

# JENNIFER K. WAGNER

## CURRICULUM VITAE

### CURRENT POSITIONS

08/2021 – Assistant Professor of Law, Policy, & Engineering; School of Engineering Design and Innovation; Pennsylvania State University  
06/2019 – 06/2022 Academic Affiliate of Anthropology, Pennsylvania State University  
10/2007 – Present Attorney, solo practitioner, PA ID #206275

#### *Additional PSU Affiliations*

08/2022 – Present Affiliate Faculty, Center on Human Evolution and Diversity, PSU  
07/2022 – Present Faculty, Bioinformatics and Genomics Program, Huck Institutes of the Life Sciences, PSU  
02/2022 – Present Affiliate Faculty, Penn State Law  
01/2022 – Present Academic Affiliate, Rock Ethics Institute, PSU  
12/2021 – Present Affiliate Assistant Professor, Department of Biomedical Engineering, PSU  
11/2021 – Present Academic Affiliate, Institute for Computational and Data Sciences, PSU

### PREVIOUS POSITIONS

Summer 2021 Adjunct Instructor, Penn State Law  
2015-2021 Associate Director of Bioethics Research, Geisinger  
Assistant Professor, Center for Translational Bioethics & Health Care Policy, Geisinger  
2014-2015 AAAS Congressional Science and Engineering Fellow  
U.S. Senate Office of Senator Edward J. Markey  
2014 Assistant Professor, Department of Epidemiology and Population Health, Division of Bioethics, Albert Einstein College of Medicine of Yeshiva University  
2012-2014 Research Associate, Center for the Integration of Genetic Healthcare Technologies, University of Pennsylvania  
2013-2019 Adjunct Research Assistant of Anthropology, Pennsylvania State University  
2012-2013 Lecturer in Anthropology, Pennsylvania State University  
2011-2012 Post-Doctoral Researcher, Center for the Integration of Genetic Healthcare Technologies, University of Pennsylvania  
2010-2011 Post-Doctoral Associate, Institute for Genome Sciences & Policy, Duke University  
2010-2011 Visiting Assistant Professor, Department of Cultural Anthropology, Duke University

### EDUCATION

2010 Ph.D. Anthropology Pennsylvania State University  
Thesis: “Social and Legal Implications of DNA Ancestry Tests”  
Committee: Ken Weiss (chair), Mark Shriver, Nina Jablonski, Chloe Silverman, and Jonathan Marks  
2007 J.D. University of North Carolina School of Law  
2002-2003 University of Michigan, Graduate Program in Biomedical Science (Human Genetics)  
2002 B.A. Anthropology with Honors and High Distinction Pennsylvania State University

### GRANT AWARDS (listing only those as Principal Investigator)

2012 – 2019 NIH Pathway to Independence K99/R00 Award (PA10-063)  
“Multidisciplinary Study of Race, Appearance, Ancestry, Discrimination & Prejudice”  
Role: Principal Investigator  
Agency: National Human Genome Research Institute (NHGRI)  
Proposal earned the highest possible Impact/Priority Score (10)  
Grant Award: K99HG006446, R00HG006446  
Total Award: \$926,736 Award Periods: 1/1/12-2/28/14 (K99) and 9/1/15-2/28/19 (R00)  
2020 – 2021 Administrative Supplement for Research on Bioethical Issues (NOT-OD-20-038)  
“The Genetic Architecture of Human Facial Morphology”

Role: Co-Principal Investigator (Weinberg and Claes)  
Agency: National Institute of Dental and Craniofacial Research (NIDCR) and Office of the  
Director (OD), National Institutes of Health  
Grant Award: 3R01DE027023-04S1  
Total Award: \$172,218                      Award Period: 08/06/20 – 02/28/21, NCE – 7/31/21

2020 – Present “Consumer Protections for Genomics and Precision Health”  
Role: Principal Investigator  
Agency: National Human Genome Research Institute (NHGRI)  
Grant Award: 1R01HG011051-01  
Total Award: \$399,957                      Award Period: 09/18/20 – 08/31/22

2022 – Present Administrative Supplement for Research on Bioethical Issues (NOT-OD-22-065)  
“PREMIERE: A PREdictive Model Index and Exchange REpository”  
Role: Co-Principal Investigator (Bui and Wagner)  
Agency: National Institute of Biomedical Imaging and Bioengineering (NIBIB)  
Grant Award: 3R01EB027650-03S1  
Total Award: \$291,548                      Award Period: 09/22/2022 – 05/31/2023

## PUBLICATIONS

1. CD Schmit, MJ Doerr, **JK Wagner**. “Leveraging IP for AI Governance” *Science*. 2023; 379(6633): 646-648. DOI: 10.1126/science.add2202.
2. **JK Wagner**, J-H Yu, D Fullwiley, C Moore, JF Wilson, MJ Bamshad, CD Royal; on behalf of the Genetic Ancestry Inference Roundtable Participants. “Guidelines for Genetic Ancestry Inference Created Through Roundtable Discussions” *Human Genetics and Genomics Advances*. Published online Jan. 13, 2023. DOI: <https://doi.org/10.1016/j.xhgg.2023.100178>
3. E Kowal, LS Weyrich, JM Argüelles, AC Bader, C Colwell, AD Cortez, JL Davis, G Figueiro, K Fox, RS Malhi, E Matisoo-Smith, A Nayak, EA Nelson, G Nicholas, MA Nieves-Colón, L Russell, S Ulm, F Vergara-Silva, FA Villanea, **JK Wagner**, JM Yracheta, KS Tsosie. “Community partnerships are fundamental to ethical ancient DNA research.” *Human Genetics and Genomics Advances*. Published online Jan. 11, 2023. DOI:<https://doi.org/10.1016/j.xhgg.2022.100161>
4. **JK Wagner**. “Algorithmic Fairness in the Roberts Court Era,” *Pac. Symposium on Biocomputing* 2023; 28:519-530. <http://psb.stanford.edu/psb-online/proceedings/psb23/wagner.pdf>
5. **JK Wagner**, JK Tanniru, CA Chane, MN Meyer, “Exploring Access to Genomic Risk Information and the Contours of the HIPAA Public Health Exception” *Journal of Law and the Biosciences*. 2022; 9(2):lsac034. <https://academic.oup.com/jlb/article/9/2/lsac034/6884060>
6. KE Tolwinski, D Madden, **JK Wagner**. “A genetic imaginary for social justice: the rhetoric of genomic medicine as exceptional, ordinary, and ethical obligation.” *SSM Qualitative Research in Health*. Early access ahead of print June 25, 2022 (Vol. 2 publication date Dec. 2022).
7. RE Fleskes, AC Bader, KS Tsosie, **JK Wagner**, KG Claw, NA Garrison. “Ethical Guidance in Human Paleogenomics: New and Ongoing Perspectives.” *Annual Review of Genomics and Human Genetics*. 2022; 23:627-652. <https://www.annualreviews.org/doi/10.1146/annurev-genom-120621-090239>
8. **JK Wagner**, “Biometric data protections (or lack thereof),” PBI Cyberlaw Update 2022. Continuing Legal Education (CLE) materials. April 25, 2022 (non-peer-reviewed)
9. SH Katsanis, P Claes, M Doerr, R Cook-Deegan, JD Tenenbaum, BJ Evans, MK Lee, J Anderton, SM Weinberg, **JK Wagner**, “U.S. Adult Perspectives on Facial Images, DNA, and Other Biometrics” *IEEE Transactions on Technology and Society*. 2022; 3(1), 9–15. (early access published Oct. 18, 2021). DOI: 10.1109/TTS.2021.3120317
10. SH Katsanis, P Claes, M Doerr, R Cook-Deegan, JD Tenenbaum, BJ Evans, MK Lee, J Anderton, SM Weinberg, **JK Wagner**, “A Survey of U.S. Public Perspectives on Facial Recognition Technology and Facial Imaging Data Practices in Health and Research Contexts,” *PLoS ONE*. 2021; 16(10): e0257923. <https://doi.org/10.1371/journal.pone.0257923>

11. D Madden, B Baker, **JK Wagner**, SH Katsanis, “Framing the utility and potential pitfalls of relationship and identity DNA testing across United States immigration contexts,” *Human Genetics and Genomics Advances* published online Sept. 24, 2021 DOI:<https://doi.org/10.1016/j.xhgg.2021.100060>
12. **JK Wagner**, J-H Yu, JX Chong, CD Royal, MJ Bamshad. “Centering Equity in *Human Genetics and Genomics Advances*,” *Human Genetics and Genomics Advances*. 2021; 2(4): 10048. Doi: <https://doi.org/10.1016/j.xhgg.2021.100048> (Editorial; not peer-reviewed)
13. A DiNucci, NB Henrikson, MC Jonas, S Basra, P Blasi, J Brown, ED Esplin, D Hassen, J Hao, Y Hu, T Klinger, I Ladd, K Leppig, M Lewis, M Meyer, S Ney, A Ramaprasan, K Romagnoli, Z Salvati, A Scrol, R Schwiter, L Sheridan, B Somasundaram, P Suwannarat, **JK Wagner**, AK Rahm. “Feasibility and Assessment of a Cascade Traceback Screening program (FACTS): protocol for a multisite study to implement and assess an ovarian cancer Traceback cascade testing program,” *Journal of Personalized Medicine* 2021; 11(6): 543. <https://doi.org/10.3390/jpm11060543>
14. E Barnert, SH Katsanis, R Mishori, **JK Wagner**, RF Selden, D Madden, et al. “Using DNA to reunify separated migrant families,” *Science* 2021; 372 (6547): 1154-1156. DOI: 10.1126/science.abh3979
15. **JK Wagner** and MN Meyer. “Genomic Medicine and the ‘Loss of Chance’ Medical Malpractice Doctrine.” *Human Genetics and Genomics Advances*. April 5, 2021. DOI: <https://doi.org/10.1016/j.xhgg.2021.100032>
16. D Berger, M Hu, SH Katsanis, and **JK Wagner**. “Biometrics and Midnight Regulations.” *The Regulatory Review*. March 11, 2021. <https://www.theregreview.org/2021/03/11/berger-hu-katsanis-wagner-biometric-data-midnight-regulations/>
17. NB Henrickson, **JK Wagner**, H Hampel, C DeVore, N Shridhar, J Williams, KE Donohue, I Kullo, and AE Prince. “What guidance does HIPAA offer to providers considering familial risk notification and cascade genetic testing?” *Journal of Law and the Biosciences*. December 11, 2020, Isaa071, <https://doi.org/10.1093/jlb/Isaa071>
18. CK Rubanovich, R Taitingfong, C Triplett, O Libiger, N Schork, **JK Wagner**, C Bloss. “Impacts of Personal DNA Ancestry Testing” *Journal of Community Genetics*. 13 Aug 2020 epub ahead of print.
19. **JK Wagner**, C Colwell, KG Claw, A Stone, DA Bolnick, J Hawks, KB Brothers, NA Garrison. “Fostering Responsible Research on Ancient DNA.” *American Journal of Human Genetics*. 2020;107(2):183-195.
20. WS McDonald, **JK Wagner**, PA Deverka, LA Woods, J Peterson, MS Williams. “Genetic Testing and Employer-Sponsored Wellness Programs: An Overview of Current Vendors, Products, and Practices” *Molecular Genetics & Genomic Medicine*. 26 Jul 2020. <https://doi.org/10.1002/mgg3.1414>
21. M Doerr and **JK Wagner**. “Research Ethics in a Pandemic: Considerations for the Use of Research Infrastructure and Resources for Public Health Activities.” *Journal of Law & Biosciences*. 2020; 7(1). Advance view published May 18, 2020, Isaa028, <https://doi.org/10.1093/jlb/Isaa028>
22. JM Savatt, **JK Wagner**, S Joffe, et al. “Pediatric Reporting of Genomic Results Study (PROGRESS): A mixed-methods, longitudinal, observational cohort study protocol to explore disclosure of actionable adult- and pediatric-onset genomic variants to minors and their parents” *BMC Pediatrics*. 2020; 20: article 222. <https://doi.org/10.1186/s12887-020-02070-4>
23. **JK Wagner**. “Health, Housing, and ‘Direct Threats’ During a Pandemic.” *Journal of Law & Biosciences*. 2020; 7(1). Advance view published May 8, 2020, Isaa022, <https://doi.org/10.1093/jlb/Isaa022>
24. **JK Wagner**, Letter to the Editor: “Concerning Data Sharing in Biological Anthropology,” *American Journal of Physical Anthropology*. 2020; 1-3. DOI:10.1002/ajpa.24074
25. **JK Wagner**. “The Federal Trade Commission and Consumer Protections for Mobile Health Apps” *Journal of Law, Medicine & Ethics*. 2020; 48(Supp 1): 103-114.
26. **JK Wagner**, DJ Madden, V Oray, SH Katsanis. “Conversations Surrounding the Use of DNA Tests in the Family Reunification of Migrants Separated at the US-Mexico Border in 2018,” *Frontiers in Genetics*. 2019; 10:1232. doi: 10.3389/fgene.2019.01232

