Christina G. Tise, MD, PhD

(Formerly Christina G. Perry)
105 Paul Avenue, Mountain View, CA 94041
"Christy" ● 302-650-2006 ● cgtise@stanford.edu

EDUCATION AND TRAINING

2019- Present **Medical Genetics Residency Program, PGY2-PGY3**
Stanford University, Stanford, CA

2018 – 2019 **Pediatric Residency Program, PGY1**
Stanford University, Stanford, CA

2010 – 2018 **Medical Scientist Training Program (MSTP)**
University of Maryland School of Medicine (UMSOM), Baltimore, MD
- **PhD in Epidemiology and Human Genetics, Human Genetics and Genomic Medicine Track**
- **Medical School (MD)**

2006 – 2009 **B.S. in Biochemistry, Chemistry Minor**
Virginia Tech, Blacksburg, VA

CLINICAL AND RESEARCH EXPERIENCE

2018 – Present **Clinical Residency at Stanford University**
Clinical Training Employment
Lucile Packard Children's Hospital and Stanford Medical Center, Stanford, CA
Program Director: David Stevenson, MD

2016 **PhD Intern at Regeneron Genetics Center**
Post-Doctoral Research Employment
Translational Genetics Department, Regeneron Genetics Center LLC, Regeneron Pharmaceuticals, Inc., Tarrytown, NY
Supervisor: Alan Shuldiner, MD

2012 – 2015 ***A Macro View of a Micronutrient: Revealing the Genetics and Elucidating the Impact of Serum Sulfate on Human Health in the Old Order Amish***
Doctoral Dissertation Research, Funded
Program for Personalized and Genomic Medicine and Division of Endocrinology, Diabetes & Nutrition, UMSOM, Baltimore, MD
Dissertation Chairs: Alan Shuldiner, MD and Laura Yerges-Armstrong, PhD

2012 – 2013 **Pediatric Biochemical Genetics Laboratory Technician**
Diagnostic Laboratory Rotation
Department of Pediatrics, UMSOM, Baltimore, MD
Supervisors: Miriam Blitzer, PhD and Erin Strovel, PhD

2012 ***Knocking-out Diabetes, One Hormone-Sensitive Lipase (HSL) Mutation at a Time***
Laboratory Rotation
Division of Endocrinology, Diabetes & Nutrition, UMSOM, Baltimore, MD
Supervisor: Alan Shuldiner, MD

2011 **The Role of Occupation in Psychogenic Movement Disorders**
Clinical Research Employment
Department of Neurology, UMSOM, Baltimore, MD
Supervisor: Stephen Reich, MD

2010 **Genotyping and Identification of *Gibberella zeae* Strains Collected from the Atmosphere**

Laboratory Research Employment
Department of Plant Pathology & Weed Science, Virginia Tech, Blacksburg, VA
Supervisor: David Schmale, PhD

2009 **Cancer Genetic Counseling Internship**
Post-Bachelors Internship
Carilion Breast Care Center, Roanoke, VA
Supervisor: Kara Bui, MS, CGC

2008 – 2009 **Construction and Characterization of Inositol 5-phosphatase Promoter-GUS Constructs in *Arabidopsis thaliana***
Undergraduate Research
Department of Biochemistry, Virginia Tech, Blacksburg, VA
Supervisor: Glenda Gillaspy, PhD

2007 – 2008 **Plant Pathology Laboratory Technician**
Undergraduate Employment
Virginia Cooperative Extension, Virginia Tech, Blacksburg, VA
Supervisor: Mary Ann Hansen, MS

2007 **Esophagogastrectomy Procedure Study**
Undergraduate Clinical Research
Helen F. Graham Cancer Center, Newark, DE
Supervisor: Thomas Bauer, MD

LEADERSHIP POSITIONS

2020 – Present **Chief Resident**
Medical Genetics Residency Program, Stanford, CA
Program Director: David Stevenson, MD

2020 – Present **Global Genomic Medicine Collaborative (G2MC), Young Investigator Representative to Steering Committee**

