020; 15: e0234357.

68. Oluwafemi OO*, Benjamin RH*, Navarro Sanchez ML*, Scheuerle AE, Schaaf CP, Mitchell LE, Langlois PH, Canfield MA, Swartz MD, Scott DA, Northrup H, Ray JW, McLean SD, Ludorf KL*, Chen H, Lupo PJ, **Agopian, AJ**. Birth defects that co-occur with non-syndromic gastroschisis and omphalocele. American Journal of Medical Genetics; 2020; 182: 2,581-2,593.

69. Trevino CE, Holleman AM, Corbitt H, Maslen CL, Rosser TC, Cutler DJ, Johnston HR, Rambo-Martin BL, Oberoi J, Dooley KJ, Capone GT, Reeves RH, Cordell HJ, Keavney BD, **Agopian AJ**, Goldmuntz E, Gruber PJ,

O'Brien JE, Bittel DC, Wadhwa L, Cua CL, Mulle JG, Epstein MP, Sherman SL, Zwick ME. Identifying genetic factors that contribute to the increased risk of congenital heart defects in infants with Down syndrome. Scientific Reports; 2020; 10: 18,051.

70. Lei Y, Ludorf KL*, Yu X, Benjamin RH, Gu X, Lin Y, Finnell RH, Mitchell LE, Musfee FI, Malik S, Canfield MA, Morrison AC, Hobbs CA, Van Zutphen AR, Fisher S, **Agopian AJ**. Maternal hypertension-related genotypes and congenital heart defects. American Journal of Hypertension; 2021; 34: 82-91.

71. Ludorf KL*, Benjamin RH*, Navarro Sanchez Maria Luisa*, McLean SD, Northrup H, Mitchell LE, Langlois PH, Canfield MA, Scheuerle AE, Scott DA, Schaaf CP, Ray JW, Oluwafemi O, Chen H, Swartz MD, Lupo PJ, **Agopian AJ**. Patterns of co-occurring birth defects among infants with hypospadias. Journal of Pediatric Urology; 2021; 17: 64.e1-64.e8.

72. Oluwafemi OO*, Musfee FI*, Mitchell LE, Goldmuntz E, Xie HM, Hakonarson H, Morrow BE, Guo T, Taylor DM, McDonald-McGinn DM, Emanuel BS, **Agopian AJ.** Genome-wide Association Studies of Conotruncal Heart Defects with Normally-related Great Vessels in the United States. Genes; 2021; 12: 1030.

73. Schraw JM, Woodhouse JP, Langlois PH, Canfield MA, Scheuerle AE, **Agopian AJ**, Benjamin RH*, Lupo PJ. Risk Factors and Time Trends for Isolated Craniosynostosis. Birth Defects Research; 2021; 113: 43-54.

74. Diaz D*, Benjamin RH*, Navarro Sanchez ML*, Mitchell LE, Langlois PH, Canfield MA, Chen H, Scheuerle AE, Schaaf CP, Scott DA, Northrup H, Ray JW, McLean SD, Swartz MD, Ludorf KL*, Lupo PJ, **Agopian AJ**. Patterns of congenital anomalies among individuals with trisomy 13 in Texas. American Journal of Medical Genetics Part A; 2021; 185: 1787-1793.

75. Benjamin RH*, Salemi J, Canfield MA, Nembhard W, Ganduglia-Cazaban C, Tsao K, Johnson A, **Agopian AJ**. Causes of neonatal and postneonatal death among infants with birth defects in Texas; Birth Defects Research; 2021; 113: 665-675.

76. Musfee FI*, **Agopian AJ**, Goldmuntz E, Hakonarson H, Morrow BE, Taylor D, Tristani-Firouzi M, Watkins WS, Mitchell LE. Common variation in cytoskeletal genes is associated with conotruncal heart defects. Genes; 2021; 12: 655.

77. Schraw JM, Benjamin RH*, Scott DA, Brooks BP, Hufnage RB, McLean SD, Northrup H, Langlois PH, Canfield MA, Scheuerle AE, Schaaf CP, Ray JW, Chen H, Swartz MD, Mitchell LE, **Agopian AJ**†, Lupo PJ †. A Comprehensive Assessment of Co-Occurring Birth Defects among Infants with Non-Syndromic Anophthalmia or Microphthalmia; Ophthalmic Epidemiology; 2021; 20:1-8.