27. **JK Wagner**. “Ethical and Legal Considerations for the Inclusion of Underserved and Underrepresented Immigrant Populations in Precision Health and Genomic Research in the US” *Ethnicity & Disease*. 2019; 29 (supp. 3): 641-650.
28. K Tolwinski, A Nemoianu, A Bucaloiu, J Venditto, FD Davis, **JK Wagner**. “‘I don’t want to go on living this way’: Desire for hastened death and the ethics of involuntary hospitalization.” *American Journal of Bioethics*. 2019;19(10):88-90.
29. CJ Guerrini, **JK Wagner**, SC Nelson, GH Javitt, and AL McGuire. “Who’s on third? regulation of third-party genetic interpretation services.” *Genetics in Medicine*. 2019;22:4-11. <https://doi.org/10.1038/s41436-019-0627-6>
30. D Sero, A Zaidi, J Li, J White, T González Zarzar, M Marazita, S Weinberg, P Suetens, D Vandermeulen, **J Wagner**, M Shriver, and P Claes. "Facial Recognition from DNA using face-to-DNA classifiers." *Nature Communications*. 2019; 10: 2557. <https://doi.org/10.1038/s41467-019-10617-y>
31. **Wagner JK**. “Disparate Impacts and GINA: Congress’s Unfinished Business” *Journal of Law & Biosciences*. 2018; 5(3):527-549. <https://doi.org/10.1093/jlb/lasz003>
32. Y Bombard, KB Brothers, S Fitzgerald-Butt, NA Garrison, L Jamal, CA James, GP Jarvik, JB McCormick, TN Nelson, KE Ormond, HL Rehm, J Richer, E Souzeau, JL Vassy, **JK Wagner**, and HP Levy. “ASHG Position Statement: The Responsibility to Recontact Research Participants After Reinterpretation of Genetic and Genomic Research Results" *American Journal of Human Genetics*. 2019;104(4): 578-595. DOI: <https://doi.org/10.1016/j.ajhg.2019.02.025>
33. SH Katsanis, E Huang, A Young, V Grant, E Warner, S Larson, and **JK Wagner**. “Caring for Trafficked and Unidentified Patients in the EHR Shadows: Shining a Light by Sharing the Data” *PLoS One*. 2019;14(3): e0213766. <https://doi.org/10.1371/journal.pone.0213766>
34. EA Wright, **JK Wagner**, MD Shriver, JR Fernandez, and NG Jablonski. “Practical and ethical considerations of using the results of personalized DNA ancestry tests with middle-school-aged learners” *American Journal of Human Genetics*. 2019; 104(2): 197-202. DOI:<https://doi.org/10.1016/j.ajhg.2019.01.001>
35. M Doerr, S Grayson, S Moore, C Suver, J Wilbanks, **J Wagner**. “Implementing a universal informed consent process for the *All of Us* Research Program.” *Pac. Symposium on Biocomputing* 2019; 24: 427-438. Available at <https://psb.stanford.edu/psb-online/proceedings/psb19/doerr.pdf>
36. SC Nelson, J-H Yu, **JK Wagner**, TM Harrell, CDM Royal, MJ Bamshad. “A qualitative content analysis of the views of genetics professionals on race, ancestry, and genetics” *AJOB Empirical Bioethics*. 2019; 9(4):222-234. doi: 10.1080/23294515.2018.1544177
37. Williams MS, Buchanan AH, Davis FD, Faucett WA, Hallquist MLG, Leader JB, Martin CL, McCormick CZ, Meyer MN, Murray MF, Rahm AK, Schwartz MLB, Sturm AC, **Wagner JK**, Williams JL, Willard HF, Ledbetter DH. “Patient-Centered Precision Health in A Learning Health Care System: Geisinger’s Genomic Medicine Experience.” *Health Affairs*. 2018; 37(5): 757-764. doi: 10.1377/hlthaff.2017.1557.
38. Turner T, **Wagner JK**, and Cabana G. “Ethics in Biological Anthropology.” *American Journal of Physical Anthropology*. 2018; 165(4): 939-951. doi: 10.1002/ajpa.23367.
39. Rocha HM, Savatt JM, Riggs ER, **Wagner JK**, Faucett WA, Martin CL. “Incorporating Social Media into your Support Tool Box: Points to Consider from Genetics-Based Communities.” *Journal of Genetic Counseling*. 2018; 27(2):470-480. doi: 10.1007/s10897-017-0170-z.
40. Buchanan AH, Manickam K, Meyer MN, **Wagner JK**, et al. “Early cancer diagnoses through BRCA1/2 screening of unselected adult biobank participants.” *Genetics in Medicine*. 2018; 20(5):554-558. doi:10.1038/gim.2017.145
41. Nicol D, et al. “Key Challenges in Bringing CRISPR-mediated Somatic Cell Therapy into the Clinic.” *Genome Medicine*. 2017; 9(1):85-88. doi: 10.1186/s13073-017-0475-4.
42. Ifekwunigwe J, **Wagner JK**, Yu J-H, Bamshad M, Royal CD. “A Qualitative Analysis of How Anthropologists Interpret the Race Construct.” *American Anthropologist*. 2017; 119(3): 422–434. doi: 10.1111/aman.12890.
43. **Wagner JK**. “DNA, Racial Disparities, and Biases in Criminal Justice: Searching for Solutions.” *Albany Law Journal of Science & Technology*. 2017; 27(2): 95-138.

44. Huang E and **Wagner JK**. “The Indefinite ‘Stay’ on Regulatory Reforms for Research with Prisoners.” *American Journal of Bioethics*. 2017; 17(7): 55-57. doi: 10.1080/15265161.2017.1328534.
45. Katsanis S, Felini M, Kim J, Minear M, Chandrasekharan S, and **Wagner JK**. “Perspectives of women in prostitution diversion program on DNA collection for a high-risk DNA database.” *International Journal of Criminal Justice Sciences*. 2017; 12(1):111-128. doi: 10.5281/zenodo.345720.
46. Huang E, Cauley JM, and **Wagner JK**. “Barred from Better Medicine? Reexamining Regulatory Barriers to the Inclusion of Prisoners in Research.” *Journal of Law and the Biosciences*. 2017; 4(1):159-174. doi: 10.1093/jlb/lsw064.
47. **Wagner JK**, Yu J-H, Ifekwunigwe J, Harrell T, Bamshad M, and Royal C. “Anthropologists’ Views on Race, Ancestry, and Genetics.” *American Journal of Physical Anthropology*. 2017; 162(2):318-327. doi: 10.1002/ajpa.23120.
48. **Wagner JK**, Peltz-Rauchman C, Rahm AK, Johnson CC. “Precision Engagement: PMI’s success will depend upon more than genomes and big data.” *Genetics in Medicine*. 2017;19(6):620-624. doi: 10.1038/gim.2016.165.
49. Nicol D, Bubela T, Chalmers D, Charbonneau J, Critchley C, Dickinson J, Fleming J, Hewitt A, Kaye J, Liddicoat J, McWhirter R, Otlowski M, Ries N, Skene L, Stewart C, **Wagner J**, Zeps N. “Precision Medicine: Drowning in Regulatory Soup.” *Journal of Law and the Biosciences*. 2016; 3(2):281-303. doi: 10.1093/jlb/lsw018.
50. Katsanis SH, Kim J, Minear MA, Chandrasekharan S, and **Wagner JK**. “Preliminary Perspectives on DNA Collection in Anti-Human Trafficking Efforts.” *Recent Advances in DNA & Gene Sequences*. 2014; 8(2): 78-90. doi: 10.2174/2352092209666150216122234.
51. Claes P, Liberton DK, Daniels K, Matthes Rosana K, Quillen EE, Pearson LN, McEvoy B, Bauchet M, Zaidi AA, Yao W, Tang H, Barsh GS, Absher DM, Puts DA, Rocha J, Beleza S, Pereira RW, Baynam G, Suetens P, Vandermeulen D, **Wagner JK**, Boster JS, and Shriver MD. “Modeling 3D facial shape from DNA.” *PLoS Genetics*. 2014; 10(3):e1004224. doi:10.1371/journal.pgen.1004224.
52. **Wagner JK**, Mozersky JT, Pyeritz RE. “‘Use it or lose it’ as an alternative approach to protect genetic privacy in personalized medicine.” *Urologic Oncology: Seminars and Original Investigations*. 2014; 32(2): 198-201. doi: 10.1016/j.urolonc.2013.09.016.
53. **Wagner JK**. “Playing with Heart and Soul...and Genomes: Sports Implications and Applications of Personal Genomics.” *PeerJ*. 2013; 1:e120. doi: 10.7717/peerj.120.
54. Daley L-A A, **Wagner JK**, Himmel T, McPartland K, Katsanis S, Shriver MD, and Royal CD. “Personal DNA Activities in College Classrooms: Perspectives of Students and Professors.” *Genetic Testing & Molecular Biomarkers*. 2013; 17(6): 446-452. doi: 10.1089/gtmb.2012.0404.
55. **Wagner JK**. “Sidelineing GINA: The Impact of Personal Genomics and Collective Bargaining in Professional Sports.” *Virginia Sports and Entertainment Law Journal*. 2013; 12(1):81-125.
56. **Wagner JK** and Royal CD. “Field of Genes: An Investigation of Sports-Related Genetic Testing.” *Journal of Personalized Medicine*. 2012; 2(3):119-137. doi:10.3390/jpm2030119.
57. **Wagner JK**. “Out with the ‘Junk’ DNA phrase.” *Journal of Forensic Sciences*. 2013; 58(1):292-4. doi: 10.1111/j.1556-4029.2012.02252.x.
58. Katsanis SH and **Wagner JK**. “Characterization of the Standard and Recommended CODIS Markers.” *Journal of Forensic Sciences*. 2013; 58 Suppl 1:S169-72. doi: 10.1111/j.1556-4029.2012.02253.x.
59. **Wagner J**. Cockamamie state laws threaten the genetic rights movement. *Nature Medicine*. 2012; 18(4):485 doi:10.1038/nm0412-485.
60. **Wagner JK**, Cooper JD, Sterling R, and Royal CD. “Tilting at Windmills No Longer: A Data Driven Discussion of DTC DNA Ancestry Tests.” *Genetics in Medicine*. 2012; 14(6):586-93. doi:10.1038/gim.2011.77.
61. **Wagner JK** and Weiss KM. “Attitudes on DNA Ancestry Tests.” *Human Genetics*. 2012; 131(1):41-56. doi: 10.1007/s00439-011-1034-5.
62. **Wagner JK**. “Understanding FDA Regulation of DTC Genetic Tests Within the Context of Administrative Law.” *American Journal of Human Genetics*. 2010; 87(4):451-456. doi: 10.1016/j.ajhg.2010.09.003