2019 – 2020 **Medical Genetics Wellness Committee, Resident Representative**
Medical Genetics Residency Program, Stanford, CA
Faculty Representative: Dena Matalon, MD

2018 – 2019 **Pediatric Residency Counsel Representative for Medical Genetics**
Pediatric Residency Program, Stanford, CA
Pediatric Program Director: Rebecca Blankenburg, MD

2012 – 2016 **Graduate Student Association Representative for EPI/HGEN Program**
Graduate Program in Life Sciences, UMSOM, Baltimore, MD
Finance committee: 2015-2016

2013 – 2016 **Student Ambassador for the Program in Epidemiology and Human Genetics**
Graduate Program in Life Sciences, UMSOM, Baltimore, MD
Program Director: Laura Hungerford, PhD

2012 – 2014 **MSTP Advisory Committee Student Member and Interviewer**
Medical Scientist Training Program, UMSOM, Baltimore, MD
Program Director: Michael Donnenberg, MD

2011 – 2012 **President of Medical Genetics Interest Group (Member since 2010)**
UMSOM, Baltimore, MD
Faculty Mentor: Miriam Blitzer, PhD and Julie Kaplan, MD

2011 – 2012 **President of Medical Students for Choice (Member since 2010)**
UMSOM, Baltimore, MD
Faculty Mentor: Katherine Hladky, MD

TEACHING EXPERINCE

2020 – Present **Medical School Small Group Preceptor, Stanford School of Medicine**
Professor: Tina Cowan, PhD
- *Applied Biochemistry* (BIOC 200)

2020 – Present **Pediatric Residency Didactic Lectures**
- *Genetic Testing 101*
- *Gene Therapy Using Adeno-Associated Viral Vectors*

2019 – Present **Medical Genetics Residency Didactic Lectures**
- *Cocktails and Wagging Tails: A Tale of Genetic Hypersociability* (Williams syndrome)
- *Craniofacial Anomalies and Orofacial Clefts*
- *3-methylcrotonyl-CoA carboxylase deficiency* (3-MCC deficiency)
- *Lesch Nyhan syndrome*
- *Cystinuria: Prenatal Diagnosis by Ultrasound*
- *Incidental Findings by Newborn Screening* (Zellweger spectrum disorder)
- *Biochemical Genetics Jeopardy*
- *Prenatal Genetics Jeopardy*

2013 – 2016 **Medical School Small Group Preceptor, UMSOM**
Professor: Kerri Thom, MD
- *Foundations of Disease*
- *Host Defenses and Infectious Disease*
- *Pathophysiology and Therapeutics*

2013 – 2015 **Orientation Ethics Discussion Leader**
Graduate Program in Life Sciences, UMSOM, Baltimore, MD
Supervisor: Erin Golembewski, PhD

2013 – 2014 **Graduate Teaching Assistant**
Department of Epidemiology & Public Health, UMSOM, Baltimore, MD
- *Principles of Biostatistics* (PREV 620) Fall 2013, Professor: Clayton Brown, PhD
- *Introduction to SAS* (PREV 619) Fall 2014, Professor: Min Zhan, PhD

2014 **Primary Mentor for Health Professions – Student Training in Aging Research Program (HP-STAR) Summer Student**
UMSOM, Baltimore, MD
Student: Leslie Anforth (Rising 2nd Year PharmD Candidate)

2009 – 2010 **Tutor to Undergraduate Students (Biochemistry, Physics, & Physical Chemistry)**
Teaching Employment
Virginia Tech, Blacksburg, VA

ACADEMIC AND PROFESSIONAL HONORS

2020 American Federation for Medical Research (AFMR) Henry Christian Award
2018 J. Edmund and Kathryn S. Bradley Award for Excellence in Pediatrics, UMSOM
2018 Outstanding Recent Biochemistry Undergraduate Alumni Award, Virginia Tech
2016 2016 PhD Thesis Award, Graduate Program in Life Sciences, UMSOM
2016 Commencement Speaker for Epidemiology and Human Genetics Graduate Program
2015 St. Jude Future Fellow Research Conference, St. Jude Children's Research Hospital
2015 Best Poster Presentation Award, Graduate Research Conference, UMSOM
2014 Elaine Miye Otani Scholar, Program in Epidemiology and Human Genetics, UMSOM
2013 2nd Place Poster Presentation Award, Cardiovascular Retreat, UMSOM
2011 3rd Place Oral Presentation Award, Medical Student Research Day, UMSOM

