

Jenna Colavincenzo Carlson

Curriculum Vitae

May 30, 2019

7130 Public Health
Department of Biostatistics
Graduate School of Public Health
University of Pittsburgh
130 De Soto Street
Pittsburgh, PA 15261

Phone: (412) 383-0605
Email: jnc35@pitt.edu

EDUCATION AND TRAINING

Undergraduate

2007 – 2012	School of Science and Mathematics California Polytechnic State University San Luis Obispo, CA	B.S., 2012	Applied Mathematics Statistics
-------------	--	------------	-----------------------------------

Graduate

2012 – 2017	Graduate School of Public Health University of Pittsburgh Pittsburgh, PA	Ph.D., 2017	Biostatistics Mentor: Eleanor Feingold, Ph.D.
-------------	--	-------------	--

Post-Graduate

2017 – 2018	Graduate School of Public Health University of Pittsburgh Pittsburgh, PA	Postdoctoral Associate	Human Genetics Mentors: Daniel E. Weeks, Ph.D. Ryan L. Minster, Ph.D., M.S.I.S
-------------	--	---------------------------	--

APPOINTMENTS AND POSITIONS

Academic

2017 – 2018	Postdoctoral Associate, Department of Human Genetics, University of Pittsburgh, Pittsburgh, PA
2018 – 2019	Visiting Assistant Professor, Department of Biostatistics, University of Pittsburgh, Pittsburgh, PA
2018 – 2019	Assistant Professor, Department of Biostatistics, University of Pittsburgh, Pittsburgh, PA

CERTIFICATION AND LICENSURE

Specialty Certification

- 2012 SAS® Certified Base Programmer for SAS® 9
- 2018 Associate Certification in STEM Teaching, Center for the Integration of Research, Teaching and Learning, University of Pittsburgh

MEMBERSHIP IN PROFESSIONAL AND SCIENTIFIC SOCIETIES

- 2015 – American Society of Human Genetics
- 2019 – American Statistical Association

HONORS

- 2012 $\mu\sigma\mu$ National Statistics Honorary Society, California Polytechnic State University
- 2012 PME National Mathematics Honorary Society, California Polytechnic State University
- 2013 Student Scholar, Pharmaceutical SAS® User Group
- 2013 Student Scholar, Western Users of SAS® Software
- 2013 Student Ambassador Honorable Mention, SAS® Global Forum
- 2015 Biostatistics Department Award for Dean's Day Poster Presentation, Second Place
- 2017 Biostatistics Department Award for Dean's Day Poster Presentation, First Place

PROFESSIONAL ACTIVITIES

TEACHING

Courses Taught

<i>Years Taught</i>	<i>Course Number Title</i>	<i>Lecture Hours; Credits Average Enrollment</i>	<i>Role in Course</i>
Spring 2017	BIOST 2011 Principles of Statistical Reasoning	3 h/wk; 3 cr 72 students	Instructor Course Designer Teaching Fellow

Fall 2018	BIOST 2039 Biostatistical Methods	3 h/wk; 3 cr 16 students	Director Course Designer
Fall 2018	BIOST 2041 Introduction to Statistical Methods	3 h/wk; 3 cr 158 students	Director Course Designer
Spring 2019	BIOST 2011 Principles of Statistical Reasoning	3 h/wk; 3 cr 48 students	Director

Other Teaching

<i>Dates</i>	<i>Type of Teaching</i>	<i>Title</i>
2011	Teaching Assistant Linear Algebra II (MATH 306; Cal Poly)	
2012	Teaching Assistant Introduction to Statistical Concepts and Methods (STAT 217; Cal Poly)	
2012	Teaching Assistant Principles of Statistical Reasoning (BIOST 2011)	
2013	Teaching Assistant SAS Data Management and Analysis (BIOST 2093)	
2013	Two lectures SAS Data Management and Analysis (BIOST 2093)	ODS and ODS Graphics Macros
2016	Two lectures Human Population Genetics (HUGEN 2022)	Gene Mapping: Genome-Wide Association Studies
2017	Teaching Fellow Principles of Statistical Reasoning (BIOST 2011)	

Service on Masters or Doctoral Committees

<i>Name</i>	<i>Degree Awarded, Year</i>	<i>Type of Document and Title</i>
Priyanka Setty	MS Biostatistics, 2019 (tentative)	In progress

Service on Comprehensive or Qualifying Examination Committees

<i>Dates</i>	<i>Student Population</i>	<i>Type of Exam</i>
2019	21 M.S. Biostatistics Students	Comprehensive
2019	Ph.D. Epidemiology Students	Preliminary

Supervision of Post-Doctoral Students, Residents, and Fellows

<i>Dates</i>	<i>Name</i>	<i>Position</i>	
2019 –	Mohanraj Krishnan	Postdoctoral Associate	P.I.: Ryan L. Minster, Ph.D., M.S.I.S. Department of Human Genetics University of Pittsburgh

