

UNC SCHOOL OF MEDICINE

**Personal Information**

Name: Xiaojing Zheng  
Email: Xiaojinz@email.unc.edu  
Phone: (919) 962-3448 (office)

**Education**

Ph. D.	University of Pittsburgh, Pittsburgh, PA	Biostatistics	2012
Ph. D.	University of Pittsburgh, Pittsburgh, PA	Human Genetics	2007
M.S.	Tongji Medical School, Huazhong University of Science and Technology, Wuhan, China	Nephrology	2001
B.S.	Tongji Medical School, Huazhong University of Science and Technology, Wuhan, China	Medicine	1995

**Professional Experience**

Department of Pediatrics, University of North Carolina at Chapel Hill, NC	Associate Professor	Jan 2020- Present
Department of Biostatistics, University of North Carolina at Chapel Hill, NC	Aadjunct Assistant Professor	Dec 2019- Present
Department of Pediatrics, University of North Carolina at Chapel Hill, NC	Assistant Professor	Oct 2014- Dec 2019
Department of Pediatrics, University of North Carolina at Chapel Hill, NC	Instructor	Nov 2013- Sep 2014
Department of Pediatrics University of Pittsburgh Pittsburgh, PA	Research Assistant Professor	Jun 2012- Oct 2013

## **Honors and Awards**

Award for Atlantic Coast Sexually Transmitted Infections Cooperative Research Center Developmental Research Program	2015-2017
Award for The American Association of Immunologists early career faculty travel grant	Mar 2014
Award for workshop on leadership in bioscience, Cold Spring Harbor Laboratory, New York	Mar 2014
Travel Award, Graduate and Professional Student Assembly, University of Pittsburgh	Nov 2010
NIH Pre-doctoral Fellowship, T32	2008-2012
Travel Award, Graduate and Professional Student Assembly, University of Pittsburgh	Oct 2007
Outstanding Graduate Student, Tongji Medical School, Huazhong University of Science and Technology, Wuhan, China	2000-2001
Outstanding Undergraduate Student, Tongji Medical School, Huazhong University of Science and Technology, Wuhan, China	1993-1995

## **Bibliography and Products of Scholarship**

### *Books and Chapters:*

1. **Zheng X**. Nephrotoxicity of Immunosuppressants. In: Sun S. *Diagnosis and Treatment of Renal Failure*. Beijing: People's Military Medical Publisher. 2001: 365-378.

### *Refereed original research:*

#### **# indicates co-first authorship**

#### **\* indicates corresponding authorship**

2. **Zheng X\***, Zhong W, O'Connell CM, Liu Y, Haggerty CL, Geisler WM, Anyalechi GE, Kirkcaldy RD, Wiesenfeld HC, Hillier SL, Steinkampf MP, Hammond KR, Fine J, Li Y, and Darville T\*. Host Genetic Risk Factors for *Chlamydia trachomatis* Related Infertility in Women. *J Infect Dis*. 2021 Aug 16;224(Supplement\_2):S64-S71. PMID: 34396400; PMCID: PMC8365119.
3. Li C, Tang W, Ho HC, Ong JJ, **Zheng X**, Sun X, Li X, Liu L, Wang Y, Zhao P, Xiong M, Zheng H, Wang C, Yang B. Prevalence of Chlamydia trachomatis Among Pregnant Women, Gynecology Clinic Attendees, and Subfertile Women in Guangdong, China: A Cross-sectional Survey. *Open Forum Infect Dis*. 2021 Apr 24;8(6):ofab206. PMID: 34235228; PMCID: PMC8253043.