2011 Anatomy Honors Project, Indexing of Embryology Specimen Collection, UMSOM
2010 – 2014 Wilbur E. Postles Medical School Scholarship Recipient for Delaware Residents
2009 Summa Cum Laude & Commonwealth Scholar, Virginia Tech
2007 – 2009 University Honors Program, Virginia Tech
2007 Univ. Writing Award and Publication, Virginia Tech Writing & Composition Handbook
2006 – 2009 Dean's List, Virginia Tech
2006 Virginia Tech Alumni Association of Delaware Scholarship Recipient

GRANTS AWARDED

07/1/21-06/30/22; $85,000
Pfizer/ACMGF Next Generation Clinical Laboratory Biochemical Genetics Fellowship Award
The Role of Inborn Errors of Metabolism in Pregnancy Loss: A Population and Biochemical Approach

MEMBERSHIPS IN PROFESSIONAL SOCIEITIES

American Medical Association (AMA) Trainee Member
American Society of Human Genetics (ASHG) Trainee Member
American College of Medical Genetics (ACMG) Trainee Member
Western Society for Pediatric Research (WSPR) Trainee Member
American Academy of Pediatrics (AAP) Trainee Member
American Academy of Neurology (AAN) Student Member – Past member
Pharmacogenomics Research Network (PGRN) – Past member

INVITED ORAL PRESENTATIONS

2020 *Uterine Transplantation: Genetics, Ethics, and Growing Pains*. Medical Genetics Grand Rounds, Stanford, CA

2019 *Gene Therapy Using Adeno-Associated Viral Vectors.* Medical Genetics Grand Rounds, Stanford, CA

2013 *Pharmacometabolomics Of Platelet Aggregation: The Effect of Serotonin in the Presence of Aspirin.* 5th Annual University of Maryland MSTP Retreat, Baltimore, MD

ORAL PRESENTATIONS

2021 *Short Bones, Renal Stones, and Diagnostic Moans: Hypercalcemia in a Girl Found to Have Coffin-Lowry Syndrome.* Western Society of Pediatric Research Annual Meeting, Virtual.

2020 *Monozygotic Twins Discordant for Cranial Dysinnervation Disorder: Evidence of Vascular Disruption.* Western Society of Pediatric Research Annual Meeting, Carmel, CA

2019 *Autism in the Amish: Exome Sequencing Unveils Novel Coding Variant.* Western Society of Pediatric Research Annual Meeting, Carmel, CA

2014 *Filtering for Genomic Nonsense to Find Biological Significance: SLC13A1 Nonsense Variants Enriched in Founder Population are Associated with Reduced Serum Sulfate and Increased Aspartate Aminotransferase Levels*. American Society of Human Genetics Annual Meeting, San Diego, CA

2014 *Pharmacometabolomics reveals that serotonin is implicated in aspirin response variability.* Graduate Research Conference, UMSOM, Baltimore, MD

2011 *Are Patients with Psychogenic Movement Disorders More Likely to Be Healthcare Workers?* Medical Student Research Day, UMSOM, Baltimore, MD