Mentoring of Graduate Students

<i>Dates</i>	<i>Name of Student</i>	<i>Degree / Program Description</i>	
2018 –	Jerry Zhang	Ph.D. Biostatistics Supervision of Graduate Student Research	P.I.: Daniel E. Weeks, Ph.D. Department of Human Genetics University of Pittsburgh

Other Teaching and Training

<i>Dates</i>	<i>Teaching Activity</i>	<i>Program / Description</i>
2016	Workshop <i>Developing a Lesson Plan</i>	Attended workshop University Center for Teaching and Learning University of Pittsburgh
2016	Workshop <i>Dealing with Difficult Situations</i>	Attended workshop University Center for Teaching and Learning University of Pittsburgh
2016	Workshop <i>Encouraging Student Participation Workshop</i>	Attended workshop University Center for Teaching and Learning University of Pittsburgh
2017	Semester-Long Course <i>Prep for the STEM Classroom Course (ENGR 3001)</i>	Completed course Center for the Integration of Research, Teaching and Learning University of Pittsburgh
2018	Short Course (4 sessions) <i>Engaging Students in the Teaching of Statistics</i>	Completed course Center for the Integration of Research, Teaching and Learning Network

2018	Training Workshop (6 sessions) <i>Effective Mentoring</i>	Completed training based on National Research Mentoring Network Center for the Integration of Research, Teaching and Learning University of Pittsburgh
2018	Workshop <i>Designing Better Test Questions</i>	Attended workshop University Center for Teaching and Learning University of Pittsburgh
2019	Pittsburgh Regional Faculty Symposium	Attended one-day symposium including teaching workshop University of Pittsburgh
2019	Workshop Series (8 sessions) <i>Evidence-Based Teaching Practices</i>	Created and co-facilitated an 8-part workshop series for Pitt Public Health faculty centered around <i>How Learning Works: 7 Research-Based Principles for Smart Teaching</i>
2019	United States Conference on Teaching Statistics 2019	Attended 3 day conference including numerous teaching workshops Consortium for the Advancement of Undergraduate Statistics Education
2019	Workshop <i>Creating and Updating Flipped Classrooms</i>	Attended online workshop American Statistical Association Section on Teaching Statistics in the Health Sciences

RESEARCH AND TRAINING

Grants and Contracts

Co-Investigator

<i>Years</i>	<i>Grant # and Title</i>	<i>Source</i>	<i>Annual Direct Cost</i>	<i>Effort</i>
2017 – 2022	R01 HL133040 Next Generation Association Studies of Adiposity in Samoans Enhanced by a Samoan-Specific Whole Genome Sequence Reference Panel	NIH NHLBI	\$494,807	20%
2017 – 2020	R00 DE025060 Genetics of Craniofacial Disorders and Related Phenotypes	NIH NIDCR	\$156,743	10%

2019 – 2024 <i>Submitted</i> <i>Not funded</i>	R01 HD099287 The Impact of <i>CREBRF</i> on growth, body composition, and cardio-metabolic disease risk development among Samoan children	NIH NICHD	\$430,773	0%
--	--	--------------	-----------	----

Invited Lectureships and Major Seminars

<i>Date</i>	<i>Title of Presentation</i>	<i>Venue</i>
2016	Creating meaningful factors from dietary questionnaires	Western Users of SAS Software Educational Forum and Conference San Francisco, CA.
2016	Methods for family-based designs in genetic studies of orofacial clefting	Biostatistics Seminar Series Department of Biostatistics University of Pittsburgh
2017	Orofacial clefting: the case for genetic modifiers	Science Tuesday Seminar Series Center for Craniofacial and Dental Genetics Department of Oral Biology University of Pittsburgh

Other Research and Training Activities

<i>Date</i>	<i>Position</i>	<i>Description of Activity</i>
2011	Undergraduate Student Researcher	Following the Longitudinal Aspects of Student Health (FLASH) Study California Polytechnic State University
2013	Research and Development Intern	Developed algorithms for copy number variation calls on array CGH technology Agilent Technologies Santa Clara, CA
2013 – 2017	Graduate Student Researcher	Analyzed large-scale genetic data examining mechanisms behind complex traits including oral health and orofacial clefting. Center for Craniofacial and Dental Genetics, Department of Oral Biology University of Pittsburgh
2014 – 2015	Research Mentor	Summer Institute for Training in Biostatistics (SIBS) University of Pittsburgh