4. Zhong W, Darville T, **Zheng X\***, Fine J\*, Li Y\*. Generalized multi-SNP mediation intersection-union test. *Biometrics*. 2020 Dec 14. doi: 10.1111/biom.13418. Epub ahead of print. PMID: 33316078.
5. Dong L, Kollipara A, Darville T, Zou F\* and **Zheng X\***. Semi-CAM: A semi-supervised deconvolution method for bulk transcriptomic data with partial marker gene information. *Sci Rep*, 2020;10(1):5434. PMID: 32214192.
6. Wang R, **Zheng X**, Xu T, Gong S, Liu S, Han L, Yang S, Xu W. Personalized Cup Positioning Guides Improved Cup Positioning and Hip Ranges of Motion in Robotic Assisted Total Hip Arthroplasty. *Front Bioeng Biotechnol*. 2020;8:988. PMID: 32974316.
7. Zhong W, Dong L, Poston TB, Spracklen CN, Wu D, Darville T, Mohlke KL, Li Y, Li Q\* and **Zheng X\***. Inferring Regulatory Networks From Mixed Observational Data Using Directed Acyclic Graphs. *Front Genet*, 2020; 11: 8. PMID: 32127796.
8. Amaral AF, Rahman KS, Kick AR, Cortes LM, Robertson J, Kaltenboeck B, Gerds V, O'Connell CM, Poston TB, **Zheng X**, Liu C, Omesi SY, Darville T, Käser T. Mucosal Vaccination with UV-Inactivated *Chlamydia suis* in Pre-Exposed Outbred Pigs Decreases Pathogen Load and Induces CD4 T-Cell Maturation into IFN- $\gamma$  + Effector Memory Cells. *Vaccines (Basel)*. 2020;8(3):E353. PMID: 32630694.
9. Zhong W, Spracklen CN, Mohlke KL, **Zheng X\***, Fine J\*, Li Y\*. Multi-SNP mediation intersection-union test. *Bioinformatics*. 2019; 35(22):4724-4729. PMID: 31099385.
10. Poston TB, Lee DE, Darville T, Zhong W, Dong L, O'Connell CM, Wiesenfeld HC, Hillier SL, Sempowski GD, **Zheng X\***. Cervical cytokines associated with *Chlamydia trachomatis* susceptibility and protection. *J Infect Dis*. 2019; 220(2): 330-339. PMID: 30820577
11. Darville T\*, Albritton HL, Zhong W, Dong L, O'Connell CM, Poston TB, Quayle AJ, Goonetilleke N, Wiesenfeld HC, Hillier SL, **Zheng X\***. Anti-chlamydia IgG and IgA are insufficient to prevent endometrial *Chlamydia* infection in women and increased anti-chlamydia IgG is associated with enhanced risk for incident infection. *Am J Reprod Immunol*. 2019; 81(5):e13103. PMID: 30784128.
12. **Zheng X\***, O'Connell CM, Zhong W, Poston TB, Wiesenfeld HC, Hillier SL, Trent M, Gaydos C, Tseng G, Taylor BD, et al. Gene expression signatures can aid diagnosis of sexually transmitted infection-induced endometritis in women. *Front Cell Infect Microbiol*. 2018; 8:307. PMID: 30294592.
13. **Zheng X**, O'Connell CM, Zhong W, Nagarajan UM, Tripathy M, Lee D, Russell AN, Wiesenfeld H, Hillier S, Darville T. Discovery of blood transcriptional endotypes in women with pelvic inflammatory disease. *J Immunol*. 2018; 200(8):2941-2956. PMID: 29531169
14. Taylor BD, **Zheng X**, O'Connell CM, Wiesenfeld HC, Hillier SL, Darville T. Risk factors for *Mycoplasma genitalium* endometritis and incident infection: a secondary data analysis of the T cell Response Against *Chlamydia* (TRAC) Study. *Sex Transm Infect*. 2018; 94(6): 414-420. PMID: 29563165.
15. Taylor BD, **Zheng X**, Darville T, Zhong W, Konganti K, Abiodun-Ojo O, Ness RB, O'Connell CM, Haggerty CL. Whole-exome sequencing to identify novel biological pathways associated with infertility after pelvic inflammatory disease. *Sex Transm Dis*. 2017; 44:35-41. PMID: 27898568.