78. Navarro Sanchez ML*, Benjamin RH*, Mitchell LE, Langlois PH, Canfield MA, Swartz MD, Scheuerle AE, Scott DA, Northrup H, Schaaf CP, Ray JW, McLean SD, Chen H, Lupo PJ, **Agopian AJ**. Birth Defects Co-Occurrence Patterns among Infants with Cleft Lip and/or Palate. The Cleft Palate-Craniofacial Journal; 2022; 59: 417-426.

79. Benjamin RH*, Scheuerle AE, Scott DA, Navarro Sanchez ML*, Langlois PH, Canfield MA, Northrup H, Schaaf CP, Ray JW, McLean SD, Chen H, Swartz MD, Lupo PJ, **Agopian AJ**. Birth defect co-occurrence patterns in the Texas Birth Defects Registry. Pediatric Research; 2022; 91:1278-1285.

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82. Musfee FI*, Olomobola O, **Agopian AJ**, Goldmuntz E, Hakonarson H, Mitchell LE. Maternal Effect Genes as Risk Factors for Congenital Heart Defects. Human Genetics and Genomics Advances; 2022; 3: 100098.

83. Cavallo L, Kovar EM, Amal A, McLoughlin L, Mittal NK, Rodriquez-Baez N, Shneider BL, Zwiener RJ, Chambers TM, Langlois PH, Canfield MA, **Agopian AJ**, Lupo PJ, Harpavat S. The Epidemiology of Biliary Atresia: Exploring the Role of Developmental Factors on Birth Prevalence. Journal of Pediatrics; 2022; 246:89-94.

84. Diaz P*, Coughlin W, Lam W, Ermis P, Aguilar D, Ganduglia Cazaban C, **Agopian AJ**. Describing Characteristics of Adults with and without Congenital Heart Defects Hospitalized with COVID-19. Birth Defects Research; 2022; 114:652–661.

85. Langlois PH, Marengo L, Lupo PJ, Drummond-Borg M, **Agopian AJ**, Nembhard WN, Canfield MA. Evaluating the proportion of isolated cases among a spectrum of birth defects in a population-based registry. Birth Defects Research; 2022 (in press).

86. Navarro Sanchez ML*, Swartz MD, Langlois PH, Canfield MA, **Agopian AJ**. Epidemiology of Non-syndromic, Orofacial Clefts in Texas: Differences by Cleft Type and Presence of Additional Defects. The Cleft Palate Craniofacial Journal; 2022 (in press).

87. Howley M, Williford E, **Agopian AJ**, Lin A, Botto L, Cunniff C, Romitti P, Nestoridi E, Browne M. Patterns of Multiple Congenital Anomalies in the National Birth Defect Prevention Study: Challenges and Insights. Birth Defects Research; 2022 (in press).

88. Richard MA, Patel J, Benjamin RH, Bircan E, Canon SJ, Canfield MA, **Agopian AJ**, Lupo PJ, Nembhard WN. Prevalence and Clustering of Congenital Heart Defects among Boys with Hypospadias: A Multi-State Study. JAMA Network Open; 2022 (in press).

89. Ludorf KL*, Benjamin RH, Malik S, Langlois PH, Canfield MA, **Agopian AJ**. Association between maternal smoking and survival among infants with trisomy 21. Birth Defects Research; 2022 (in press).

90. Swanson J, Shumate C, **Agopian AJ**, Mitchell LE, Canfield MA, Salemi JL. Factors associated with Medicaid participation among infants born with birth defects in Texas, 2010-2014. Birth Defects Research; 2022 (in press).

91. Benjamin RH, Mitchell LE, Scheuerle AE, Langlois PH, Canfield MA, Drummond-Borg M, Nguyen JM, **Agopian AJ**. Identifying syndromes in studies of structural birth defects: Guidance on classification and evaluation of potential impact. American Journal of Medical Genetics Part A; 2022 (in press).

92. Benjamin RH, Canfield MA, Marengo LK, **Agopian AJ**. Contribution of preterm birth to mortality among neonates with birth defects in Texas. Journal of Pediatrics; 2022 (in press).