PUBLICATIONS

REFEREED ARTICLES

1. Shaffer JR, **Carlson JC**, Stanley BO, Feingold E, Cooper M, Vanyukov MM, Maher BS, Slayton RL, Willing MC, Reis SE, McNeil DW, Crout RJ, Weyant RJ, Levy SM, Vieira AR, Marazita ML. **Effects of enamel matrix genes on dental caries are moderated by fluoride exposures.** *Human Genetics*. 2015 Feb;134(2):159-67. DOI: 10.1007/s00439-014-1504-7. PMID: 25373699; PMCID: PMC4293346.
2. Leslie EJ*, Taub MA*, Liu H, Steinberg KM, Koboldt DC, Zhang Q, **Carlson JC**, Hetmanski JB, Wang H, Larson DE, Fulton RS, Kousa YA, Fakhouri WD, Najj A, Ruczinski I, Begum F, Parker MM, Busch T, Standley J, Rigdon J, Hecht JT, Scott AF, Wehby GL, Christensen K, Czeizel AE, Deleyiannis FW, Schutte BC, Wilson RK, Cornell RA, Lidral AC, Weinstock GM, Beaty TH, Marazita ML, Murray JC. **Identification of functional variants for cleft lip with or without cleft palate in or near PAX7, FGFR2, and NOG by targeted sequencing of GWAS loci.** *American Journal of Human Genetics*. 2015 Mar 5; 96(3):397-411. DOI: 10.1016/j.ajhg.2015.01.004. PMID: 25704602. PMCID: PMC4375420.
3. Leslie EJ, Liu H, **Carlson JC**, Shaffer JR, Feingold E, Wehby G, Laurie CA, Jain D, Laurie CC, Doheny KF, McHenry T, Resick J, Sanchez C, Jacobs J, Emanuele B, Vieira AR, Neiswanger K, Standley J, Czeizel AE, Deleyiannis F, Christensen K, Munger RG, Lie RT, Wilcox A, Romitti PA, Field LL, Padilla CD, Cutiongco-de la Paz EM, Lidral AC, Valencia-Ramirez LC, Lopez-Palacio AM, Valencia DR, Arcos-Burgos M, Castilla EE, Mereb JC, Poletta FA, Orioli IM, Carvalho FM, Hecht JT, Blanton SH, Buxó CJ, Butali A, Mossey PA, Adeyemo WL, James O, Braimah RO, Aregbesola BS, Eshete MA, Deribew M, Koruyucu M, Seymen F, Ma L, de Salamanca JE, Weinberg SM, Moreno L, Cornell RA, Murray JC, Marazita ML. **A Genome-wide Association Study of Nonsyndromic Cleft Palate Identifies an Etiologic Missense Variant in GRHL3.** *American Journal of Human Genetics*. 2016 Apr 7;98(4):744-54. DOI: 10.1016/j.ajhg.2016.02.014. Epub 2016 Mar 24. PubMed PMID: 27018472; PubMed Central PMCID: PMC4833215.
4. Leslie EJ*, **Carlson JC***, Shaffer JR*, Feingold E, Wehby G, Laurie CA, Jain D, Laurie CC, Doheny KF, McHenry T, Resick J, Sanchez C, Jacobs J, Emanuele B, Vieira AR, Neiswanger K, Lidral AC, Valencia-Ramirez LC, Lopez-Palacio AM, Valencia DR, Arcos-Burgos M, Czeizel AE, Field LL, Padilla CD, Cutiongco-de la Paz EMC, Deleyiannis F, Christensen K, Munger RG, Lie RT, Willcox A, Romitti PA, Castilla EE, Mereb JC, Poletta FA, Orioli IM, Carvalho FM, Hecht JT, Blanton SH, Buxó CJ, Butali A, Mossey PA, Adeyemo WL, James O, Braimah RO, Aregbesola BS, Eshete MA, Abate F, Koruyucu M, Seymen F, Ma L, Enríquez de Salamanca J, Weinberg SM, Moreno L, Murray JC, Marazita ML. **A multi-ethnic genome-wide association study identifies novel loci for nonsyndromic cleft lip with or without cleft palate on 2p24.2, 17q23 and 19q31.** *Human Molecular Genetics*. 2016 Jul 1;25(13):2862-2872. DOI: 10.1093/hmg/ddw104. PMID: 27033726 PMCID: PMC5181632.
5. Leslie EJ, **Carlson JC**, Cooper ME, Christensen K, Weinberg SM, Marazita ML. **Exploring subclinical phenotypic features in twin pairs discordant for cleft lip and palate.** *Cleft Palate Craniofacial Journal*. 2017 Jan;54(1):90-93. DOI: 10.1597/15-190. PMID: 26882109 PMCID: PMC4987268.