16. Russell AN<sup>#</sup>, **Zheng X<sup>#</sup>**, O'Connell CM, Wiesenfeld HC, Hillier SL, Taylor BD, Picard MD, Flechtner JB, Zhong W, Frazer LC, Darville T. Identification of *chlamydia trachomatis* antigens recognized by T Cells from highly exposed women who limit or resist genital tract infection. *J Infect Dis.* 2016; 214(12):1884-1892. PMID: 27738051.
17. Russell AN<sup>#</sup>, **Zheng X<sup>#</sup>**, O'Connell CM, Taylor BD, Wiesenfeld HC, Hillier SL, Zhong W, Darville T. Analysis of factors driving incident and ascending infection and the role of serum antibody in *Chlamydia trachomatis* genital tract infection. *J Infect Dis.* 2016; 213:523-31. PMID: 26347571.
18. Uzun A, Sahin Y, Schuster JS, **Zheng X**, Ryckman K, Feingold E, Padbury J. Structural and genomic variation in preterm birth. *Pediatr Res.* 2016; 80:829-836. PMID: 27466897.
19. **Zheng X**, Demirci FY, Barmada MM, Richardson GA, Lopez OL, Sweet RA, Kamboh MI, Feingold E. Genome-wide copy number variation study of Psychosis in Alzheimer's disease. *Translational Psychiatry*, 2015; 5, e574. PMID: 26035058.
20. **Zheng X\***, Demirci FY, Barmada MM, Richardson GA, Lopez OL, Sweet RA, Kamboh MI, Feingold E. A Rare Duplication on Chromosome 16p11.2 is Identified in Patients with Psychosis in Alzheimer's Disease. *Plos One*, 2014; 9: e111462. PMID: 25379732.
21. Barral R, Desai R, **Zheng X**, Frazer LC, Sucato GS, Haggerty CL, O'Connell CM, Zurenski MA, Darville T. Frequency of *Chlamydia trachomatis*-specific T cell interferon- $\gamma$  and interleukin-17 responses in CD4-enriched peripheral blood mononuclear cells of sexually active adolescent females. *J Reprod Immunol.* 2014; 103:29-37. PMID: 24582738.
22. **Zheng X**, Feingold E, Ryckman KK, Shaffer JR, Boyd HA, Feenstra B, Melbye M, Marazita ML, Murray JC, Cuenca KT. Cuenca. Association of Maternal CNVs in GSTT1/GSTT2 with smoking, preterm delivery and low birth weight. *Front Genet.* 2013; 4: Article 196. PMID: 24194744.
23. **Zheng X\***, Shaffer JR, McHugh CP, Laurie CC, Feenstra B, Melbye M, Murray JC, Marazita ML, Feingold E. Using family data as a verification standard to evaluate CNV calling strategies. *Genetic Epidemiology.* 2012; 36:253-262. PMID: 22714937.
24. **Zheng X**, Morrison AC, Turner ST, Ferrell RE. Association of *SLC20A1* and sodium lithium countertransport. *American Journal of Hypertension.* 2011; 24: 1069-72. PMID: 21796222.
25. **Zheng X**, Morrison AC, Feingold E, Turner ST, Ferrell RE. Association of *NEDD4L* and sodium lithium countertransport. *American Journal of Hypertension.* 2011; 24: 145-148. PMID: 21088674.
26. **Zheng X**, Kammerer CM, Cox LA, Morrison A, Turner ST, Ferrell RE. Association of *SLC34A2* variation and sodium lithium countertransport activity in humans and baboons. *American Journal of Hypertension.* 2009; 22: 288-293. PMID: 19119262.
27. Thalamuthu A, Mukhopadhyay I, **Zheng X**, Tseng GC. Evaluation and comparison of gene clustering methods in microarray analysis. *Bioinformatics.* 2006; 22: 48-54. PMID: 16882653.
28. **Zheng X** and Sun S. Renal protective effects of angiotensin II receptor antagonist losartan on diabetic rats. *Acta Universitatis Medicinæ Tongji.* 2002; 31: 48-54.

29. Wang L, Xiong M, Che D, **Zheng X**. Effect of c-myc antisense oligodeoxynucleotides on hypoxia-induced proliferation of pulmonary vascular pericytes. *Journal of Tongji Medical University*. 2000; 20: 194-196. PMID: 11215044
30. **Zheng X**, Su P, Wang T, Zheng D. Acute renal failure secondary to ciprofloxacin therapy. *Chinese Journal of Pharmacoepidemiology*.1999; 8: 125-127.

*Submitted original research:*

31. Liu C, Hufnagel K, O'Connell CM, Goonetilleke N, Mokashi N, Waterboer T, Tollison TS, Peng X, Wiesenfeld HC, Hillier SL, **Zheng X\*** and Toni Darville\*. Reduced Endometrial Ascension and Enhanced Reinfection Associated with IgG Antibodies to Specific Chlamydia trachomatis Proteins in Women at Risk for Chlamydia. *J Infect Dis*. 2021 (submitted).
32. Liu Y, Darville T, **Zheng X\*** and Li Q\*. *Decomposition of Variation of Mixed Variables by a Latent Mixed Gaussian Copula Model*. *Biometrics*. 2021 (submitted).