MANUSCRIPT REVIEW ACTIVITIES

2010-present Reproductive Sciences, Reviewer

2010-present Birth Defects Research Part A, Reviewer

2011-present American Journal of Medical Genetics, Part A, Reviewer

2012-present BMC Pediatrics, Reviewer

2012-present PLoS ONE, Reviewer

2012-present Maternal and Child Health Journal, Reviewer

2012-present Environmental Health, Reviewer

2012-present BMC Pregnancy and Childbirth, Reviewer

2012-present International Journal of Molecular Sciences, Reviewer

2013-present Paediatric and Perinatal Epidemiology, Reviewer

2013-present American Journal of Epidemiology, Reviewer

2013-present Gene, Reviewer

2013-present Meta Gene, Reviewer

2013-present Pediatrics, Reviewer

2014-present International Journal of Environmental Research and Public Health, Reviewer

2014-present Pathology: Research and Practice, Reviewer

2014-present Environmental Pollution, Reviewer

2014-present Neurotoxology, Reviewer

2014-present Congenital Anomalies, Reviewer

2015-present World Journal of Pediatrics, Reviewer

2015-present Journal of Pediatrics, Reviewer

2015-present Garland Science Textbooks, Reviewer

2016-present Archives of Disease in Childhood, Reviewer

2016-present BMC Cardiovascular Disorders, Reviewer

2016-present Human Genetics, Reviewer

2016-present The Cleft Palate-Craniofacial Journal, Reviewer

2016-present Journal of Cardiovascular Development and Disease, Reviewer

2017-present	Epidemiology, Reviewer
2017-present	BMJ Open, Reviewer
2017-present	Genetic Epidemiology, Reviewer
2017-present	New England Journal of Medicine, Reviewer
2017-present	Clinical Cardiology, Reviewer
2018-present	American Heart Journal, Reviewer
2018-present	PLOS Genetics, Reviewer
2018-present	Journal of the American College of Cardiology, Reviewer
2018-present	Annals of Epidemiology
2019-present	Environmental Science & Technology
2019-present	Journal of the American Heart Association
2020-present	G3: Genes|Genomes|Genetics
2020-present	Tropical Medicine and Infectious Disease
2020-present	BMC Medicine
2021-present	Genes
2021-present	Journal of Pediatric Genetics
2021-present	Exposure and Health
2022-present	Clinical Case Reports
2022-present	JAMA Network Open

GRANT REVIEW ACTIVITIES

2014	CDC Coordinating Center for Research and Training to Promote the Health of People with Developmental and Other Disabilities (DD12-006), Member
2015	American Heart Association, Innovative Research Grant - Clinical and Population Science Peer Review Committee, Member
2016	American Heart Association, Innovative Research Grant - Clinical and Population Science Peer Review Committee, Member
2017	American Heart Association, Genomics, Translational Biology and Observational Epidemiology Study Section, Member

2017	CDC Coordinating Center for Research and Training to Promote the Health of People with Developmental and Other Disabilities (DD12-006), Member
2018	American Heart Association, Career Development Award Clinical-Population Sciences Committee, Member
2018	CDC Coordinating Center for Research and Training to Promote the Health of People with Developmental and Other Disabilities (DD17-001), Member
2018	NIEHS, University of Michigan P30 Center on Lifestage Environmental Exposures and Disease (M-LEEaD), Traditional Pilot Project Grants, Invited External Member
2018	NIH Therapeutic Approach to Genetic Diseases Study Section, ad hoc Member
2020	American Heart Association, Career Development Award Clinical-Population Sciences Committee, Member.
2020	CDC Fragile X Special Emphasis Panel (DD15-003), Member
2020	NIH NINR Nursing Research Review Committee (NRRC) IRG, ad hoc Member
2020	NIH NICHD Developmental Mechanisms of Human Structural Birth Defects SEP, ad hoc Member
2020	NIH Pregnancy and Neonatology study section, ad hoc Member
2021	Department of Defense CDMRP PRE-CHD Peer Reviewed Medical Research Program (PRMRP), ad hoc Member
2021	CDC Fragile X Special Emphasis Panel (DD21-002), Member
2022	Sapienza Research Committee, University of Rome, External Referee

CURRENT RESEARCH SUPPORT

R01HD093660 2018-2023 Agency: NIH	Project: A multidisciplinary approach for identifying and characterizing novel congenital malformation syndromes (A.J. Agopian) Goal: The goal of this study is to identify and characterize novel congenital malformation syndromes. Role: Multiple Principal Investigator
000962600001 2021-2023 Agency: HHS	Project: Strengthening Birth Defects Surveillance in Texas: Innovative Data Linkages, Applied Epidemiology, and Enhanced Prevention and Outreach (A.J. Agopian) Goal: Evaluate, develop and implement surveillance strategies and outreach programs for the Texas Birth Defects Registry. Evaluate outcomes among children with birth defects, perform data quality assessments, and describe recent analytical results and new approaches for outreach activities with families. Role: Principal Investigator
001177900001 2022-2023 Agency: HHS	Project: Birth Defects Diagnoses and Coding Services Contract (A.J. Agopian) Goal: Provide guidance and technical assistance on reviewing birth defect diagnoses, coding services, and data quality control for the Texas Birth Defects Registry.

