

## List of publications: Esteban J. Parra graduate students (updated November 2024).

### Cristina Abbatangelo (Ph.D., in progress)

**Abbatangelo CL**, Lona Durazo F, Wendt FR, Parra EJ, Novroski NMM. 2023. From genetic association to forensic prediction: Computational methods and tools for identifying phenotypically informative SNPs. *Forensic Genomics* 3:47-68.

### Hayley Welsh (Ph.D., in progress)

**Welsh H**, Batalha CMPF, Li W, Mpye KL, Souza-Pinto NC, Naslavsky MS, Parra EJ. 2023. A Systematic Evaluation of Normalization Methods and Probe Replicability using Infinium EPIC Methylation Data. *Clin. Epigenetics* 15:41.

### Frida Lona-Durazo (Ph.D. 2021)

Villaplana-Velasco, A, Pigeyre M, Engelmann J, Rawlik K, Canela-Xandri O, Tochel C, **Lona-Durazo F**, Krishnan Mookiah MR, Doney A, Parra EJ, Trucco E, MacGillivray T, Rannikmae K, Tenesa A, Pairo-Castineira E, Bernabeu MO. 2023. Fine-mapping of retinal vascular complexity loci identifies Notch regulation as a shared mechanism with myocardial infarction outcomes. *Commun. Biol.* 6:523

**Lona-Durazo F**, Thakur R, Pairo-Castineira E, Funderburk K, Zhang T, Kovacs MA, Choi J, Jackson IJ, Brown KM, Parra EJ 2022. Investigating the genetic architecture of eye colour in a Canadian cohort. *iScience.* 25:104485.

**Lona-Durazo F**, Mendes M, Thakur R, Funderburk K, Zhang T, Kovacs MA, Choi J, Brown KM, Parra EJ. 2021. A large Canadian cohort provides insights into the genetic architecture of human hair colour. *Commun. Biol.* 4:1253.

**Lona-Durazo F**, Hernandez-Pacheco N, Fan S, Zhang T, Choi J, Kovacs MA, Loftus SK, Le P, Edwards M, Fortes-Lima CA, Eng C, Huntsman S, Hu D, Gómez-Cabezas EJ, Marín-Padrón LC, Grauholm J, Mors O, Burchard EG, Norton HL, Pavan WJ, Brown KM, Tishkoff S, Pino-Yanes M, Beleza S, Marcheco-Teruel B, Parra EJ. 2019. Meta-analysis of GWA studies provides new insights on the genetic architecture of skin pigmentation in recently admixed populations. *BMC Genet.* 20:59.

Quillen EE, Norton HL, Parra EJ, **Lona-Durazo FL**, Ang KC, Illiescu FM, Pearson LN, Shriver MD, Lasisi T, Gokcumen O, Starr I, Lin Y-L, Martin AR, Jablonski NG. 2018. Shades of complexity: New perspectives on the evolution and genetic architecture of human skin. *Am J Phys Anthropol* 168 Suppl 67:4-26.

## **Melissa Edwards (M.Sc. 2010, Ph.D. 2016)**

- Edwards M**, Cha D, Krithika S, Johnson M, Parra EJ. 2016. Analysis of iris surface features in populations of diverse ancestry. *R. Soc. Open Sci.* 3:150470.
- Edwards M**, Cha D, Krithika S, Johnson M, Cook G, Parra EJ. 2016. Iris pigmentation as a quantitative trait: variation in populations of European, East Asian and South Asian ancestry and association with candidate gene polymorphisms. *Pigment Cell Melanoma Res* 29:141-162.
- Valenta K, **Edwards M**, Rafaliarison R, Johnson S, Holmes S, Brown K, Dominy N, Lehman S, Parra E, Melin A. 2016. Visual ecology of Eulemur suggests a cathemeral origin for the primate cone opsin polymorphism. *Funct. Ecol.* (In press).
- Norton HL, **Edwards M**, Krithika S, Johnson M, Werren EA, Parra EJ. 2016. Quantitative assessment of skin, hair, and iris variation in a diverse sample of individuals and associated genetic variation. *Am. J. Phys. Anthropol.* (in press).
- Eaton K, **Edwards M**, Krithika S, Cook G, Norton H, Parra EJ. 2015. Association study confirms the role of two *OCA2* polymorphisms in normal skin pigmentation variation in East Asian populations. *Am. J. Hum. Biol.* 27:520-525.
- Cook GR, Krithika S, **Edwards M**, Kavanagh P, Parra EJ. 2014. Quantitative measures of odor detection thresholds using an air dilution olfactometer, and association with genetic variants in a sample of diverse ancestry. *PeerJ* 2:e643.
- Hider JL, Gittelman RM, Shah T, **Edwards M**, Rosenbloom A, Akey JM, Parra EJ. 2013. Exploring signatures of positive selection in pigmentation candidate genes in populations of East Asian ancestry. *BMC Evol Biol* 13:150
- Edwards M**, Gozdzik A, Ross K, Miles J, Parra EJ. 2012. Quantitative measures of iris color using high resolution photographs. *Am. J. Phys. Anthropol.* 147:141-149
- Ross KA, Bigham AW, **Edwards M**, Gozdzik A, Suarez-Kurtz G, Parra EJ. 2010. Worldwide allele frequency distribution of four polymorphisms associated with warfarin dose requirements. *J. Hum. Genet.* 55:582-589.
- Cruz M, Valladares-Salgado A, Garcia-Mena J, Ross K, **Edwards M**, Angeles-Martinez J, Ortega-Camarillo C, Escobedo de la Peña J, Burguete-Garcia AI, Wachter-Rodarte N, Ambriz R, Rivera R, D'artote AL, Peralta J, Parra EJ, Kumate J. 2010. Candidate gene