63. **Wagner JK.** “Interpreting the Implications of DNA Ancestry Tests.” *Perspectives in Biology and Medicine*. 2010; 53(2): 231-248. doi: 10.1353/pbm.0.0158
64. **Wagner JK.** “Just the Facts Ma’am: Removing the Drama from DNA Dragnets.” *North Carolina Journal of Law & Technology* 2009; 11(1): 51-101.
65. **Wagner JK** and Shriver MD. “Misinformation, Social Construction, and Genomic Ancestry Testing.” *Science*. 19 Dec 2007. (e-letter)
66. Pfaff CL, Barnholtz-Sloan J, **Wagner JK**, and Long JC. “Information on ancestry from genetic markers.” *Genetic Epidemiology* 2004; 26(4): 305-315. doi: 10.1002/gepi.10319
67. **Wagner JK**, Jovel C, Norton HL, Parra EJ, and Shriver MD. “Comparing quantitative measures of erythema, pigmentation, and skin response using reflectometry.” *Pigment Cell Research*. 2002; 15(5):379-384. doi: 10.1034/j.1600-0749.2002.02042.x
68. **Wagner JK**, Parra EJ, Norton HL, Jovel C, and Shriver MD. “Skin responses to ultraviolet radiation: effects of pigmentation, sex, and ancestry.” *Pigment Cell Research*. 2002; 15(5):385-390. doi: 10.1034/j.1600-0749.2002.02046.x

#### LECTURES, POSTERS, PRESENTATIONS, AND CONFERENCE PARTICIPATION

1. “Protecting Competition in Genomics and Precision Health” Biolawlapalooza. May 19-20, 2023. Stanford Law School, Palo Alto, CA.
2. “Privacy: An Ethical Imperative for Biomedical Data Science.” UCLA Health Data Day, University of California-Los Angeles. May 11, 2023. Invited by Rochelle Cross of HEARST Health.
3. “Ethical, Legal, and Social Implications of Biometrics.” Invited Guest Lecture. May 4, 2023. KU Leuven. Invited by Peter Claes.
4. “Hot Topics in Genetics/omics Law Part II.” Weekly Wednesday Wartik Genomic Lecture Series (Bioinformatics & Genomics Graduate Program). Penn State University. Invited by George (PJ) Perry.
5. HIPAA and Data Privacy: Then and Now. Guest Lecture. Duke University DUHS Clinical Research Training Program, Responsible Conduct of Research course. Mar. 27, 2023. Invited by Dr. Misha Angrist.
6. “Algorithmic Fairness in the Roberts Court Era.” Invited Guest Lecture for Boston Children’s Hospital’s AI and Machine Learning Working Group Journal club. Mar. 21, 2023. Invited by William LaCava.
7. “Data Justice and Digital Twins in Healthcare.” Ethical and Social Implications of Biotechnology. Invited Guest Lecture. Mar. 20, 2023. University of Pittsburgh. Invited by Daniel Wilkenfeld.
8. “Biometrics and AI: Acknowledging the ‘Stress Cases’ for Privacy Law.” Invited Panel Speaker for “Science on Trial.” AAAS Annual Meeting. Washington, DC. Mar. 5, 2023. Invited by Allain Norman.
9. “Privacy Law Constraints on Precision Public Health.” Biobehavioral Health (BBH) Departmental Colloquium Invited seminar. Jan. 30. 2023. Invited by Dr. Harold Lee.
10. “Genomic Medical Malpractice.” Guest lecture for “Viewing Translational Genomics through an ELSI Lens” Course. Penn State College of Medicine. January 19, 2023. Invited by Dr. Jennifer McCormick.
11. “Algorithmic Fairness in the Roberts Court Era.” Pacific Symposium on Biocomputing, Big Island of Hawaii, January 5, 2023.
12. “Hot Topics in Genetics/omics Law.” Weekly Wednesday Wartik Genomic Lecture Series (Bioinformatics & Genomics Graduate Program). Penn State University. Dec. 7, 2022. Invited by George (PJ) Perry.
13. “Ethical, Legal, and Social Issues Regarding Health Risk Information Flows.” Invited Guest Lecture. PHIL 432: Medical and Health Care Ethics). Penn State University. Nov. 29, 2022. Invited by Michele Mekel.
14. JK Wagner. “Perspectives on Facial Imaging and Analytics in Healthcare and Biomedical Research” Invited Seminar. BME 590 Seminar Series. Nov. 10, 2022.
15. JK Wagner, “Legal Issues with Precision Medicine and Precision Public Health.” Invited Guest Lecture, PHS 597: AI in Healthcare, Penn State College of Medicine, Dept. of Public Health Sciences. Nov. 9, 2022. Invited by Dr. Vita Abedi.

16. JK Wagner, J Tanniru, C Chane, M Meyer. “Assessing a Legal Pathway to Implement a Cascade Traceback Screening Program for Ovarian Cancer.” Podium Presentation. ASHG Annual Meeting. Los Angeles, CA. Oct. 28, 2022.
17. Death Over Dinner. Discussion Co-Moderator. PSU Bioethics Program Webinar. Oct. 19, 2022.
18. Co-Moderator with Dr. Hadi Hosseini. “Fireside Chat with Vincent Conitzer: Responsible AI & AI Bill of Rights,” ICDS AI Symposium: Data Science, AI, and a Sustainable, Resilient, and Equitable Future. Oct. 13, 2022. State College, PA.
19. Genomic Medicine and Malpractice Liability. Invited Guest Lecture, Genomics and Law, University of Illinois Urbana-Champaign College of Law. Oct. 7, 2022. Invited by Prof. Jacob Sherkow
20. “The Impact of Dobbs v. Jackson Women’s Health Organization on Genetic Counseling Practice” Invited Webinar Speaker. July 14, 2022. Invited by Meghan Carey, Executive Director of the National Society of Genetic Counselors.
21. “Ethical Issues in Genetic Testing,” Invited Panel Speaker. American Society of Clinical Oncology Annual Meeting. Chicago, IL and virtual. June 3, 2022. Invited by Dr. Susan Domchek.
22. Madden D, Wagner JK, Katsanis SH. “Setting policy parameters for emergent uses of biometrics in pediatric and other healthcare settings,” Telling Time: 5<sup>th</sup> Annual Medical Humanities and Bioethics Conference, Northwestern University. May 19, 2022. Presentation to be given by Diana Madden.
23. “Algorithmic fairness, privacy, nondiscrimination, and free speech under the Roberts Court (Yep, it’s a dumpster fire!)” Biolawlapalooza. May 13-14, 2022. Palo Alto, CA.
24. “Ethical, Legal, and Social Implications of Biometrics” Guest lecture. KU Leuven. April 28, 2022. Invited by Dr. Peter Claes
25. “Biometric data protections (or lack thereof)” CLE Presentation. Pennsylvania Bar Institute Cybersecurity Update program. April 25, 2022.
26. “Privacy Protections for Proteomic and Metabolomic Data (P3MD)” Invited participant. NHLBI-funded Workshop. Event hosted by National Jewish Health and the University of Colorado. Denver, CO. April 21-22, 2022.
27. Discussant for “Risky Fine Print: A Novel Typology of Ethical Risks in Mobile App User Agreements.” Data Law and AI Ethics Research Colloquium. Virtual event co-hosted by Penn State Institute for Computational and Data Sciences, Monash Law and Monash Data Futures Institute at Monash University in Melbourne, Australia; Virginia Tech Pamplin College of Business; and Kelly School of Business, Indiana University - Bloomington. April 4-6, 2022.
28. “Ancient DNA (aDNA) Ethics.” Guest lecture in course titled “Ethical Issues in Human Biology.” Guest lecture. University of Cincinnati. April 1, 2022. Invited by Dr. Heather Norton
29. “InnovationLab: A Data Ecosystems Approach to Ethical AI for Biomedical and Behavioral Research” Invited participant. Virtual workshop sponsored by National Institutes of Health’s Office of Data Science Strategy. March 14-18, 2022.
30. “Advancing Equity Through Biodevice-Related Research” PSU Center for Biodevices FacultyXchange. Feb. 17, 2022.
31. “Genomic Medicine & the Loss of Chance Medical Malpractice Doctrine.” Guest lecture in Selectives in Humanities Course titled “Viewing Translational Genomics Through an Ethical, Legal/Policy, and Social Implications (ELSI) Lens.” Penn State College of Medicine. January 25, 2022. Invited by Dr. Jennifer McCormick.
32. “The Future of Reproductive Rights” (Discussion on Dobbs v. Jackson Women’s Health Organization). Panel Speaker. Event hosted by the Penn State Law chapter of the American Constitution Society. University Park, PA. November 30, 2021.
33. “Building a DNA Bridge to Reunify Separated Migrant Families,” Panel speaker. AAAS Science, Technology and Human Rights Conference (virtual), October 21, 2021.