PEER-REVEIWED PUBLICATIONS

1. Morales AM, **Tise CG**, Narang A, Grimm PC, Enns GM, Lee CU. Profound neonatal lactic acidosis and sensorineural hearing loss in a patient with glycogen storage disease type IXα2 with a de novo pathogenic variant in *PHKA2*. Accepted for publication in Molecular Genetics and Metabolism Reports.
2. **Tise, CG**, Morales, JA, Lee, AS, et al. Aicardi-Goutières syndrome may present with positive newborn screen for X-linked adrenoleukodystrophy. Am J Med Genet Part A. 2021; 1– 6. PMID: 33683010.
3. **Tise CG,** Byers HM. Genetics of recurrent pregnancy loss: a review. Curr Opin Obstet Gynecol. 2021 Apr 1;33(2):106-111. PMID: 33605623.
4. **Tise CG**, Joshi NS, Erice-Taganas AD, Blecharczyk EM. Case 1: Rapidly Rising Bilirubin Level in a 3-day-old Term Infant. NeoReviews. 2020;21(10):e687-e690. PMID: 33004562.
5. **Tise CG**, Anforth LE, Zhou AE, Perry JA, McArdle PF, Streeten EA, Shuldiner AR, LM Yerges-Armstrong. Sex-specific effects of serum sulfate level and *SLC13A1* nonsense variants on DHEA homeostasis. Mol Genet Metab Rep. 2017;10:84-91. PMID: 28154797.
6. **Tise C.G.,** Perry J.A., Anforth L.E., Pavlovich M.A., Ryan K.A., O'Connell J.R., Yerges-Armstrong L.M., Shuldiner, A.R. From Genotype to Phenotype: Nonsense Variants in *SLC13A1* are Associated with Decreased Serum Sulfate and Increased Serum Aminotransferases. G3 (Bethesda). 2016 Sep 8;6(9):2909-18. PMID: 27412988.
7. **Perry C**, Holmes K, Anderson K, Gruber-Baldini A, Fishman P, Shulman L, Weiner W, Reich S. Are Patients with Psychogenic Movement Disorders More Likely to Be Healthcare Workers? Mov Disord Clin Pract. 2016 Apr 26;4(1):62-7. PMID: 30713949.
8. **Perry CG**, Maloney KA, Beitelshees AL, Jeng LJB, Ambulos Jr. NP, Blitzer MG, Shuldiner AR. Educational Innovations in Clinical Pharmacogenomics. Clin Pharmacol Ther. 2016 Feb 13;99(6):582-4. PMID: 26875057.
9. Ellero Simatos S, Lewis JP, Georgiades A, Yerges-Armstrong LM, Beitelshees AL, Horenstein RB, Dane A, Harms AC, Ramaker R, Vreeken RJ, **Perry CG**, Zhu H, Sanchez CL, Kuhn C, Ortel TL, Shuldiner AR, Hankemeier T, Kaddurah Daouk R. Pharmacometabolomics reveals that serotonin is implicated in aspirin response variability. CPT: pharmacometrics and systems pharmacology. 2014 Jul 16;3:e125-e125. PMID: 25029353.
10. Fisch AS, **Perry CG**, Stephens SH, Horenstein RB, Shuldiner AR. Pharmacogenomics of anti-platelet and anti-coagulation therapy. Curr Cardiol Rep. 2013 Jul;15(7):381. Review. PMID: 23797323.
11. **Perry CG**, Shuldiner AR. Pharmacogenomics of anti-platelet therapy: how much evidence is enough for clinical implementation? J Hum Genet. 2013 Jun;58(6):339-45. Epub 2013 May 23. Review. PMID: 23697979.

PUBLISHED ABSTRACTS

1.	**Tise C**, Velez-Bartolomei F, Morales JA, Lee C, Bernstein J, Enns G. eP547 - Unexpected diagnoses in patients with abnormal newborn screening. Molecular Genetics and Metabolism. 2021;132:S354 (abstract #eP547).
2.	**Tise CG**, Grover M, Matalon DR, Byers H. Short Bones, Renal Stones, and Diagnostic Moans: Hypercalcemia in a Girl Found to Have Coffin-Lowry Syndrome. Journal of Investigative Medicine, 2021 Vol. 69, 105 (abstract #6).
3.	**Tise CG**, DeFilippo C, Ruzhnikov M, Stevenson DA. Monozygotic Twins Discordant for Cranial Dysinnervation Disorder: Evidence of Vascular Disruption. Journal of Investigative Medicine, 2020 Vol. 68, 264 (abstract #339).
4.	**Tise CG**, Kleinberger JW, Pavlovich MA, Daue ML, Loesch DP, Reid JG, Overton JD, O'Connell JR, Perry JA, Yerges-Armstrong LM, Shuldiner AR, Zaghloul NA. Autism in the Amish: Exome