6. Lee MK, Leslie EJ, Orlova E, **Carlson JC**, Feingold E, Marazita ML, Shaffer JR, Weinberg SM. **Genome-Wide Association Study of Facial Morphology Reveals Novel Associations with *FREM1* and *PARK2***. *PLoS ONE*. 2017 Apr 25;12(4):e0176566. DOI: 10.1371/journal.pone.0176566. eCollection 2017. PubMed PMID: 28441456; PubMed Central PMCID: PMC5404842.
7. Leslie EJ, **Carlson JC**, Shaffer JR, Butali A, Buxo CJ, Castilla EE, Christense K, Deleyiannis FW-B, Field LL, Hecht JT, Moreno L, Orioli IM, Padilla C, Vieira AR, Wehby GL, Feingold E, Weinberg SM, Murray JC, Beaty TH, Marazita ML. **Genome-wide meta-analyses of nonsyndromic orofacial clefts identify novel associations between *FOXE1* and all orofacial clefts, and *TP63* and cleft lip with or without cleft palate**. *Human Genetics*. 2017 Mar;136(3):275-286. DOI: 10.1007/s00439-016-1754-7. Epub 2017 Jan 4. PubMed PMID: 28054174; PubMed Central PMCID: PMC5317097.
8. Liu H, Leslie EJ, **Carlson JC**, Beaty TH, Marazita ML, Lidral AC, Cornell RA. **Identification of common, non-coding variants at 1p22 that are pathogenic for nonsyndromic cleft lip with or without cleft palate**. *Nature Communications*. 2017 Mar 13;8:14759. DOI: 10.1038/ncomms14759. PubMed PMID: 28287101; PubMed Central PMCID: PMC5355807.
9. Leslie EJ, **Carlson JC**, Shaffer JR, Buxo CJ, Castilla EE, Christensen K, Deleyiannis F, Field LL, Hecht JT, Moreno L, Orioli IM, Padilla C, Vieira AR, Wehby GL, Feingold E, Weinberg SM, Murray JC, Marazita ML. **Association studies of low-frequency coding variants in nonsyndromic cleft lip with or without cleft palate**. *American Journal of Medical Genetics Part A*. 2017 Jun;173(6):1531-1538. DOI: 10.1002/ajmg.a.38210. Epub 2017 Apr 19. PubMed PMID: 28425186; PubMed Central PMCID: PMC5444956.
10. **Carlson JC**, Taub M, Beaty TH, Murray JC, Feingold E, Marazita ML, Leslie EJ. **Identifying genetic sources of phenotypic heterogeneity in orofacial clefts by targeted sequencing**. *Birth Defects Research Part A*. *Birth Defects Res*. 2017 Jul 17;109(13):1030-1038. DOI: 10.1002/bdr2.23605. PubMed PMID: 28762674; PubMed Central PMCID: PMC5549861.
11. **Carlson JC**, Standley J, Petrin A, Shaffer JR, Butali A, Buxo CJ, Castilla E, Christensen K, Deleyiannis FWD, Hecht JT, Field LL, Garidkhuu A, Moreno Uribe LM, Nagato N, Orioli IM, Padilla C, Poletta F, Suzuki S, Viera AR, Wehby GL, Weinberg SM, Beaty TH, Feingold E, Murray JC, Marazita ML, Leslie EJ. **Identification of 16q21 as a modifier of nonsyndromic orofacial cleft phenotypes**. *Genetic Epidemiology*. 2017 Dec;41(8):887-897. DOI: 10.1002/gepi.22090. Epub 2017 Nov 10. PubMed PMID: 29124805; PubMed Central PMCID: PMC5728176.
12. Shaffer JR, Li J, Lee MK, Roosenboom J, Orlova E, Adhikari K, 23andMe Research Team, Gallo C, Poletti G, Schuler-Faccini L, Bortolini MC, Canizales-Quinteros S, Rothhammer F, Bedoya G, González-José R, Balding D, Pfeffer PE, Wollenschlaeger CA, Hecht JT, Wehby GL, Moreno LM, Ding A, Jin L, Yang Y, **Carlson JC**, Leslie EJ, Feingold E, Marazita ML, Hinds D, Cox TC, Ruiz-Linares A, Wang S, Weinberg SM. **Multiethnic GWAS reveals polygenic architecture of earlobe attachment**. *American Journal of Human Genetics*. 2017 Dec 7;101(6):913-924. DOI: 10.1016/j.ajhg.2017.10.001. Epub 2017 Nov 30. PubMed PMID: 29198719; PubMed Central PMCID: PMC5812923.
13. Duverger O, **Carlson JC**, Karacz C, Marazita ML, Shaffer JR, Morasso M. **Genetic variants in pachyonychia congenita-associated keratins increase susceptibility to tooth decay**. *PLoS Genetics*. 2018 Jan 22;14(1):e1007168. DOI: 10.1371/journal.pgen.1007168. eCollection 2018 Jan. PubMed PMID: 29357356; PubMed Central PMCID: PMC5794186.