34. “Emerging public policy and perspectives on biometrics (including DNA and facial imaging) in the US.” Poster. ASHG Annual Meeting (virtual). October 18, 2021.
35. “Fairness in Digital Health.” Panel Speaker for the “Law, Policy and Data Panel” of “The Future of Digital Fairness.” Penn State Institute for Computational and Data Sciences virtual conference. October 7, 2021.
36. “Remembering 9/11: Ethical, Legal, & Social issues with Using DNA for Disaster Victim Identification,” seminar organizer and moderator. ELSI Friday Forum, Sept. 10, 2021.
37. NIH/ODSS Panel Discussion, “Diversity in Data Science Training and Research,” AI and Data Science in Biomedical Applications track of the ISMB2021/ECCB2021 Annual Conference (virtual). July 27, 2021. Invited by Dr. Peipei Ping and Dr. Alex Bui on behalf of Dr. Susan Gregurick at the NIH Office of the Director and Data Science Strategy.
38. NIH symposium “A Match Made in Science: Integrating Bioethics within Biomedical Research.” Invited speaker for session entitled “Finding the Win/Win: Practical Advice for Bioethicists and Biomedical Researchers.” July 19, 2021. Invited by Dr. Lyric Jorgenson, Acting Director of the NIH Office of Science Policy.
39. “Heads up on ELSI of facial imaging.” FaceBase Community Forum. June 15, 2021.
40. “Ethical, Legal & Social Issues in Genetics & Genomics” session. Invited Speaker. Inaugural Cone Health & University of North Carolina Greensboro Precision Health Institute Symposium. May 21, 2021.
41. “Advancing Data Justice: A Need for Anthropologists to Address Data Disparities and Dataveillance” as part of the AAPA Symposium, “Ethics and best practices of studying contemporary human populations.” 90<sup>th</sup> Annual Meeting of the AAPA. Apr. 9, 2021.
42. “Responsible Research on Ancient DNA,” Panel Moderator. ASHG Webinar. Mar. 8, 2021.
43. “Minding the Data” Invited Session Speaker for session titled, “Medical Research as Public Health Initiative.” Lee E. Teitelbaum Utah Law Review Symposium on “Law and Ethics of Medical Research.” Nov. 20, 2020.
44. “Advancing the International Human Right to Science” Invited Roundtable Discussant for session titled, “Decolonizing Anthropological Genetics,” American Anthropological Association “Raising Our Voices!” virtual program. Nov. 5, 2020. Recording available at <https://youtu.be/7On9bTsFUZU>
45. Synthesis Comments as Co-Moderator of invited session titled, “The History and Future of Protections Against Genetic Discrimination” ASHG Annual Meeting. Oct. 28, 2020.
46. “Investigative Genetic Genealogy and Constraints on Law Enforcement.” Invited panel session titled “To Catch a Killer: Law Enforcement Uses of DNA Databases,” 5<sup>th</sup> ELSI Congress – Virtual ELSI Forum. June 16, 2020. Recording available at <https://vimeo.com/430540938>
47. “COVID-19, Genetic Privacy, and the Future of the Work Place,” Invited speaker. Webinar hosted by PSU Rock Ethics Institute. May 29, 2020. Recording available at <https://www.facebook.com/RockEthicsPSU/videos/605276936751978/>
48. “Research Ethics and Public Health Emergencies.” Invited speaker. Webinar hosted by Sage Bionetworks. April 9, 2020. Recording available at <http://sageassembly.org/webinar-series/>
49. “Legal and Policy Challenges to Acceleration of Precision Medicine.” Session titled “Making Precision Medicine Mainstream with Health Data: Challenges to Acceleration.” Precision Medicine World Conference, Santa Clara, CA. January 22, 2020.
50. “Legal Angles and the ‘Illusion’ of Certainty: Regulation of Diverse Data Sets.” Invited speaker for the workshop titled, “Navigating ethical quandaries with the privacy dilemma of biomedical datasets.” Pacific Symposium on Biocomputing. Big Island of Hawaii. January 3, 2020.
51. “Promoting Health Equity with and within Precision Medicine.” Pennsylvania Health Equity Summit. Invited by David Saunders, Director of the Office of Health Equity, Pennsylvania Department of Health. November 1, 2019.
52. “Government and Genetics: Balancing National Security and Humanitarian Interests” Podium Presentation. Invited Session titled, “DNA in the Public Sphere: How Genomic Information is Used and Protected Outside of Research and Medicine.” ASHG Annual Meeting. Houston, TX. October 15-19, 2019.



53. "Consumer Protections for Precision Health." 2019 Nova Law Review Symposium: "First do no harm: A patient-driven approach to navigating the health law, intellectual property, and technology maze." Nova Southeastern University Shepard Broad College of Law. Ft. Lauderdale, FL. October 11, 2019.
54. "Shams, Scams, and Flimflams: Consumer Protections for the Personal Genomics Industry." "Direct-to-Consumer (DTC) Genetic Testing: What needs to be done to get this business 'morally right' Workshop." Georgetown University, Washington, DC. September 12-13, 2019.
55. Panel speaker for "Exploring Vulnerabilities of Open Approaches" Sage Assembly. Seattle, WA. July 25, 2019.
56. "Precision Health and the Role of the FTC." Podium presentation. ALSME Health Law Professors Conference. Loyola, IL. June 5-7 2019.
57. "National DNA Day: What you need to know?" Invited panelist. Institute for Public Policy, Bucknell University alumni event. Washington, DC. April 25, 2019. Invited by Amy Wolaver.
58. "FTC Role in Preventing the Proliferation of Unfairness in Precision Health." Podium presentation. Biolawlapalooza. Stanford Law School. Palo Alto, CA. March 29-30, 2019. Invited Participant.
59. "Precision Health: Seeing the Forest and the Trees." UCLA Institute for Society & Genetics and Institute for Precision Health Joint Symposium. Los Angeles, CA. February 7, 2019.
60. M Doerr, S Grayson, S Moore, C Suver, J Wilbanks, J Wagner. "Implementing a uniform informed consent process for the All of Us Research Program." Poster. Pacific Symposium Biocomputing. Big Island of Hawaii. January 2019.
61. "Is Law a Help or a Threat to the Inclusion of Underserved and Immigrant Populations in Genomic Research?" Podium presentation. November 29, 2018. Symposium and webcast entitled "How Can Law Support Genomics and Precision Medicine to Advance the Health of Underserved Populations?" Invited by Susan Wolf, Ellen Wright Clayton, and Consuelo Hopkins Wilkins. Meharry Medical College, Nashville, TN. Video available at [https://www.youtube.com/watch?v=p2f0p\\_9obMc&index=4&t=0s&list=PL6eC1Z6k4A9t7VNB4ZFa1Mwt568zt1FHx](https://www.youtube.com/watch?v=p2f0p_9obMc&index=4&t=0s&list=PL6eC1Z6k4A9t7VNB4ZFa1Mwt568zt1FHx)
62. "Genetic information privacy protections and policy." Podium presentation. ASHG Annual Meeting. Privacy Policy Luncheon. San Diego, CA. October 18, 2018.
63. E Huang, R Pulk, JK Wagner. "Psychiatric Pharmacogenomics: panacea or predicament?" Poster. ASHG Annual Meeting. San Diego, CA. October 19, 2018.
64. SH Katsanis and JK Wagner. "Family Ties and DNA at the Border: Untangling Misconceptions." Podium presentation. International Symposium of Human Identification (ISHI). Phoenix, AZ. September 24-27, 2018.
65. "Looking Back after 10 Years of GINA, the Genetic Information Nondiscrimination Act of 2008" Podium Presentation. Continuing Legal Education (CLE) Course. September 20, 2018. Centre County Bar Association. Bellefonte, PA.
66. "Vulnerable populations" Brian Piper's Bioethics Class at the Geisinger Commonwealth School of Medicine's Master of Biomedical Science program. Invited Guest Lecture. June 12, 2018.
67. "FTC Regulation of Mobile Health Apps." Invited Speaker. Working Group Meeting #2 for Addressing ELSI Issues in Unregulated Health Research Using Mobile Devices Meeting. Chicago, IL. April 24-25, 2018.
68. Sage Assembly – Algorithms and the Role of the Individual. Seattle, WA. April 19-21, 2018. Invited participant.
69. Workshop titled "Professional ethics in biological anthropology: how to approach an ethical dilemma" (workshop speaker). Annual Meeting of the American Association of Physical Anthropologists (AAPA). Austin, TX. April 11-14, 2018.
70. "Data Access Policies as a Risk Mitigation Strategy." Bio Lawlapalooza. Stanford Law School. Palo Alto, CA. March 22-23, 2018. (abstract accepted but winter storm precluded attendance).
71. "Data Disparities: Discrimination & Equity in Big Data." Podium Presentation. Invited Keynote ELSI Speaker for Pacific Symposium Biocomputing. Big Island of Hawaii. January 6, 2018. Recording available at <https://www.youtube.com/watch?v=UKNzGg-iPiE>
72. E Huang, AK Rahm, C Flansburg, and JK Wagner. "MyCode Participants' Research Priorities for Precision Health." Poster. Annual Meeting of the American Society of Human Genetics. Orlando, FL. October 20, 2017.

73. "A Legal Analysis of the Loss of Chance Doctrine in the Context of Genomics and Precision Medicine." Poster. Annual Meeting of the American Society of Human Genetics. Orlando, FL. October 19, 2017.
74. "Legal considerations for direct contact of at-risk relatives." Panel session organized by Amy Sturm titled "Cascade Testing When the Stakes are High: Novel Research Findings, Innovative Technological Tools, and Direct Contact to Assist in Family Communication and Evaluation of At-Risk Relatives." National Society of Genetic Counselor's 36th Annual Conference Pre-Conference Symposium. September 13, 2017. Columbus, OH
75. "State Law." Panel session organized by Misha Rashkin titled "Are you ready to discuss genetic discrimination? Your patients expect you to be." National Society of Genetic Counselor's 36th Annual Conference. September 14, 2017. Columbus, OH.
76. "Policy and Regulatory Considerations" Panel Session Invited Speaker. "Learning from Patient Experience: New Frontiers in Patient-Partnered Research." Organized by the Broad Institute, Biden Cancer Initiative, and Emerson Collective. June 12-13, 2017. Cambridge, MA.
77. "Patient engagement in the LHCS: challenges and strategies." Panel session titled "Advancing ELSI Research in a Learning Health Care System." ELSI Congress, June 5, 2017. Farmington, CT.
78. RA Pulk, MS Williams, and JK Wagner. "A Bioethical Inquiry into the Utilization of Pharmacogenomic Information Extracted from Whole Exome Sequencing Generated for Research." Poster. ELSI Congress, June 5-7. Farmington, CT.
79. "Precision Medicine Data: Inside, Outside, Upside Down." ELSI Panel Session Invited Speaker. Precision Genomics Midwest. May 18, 2017. Cincinnati, OH
80. Bio Lawpalooza. Stanford Law School. Palo Alto, CA. April 20-21, 2017. Invited Participant.
81. "Reflecting at 99: Engaging Ethics in the AJPA." Poster. Annual Meeting of the American Association of Physical Anthropologists (AAPA). April 19-22, 2017. New Orleans, LA.
82. T Gonzalez-Zarzar, J Fernandez, M Beasley, A Zaidi, J Boster, P Claes, MD Shriver, and JK Wagner. "Why are men's faces more easily recognized as male?: Evolutionary conditioning of perceptual biases." Poster. Annual Meeting of the American Association of Physical Anthropologists (AAPA). April 19-22, 2017. New Orleans, LA.
83. "Science Policy." Invited Speaker on behalf of AAAS. Penn State University Science Policy Society. March 30, 2017. University Park, PA.
84. Genetic Alliance 30<sup>th</sup> Anniversary Conference. Invited Facilitator for "Radical innovation or iterative improvement" workstream. March 9-10, 2017. Bethesda, MD.
85. Scripps 10<sup>th</sup> Annual Future of Genomic Medicine. Attendee. March 2-3, 2017. La Jolla, CA.
86. Genome Editing & Law Workshop. Invited Participant. Centre for Law and Genetics, University of Tasmania. November 13-14, 2016. Hobart, Australia.
87. "Efforts to modernize the federal human research protection policy." Invited presentation. Central Northeast Pennsylvania Chapter of Association of Clinical Research Professionals (CNEPA ACRP). October 25, 2016. Hershey, PA.
88. "Unusual Suspects: A Legal Line-Up Beyond GINA." Invited Session Organizer/Moderator. "Ready or not, here they come: law enforcement and third-party access to genomic databases." Podium Presentation. Annual Meeting of the American Society of Human Genetics. Vancouver, BC. October 18-23, 2016.
89. "DNAlawyer: Define your own career." Invited Keynote Speaker for the 6<sup>th</sup> Annual Susquehanna Valley Undergraduate Research Symposium. July 27, 2016. Bloomsburg, PA.
90. "From Patient to Partner" Workshop, co-organizer. PCORI-funded "Enhancing Patient- and Family-Centered Care through Learning, Discovery and Engagement: A Symposium." June 14-15, 2016. Danville, PA.
91. GET Labs and GET Conference. Attendee. Boston, MA. April 25-26, 2016.
92. "Participant Engagement." Invited Presentation. Genomics Retreat. State College, PA. April 21, 2016.
93. Annual Meeting of the American Association of Physical Anthropologists (AAPA). Attendee. April 13-17, 2016 Atlanta, GA.