	Sequencing Unveils Novel Coding Variant. Journal of Investigative Medicine, 2019 Vol. 67, 238 (abstract #405).
5.	Taylor SI, Perry JA, Ryan K, **Perry CG,** Damcott CM, Horenstein RB, Mitchell B, O'Connell JR, O'Conner TD, Pollin TI, Silver KD, Yerges-Armstrong L, Shuldiner AR. Genetic Variant (R27S) in Insulin-like Peptide 5 is Associated with Increased Insulin Sensitivity. Diabetes 2015; 64 (1): A457 (abstract #1763P).
6.	Kant R, **Perry CG**, Lewis JP, Horenstein RB, Streeten EA, Shuldiner AR, Munir KM. Vitamin D Inhibits Human Platelet Aggregation: Implications for Hypercoagulable State in Diabetes. Diabetes 2014; 63 (1): A569 (abstract #2240PO).
7.	**Perry, C.**, Holmes, K., Gruber-Baldini, A., Anderson, K., Shulman, L., Weiner, W., et al; Are patients with psychogenic movement disorders more likely to be healthcare workers? (2012), Poster Presentations. Mov. Disord., 27: S1-S523 (abstract #277).
8.	**Perry C**, Holmes K, Anderson K, et al. Are Patients with Psychogenic Movement Disorders More Likely To Be Healthcare Workers? Neurology. 2012;78(1):X15 (abstract #P04.033).

ABSTRACTS

1. Liu, LY, **Tise, CG**, Marqueling, AL. *ERCC2* Overlap syndrome: novel report of a 9-month old boy with phenotypic features of xeroderma pigmentosum, trichothiodystrophy, and cerebrooculofacioskeletal syndrome. Oral Presentation: Cases of the Year. 33rd Annual Pre-AAD Society for Pediatric Dermatology Meeting. March 2021, Virtual.
2. **Tise C.G.**, Bernstein J.A, Enns G.M. The Value of Additional Molecular and Biochemical Evaluation in Patients with Abnormal Perinatal Screening. Dynamic poster presentation, Annual Meeting of The American Society of Human Genetics, October 2020, Virtual.
3. **Tise CG**, Kleinberger JW, Pavlovich MA, Daue ML, Loesch DP, O'Connell JR, Perry JA, Yerges-Armstrong LM, Shuldiner AR, Zaghloul NA, Regeneron Genetics Center. Autism spectrum disorder in the Amish: Exome sequencing unveils a novel missense variant in EvC ciliary complex subunit 1 (*EVC)*, a known regulator of the sonic hedgehog signaling pathway. Poster presentation, Annual Meeting of The American Society of Human Genetics, October 2019, Houston, TX.
4. **Tise CG**, Kleinberger JW, Pavlovich MA, Daue ML, Loesch DP, Reid JG, Overton JD, O'Connell JR, Perry JA, Yerges-Armstrong LM, Shuldiner AR, Zaghloul NA. Autism in the Amish: Exome Sequencing Unveils Novel Coding Variant. Poster presentation, 10th Annual Pediatrics Research Retreat, April 2019, Stanford, CA.
5. **Tise CG**, Kleinberger JW, Pavlovich MA, Daue ML, Perry JA, O'Connell JR, Reid JG, Overton JD, Yerges-Armstrong LM, Shuldiner AR, Zaghloul NA. Autism Spectrum Disorder in the Amish: Exome Sequencing in a Founder Population Unveils Novel Coding Variants. Poster presentation, Annual Meeting of The American Society of Human Genetics, October 2017, Orlando, FL.
6. **Perry C.G.**, Yerges-Armstrong L.M., Morton D.H., Shuldiner A.R., Puffenberger E.G., Streeten E.A. Is It All Nonsense? Autism Spectrum Disorder, Low Serum Sulfate, and a Nonsense Mutation in *SLC13A1* Observed in an Old Order Mennonite Family with Osteoporosis-Pseudoglioma Syndrome. Poster presentation, American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting, March 2016, Tampa, FL.
7. **Perry CG**, Yerges-Armstrong LM, Shuldiner AR, Zaghloul NA. Reeling in the Effect of Decreased Sulfate on Embryonic Development and Risk of Autism Spectrum Disorder through Disruption of *slc13a1* in Zebrafish. Poster presentation, Annual Meeting of The American Society of Human Genetics, October 2015, Baltimore, MD.
8. **Perry CG**, Perry JA, Anforth LE, Pavlovich MA, Ryan KA, O'Connell JR, Yerges-Armstrong LM, Shuldiner AR. From Genomic Nonsense to Biological Significance: *SLC13A1* Nonsense Variants, Serum Sulfate, and Clinical Implications. Poster presentation, 30th Annual MD-PhD National Student Conference, July 2015, Keystone, CO.