14. Claes P, Roosenboom J, White J, Swigut T, Sero D, Li J, Lee MK, Zaidi A, Mattern B, Liebowitz C, González T, Leslie EJ, **Carlson JC**, Orlova E, Suetens P, Vandermeulen D, Feingold E, Marazita ML, Shaffer JR, Wysocka J, Shriver M, Weinberg SM. **Genome-wide mapping of global-to-local genetic effects on human facial shape.** *Nature Genetics*. 2018 Feb 19. DOI: 10.1038/s41588-018-0057-4. [Epub ahead of print] PubMed PMID: 29459680.
15. Ballantine JL, **Carlson JC**, Zandoná AF, Agler C, Zeldin LP, Rozier RG, Roberts MW, Basta PV, Luo J, Antonio-Obese ME, McNeil DW, Weyant RJ, Crout RJ, Slayton RL, Levy SM, Shaffer JR, Marazita ML, North KE, Divaris K. **Exploring the Genomic Basis of Early Childhood Caries: a Pilot Study.** *International Journal of Paediatric Dentistry*. Mar;28(2):217-225. DOI: 10.1111/ipd.12344. Epub 2017 Oct 23. PubMed PMID: 29057527; PubMed Central PMCID: PMC5811369.
16. Camison L, Bykowski M, Lee WW, **Carlson JC**, Roosenboom J, Goldstein JA, Losee JE, Weinberg SM. **Validation of the Vectra H1 portable three-dimensional photogrammetry system for facial imaging.** *International Journal of Oral and Maxillofacial Surgery*. 2018 Mar;47(3):403-410. DOI: 10.1016/j.ijom.2017.08.008. Epub 2017 Sep 14. PubMed PMID: 28919165; PubMed Central PMCID: PMC5803347.
17. **Carlson JC***, Nidey NL*, Butali A, Buxo CJ, Christensen K, Deleyiannis FWD, Hecht JT, Field LL, Moreno-Uribe LM, Orioli IM, Castilla E, Poletta F, Padilla C, Viera AR, Weinberg SM, Wehby GL, Feingold E, Murray JC, Marazita ML, Leslie EJ. **Genome-wide Interaction Studies Identify Sex Specific Risk Alleles for Nonsyndromic Orofacial Clefts.** *Genetic Epidemiology*, 2018;1–9. DOI: 10.1002/gepi.22158
18. Shaffer JR, LeClair J, **Carlson JC**, Feingold E, Buxo CJ, Castilla EE, Christensen K, Deleyiannia FWB, Field LL, Hecht JT, Moreno L, Orioli IM, Padilla C, Vieira AR, Wehby GL, Murray JC, Weinberg SM, Marazita ML, Leslie EJ. **Association of Low-Frequency Variants in Regulatory Regions with Non-Syndromic Orofacial Clefts.** *American Journal of Medical Genetics Part A*, 2019 Mar;179(3):467-474. DOI: 10.1002/ajmg.a.61002. Epub 2018 Dec 24.
19. **Carlson JC**, Anand D, Buxo, C, Christensen K, Deleyiannis F, Hecht J, Moreno-Uribe L, Orioli I, Padilla C, Shaffer JR, Vieira AR, Wehby GL, Weinberg SM, Murray JC, Beaty TH, Marazita ML, Feingold E, Leslie EJ. **A systematic genetic analysis and visualization of phenotypic heterogeneity among orofacial cleft GWAS signals.** *Genetic Epidemiology* [in press], DOI: 10.1002/gepi.22214

* indicates equal contribution

SUBMITTED ARTICLES AND PREPRINTS

1. Orlova E, **Carlson JC***, Lee MK*, Feingold E, McNeil DW, Crout R, Weyant RJ, Marazita ML, Shaffer JR. **Pilot GWAS of Dental Caries in African-Americans: old genes, novel genes, and heterogeneity.** *BMC Oral Health*. [under review].
2. **Carlson JC**, Weeks DE, Hawley NL, Sun G, Cheng, H, Naseri T, Reupena MS, Deka R, McGarvey ST*, Minster RL*. **Genome-wide Association Studies in Samoans Give Insight into the Genetic Etiology of Fasting Serum Lipid Levels.** *PLoS ONE*. [under review] [Preprint] DOI: 10.1101/411546

3. **Carlson JC***, Rosenthal SL*, Russell EM, Hawley NL, Sun G, Cheng H, Naseri T, Reupena MS, Deka R, McGarvey ST, Weeks DE, Minster RL. **CREBRF is associated with larger stature in Samoans.** *American Journal of Human Biology*. [under review].