94. "Understanding ancestry: race, genes, genealogy." Panelist. Spelman College. April 1, 2016. Atlanta, GA.
95. "Genetics, Bioethics, and Policy." Guest Lecture. Integrated Perspectives Course ("Introduction to Public Policy," 58241), Bucknell University. March 3, 2016. Lewisburg, PA. Invited Lecture by Sharon Larson and Amy Wolaver.
96. "Research Ethics: Then and Now." Invited Presentation. Central Northeast Pennsylvania Chapter of Association of Clinical Research Professionals (CNEPA ACRP). December 2, 2015. Hershey, PA.
97. Annual Meeting of the American Society of Human Genetics. Attendee. October 7-10, 2015. Baltimore, MD.
98. "Progress in Personalized Medicine: Embracing the Disruptive." Podium Presentation and Ethics Panel Participant. Fusion Personalized Medicine Conference. September 30-October 3, 2015. Tucson, AZ.
99. GET Global Conference. Attendee. September 17-19, 2015. Vienna, Austria.
100. ASHG Genetic Ancestry Inference Roundtables II. Planning Committee Member and Roundtable Participant. May 19-20, 2015. Durham, NC.
101. Annual Meeting of the American Association for the Advancement of Science (AAAS). Attendee. February 12-15, 2015. San Jose, CA.
102. Human Rights Applications of Genetic Technologies." Podium Presentation. AAAS Science and Human Rights Coalition Meeting. Plenary Session: Innovations in Science and Technology for Human Rights. July 14, 2014. Washington, DC.
103. "Personal Genetics in Sports Medicine and Public Health." Podium Presentation. 9<sup>th</sup> Annual Texas Conference on Health Disparities: The Role of Genomics in Eliminating Health Disparities. Fort Worth, TX. May 29-30, 2014. Invited by Dr. Jamboor K. Vishwanatha.
104. "DNA in Human Trafficking." Workshop on Social Implications of Genomic Technologies in the Justice System. May 14, 2014. University of Illinois Urbana-Champaign Institute for Genomic Biology (IGB).
105. "Human Genomes, Human Rights: Research and Applications to Ensure the Dignity and Equality of All Human Beings." Invited Public Lecture. May 13, 2014. University of Illinois Urbana-Champaign Institute for Genomic Biology (IGB). Workshop on Social Implications of Genomic Technologies in the Justice System. May 13-14, 2014. Invited by Dr. Ripan Malhi.
106. GET Labs/GET Conference. "Perceptions of Ancestry." April 29-30, 2014. Cambridge, MA.
107. "Rage Against the FDA Machine" (Alternative title: "Vaping, Slurping, & Swabbing: Vexing Regulatory Issues for the FDA") Duke Science & Society Journal Club. April 2, 2014. Duke University, Durham, NC.
108. "Personal Genomics and Electronic Medical Records." Guest Lecture. April 1, 2014. Applied Genomics and Personalized Medicine for Health Care (Nursing 562). Duke University, Durham, NC. Invited by Sara Katsanis and Jennifer Dungan.
109. "Personal Genomics in Sports." Guest Lecture. March 31, 2014. Past and Future of Human Genomes (Genome/Biology 0159). Duke University, Durham, NC. Invited by Dr. Misha Angrist.
110. "Legal Issues of Biomedical Sciences." Guest Lecture. December 13, 2013. Veterinary and Biomedical Sciences: Mechanisms of Disease (VBSC050S). Penn State Univ., University Park, PA. Invited by Dr. Michael Mwangi.
111. "Ancestry and WGS: other privacy concerns?" Webinar Panelist. December 10, 2013. Genetic Alliance. Invited by President Sharon Terry. Accessible at <http://www.geneticalliance.org/events/webinars/privacyseries>
112. "What's in a Face? Perceiving Sex and Ancestry." Penn CIGHT Meeting. December 4, 2013. University of Pennsylvania, Philadelphia, PA.
113. "Genetic Screening of Athletes." Guest Lecture. November 26, 2013. Bioethics. New School, NY. Invited by Dr. Jessica Mozersky.
114. "Human Diversity and Race." Guest Lecture. November 19, 2013. Graduate seminar in Biological Evolution (ANTH 602). University of Pennsylvania, Philadelphia, PA. Invited by Dr. Theodore Schurr.

115. "Applications and Implications of Personal Genomics in Sports." University of North Texas Health Science Center. November 11, 2013. Fort Worth, TX.
116. "Update on the Priority 3 Refugee Program." DNA Applications in Human Rights and Human Trafficking Workshop. Participant. September 13, 2013. Durham, NC.
117. ASHG Roundtables on Genetic Ancestry Inference. Planning Committee Member and Roundtable Participant. September 10-11, 2013. Washington, DC.
118. "Playing with heart and soul...and genomes: genomic sports medicine." Poster. Why we can't wait: conference to eliminate health disparities in genomic medicine. May 29-31, 2013. San Francisco, CA.
119. "Re-identification is not the problem. The delusion of de-identification is." Law, Ethics, and Science of Re-identification Demonstrations. Bill of Health online symposium. Participant. May 20-25, 2013.
120. Genomes, Environments, Traits (GET) Conference. Attendee. April 25-26, 2013. Boston, MA.
121. Annual Meeting of the American Association of Physical Anthropologists (AAPA). Ethics Symposium (Session 39) Discussant. April 9-13, 2013. Knoxville, TN.
122. "Genetic Screening and Testing in Sports: Facilitating Player Success, Safety, or Discrimination?" April 9, 2013. Taft Research Center Lecture Series. University of Cincinnati. Invited by Dr. Heather Norton.
123. "Genetic Screening of Athletes." Guest Lecture. April 4, 2013. Bioethics (HSOC 102/SOC 101). University of Pennsylvania, Philadelphia, PA. Invited by Dr. Jessica Mozersky.
124. "Genetics and Genealogy: Teaching Evolution and Human Diversity to Middle School Students." NESCent Working Group Meeting, Co-Coordinator. March 26-27, 2013. Durham, NC. Collaboration with Drs. Nina Jablonski, Catherine Bliss, Eric Plutzer, Mark Shriver, and Abby Wolf.
125. DNA Applications in Human Rights & Human Trafficking Workshop. Participant. March 20, 2013. Durham, NC.
126. "Beyond Color: Visualizing Ancestry from False Color 3D Facial Images." Penn CIGHT Meeting. March 6, 2013. University of Pennsylvania, Philadelphia, PA.
127. "Personal Genomics in Sports." Guest Lecture. January 31, 2013. Frontiers: Personalized Medicine (FRO531). University of Pennsylvania, Philadelphia, PA. Invited by Dr. Reed Pyeritz.
128. "Genetics and Genealogy: Teaching Evolution and Human Diversity to Middle School Students" NESCent Working Group Meeting, Co-Coordinator. January 10-12, 2013. Durham, NC. Collaboration with Drs. Nina Jablonski, Catherine Bliss, Eric Plutzer, Mark Shriver, and Abby Wolf.
129. Wagner JK, Claes P, and Shriver MD. "Discriminating Faces: Visual Cues of Ancestry." Poster. Nov 7, 2012. 62<sup>nd</sup> Annual Meeting of the American Society of Human Genetics, San Francisco, CA.
130. "Is Genomic Information Scary? – Contextual Considerations of Genomics." Forum Participant. October 24, 2012. Duke University, Durham, NC. Invited by Sara Katsanis and Jennifer Dungan.
131. Eighth Meeting of CEER Investigators. Attendee. October 15-17, 2012. National Human Genome Research Institute, Rockville, MD.
132. "Using Genetics and Genealogy to Teach Evolution and Human Diversity." NESCent Catalysis Meeting, Co-Organizer. June 20-23, 2012. Durham, NC. Collaboration with Drs. Nina Jablonski, Mark Shriver, Henry Louis Gates, Jr., and Abby Wolf.
133. National Cancer Institute's (NCI) Identifiability of Genomic Data and Biospecimens Workshop. June 11-12, 2012. Rockville, MD.
134. "From Henrietta to GINA: Genetic Information and the Current Legal Landscape." Guest Lecture. April 18, 2012. Past and Future of the Human Genome (Genome/Biology 44). Duke University, Durham, NC. Invited by Drs. Misha Angrist and David Goldstein.
135. "Ethics of Practice and Practice of Ethics: An Open Dialogue Among Bioanthropologists." Forum Co-Organizer. April 12, 2012. 81st Annual Meeting of the American Association of Physical Anthropologists. Portland, OR. Collaboration with Dr. Graciela Cabana, Dr. Claudia Valeggia, and Ms. Alexandra Tito.