association study conditioning on individual ancestry in type 2 diabetes and metabolic syndrome patients from Mexico City. *Diabetes Metab. Res. Rev.* 26: 261-270.

**Edwards M**, Bigham A, Tan J, Li S, Gozdzik A, Ross K, Jin L, Parra EJ. 2010. Association of the OCA2 polymorphism His615Arg with melanin content in East Asian populations: Further evidence of convergent evolution of skin pigmentation. *PLoS Genetics* 6:e1000867.

### **Agnes Gozdzik, (Ph.D. 2010)**

Sham L, Yeh EA, Magalhaes S, Parra E, **Gozdzik A**, Banwell B, Hanwell HE. 2015. Evaluation of Fall Sun Exposure Score in Predicting Vitamin D Status in Young Canadian Adults, and the Influence of Ancestry. *Journal of Photochemistry and Photobiology B: Biology* 145:25-29.

Ginter JK, Krithika S, **Gozdzik A**, Hanwell H, Whiting S, Parra EJ. 2013. Vitamin D status of older adults of diverse ancestry living in the Greater Toronto Area. *BMC Geriatr* 13:66.

Edwards M, **Gozdzik A**, Ross K, Miles J, Parra EJ. 2012. Quantitative measures of iris color using high resolution photographs. *Am. J. Phys. Anthropol.* 147:141-149.

**Gozdzik A**, Zhu J, Wong B Y-L, Fu L, Cole DEC, Parra EJ. 2011. Association of vitamin D binding protein (VDBP) polymorphisms and serum 25(OH)D concentrations in a sample of young Canadian adults of different ancestry. *J. Steroid Biochem. Mol. Biol.* 127:405-412.

**Gozdzik A**, Barta JL, Weir A, Cole DEC, Vieth R, Whiting SJ, Parra EJ. 2010. Serum 25-hydroxyvitamin D concentrations fluctuate seasonally in young adults of diverse ancestry living in Toronto. *J. Nutr.* 140:2213-2220.

Ross KA, Bigham AW, Edwards M, **Gozdzik A**, Suarez-Kurtz G, Parra EJ. 2010. Worldwide allele frequency distribution of four polymorphisms associated with warfarin dose requirements. *J. Hum. Genet.* 55:582-589.

Edwards M, Bigham A, Tan J, Li S, **Gozdzik A**, Ross K, Jin L, Parra EJ. 2010. Association of the OCA2 polymorphism His615Arg with melanin content in East Asian populations: Further evidence of convergent evolution of skin pigmentation. *PLoS Genetics* 6:e1000867.

Wu H, **Gozdzik A**, Barta JL, Wagner D, Cole DE, Vieth R, Parra EJ, Whiting SJ. 2009. The development and evaluation of a food frequency questionnaire used in assessing vitamin D intake in a sample of healthy young Canadian adults of diverse ancestry. *Nutr. Res.* 29:255261.

**Gozdzik A**, Barta JL, Wu H, Wagner D, Cole DE, Vieth R, Whiting S, **Parra EJ**. 2008. Low wintertime vitamin D levels in a sample of healthy young adults of diverse ancestry living in the Toronto area: Associations with vitamin D intake and skin pigmentation. *BMC Public Health* 8: 336.

### **Cristina Abbatangelo (M.Sc. 2020)**

Debortoli G, **Abbatangelo C**, Ceballos F, Fortes-Lima C, Norton HL, Ozarkar S, Parra EJ, Jonnalagadda M. 2020. Novel insights on demographic history of tribal and caste groups from West Maharashtra (India) using genomewide data. *Sci Rep* 10:10075.