* indicates equal contribution

PUBLISHED ABSTRACTS

1. **Carlson JC. Doctoring Your Clinical Trial with Adaptive Randomization: SAS Macros to Perform Adaptive Randomization.** *SAS® Global Forum, San Francisco, CA. April 28-May 1, 2013. Pharmaceutical SAS User Group (PharmaSUG), Chicago, IL, May 12-15, 2013. Platform presentation.*
2. Weyant RJ, Polk D, **Carlson JC**, McNeil DW, Crout RJ, Foxman B, Marazita ML. **Family Function Measure Predicts Caries in Northern Appalachia Children.** *Journal of Dental Research, 94A:3184, 2015. Platform Presentation.*
3. Marazita ML, Shaffer JR, Feingold E, Stanley B, **Carlson JC**, Lewis D, Wang X, McNeil DW, Weyant R, Neiswanger K, Foxman B, Crout RJ. **Genetic Risk Factors for Dental Caries in Children and Adults.** *Journal of Dental Research, 94A:3186, 2015. Platform Presentation.*
4. Shaffer JR, **Carlson JC**, McNeil DW, Weyant R, Crout RJ, Feingold E, Marazita ML. **Dioxin receptor gene AHR is associated with early childhood caries.** *Journal of Dental Research, 94A:1952, 2015. Platform Presentation.*
5. Leslie EJ, **Carlson JC**, Shaffer JR, Feingold E, Beaty TH, Murray JC, Weinberg SM, Marazita ML. **Uncovering novel genes contributing to phenotypic heterogeneity in a common birth defect.** *2015 Human Genetics and Genomics Gordon Conference, Newport, RI. July 19-24, 2015. Poster.*
6. **Carlson JC**, Leslie EJ, Shaffer JR, Schwender H, Taub MA, Ruczinski I, Murray JC, Beaty TH, Marazita ML, Feingold E. **Methods for detecting modifier genes responsible for phenotypic heterogeneity.** *65th annual meeting of the American Society of Human Genetics, Baltimore, MD. October 6-10, 2015. Poster.*
7. Leslie EJ, Shaffer JR, **Carlson JC**, Feingold E, Laurie C, Doheny K, Neiswanger K, Moreno L, Lidral AC, Czeizel A, Padilla C, Deleyiannis F, Field LL, Wehby G, Vieira A, Castilla E, Butali A, Hecht JT, Buxo CJ, Christensen K, Ma L, Murray JC, Weinberg SM, Marazita ML. **Multi-ethnic genome-wide association studies of CL/P identify novel risk genes and evidence for genetic modifiers.** *38th annual meeting of the Society of Craniofacial Genetics and Developmental Biology, Baltimore, MD. October 5-6, 2015. Oral platform presentation.*
8. Leslie EJ, **Carlson JC**, Shaffer JR, Feingold E, Laurie C, Doheny K, Moreno L, Czeizel AE, Field LL, Deleyiannis F, Wehby G, Castilla EE, Vieira AR, Butali A, Christensen K, Ma L, Neiswanger K, Lidral A, Beaty T, Murray JC, Weinberg SW, Marazita ML. **Uncovering novel genes contributing to phenotypic heterogeneity in a common birth defect.** *65th annual meeting of the American Society of Human Genetics, Baltimore, MD. October 6-10, 2015. Poster.*

9. Sandoval RS, Leslie EJ, **Carlson JC**, Marazita ML, Weinberg SM. **Lack of evidence for an association between season of conception and nonsyndromic orofacial clefting.** *73rd Annual Meeting, American Cleft Palate-Craniofacial Association. Atlanta, GA. April 5-9, 2016. Poster.*
10. Leslie EJ, Shaffer JR, **Carlson JC**, Liu H, Moreno L, Wehby G, Cornell RA, Murray JC, Weinberg SM, Marazita ML. **Association of missense variant in *GRHL3* in a genome-wide association study of isolated cleft palate.** *73rd Annual Meeting, American Cleft Palate-Craniofacial Association. Atlanta, GA. April 5-9, 2016. Platform presentation.*
11. Alotaibi R, Lee MK, **Carlson JC**, Neiswanger K, Cooper ME, McNeil DW, Weyant RJ, Crout RJ, Marazita ML. **Role of Environmental Factors on the Pattern of Dental Caries.** *American Association for Dental Research Annual Meeting, Los Angeles, CA. March 16-19, 2016. Poster.*
12. **Carlson JC. A SAS Macro for Quick Descriptive Statistics.** *Western Users of SAS® Software Educational Forum and Conference, San Francisco, CA. September 7-9, 2016. Platform presentation.*
13. **Carlson JC. Creating Meaningful Factors from Dietary Questionnaires.** *Western Users of SAS® Software Educational Forum and Conference, San Francisco, CA. September 7-9, 2016. Invited speaker.*
14. Leslie EJ, **Carlson JC**, Shaffer JR, Butali A, Buxo CJ, Christensen K, Deleyiannis F, Hecht JT, Moreno L, Orioli IM, Vieira AR, Wehby GL, Feingold E, Weinberg SM, Murray JC, Beaty TH, Marazita ML. **Genome-wide analyses reveal subtype-specific genetic effects in orofacial cleft birth defects.** *66th Annual Meeting of the American Society of Human Genetics, Vancouver, Canada. October 18-22, 2016. Poster.*
15. Lee MK, Leslie EJ, **Carlson JC**, Orlova E, Feingold E, Marazita ML, Shaffer JR, Weinberg SM. **Genome-wide association study of multivariate measures of normal human facial morphology.** *66th Annual Meeting of the American Society of Human Genetics, Vancouver, Canada. October 18-22, 2016. Poster.*
16. **Carlson JC**, Leslie EJ, Shaffer JR, Christensen K, Deleyiannis F, Hecht JT, Moreno Uribe LM, Vieira AR, Wehby GL, Feingold E, Weinberg SM, Marazita ML. **Genome-wide interaction study implicates *VGLL2* and alcohol exposure in orofacial clefting.** *66th Annual Meeting of the American Society of Human Genetics, Vancouver, Canada. October 18-22, 2016. Poster.*
17. Alotaibi RN, Howe BJ, Chernus JM, Mukhopadhyay N, Sanchez CA, Cooper ME, Deleyiannis FW, Neiswanger K, Leslie EJ, **Carlson JC**, Resick JM, Vieira AR, Shaffer JR, Moreno-Urbe LM, Marazita M. **Genome-Wide Association Study of Dental Caries in Orofacial Cleft Families.** *94th Annual Meeting of the International Association for Dental Research, San Francisco, CA. March 22-25, 2017. Poster.*
18. Feingold E, Chernus J, Bowser J, Rooseboom J, Rajagopalan S, Neiswanger K, Leslie EJ, **Carlson JC**, Sanchez C, Soejima T, Czeizel A, Hecht JT, Castilla EE, Salamanca J, Orioli IM, Poletta FA, Weinberg SM, Marazita ML. **GWAS of fingerprint patterns.** *67th Annual Meeting of the American Society of Human Genetics, Orlando, FL. October 17-21, 2017. Poster.*