136. "Homo sapiens ludius (sporting man)." April 3, 2012. Human Origins (APG 201) and Human Variation (APG 350). University of Rhode Island, RI. Invited by Dr. Holly Dunsworth.
137. "Warming Up: Personalized Genomics in Athletic Training." Guest Lecture. February 2, 2012. Frontiers: Personalized Medicine (FRO531). University of Pennsylvania, Philadelphia, PA. Invited by Dr. Reed Pyeritz.
138. "Scientific Evidence in Criminal Investigations and Prosecutions." Guest Lecture. January 24, 2012. Forensic Molecular Anthropology (Anth 413). Penn State University, University Park, PA. Invited by Dr. Mark Shriver.
139. "Anthropological Research Considerations and Implications." Guest Lecture. January 19, 2012. Being Human (Anth 143). University of Pennsylvania, Philadelphia, PA. Invited by Dr. Claudia Vallengia.
140. "Personal Genomics in Education: Perspectives of a DNA Lawyer." Guest Lecture by Adobe Connect. January 17, 2012. Applied Genomics & Personalized Medicine in Clinical Care (N562). Duke University, Durham, NC. Invited by Jennifer Dungan and Sara Katsanis.
141. "Genomics in Sports: Fair or Foul?" Guest Lecture. November 2011. Anthropology of Sports (Cultural Anthropology) Course. Duke University, Durham, NC. Invited by Dr. Orin Starn.
142. "Multidisciplinary Me: Research Highlights." Penn CIGHT Meeting. October 2011. University of Pennsylvania, Philadelphia, PA.
143. Seventh Meeting of CEER Investigators. Attendee. October 3-5, 2011. National Human Genome Research Institute, Rockville, MD.
144. "Field of Genes: An Investigation of Sports-Related DNA Tests." 2011-2012 Anthropology Colloquia. September 9, 2011. Penn State University, University Park, PA. Invited by Dr. David Puts, Colloquium Committee Chair.
145. "Geeks and Gleeks: Legal Issues Around the Spittoon." Guest Lecture. September 2, 2011. Molecular Anthropology (Anth 461) and Genes in Human Biology and Evolution (Anth 297A). Penn State University, University Park, PA. Invited by Dr. Mark Shriver.
146. Second National Conference on Genetics Ethics and the Law. Attendee. June 1-2, 2011. University of Virginia, Charlottesville, VA.
147. "Ancestry Testing" Workshop. Session Co-Chair. 2011 ELSI Congress. April 12, 2011. Chapel Hill, NC.
148. "Race, Sex, and Genes: Evolving Notions of Competitive Fairness." Guest Lecture. March 29, 2011. Anthropology of Sports (Cultural Anthropology) Course. Duke University, Durham, NC. Invited by Dr. Orin Starn.
149. "Direct-to-Consumer DNA Ancestry Testing." Guest Lecture. March 23, 2011. "Your Genome in Perspective: The Ethics of the Genome Revolution" Institute for Genome Sciences & Policy House Course. Duke University, Durham, NC. Invited by student organizers, Selina Chen and Akash Shah.
150. "Employment Discrimination and Genetic Information: Advising Clients on Title II of the Genetic Information Nondiscrimination Act." Podium Presentation. Continuing Legal Education (CLE) Course. January 11, 2011. Centre County Bar Association. Bellefonte, PA.
151. "DTC DNA Ancestry Tests." Guest Lecture. December 6, 2010. Focus Interdisciplinary Discussion Course. Institute for Genome Sciences & Policy. Duke University, Durham, NC. Invited by Dr. Tomalei Vess.
152. "What's past is prologue: the future of personal genomics." Invited Discussion Panel Participant. November 2010. Institute for Genome Sciences & Policy Annual Retreat. Chapel Hill, NC. Invited by Dr. Misha Angrist.
153. "Attitudes on DNA Ancestry Tests." Poster. November 2010. Annual Meeting of the American Society of Human Genetics, Washington, DC.
154. "From Genomophiles to Genomophobes: Identities in a Personal Genomics Age." Invited Presentation. Department of Cultural Anthropology's Lunch Lecture Series. May 10, 2010. Duke University. Durham, NC.
155. "The Search for a 'Reasonable' Expectation of Genomic Privacy." Poster. November 2009. Human Genome Organization (HUGO) Genomics, Ethics, Law & Society Symposium. Geneva, Switzerland.

156. Illinois Biology and Politics Summer Institute. National Science Foundation (NSF) Fellow. July 2009. Champaign-Urbana, IL.
157. “The Genetic Information Nondiscrimination Act.” Podium Presentation. Continuing Legal Education (CLE) Course. July 16, 2009. Centre County Bar Association. Bellefonte, PA.
158. “An Anthropological Critique of ‘Scientific Integrity.’” Podium Presentation. May 2, 2009. Conference entitled “Engaging Ethics: Multi-disciplinary Approaches to Multi-dimensional Relationships.” Binghamton University.
159. “Redefining Native Americans in a Post-Genomic Era: Legal Implications of Genetic and Genomic Ancestry Tests.” Podium Presentation. October 18, 2008. Sequoyah Research Center’s Annual Symposium: “The New Faces of an Ancient People; Emerging American Indian Studies Research from Indian Country” University of Arkansas-Little Rock.
160. “The Genetic Information Nondiscrimination Act of 2008: Minimal Protections but Maximum Publicity” Poster. November 2008. Annual Meeting of the American Society of Human Genetics. Philadelphia, PA.

## TEACHING EXPERIENCE

2021-Present	The Pennsylvania State University		
<i>Forthcoming Fall 2023</i>	Instructor	Datafied Cultures & Privacy Law	(ENGR497, SEC 001)
<i>Forthcoming Fall 2023</i>	Instructor	Genetics Law	(ENGR497, SEC 002)
Spring 2023	Instructor	Datafied Cultures & Privacy Law	(ENGR497, SEC 003)
Spring 2023	Instructor	Biomedical Engineering, Law, & Policy	(ENGR497, SEC 001)
Fall 2022	Instructor	Engineers & Scientists Shaping Policy	(ENGR597, SEC 001)
Spring 2022	Instructor	Biomedical Engineering, Law, & Policy	(ENGR497, SEC 002)
2021	Penn State Law		
Summer 2021	Instructor	Law and Precision Medicine	(MLSLW997-9487 SEC 202)
2012-2013	The Pennsylvania State University		
Spring 2013,	Instructor	Introduction to Cultural Anthropology	(ANTH 045WD)
Fall 2012		World Campus (online course)	
2010-2011	Duke University		
Spring 2011	Instructor	Culture & Genomics	(CUL ANTH 180.02)
Fall 2010	Lecturer	Race, Genomics & Society	(GENOME 158S/AAAS 159S)
		Instructor: Dr. Charmaine Royal	
2007-2010	The Pennsylvania State University		
Spring 2010	Teaching Assistant	Sex and Evolution	(ANTH 216)
		Instructor: Dr. David Puts	
Fall 2009	Teaching Assistant	Introduction to Cultural Anthropology	(ANTH 045)
		Instructor: Dr. Erick Rochette	
Spring 2009	Teaching Assistant	Introduction to Anthropology	(ANTH 001)
		Instructor: Dr. Susan Evans	
Fall 2008	Instructor	Anthropology and the Law	(ANTH 497A)
Spring 2008	Teaching Assistant	North American Indians	(ANTH 146)
		Instructor: Dr. J. Heath Anderson	
Fall 2007	Teaching Assistant	Advanced Human Genetics	(ANTH/BIOL 460)
		Instructor: Dr. Kenneth M. Weiss	

## RESEARCH EXPERIENCE

2021-Present	School of Engineering Design and Innovation, Pennsylvania State University
2015-2021	Geisinger, Center for Translational Bioethics & Health Care Policy
2014	Albert Einstein College of Medicine, Department of Epidemiology and Population Health
2011-2014	University of Pennsylvania, Perelman School of Medicine, Division of Translational Medicine and Human Genetics, Center for the Integration of Genetic Healthcare Technologies (PennCIGHT); Dr. Reed Pyeritz, advisor
2010-2011	Duke University, Institute for Genome Sciences & Policy (IGSP) Dr. Charmaine Royal, advisor

2007-2010 The Pennsylvania State University  
Graduate Student; Dr. Kenneth Weiss, advisor

2002-2003 The University of Michigan  
Spring 2003 Graduate Student; Dr. Jeffrey Long, advisor  
Fall 2002 Graduate Student; Dr. Margit Burmeister, advisor

1999-2002 The Pennsylvania State University  
Undergraduate Student Researcher, Dr. Mark Shriver, advisor

### FIELD WORK/ STUDIES ABROAD

Summer 2006 Irish Centre for Human Rights at National University of Ireland Galway; Republic of Ireland  
International Human Rights Law (Minority and Indigenous Peoples Rights)

Spring 2001 ADBOU – Syddansk Universitet; Odense, Denmark  
“Skeletal Analysis of Refshale, a Medieval Danish Cemetery”

Summer 1999 Archaeological Field School on Susquehannock site in Lancaster County, PA

### LEGAL EXPERIENCE

Oct 2007 – Present	Attorney, Solo Practice	Centre County, PA
Summers 2005, 2006	Summer Law Clerk	Glenn, Mills, & Fisher, P.A. Durham, NC
2003-2004	Legal Assistant	Mediation, Inc. Chapel Hill, NC
Summer 2003	Legal Assistant	Law Office of Elizabeth Gervais-Gruen Chapel Hill, NC

### POLICY EXPERIENCE

2014 - 2015 U.S. Senate Office of Senator Edward J. Markey  
Policy portfolio included (1) judiciary (*e.g.*, immigration, human rights, LGBTQ, disabilities, intellectual property, law enforcement, hate crimes, nominations, guns, adoptions, whistleblower protections), (2) health (*e.g.*, mental health, infectious disease, genomic medicine), (3) consumer protection (*e.g.*, governmental investigations and oversight, toxic chemicals), and (4) privacy (*e.g.*, data brokers, open science issues, medical privacy). Responsibilities included drafting legislation, letters, memos, talking points, and press releases; policy analysis and development; making voting recommendations; holding meetings with constituents and advocates; and attending congressional briefings.

### EDITORIAL EXPERIENCE

2020 – 2023 *Human Genetics and Genomics (HGG) Advances*  
Associate Editor

2012 – 2019 *PeerJ* (open access, peer-reviewed scholarly journal), [www.peerj.com](http://www.peerj.com)  
Academic Editor in Section Areas of Anthropology, Legal Issues, Ethical Issues, Science Policy, and Genetics

### SCIENTIFIC ADVISORY BOARDS

2019 – 2022 Sage Bionetworks

### COMMITTEE EXPERIENCE

#### *External*

2022 – Present American Association for the Advancement of Science,  
Committee on Scientific Freedom and Responsibility

2020 – Present Human Genetics and Genomics Advances, Equity Work Group

2018 – Present Pennsylvania Bar Association, Cybersecurity and Data Privacy Committee

2018 – 2022 American Association of Biological Anthropologists, Science Policy Committee  
Member 2018-2022

2018 – 2019 Pennsylvania Bar Association, BLI Alumni Task Force

2016 – 2020 American Society of Human Genetics Social Issues Committee,  
Member 2016-2018, 2019; Committee Chair 2018 and 2019

2015 – 2020 American Association of Anthropological Geneticists Ethics Committee, Member

2012 – 2021 American Association of Physical Anthropologists Ethics Committee  
Member since 2012, Committee Co-Chair March 2015-March 2018

2011 – 2015 ASHG Ancestry Inference Roundtables Planning Committee, Member

### ***Internal (Penn State University)***

Spring 2023 – Present	Genetic Counseling Club, faculty advisor
Fall 2022 – Present	Bioinformatics & Genomics Program Admissions Committee, member
Fall 2022 – Present	Engineering Design and Innovation PhD Exploratory Committee, member
Fall 2022 – Present	MELP Admissions Committee, member
Spring 2022 – Fall 2022	ICDS 2022 Fall AI Symposium Planning Committee, member
Spring 2022 – Present	SEDTAPP Diversity, Equity & Inclusion Work Group, member
2021 – Spring 2022	SEDTAPP representative for the College of Engineering train-the-trainer “Understanding Research Misconduct and Why It Matters” workshop

#### ***PhD Dissertation Committees***

Fall 2022 – Present	Kyeonghun Jwa (Mechanical Engineering)
Fall 2022 – Present	Brittani Bedford (Food Science, minoring in ELP)