9. **Perry C.G.**, Maloney K.A., Blitzer M.G., Jang L.J., Ambulos Jr. N.P., Shuldiner A.R. Embedding Pharmacogenomics and Personalized Medicine Education into the Medical School Curriculum. Poster presentation, Up Close and Personalized International Congress on Personalized Medicine, June 2015, Tel Aviv, Israel.
10. **Perry CG**, Perry JA, Anforth LE, Pavlovich MA, Ryan KA, O'Connell JR, Yerges-Armstrong LM, Shuldiner AR. From Genomic Nonsense to Biological Significance: *SLC13A1* Nonsense Variants, Serum Sulfate, and Clinical Implications. Poster presentation, St. Jude Future Fellow Research Conference, June 2015, Memphis, TN.
11. **Perry CG**, Perry JA, Anforth LE, Pavlovich MA, Ryan KA, O'Connell JR, Yerges-Armstrong LM, Shuldiner AR. From Genomic Nonsense to Biological Significance: *SLC13A1* Nonsense Variants, Serum Sulfate, and Clinical Implications. Poster presentation, Pharmacogenetics Research Network Semi-Annual Meeting, April 2015, State College, PA.
12. **Perry C.G.**, Maloney K.A., Blitzer M.G., Jang L.J., Ambulos Jr. N.P., Shuldiner A.R. Embedding Pharmacogenomics and Personalized Medicine Education into the Medical School Curriculum. Poster presentation, American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting, March 2015, Salt Lake City, UT.
13. **Perry CG**, Perry JA, Anforth LE, O'Connell JR, Yerges-Armstrong LM, Shuldiner AR. From Genomic Nonsense to Biological Significance: *SLC13A1* Nonsense Variants, Serum Sulfate and More. Poster presentation, Graduate Research Conference, University of Maryland SOM, March 2015, Baltimore, MD.
14. **Perry C.G.**, Maloney K.A., Doyle L.E., Ambulos Jr. N.P., Wachbroit R.S., Blitzer M.G., Shuldiner A.R. Personal Genomes in Medical Education: Pharmacogenomics. Poster presentation, American College of Medical Genetics Annual Clinical Genetics Meeting, March 2014, Nashville, TN.
15. **Perry CG**, Ellero-Simatos S, Lewis JP, Georgiades A, Yerges-Armstrong L, Beitelshees AL, Horenstein RB, Dane A, Harms A, Ramaker R, Zhu H, Sanches CL, Kuhn C, Ortel TL, Shuldiner AR, Hankemeier T, Kaddurah-Daouk R. Pharmacometabolomics reveals that serotonin is implicated in aspirin response variability. Oral presentation, Graduate Research Conference, University of Maryland SOM, March 2014, Baltimore, MD.
16. **Perry CG,** Ellero-Simatos S, Georgiades A, Lewis JP, Ramaker R, Yerges-Armstrong L, Beitelshees AL, Horenstein RB, Dane A, Harms A, Zhu H, Shuldiner AR, Hankemeier T, Kaddurah-Daouk R. Pharmacometabolomics of Platelet Aggregation: The Effect of Serotonin in Response to Aspirin Administration. Poster presentation, Annual University of Maryland SOM Cardiovascular Retreat, November 2013, Baltimore, MD.
17. Ellero-Simatos S, Georgiades A, Lewis JP, **Perry CG**, Ramaker R, Yerges-Armstrong L, Beitelshees AL, Horenstein RB, Dane A, Harms A, Zhu H, Shuldiner AR, Hankemeier T, Kaddurah-Daouk R. Pharmacometabolomics of Aspirin: New Insights about an Old Drug. Poster presentation, International Conference of the Metabolomics Society, July 2013, Glasgow, Scotland.
18. **Perry C**, Holmes K, Anderson K, Gruber-Baldini A, Fishman P, Shulman L, Weiner W, Reich S. Are Patients with Psychogenic Movement Disorders More Likely to Be Healthcare Workers? Oral presentation, University of Maryland SOM Annual Medical Student Research Day, November 2011, Baltimore, MD.