*National and International Abstracts:*

& indicates selected oral presentation

1. Poston T, Kollipara A, Girardi J, O'Connell CM, Darville T, **Zheng X**. Identification of unique memory T cell populations associated with protection against Chlamydia trachomatis reinfection in the peripheral blood of highly exposed women. The American Association of Immunologists annual meeting, virtual, May 10-15, 2021. &
2. Host genetic risk factors for Chlamydial trachomatis related upper genital tract infection in women. **Zheng X\***, Zhong W, O'Connell CM, Liu Y, Haggerty CL, Geisler WM, Anyalechi GE, Kirkcaldy RD, Wiesenfeld HC, Hillier SL, Steinkampf MP, Hammond KR, Fine J, Li Y, and Darville T. STI CRC annual meeting, June 14-16, virtual, 2021.&
3. Dong L, **Zheng X\*** and Zou F\*. Surrogate Variable Analysis Based Deconvolution of Bulk Transcriptomics Data. Joint Statistical Meetings, Denver, Colorado, Jul 27 - Aug 1, 2019.
4. Zhong W, Darville T, O'Connell CM, Wiesenfeld HC, Hillier SL, Haggerty CL, Geisler WM, Anyalechi G, Kirkcaldy RD, Li Y, Fine J, **Zheng X**. Decipher human genetic basis of ascending chlamydia genital tract infection and induction of infertility in women. Ninth Biennial Meeting of the Chlamydia Basic Research Society, Seattle, WA. March 18-21, 2019.
5. Zhong W, O'Connell CM, Wiesenfeld HC, Hillier SL, Lee HC, Geisler WM, Anyalechi G, Kirkcaldy RD, Li Y, Darville T, **Zheng X**. Host genetic variation for susceptibility of ascending chlamydia genital tract infection. American Society of Human Genetics annual meeting, San Diego, Oct 16-20, 2018.&
6. Dong L, O'Connell CM, Li Q, Wiesenfeld HC, Hillier SL, Darville T, **Zheng X**. Endometrial microRNA Networks Associated with Pelvic Inflammatory Disease progression. American Society of Human Genetics annual meeting, San Diego, Oct 16-20, 2018. &
7. Zhong W, Spracklen CN, Mohlke KL, **Zheng X\***, Fine J\* and Li Y\*. SMUT: multi-SNP Mediation intersection-Union Test. Joint Statistical Meetings, Vancouver, Canada, Jul 28 - Aug 2, 2018. &