### ***Internal (Geisinger)***

Fall 2020 – 2021	Data Ethics Working Group, member
Spring 2020 – 2021	COVID-19 Research Oversight, Participant Interaction & Behavioral Studies Work Group, member
Fall 2015 – 2021	Patient Engagement/Learning Health Care System Working Group, member
Fall 2015 – 2021	Informed Consent Accessibility Working Group, member
Fall 2015 – 2021	Genomics Council, member
Spring 2018 – 2019	Inclusion Circles, member
Spring 2017 – 2018	Customer Resource Management (CRM) Working Group, member
Fall 2017 – 2019	Associate Dean and Library Director Search Committee, member
Spring 2016 – 2017	GenomeFirst™ Oversight Committee, member
Spring 2016 – 2018	MyCode Clinical Oversight Committee, member
Spring 2016 – 2018	Social Media in Research Working Group, Chair
Fall 2016 – 2021	IRB Leadership Committee, member
Fall 2016 – 2018	Patient Engagement Metrics Working Group, member
Fall 2016 – 2018	Patient-Partner Recruitment Working Group, Chair
Fall 2016 – 2018	Patient Engagement Communications Working Group, member

## **MENTORING EXPERIENCE**

### ***Junior Faculty Mentoring Committees***

2018 – 2020	Tara Schmidlen, genetics counselor
2017 – 2018	Dr. Rebecca Pulk, pharmacogenomics post-doctoral fellow

### ***Post-Doctoral Researchers***

2017 – 2018	Dr. Kasia Tolwinski (Ph.D. Cornell University)
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### ***Graduate/Professional Students***

Spring 2023	John-Luc Legrand, law student research assistant, Penn State Law
Spring 2023 – Present	Nia Everetese, law student research assistant, Penn State Law
Spring 2023 – Present	Estevan Hammer, D. Eng. student, Penn State University
Fall 2022	Talia D. Sturkie, law student independent studies, Penn State Law
Fall 2022 – Present	Lawrence Miller, law student research assistant, Penn State Law
Summer 2022 - Present	Abdulai Rashid, law student research assistant, Penn State Law
Summer 2022	Michael Sekich, law student research assistant, Penn State Law
Spring 2022 – Present	Caitlin Maloney, ELSI Hub Trainee Connect mentee, MPH Public Health Genetics student, University of Washington
Fall 2021 - Spring 2022	Mohamed Ahmed, law student research assistant, Penn State Law
Fall 2018 – Fall 2020	Diana Madden, bioethics research intern, Duke University
Summer 2019	Miaraha Humayun, science policy research intern, Duke University
Summer 2018	Derek Walton, law research intern, St. Louis University School of Law

### ***Undergraduate Students***

Summer 2023	Wamaita Karungu, research assistant, Penn State University
Summer 2023	Pingxu Hao, research assistant, Penn State University
Spring 2023	Samiksha Kature, research assistant, Penn State University



Fall 2022 – Spring 2023	Morgan Schnars, research assistant, Penn State University
Summer 2022	Nathan Rihani, research assistant, Penn State University
Spring 2022 – Spring 2023	Juhi Tanniru, research assistant, Penn State University
Spring 2022 – Summer 2022	Ethan Niemeyer, research intern, Penn State University
Fall 2021 – Summer 2022	Courtney Chane, research assistant, Penn State University
Spring 2019	Elaine Huang, research intern, Lafayette College
Summer 2018	Benjamin Dralle, research intern, Iowa State University
Fall 2017 – Spring 2018	Elizabeth Warner, research intern, Bucknell University
Spring 2017	James Hamm, research intern, Bucknell University

**EXTERNALLY-FUNDED RESEARCH** (in addition to those awards previously mentioned)

**As Key Personnel**

U01CA240747	PI: Rahm, Henrikson, Cabell	06/01/2020 – 05/31/2024
“Feasability and assessment of a cascade traceback screening program – FACTS”		
This study aims to determine how to communicate to ovarian cancer patients the availability of genetic testing, how to facilitate testing with at-risk relatives, and how privacy laws facilitate or hinder notification and testing of at-risk relatives.		
Agency: NCI	Role: Co-I (lead of legal and policy research aim)	
1R01HG009671-01A1	PI: Adam Buchanan	09/19/2018 – 06/30/2023
“Reporting Adult-Onset Genomic Results to Pediatric Biobank Participants and Parents”		
The goal of this project is to empirically study psychosocial, behavioral and legal impacts of disclosing adult-onset genomic findings to children and their parents. One aim is an analysis of the “loss of chance” tort doctrine and its applicability to policies for the return or deferral of adult-onset genomic results for children.		
Agency: NIH/NHGRI	Role: Co-I (lead of the legal research aim)	
#12727-GC	PI: F. Daniel Davis	02/01/2019 – 01/31/2021
“Learning to Engage and Be Engaged: Two Intersecting Curricula”		
The goal of this project is to design, develop, refine, deliver, and evaluate a Patients to Partners Curriculum for prospective patient-participants in Geisinger-based learning activities and an Engaging Patients Effectively Curriculum for health researchers to improve the substantive involvement of patients in their work.		
Agency: PCORI	Role: Co-I	
R01CA211723-03S1	Parent PI: Alanna Rahm	08/1/2019 – 7/31/2020, NCE
“Assessing Non-Inferiority of Scalable eConsent for Genomics”		
This is a randomized, controlled, non-inferiority trial comparing electronic (eConsent) to traditional consent to determine whether scalable eConsent is appropriate for genomic sequencing.		
Agency: NIH/NCI	Role: Supplement Co-PI	
1OT2OD024609-01	PI: David H. Ledbetter and Marylyn D. Ritchie	09/2016 – 08/2017
“Precision Medicine at Geisinger”		
Geisinger assisted the <i>All of Us</i> <sup>SM</sup> Research Program during design and pre-beta launch stages and shared insights learned from the design, launch, and sustainment of the MyCode® Community Health Initiative.		
Agency: NIH	Role: Key Personnel (one of four named); responsible for Geisinger’s contributions to the consent, participant-provided info, privacy and security, and engagement/communication working groups	

**As a Consultant, Advisor, and/or Working Group member**

3U01CA242954-02S1	PI: Melissa Cline (Univ. California, Santa Cruz)	2020-2021
“Federated Analysis in Cancer Genomics: Surveying the Social, Ethical, and Regulatory Landscape”		
Agency: NCI	Role: Consultant	
5R01HG009923-03	PI: Sara Katsanis (Lurie Children’s Hospital) and Nita Farahany (Duke)	2018-2021
“Genomics, Biometrics and Identity”		
Agency: NHGRI	Role: Consultant	
1R01AG065234-01	PIs: Sarah Hartz and Jessica Mozersky (Washington Univ. St. Louis)	2020-2025
“Returning Research Results That Indicate Risk of Alzheimer Disease to Healthy Participants in Longitudinal Studies”		
Agency: NIA	Role: Advisor	
n/a	PI: Sara Katsanis (Lurie Children’s Hospital)	2020-2022
“Developing Resources for DNA Testing at the Border: BorderDNA Working Group”		

Agency: Center for ELSI Resources and Analysis      Role: Working Group Member

Award #1922419 PI: Chip Colwell et al.      2020-2021  
“The Ethics of Studying Indigenous North American Ancient DNA: Moving from Theories to Practices”  
Agency: NSF      Role: Working Group Member

### **INTERNALLY-FUNDED RESEARCH (*Pennsylvania State University*)**

“Mapping the Ethics of Synthetic Data”      2022-2023  
Source: Rock Ethics Institute Seed Grant      Role: Co-PI with D Susser, L Cabrera, and S Gerke

### **MEDIA APPEARANCES AND MENTIONS**

1. April 3, 2023. Regulating AI: 3 experts explain why it’s difficult to do and important to get right. The Conversation. <https://theconversation.com/regulating-ai-3-experts-explain-why-its-difficult-to-do-and-important-to-get-right-198868>
2. October 4, 2022. Turna Ray. “Non-Profit’s Efforts With Payors to Assess NGS Labs’ Variant Interpretations Spark Debate” Genome Web, <https://www.genomeweb.com/reimbursement-news/non-profits-efforts-payors-assess-ngs-labs-variant-interpretations-spark-debate#.Yz1xT-zMKWA>
3. October 3, 2022. Turna Ray. “Highmark Asks Labs for Additional Validation Data on Cancer NGS Tests; Will Other Insurers Follow?” Genome Web, [https://www.genomeweb.com/reimbursement-news/highmark-asks-labs-additional-validation-data-cancer-ngs-tests-will-other?utm\\_source=addthis\\_shares#.YzWuHuzMKWB](https://www.genomeweb.com/reimbursement-news/highmark-asks-labs-additional-validation-data-cancer-ngs-tests-will-other?utm_source=addthis_shares#.YzWuHuzMKWB)
4. June 24, 2022. Eric Boodman Tara Bannow, Bob Herman, and Casey Ross. “HIPAA won’t protect you if prosecutors want your reproductive health records.” <https://www.statnews.com/2022/06/24/hipaa-wont-protect-you-if-prosecutors-want-your-reproductive-health-records/>
5. September 23, 2021. Nicole Wetsman, “FTC resurrects a decade-old rule as a guardrail on the health app explosion,” The Verge, <https://www.theverge.com/platform/amp/2021/9/22/22688497/ftc-health-app-privacy-transparency-data>
6. May 26, 2020. Dave Perera, “Comment: US FTC has opportunity to be bold in review of health-record data breach regulations,” MLex
7. May 7, 2019. Knowledge@Wharton Business Radio hosted by Dan Loney. Sirius XM Channel 132. (Discussing the Court of Arbitration for Sport ruling against Caster Semenya).
8. October 23, 2018. “In Williams v Quest/Athena, Judge Orders Plaintiff’s Claims to Move to Discovery” Turna Ray, Genome Web. [https://www.genomeweb.com/molecular-diagnostics/williams-v-questathena-judge-orders-plaintiffs-claims-move-discovery#.W886SC\\_Mzw4](https://www.genomeweb.com/molecular-diagnostics/williams-v-questathena-judge-orders-plaintiffs-claims-move-discovery#.W886SC_Mzw4)
9. October 17, 2018. “Why White Supremacists are Chugging Milk (and Why Geneticists are Alarmed).” Amy Harmon, New York Times. <https://www.nytimes.com/2018/10/17/us/white-supremacists-science-dna.html>
10. July 9, 2018. “DNA tests on children separated at border from family: few answers, lots of questions.” Elizabeth Weise, Ryan Suppe, and Alan Gomez. USA Today. <https://www.usatoday.com/story/tech/2018/07/09/how-dna-testing-work-reunited-families-separated-border/761810002/>
11. July 6, 2018. “DNA testing to reunite families.” PRI’s The World. <https://www.pri.org/programs/pris-world/reuniting-children-and-families-separated-border-toy-doctor-mexicos-long>
12. July 6, 2018. “Trump administration’s DNA tests raise ethical concerns” Arthur Allen and Darius Tahir. Politico. <https://www.politico.com/newsletters/morning-ehealth/2018/07/06/trump-administrations-dna-tests-raise-ethical-concerns-272546>
13. July 5, 2018. “Reported DNA testing on migrants raises questions, concerns.” Turna Ray. Genome Web. <https://www.genomeweb.com/policy-legislation/reported-dna-testing-migrants-raises-questions-concerns#.Wz52Xy3MyTc>
14. July 5, 2018. “DNA Tests on Separated Migrant Children Raise Privacy Concerns.” Kristen Brown. Bloomberg. <https://www.bloomberg.com/news/articles/2018-07-05/dna-tests-on-separated-migrant-children-raise-privacy-concerns>
15. July 3, 2018. “In Williams v Quest, State Supreme Court Leaves Room for Plaintiff to Argue Ordinary Negligence” Turna Ray. Genome Web. [https://www.genomeweb.com/molecular-diagnostics/williams-v-quest-state-supreme-court-leaves-room-plaintiff-argue-ordinary?utm\\_source=Sailthru&utm\\_medium=email&utm\\_campaign=GWDN%20Tues%20AM%20-%20NO%20PERSONALIZATION%202018-07-03&utm\\_term=GW%20Daily%20News%20Bulletin#.WzuXfi3MyTc](https://www.genomeweb.com/molecular-diagnostics/williams-v-quest-state-supreme-court-leaves-room-plaintiff-argue-ordinary?utm_source=Sailthru&utm_medium=email&utm_campaign=GWDN%20Tues%20AM%20-%20NO%20PERSONALIZATION%202018-07-03&utm_term=GW%20Daily%20News%20Bulletin#.WzuXfi3MyTc)
16. June 25, 2018. Op-Ed. Sara H. Katsanis and Jennifer K. Wagner. “Why aren’t we taking DNA instead of children?” The Herald-Sun (Durham, NC). June 25, 2018. <http://amp.heraldsun.com/opinion/article213759989.html>
17. June 13, 2018. Kristen Brown. Gizmodo. “How a legal brawl between two rich guys could change how we think about DNA.” <https://gizmodo.com/how-a-legal-brawl-between-two-rich-guys-could-change-ho-1824191082>
18. May 3, 2018. NPR On Point. <http://www.wbur.org/onpoint/2018/05/03/dna-testing-privacy>
19. December 28, 2017. “The present and future asymmetry of consumer genetic testing.” Michael Schulson. Undark.org <https://undark.org/article/consumer-genetic-testing-privacy/>
20. March 16, 2017. “The GOP’s New Bill Would Seriously Disrupt Genetics Research.” Ed Yong. The Atlantic, [https://www.theatlantic.com/science/archive/2017/03/the-gops-new-bill-is-a-disaster-for-genetics-research/519645/?utm\\_source=twb](https://www.theatlantic.com/science/archive/2017/03/the-gops-new-bill-is-a-disaster-for-genetics-research/519645/?utm_source=twb)