### **Muhammed Faizan (M.Sc. 2018)**

Jonnalagadda M, **Faizan MA**, Ozarkar S, Ashma R, Kulkarni S, Norton HL, Parra E. 2019. A genome-wide association study of skin and iris pigmentation among individuals of South Asian ancestry. *Genome Biol. Evol.* 11:1066-1076.

### **Lida Rawofi (M.Sc. 2017)**

**Rawofi L**, Edwards M, Krithika S, Le P, Cha D, Yang Z, Ma Y, Wang J, Su B, Jin L, Norton HL, Parra EJ. 2017. Genome-wide association study of pigmentary traits (skin and iris color) in individuals of East Asian ancestry. *PeerJ* 5:e3951

### **Nicole Murray (M.Sc. 2016)**

**Murray N**, Norton H, Parra EJ. 2015. Distribution of two OCA2 polymorphisms associated with pigmentation in East Asian populations. *Hum. Genome Var.* 2:15058.

### **Gillian Cook (M.Sc. 2015)**

Eaton K, Edwards M, Krithika S, **Cook G**, Norton H, Parra EJ. 2015. Association study confirms the role of two OCA2 polymorphisms in normal skin pigmentation variation in East Asian populations. *Am. J. Hum. Biol.* 27:520-525.

**Cook GR**, Krithika S, Edwards M, Kavanagh P, Parra EJ. 2014. Quantitative measures of odor detection thresholds using an air dilution olfactometer, and association with genetic variants in a sample of diverse ancestry. *PeerJ* 2:e643.

Edwards M, Cha D, Krithika S, Johnson M, **Cook G**, Parra EJ. 2016. Iris pigmentation as a quantitative trait: variation in populations of European, East Asian and South Asian ancestry and association with candidate gene polymorphisms. *Pigment Cell Melanoma Res* 29:141-162.

### **Jessica Hider (M.Sc. 2013)**

**Hider JL**, Gittelman RM, Shah T, Edwards M, Rosenbloom A, Akey JM, Parra EJ. 2013. Exploring signatures of positive selection in pigmentation candidate genes in populations of East Asian ancestry. *BMC Evol Biol* 13:150

### **Kendra Ross (M.Sc. 2010)**

Edwards M, Gozdzik A, **Ross K**, Miles J, Parra EJ. 2012. Quantitative measures of iris color using high resolution photographs. *Am. J. Phys. Anthropol.* 147:141-149

**Ross KA**, Bigham AW, Edwards M, Gozdzik A, Suarez-Kurtz G, Parra EJ. 2010. Worldwide allele frequency distribution of four polymorphisms associated with warfarin dose requirements. *J. Hum. Genet.* 55:582-589.

Cruz M, Valladares-Salgado A, Garcia-Mena J, **Ross K**, Edwards M, Angeles-Martinez J, Ortega-Camarillo C, Escobedo de la Peña J, Burguete-Garcia AI, Wachter-Rodarte N, Ambriz R, Rivera R, D'artote AL, Peralta J, Parra EJ, Kumate J. 2010. Candidate gene association study conditioning on individual ancestry in type 2 diabetes and metabolic syndrome patients from Mexico City. *Diabetes Metab. Res. Rev.* 26: 261-270.

Edwards M, Bigham A, Tan J, Li S, Gozdzik A, **Ross K**, Jin L, Parra EJ. 2010. Association of the OCA2 polymorphism His615Arg with melanin content in East Asian populations: Further evidence of convergent evolution of skin pigmentation. *PLoS Genetics* 6:e1000867.

### **Emily Cameron M.Sc. (2009)**

Beleza S, Dos Santos AM, McEvoy B, Alves I, Martinho C, **Cameron E**, Shriver MD, Parra EJ, Rocha J. 2013. The timing of pigmentation lightening in Europeans. *Mol. Biol. Evol.* 30:24-35.

**Cameron EA**, Martinez-Marignac VL, Chan A, Valladares A, Simmonds LV, Wachter N, Kumate J, McKeigue P, Shriver MD, Kittles R, Cruz M, Parra EJ. 2007. MGEA5-14 polymorphism and type 2 diabetes in Mexico City. *Am. J. Hum. Biol.* 19:593-596.

Parra EJ, **Cameron E**, Simmonds L, Valladares A, McKeigue P, Shriver M, Wachter N, Kumate J, Kittles R, Cruz M. 2007. Association of TCF7L2 polymorphisms with type 2 diabetes in Mexico City. *Clin. Genet.* 71:359-366.

Martinez-Marignac VL, Valladares A, **Cameron E**, Chan A, Perera A, Globus-Goldberg R, Wachter N, Kumate J, McKeigue P, O'Donnell D, Shriver MD, Cruz M, Parra EJ. 2007. Admixture in Mexico City: implications for admixture mapping of type 2 diabetes genetic risk factors. *Hum. Genet.* 120:807-819.