Role: Principal Investigator

COMPLETED RESEARCH SUPPORT

P01HS070454 2016-2022 Agency: NIH	Project: Developmental mechanisms of human congenital heart disease. Project 2: Genetics of nonsyndromic conotruncal heart defects (B. Morrow) Goal: The goal of this project is to identify genes and genetic variants that contribute to the risk of conotruncal heart defects Role: Co-Investigator
R21HD101927 2019-2021 Agency: NIH	Project: Maternal genes that control early embryonic development as risk factors for congenital heart defects (L.E. Mitchell) Goal: Establish the association of maternal effect genes with congenital heart defects. Role: Co-Investigator
NU50 DD000036 2016-2021 Agency: CDC	Project: Surveillance, intervention, and referral to services activities for infants in Texas with microcephaly or other adverse outcomes linked with the Zika virus (P.H. Langlois) Goal: Review, enhance and evaluate the surveillance efforts of the Texas Birth Defects Registry. Role: Co-Investigator
NU50 DD004942 2016-2020 Agency: CDC	Project: Birth defects surveillance in Texas: Methodological enhancement and impactful data utilization (M.A. Canfield) Goal: Evaluate, develop and implement surveillance strategies and outreach programs for the Texas Birth Defects Registry. Role: Co-Investigator
1R01HD086120 2016-2019 Agency: NIH	Project: Do Cesarean Deliveries Reduce Mortality in Infants with Birth Defects? (A.J. Agopian) Goal: Identify labor and delivery characteristics that are associated with improved survival of infants with open birth defects. Role: Principal Investigator
16GRNT29660001 2016-2019 Agency: American Heart Association	Project: Hypertension genotypes in mothers and risk for congenital heart defects in offspring (A.J. Agopian) Goal: Identify maternal hypertension genotypes associated with heart defects in offspring. Role: Principal Investigator
1R21ES024895-01 2014-2016 Agency: NIH	Project: Pesticides in tap water and congenital heart defects (A.J. Agopian) Goal: Evaluate maternal residential exposure to pesticides in tap water and risk for heart defects. Role: Principal Investigator
UT School of Public Health PRIME Pilot Award	Project: Maternal food intolerance genotypes and risk for neural tube defects (A.J. Agopian) Goal: Identify maternal genetic variants (in genes related to celiac disease and lactase deficiency) that increase risk for neural tube defects Role: Principal Investigator
P01 RR035750 2011-2016 Agency: NIH	Project: Genetic Mechanisms of Nonsyndromic Congenital Cardiac Defects (B. Morrow) Goal: Identify genetic determinants of congenital heart defects through follow-up of GWAS results and findings in animal models. Role: Data Analyst (Collaborator)

U01 HL098153 2009-2014 Agency: NIH	Project: The genetic basis of conotruncal defects (E. Goldmuntz) Goal: Identify genetic variation that contributes to the risk of congenital heart defects Role: Data Analyst (Collaborator)
U01 DD000494 2010-2013 Agency: CDC	Project: Texas Center for Birth Defects Research and Prevention (M.A. Canfield) Goal: (1) Bolster ongoing birth defects surveillance (2) Develop, implement, and evaluate NBDPS pooled data and local studies of birth defects. (3) Participate as one of eight sites in the National Birth Defects Prevention Study. Role: Data Analyst (Collaborator)
R01 HD39195 2007-2012 Agency: NIH	Project: Maternal and embryonic causes of spina bifida (L.E. Mitchell) Goal: The major goals of this project are to identify genetic risk factors for spina bifida. We will screen candidate genes in our human population samples using high throughput methods. Role: Data Analyst (Collaborator)
R01HD039195-S1 2008-2012 Agency: NIH	Project: Maternal and Embryonic Causes of Spina Bifida (Supplement) (L.E. Mitchell) Goal: Recollect, process and analyze samples from previous study participants. Role: Data Analyst (Collaborator)
R21 HL098844 2010-2012 Agency: NIH	Project: Genomewide association study of conotruncal heart disease (L.E. Mitchell) Goal: (1) Identify maternal and inherited (i.e. case) genotypes that are associated with CTDs, and (2) Identify pathways and gene sets that are associated with CTDs. Role: Data Analyst (Collaborator)