ONLINE ARTICLES

1. Thompson R, Raabe J, **Tise C**, Bindiganavile S, Bhat N, Lee A**.** Noonan syndrome. American Academy of Ophthalmology, EyeWiki. Sept 2019. https://eyewiki.aao.org/Noonan_syndrome.

PATENT CITATIONS

1. US application 62/022,774 (2014): Methods and Compositions for Utilizing *SLC13A1* Mutations in Monitoring, Diagnosing, and Restoring Plasma Sulfate Concentration
2. US application (2016): Methods of Screening for Agents that Upregulate *TCF7L2* Expression and/or Activity

LICENSES

- California Medical License
- DEA Registration

TECHNICAL & CLINICAL TRAINING

- Bacterial and fungal isolation
- Basic Life Support
- Cell transformation/transfection
- Computerized Patient Record System (CPRS)
- CRISPR/Cas9
- Disaccharidase assay for clinical diagnostics
- Enzyme activity assays
- EPIC experience (5+ years)
- Gel electrophoresis
- Genotyping assays
- Mendelian and linkage analysis
- Morpholino design and injection
- PCR and qRT-PCR
- Plasmid recombination
- Platelet aggregation studies
- Preparation of media and tissue cultures
- Primer design
- Promoter-GUS reporter system
- Restriction enzyme digestion
- RNA/DNA extraction
- Spectrophotometry
- Statistics and regression analysis
- TeleHealth experience (1+ year)
- Turbidimetric assays (i.e. sulfate)
- Variant interpretation and analysis
- Western blot

COMMUNITY OUTREACH

2021 **Stanford Medicine Healthcare Workers COVID Vaccination Clinic**
Role: Administered intramuscular injections to Stanford healthcare workers during multiple 8-hour volunteer shifts.

2020 **Judge for ASHG DNA Day Essay Contest**
Role: Read and scored 16 essays written by high school students on the topic of direct-to-consumer genetic testing and the comparison between genetic ancestry and cultural heritage.

2017 **Delaware Miss Amazing Pageant – Celebrating the Abilities of Girls and Women with Disabilities**, Wilmington, DE
Role: Buddy for Miss Amazing Pageant Contestant with Down Syndrome throughout the entire day of orientation, interviews, rehearsal, and final pageant performance.

2014 **Vivian T. Thomas Medical Arts Academy High School Internship Program**, UMSOM, Baltimore, MD
Role: Mentored a high school senior through the entire process of a basic science laboratory research project.

2010 – 2012 **Adolescent Empowerment Program, Baltimore YO! and Baltimore City Juvenile Justice Center**, UMSOM, Baltimore, MD
Role: Taught the monthly sexual health education course to students. Curriculum included various sexual health related issues such as contraception, parenting, nutrition, and sexually transmitted diseases.

2010 – 2011 **Community Connections, University of Maryland Emergency Department**, UMSOM, Baltimore, MD
Role: Assisted uninsured patients with the process of applying for Maryland health insurance programs.

2009 – 2010 **RAFT Crisis Hotline, New River Valley Community Services**, Blacksburg, VA
Role: Answered incoming calls and assisted and assessed callers' needs using skills obtained from the required training course.

2008 – 2009 **Biochemistry Club, Gilbert Linkous Elementary School Science Ambassador**, Virginia Tech, Blacksburg, VA
Role: Assisted in organizing and leading weekly visits to a local elementary school where students were provided various lessons in an effort to cultivate interest in science at a young age.