8. Kollipara A, Iannone MA, Poston P, Lee DE, O'Connell CM, **Zheng X**, Hillier SL, Wiesenfeld HC and Darville T. Multidimensional phenotypic immune profiling of *Chlamydia trachomatis* infected women using mass cytometry platform. HUM.243. Immunology 2018, Austen TX. May 4-8, 2018.
9. Lee DE, Zhong W, Dong L, Russell AN, O'Connell CM, Wiesenfeld HC, Hillier SL, Sempowski GD, **Zheng X** and Darville T. Increased levels of Th1-inducing cytokines are detected in cervical secretions of women with *Chlamydia trachomatis* infection limited to their cervix MUC.634. Immunology 2018, Austen TX. May 4-8, 2018.
10. Lee DE, Zhong W, Dong L, Russell AN, O'Connell CM, Wiesenfeld HC, Hillier SL, Sempowski G, Darville T and **Zheng X**. Analysis of cytokines and chemokines in cervical secretions of women actively infected with *Chlamydia trachomatis* reveal an association of increased IL--7 levels with protection from reinfection. Eighth Biennial Meeting of the Chlamydia Basic Research Society, Charlotte, NC. April 7-10, 2017.
11. **Zheng X**, O'Connell CM, Zhong W, Wiesenfeld HC, Hillier SL and Darville T. Identification of genetic variants associated with infertility after chlamydial infection. Eighth Biennial Meeting of the Chlamydia Basic Research Society, Charlotte, NC. April 7-10, 2017. &
12. Tucker ZT, **Zheng X** and O'Connell CM. Modulation of chlamydial transcriptional responses after 2-deoxyglucose treatment: evidence for a carbon response. 8<sup>th</sup> Meeting of the European Society for Chlamydia Research, Oxford, UK. September, 2016.
13. **Zheng X**, O'Connell CM, Nagarajan U, Wiesenfeld HC, Hillier SL and Darville T. Coexpression network analysis reveals pathways involved in *Chlamydia trachomatis* and/or *Neisseria gonorrhoeae* induced pelvic inflammatory disease (PID). Keystone Symposia conference on Systems Immunology: From Molecular Networks to Human Biology, Bigsky, MT. Jan 10—14, 2016. &
14. Taylor BD, **Zheng X**, Darville T, Abiodun-Ojo O, Konganti K, Threadgill D, Ness RB, Haggerty CL. Whole-exome sequencing to identify novel genes associated with infertility following chlamydial pelvic inflammatory disease. 2016 Epidemiology Congress of the Americas, June 2016, Miami, Florida.
15. Darville T, **Zheng X**, O'Connell CM, Picard M, Wiesenfeld HC, Hillier SL, and Fletchner J. CD4 but not CD8 T Cell IFN-gamma production to chlamydial antigens associates with protection from incident infection in highly exposed women. Seventh Biennial Meeting of the Chlamydia Basic Research Society, New Orleans, LA. May, 2015.
16. Russell AN, **Zheng X**, O'Connell CM, Wiesenfeld HC, Hillier SL, and Darville T. Serum Antibody titers to *Chlamydia trachomatis* determined by microimmunofluorescence (MIF) assay do not predict protection in highly exposed women. Seventh Biennial Meeting of the Chlamydia Basic Research Society, New Orleans, LA. May, 2015.
17. **Zheng X**, O'Connell CM, Nagarajan U, Wiesenfeld HC, Hillier SL, and Darville T. Identification of Biomarkers for Pelvic Inflammatory Disease Following *Chlamydia trachomatis* Infection Using Human microRNA Expression Profiling. Seventh Biennial Meeting of the Chlamydia Basic Research Society, New Orleans, LA. May, 2015. &
18. **Zheng X**, O'Connell CM, Nagarajan U, Wiesenfeld HC, Hillier SL and Darville, T. Identification of a blood transcriptional signature for chlamydial PID. Thirteenth International Symposium on Human Chlamydial Infections, Pacific Grove, CA 22-27 June, 2014.

19. Darville T, **Zheng X**, O’Connell CM, Picard M, Wiesenfeld HC, Hillier SL, and Fletchner J. Identification of *Chlamydia trachomatis* proteins recognized by T Cells from high risk women resistant to reinfection and/or protected from ascending infection. Thirteenth International Symposium on Human Chlamydial Infections, Pacific Grove, CA 22-27 June, 2014.
20. Darville T, **Zheng X**, O’Connell CM, Picard M, Wiesenfeld HC, Hillier SL et al. Identification of *Chlamydia trachomatis* proteins recognized by T cells from high-risk women resistant to reinfection and/or protected from ascending infection. (VAC7P. 961) J Immunol. 192 (1 Supplement), 141.6-141.6, May, 2014.
21. **Zheng X**, O’Connell CM, Nagarajan U, Wiesenfeld HC, Hillier SL and Darville, T. Co-expression network analysis reveals immune response pathways important for pathogenesis of Chlamydial pelvic inflammatory disease (PID) (HUM8P. 329) J. Immunol. 192 (1 Supplement), 185.4-185.4, May 2014<sup>&</sup>
22. **Zheng X**, O’Connell CM, Nagarajan U, Wiesenfeld HC, Hillier SL and Darville, T. Blood transcriptional profiling of women with *Chlamydia trachomatis* identifies a Pelvic Inflammatory Disease (PID) signature. Sexually Transmitted Infections 89 (Suppl 1), A27-A27Y. June, 2013.<sup>&</sup>
23. **Zheng X**, Morrison AC, Turner ST, Ferrell RE. Association of SLC20A1 and sodium lithium countertransport. American Society of Human Genetics annual meeting, Washington, DC. Nov 02 - 06, 2010.<sup>&</sup>
24. **Zheng X**, Kammerer CM, Cox LA, Morrison A, Turner ST, Ferrell RE. Association of SLC34A2 variation and sodium lithium countertransport activity in humans and baboons. American Society of Human Genetics annual meeting, San Diego, CA. Oct 23 - 27, 2007.<sup>&</sup>