19. Lee MK, Roosenboom J, **Carlson JC**, Leslie EJ, Feingold E, Marazita ML, Shaffer JR, Weinberg SM. **Genome-wide association study of cranial vault shape reveals novel loci at 15q26.3 and 17q11.2.** *67th Annual Meeting of the American Society of Human Genetics, Orlando, FL. October 17-21, 2017. Poster.*
20. Leslie EJ, **Carlson JC**, Standley J, Petrin A, Shaffer JR, Butali A, Buxo CJ, Castilla E, Christensen K, Deleyiannis FWD, Hecht JT, Field LL, Garidkhuu A, Moreno Uribe LM, Nagato N, Orioli IM, Padilla C, Poletta F, Suzuki S, Viera AR, Wehby GL, Weinberg SM, Beaty TH, Feingold E, Murray JC, Marazita ML. **Identification of 16q21 as a modifier locus for orofacial cleft phenotypes.** *67th Annual Meeting of the American Society of Human Genetics, Orlando, FL. October 17-21, 2017. Poster. Reviewer's Choice Abstract Award.*
21. **Carlson JC**, Nidey N, Shaffer HR, Butali A, Buxo CJ, Christensen K, Deleyiannis F, Hecht JT, Field LL, Moreno L, Orioli IM, Castilla EE, Poletta FA, Padilla C, Viera AR, Weinberg SM, Wehby GL, Feingold E, Murray JC, Marazita ML, Leslie EJ. **Exploring the impact of sex-specific genetic effects on orofacial clefting.** *67th Annual Meeting of the American Society of Human Genetics, Orlando, FL. October 17-21, 2017. Poster.*
22. LeClair J, Leslie E, **Carlson J**, Feingold E, Buxo C, Castilla E, Christensen K, Deleyiannis F, Field LL, Hecht J, Moreno L, Orioli I, Padilla C, Viera A, Wehby G, Murray J, Marazita M, Shaffer J, Weinberg S. **Association of Low-Frequency Variants in Regulatory Regions with Non-Syndromic Orofacial Clefts.** *75th Annual Meeting of the American Cleft Palate-Craniofacial Association, Pittsburgh, PA. April 10-14, 2018. Oral Presentation.*
23. **Carlson J**, Anand D, Buxo C, Christensen K, Deleyiannis F, Hecht J, Moreno L, Orioli I, Shaffer J, Viera A, Wehby G, Weinberg S, Marazita M, Leslie E. **A systematic analysis of orofacial clefts reveals subtype-specific genetic effects.** *75th Annual Meeting of the American Cleft Palate-Craniofacial Association, Pittsburgh, PA. April 10-14, 2018. Oral Presentation.*
24. **Carlson J**, Hawley NL, Sun G, Cheng H, Naseri T, Reupena MS, Deka R, McGarvey ST, Minster RL, Weeks DE, NHLBI Trans-Omics for Precision Medicine (TOPMed) Consortium. **Creating population-specific reference panels for improved genotype imputation.** *68th Annual Meeting of the American Society of Human Genetics, San Diego, CA. October 16-20, 2018. Platform Presentation.*
25. Russell EM, **Carlson J**, Hawley NL, Sun G, Cheng H, Naseri T, Reupena MS, Deka R, Weeks DE, McGarvey ST, Minster RL, TOPMed Diabetes Working Group. **Genome-wide association studies of type 2 diabetes phenotypes in Samoans.** *68th Annual Meeting of the American Society of Human Genetics, San Diego, CA. October 16-20, 2018. Poster Presentation.*
26. Shaffer JR, LeClair J, **Carlson JC**, Feingold E, Buxo CJ, Castilla EE, Christensen K, Deleyiannia FWB, Field LL, Hecht JT, Moreno L, Orioli IM, Padilla C, Vieira AR, Wehby GL, Murray JC, Weinberg SM, Marazita ML, Leslie EJ. **Association of Low-Frequency Variants in Regulatory Regions with Non-Syndromic Orofacial Clefts.** *68th Annual Meeting of the American Society of Human Genetics, San Diego, CA. October 16-20, 2018. Poster Presentation.*