## Teaching Record

### UNC

#### Ph.D Dissertation Advisor

Trainee	Training Period	Titles of Dissertation	Expected Completion Dates for PhD Degree	Current Position
Liu, Yutong	2019-present	TBA	TBA	PhD Candidate, Biostatistics, UNC
Liu, Chuwen	2019-present	TBA	TBA	PhD student, Biostatistics, UNC
Dong, Li	2016-2019	Statistical deconvolution methods for transcriptomics data	Dec., 2019	PhD Candidate, Biostatistics, UNC
Zhong, Wujuan	2015-2019	Multi-SNP Mediation Intersection-Union Test	Dec., 2019	PhD Candidate, Biostatistics, UNC

M.S. Students Advised

<b>Trainee</b>	<b>Training Period</b>	<b>Titles of Research Projects</b>	<b>Degree and Completion Dates</b>	<b>Current Position</b>
Wang, Mingyi	2019-2020	Statistical analysis of protective and pathogenic cellular immune responses to <i>Chlamydia trachomatis</i> infection	Statistics, 2020	Master student, Statistics, UNC
Lee, De'Ashia	2016-2019	Human immune response to <i>Chlamydia trachomatis</i>	Microbiology & Immunology, 2019	Program coordinator, STD/HIV and Viral Hepatitis S.C. DHEC
Bian, Tao	2017-2018	Copy number variation association analysis of age-at-onset in Alzheimer's Disease	Statistics, 2019	Internship, Synteract company
Yan, HongXia	2014-2015	Analysis of genetic factors associated with ascending <i>Chlamydia</i> genital tract infection	Statistics, 2017	Biostatistician, Synteract company
Zhou, Yunshu	2014	Analysis of <i>Chlamydia</i> antigens associated with protection of ascending infection	Biostatistics, 2016	Biostatistician, University of Iowa

Undergraduate Students Advised

<b>Trainee</b>	<b>Training Period</b>	<b>Titles of Research Projects</b>	<b>Completion Dates</b>	<b>Current Position</b>
Neha Mokashi	2019-present	TBA	TBA	Undergraduate student, Biostatistics major, UNC
Tianze Xu	May-Sep 2020	TBA	TBA	Undergraduate student, University of Illinois at Urbana-Champaign

Postdoctoral Fellows and Other Graduate Students Supervised

<b>Trainee</b>	<b>Training Period</b>	<b>Titles of Research Project</b>	<b>Prior Academic Degree Years and Institutions</b>	<b>Current Position</b>
Poston, Taylor	2018-present	Evaluation of CD4 T Cell Memory against <i>Chlamydia</i>	2017, University of Pittsburgh	Post-doctoral Research Associate, Department of Pediatrics, UNC
Kollipara, Avinash	2017-present	Human T cell immunity to <i>Chlamydia</i>	2014, Queensland University of Technology	Research Assistant Professor, Department of Pediatrics, UNC
Gyorke, Clare	2017-2021	Innate Immune Pathogenesis to <i>Chlamydia</i>	2015, University of California, Davis	PhD Candidate, Department of Microbiology & immunology, UNC



Other Trainees supervised:

Ms. Ali Russell, who received a year of funding to perform research before completion of her senior year of medical school at UNC Chapel Hill. Ms. Russell studied risk factors and correlates of immunity in women at high-risk for chlamydial infection.

**Professional Service**

*Journal Reviewer*

Ad Hoc:

*Bioinformatics*

*Pathogens*

*Sexually Transmitted Infections*

*The Journal of Pediatrics*

*Physiological Genomics*

*Human Genetics*

*BMC Infectious Diseases*

*Molecular Psychiatry*

*Frontiers in Genetics*

*Pathogens and Disease*

*Letters in Biomathematics*

*PLOS ONE*

*Frontiers in Microbiology*

*Journal Editorial board*

*Biomaterials Translational*      2019-present

*Journal co-Editor*

*Frontiers in immunology*      2021-present

*International*

Recruited to co-organize an invited session, The 11th International Chinese Statistical Association (ICSA) International Conference in HangZhou, China, 2019

*The search committee member*

08/01/2019 Pediatrics-Infectious Disease, UNC-CH

*Grant reviewer*

Preeclampsia Foundation's Peter Joseph Pappas (PJP) Research Grant program (2020)