PRESENTATIONS

1. **Carlson JC. Doctoring Your Clinical Trial with Adaptive Randomization: SAS Macros to Perform Adaptive Randomization.** *SAS® Global Forum, San Francisco, CA. April 28-May 1, 2013. Pharmaceutical SAS User Group (PharmaSUG), Chicago, IL, May 12-15, 2013. Platform presentation.*
2. **Carlson JC, Leslie EJ, Shaffer JR, Schwender H, Taub MA, Ruczinski I, Murray JC, Beaty TH, Marazita ML, Feingold E. Methods for detecting modifier genes responsible for phenotypic heterogeneity.** *65th annual meeting of the American Society of Human Genetics, Baltimore, MD. October 6-10, 2015. Poster.*
3. **Carlson JC. A SAS Macro for Quick Descriptive Statistics.** *Western Users of SAS® Software Educational Forum and Conference, San Francisco, CA. September 7-9, 2016. Platform presentation.*
4. **Carlson JC. Creating Meaningful Factors from Dietary Questionnaires.** *Western Users of SAS® Software Educational Forum and Conference, San Francisco, CA. September 7-9, 2016. Invited speaker.*
5. **Carlson JC, Leslie EJ, Shaffer JR, Christensen K, Deleyiannis F, Hecht JT, Moreno Uribe LM, Vieira AR, Wehby GL, Feingold E, Weinberg SM, Marazita ML. Genome-wide interaction study implicates VGLL2 and alcohol exposure in orofacial clefting.** *66th Annual Meeting of the American Society of Human Genetics, Vancouver, Canada. October 18-22, 2016. Poster.*
6. **Carlson JC, Nidey N, Shaffer HR, Butali A, Buxo CJ, Christensen K, Deleyiannis F, Hecht JT, Field LL, Moreno L, Orioli IM, Castilla EE, Poletta FA, Padilla C, Viera AR, Weinberg SM, Wehby GL, Feingold E, Murray JC, Marazita ML, Leslie EJ. Exploring the impact of sex-specific genetic effects on orofacial clefting.** *67th Annual Meeting of the American Society of Human Genetics, Orlando, FL. October 17-21, 2017. Poster.*
7. **Carlson J, Hawley NL, Sun G, Cheng H, Naseri T, Reupena MS, Deka R, McGarvey ST, Minster RL, Weeks DE, NHLBI Trans-Omics for Precision Medicine (TOPMed) Consortium. Creating population-specific reference panels for improved genotype imputation.** *68th Annual Meeting of the American Society of Human Genetics, San Diego, CA. October 16-20, 2018. Platform Presentation.*

SERVICE

SERVICE TO SCHOOL AND UNIVERSITY

Years	Committee	Position (elected or appointed)
2018 –	Program Committee Master of Science Program Department of Biostatistics	Member (appointed)

2018 –	Innovations Committee Master of Science Program Department of Biostatistics	Member (appointed)
2018 –	MPH Committee Graduate School of Public Health	Member (appointed)
2019 –	Curriculum Committee Department of Biostatistics	Member (appointed)
2019 –	Dean’s Day Competition Graduate School of Public Health	Faculty Judge

SERVICE TO FIELD OF SCHOLARSHIP

Manuscript Review

<i>Date</i>	<i>Journal Title</i>
2017 –	<i>BMC Oral Health</i>
2018 –	<i>Clinical Biochemistry</i>

Study Sections, Review Panels, and Advisory Boards

<i>Date</i>	<i>Position</i>	<i>Organization</i>
2015 – 2017	Board Member	Community Research Advisory Board Center for Health Equity University of Pittsburgh
2016	Section Chair	Western Users of SAS Software Educational Forum and Conference San Francisco, CA
2018 –	Member	Anthropometry and Adiposity Working Group NHLBI Trans-Omics for Precision Medicine (TOPMed) Program
2018 –	Member	Analysis Working Group NHLBI Trans-Omics for Precision Medicine (TOPMed) Program

NON-PROFESSIONAL SERVICE

<i>Date</i>	<i>Position and Organization</i>	<i>Type of Service</i>
2016 –	Board Member Bellefield Presbyterian Church Deacons	Volunteer
2018	Handler Therapy Dogs International	Volunteer
2018 –	Moderator Bellefield Presbyterian Church Deacons	Volunteer
2018 –	Food Pantry Director and Coordinator Bellefield Food Closet	Volunteer