21. March 6, 2017. "Science could suffer if Obamacare protections are weakened" Darius Tahir. Politico. <http://www.politico.com/story/2017/03/obamacare-innovation-235598>
22. January 3, 2017. "DNA tests aid genealogists in tree searches." Terry Morgan-Biesecker. Scranton Times Shamrock. <http://standardspeaker.com/news/dna-tests-aid-genealogists-in-family-tree-searches-1.2137585>
23. December 5, 2016, "Making Precision Medicine Work" Genetics in Medicine Podcast (GenePod), <http://www.nature.com/gim/podcast/index.html>
24. September 8, 2016: AAAS Science & Technology Policy Fellowships, "User your training to address societal challenges." Available at [https://www.aaas.org/news/stpf/use-your-training?mkt\\_tok=eyJpJjoiT0RNMFlUaGtNVGcyT0RsbSIsInQiOiJjYjYUrekpTNEtIeE9Id1lcL2dcL0hhdVowYmhkWmtkejVES3JBbDd2V1IzEwNzI1K0ZLTtNUbzV4UGNrMnEybvVdFQnBXMVJMZUlaYVpSQ016Y211SjJ1ZWZLU0k0ZVdYZkdPQ2R2eGkwPSJ9](https://www.aaas.org/news/stpf/use-your-training?mkt_tok=eyJpJjoiT0RNMFlUaGtNVGcyT0RsbSIsInQiOiJjYjYUrekpTNEtIeE9Id1lcL2dcL0hhdVowYmhkWmtkejVES3JBbDd2V1IzEwNzI1K0ZLTtNUbzV4UGNrMnEybvVdFQnBXMVJMZUlaYVpSQ016Y211SjJ1ZWZLU0k0ZVdYZkdPQ2R2eGkwPSJ9)
25. August 6, 2016: Fast Company. "Do Olympians have better genes than you and me?" by Christina Farr. Available at <http://www.fastcompany.com/3062037/body-os/how-much-of-olympic-performance-is-due-to-great-dna>
26. May 15, 2016: GenomeWeb. "Plaintiffs Argue Against Quest, Athena's Motion to Dismiss Negligence Case." By Turna Ray. Available at <https://www.genomeweb.com/molecular-diagnostics/plaintiffs-argue-against-quest-athenas-motion-dismiss-negligence-case>
27. April 6, 2016: GenomeWeb. "Warren Enzi Bill Seeks to Tighten Protections for Genetic Information in Research." <https://www.genomeweb.com/policy-legislation/warren-enzi-bill-seeks-tighten-protections-genetic-information-research>
28. Feb 16, 2016; GenomeWeb. "Exact v Humana Lawsuit Reflects Genetic Testing Firms' Deepening Adversarial Relations with Payors." By Turna Ray. Available at <https://www.genomeweb.com/molecular-diagnostics/exact-v-humana-lawsuit-reflects-genetic-testing-firms-deepening-adversarial>
29. Feb 1, 2016; Wired. "DNA Got a Kid Kicked Out of School—And It'll Happen Again." By Sarah Zhang. Available at <http://www.wired.com/2016/02/schools-kicked-boy-based-dna/>
30. Jan 27, 2016; GenomeWeb. "EEOC-Proposed Rule Raises Concerns it Will Weaken Genetic Anti-Discrimination Protections" by Turna Ray. Available at <https://www.genomeweb.com/policy-legislation/eoc-proposed-rule-raises-concerns-it-will-weaken-genetic-anti-discrimination>
31. Jan 27, 2016; AAAS Fellowship Focus. "Asbestos in America." By Kat Song. Available at [http://www.aaas.org/news/stpf/asbestos-america?utm\\_source=Fellowship+Focus+Jan-Feb+2016&utm\\_campaign=Fellowship+Focus+Jan-Feb+2016&utm\\_medium=email](http://www.aaas.org/news/stpf/asbestos-america?utm_source=Fellowship+Focus+Jan-Feb+2016&utm_campaign=Fellowship+Focus+Jan-Feb+2016&utm_medium=email)
32. Jan 21, 2016; The Daily Item. "Geisinger speaker explains how popular tech can help doctors." By Joe Sylvester. Available at [http://www.dailyitem.com/news/geisinger-speaker-explains-how-popular-tech-can-help-doctors/article\\_e0c526f4-bfec-11e5-8ff5-73213d3a8fbf.html?mode=print](http://www.dailyitem.com/news/geisinger-speaker-explains-how-popular-tech-can-help-doctors/article_e0c526f4-bfec-11e5-8ff5-73213d3a8fbf.html?mode=print)
33. June 4, 2013; Huffington Post Live: "DNA Swabbing: A Genetic Panopticon?" Hosted by Michael Sacks. Available at <http://live.huffingtonpost.com/r/segment/supreme-court-rules-on-dna-testing-for-suspects/51acb9772b8c2a4f8f000802>

## BOOK REVIEWS

- 2017 Book review for Genome Magazine  
 "We are family", Issue 12 (Spring 2017), March 28, 2017  
 online at [http://genomemag.com/we-are-family/#.WPX\\_nFLMwzU](http://genomemag.com/we-are-family/#.WPX_nFLMwzU)  
 Review of Blaine Bettinger's "The Family Tree Guide to DNA Testing and Genetic Genealogy"
- 2016 Book review for New Scientist  
 "Racism, photography and DNA: can we right past wrongs?" March 22, 2016, online at <https://www.newscientist.com/article/mg22930662-800-hanging-race-out-to-dry/> and in print as "Hanging Race Out to Dry," March 26, 2016.  
 Review of Amos Morris Reich's "Race and Photography" and Alondra Nelson's "The Social Life of DNA"

## VOLUNTEER/PRO BONO PROJECTS

- 2020 – Present PBA Cybersecurity and Data Privacy Committee Blog Contributor
1. "One Step Closer to Federal Data Privacy Law Reform: H.R. 8152, the American Data Privacy and Protection Act (ADPPA), July 27, 2022. Available at <https://pbacyber.com/index.php/2022/07/27/one-step-closer-to-federal-data-privacy-law-reform-h-r-8152-the-american-data-privacy-and-protection-act-adppa/>
  2. "Updated DHHS OCR Guidance on Health Information Privacy After *Dobbs*," July 27, 2022. Available at <https://pbacyber.com/index.php/2022/07/27/updated-dhhs-ocr-guidance-on-health-information-privacy-after-dobbs/>
  3. "A Post-Roe Future Presents Heightened Data Privacy Risks with FemTech," June 1, 2022. Available at <https://pbacyber.com/index.php/2022/06/01/a-post-roe-future-presents-heightened-data-privacy-risks-with-femtech/>
  4. "Current Status of Biometrics Data Protections Within and Beyond Pennsylvania," May 27, 2022. Available at <https://pbacyber.com/index.php/2022/05/27/current-status-of-biometrics-data-protections-within-and-beyond-pennsylvania/>

5. "FTC Issues Policy Statement Clarifying Data Privacy Obligations for Digital Health," September 22, 2021. Available at <http://cyber.pabar.org/index.php/2021/09/22/ftc-issues-policy-statement-clarifying-data-privacy-obligations-for-digital-health/>
6. "Department of Homeland Security Hits Reset on its Plans to Expand Biometrics" May 24, 2021. Available at <http://cyber.pabar.org/index.php/2021/05/24/departement-of-homeland-security-hits-the-reset-on-its-plans-to-expand-biometrics>
7. "The FTC Takes Aim at Zoom." December 11, 2020. Available at <http://cyber.pabar.org/index.php/2020/12/11/the-ftc-takes-aim-at-zoom/>
8. "First City in Pennsylvania Passes Ordinance on Controversial Facial Recognition Technologies." October 26, 2020. Available at <http://cyber.pabar.org/index.php/2020/10/26/first-city-in-pennsylvania-passes-ordinance-on-controversial-facial-recognition-technologies>
9. "A Dramatic Expansion of Biometrics Proposed by Department of Homeland Security," September 22, 2020. Available at <http://cyber.pabar.org/index.php/2020/09/22/a-dramatic-expansion-of-biometrics-proposed-by-department-of-homeland-security/>
10. "Emerging COVID-19 Exposure Notification Technology, Data Privacy, and Cybersecurity Issues," June 1, 2020. Available at <http://cyber.pabar.org/index.php/2020/06/01/emerging-covid-19-exposure-notification-technology-data-privacy-and-cybersecurity-issues/>
11. "FTC Undertakes 10-Year Review of Health Breach Notification Rule, Seeks Public Comments." May 19, 2020. Available at <http://cyber.pabar.org/index.php/2020/05/19/ftc-undertakes-10-year-review-of-health-breach-notification-rule-seeks-public-comments/>

Dec 2011 – 2018      Genomics Law Report. <http://www.genomicslawreport.com/index.php/author/wagjen/>  
 Contributing Editor, May 2013-December 2018

1. "A Constitutional Challenge to Alaska's Genetic Privacy Statute." July 18, 2017
2. "Keeping an Eye on 'Perceived Disability' Litigation in California: Chadam v. Palo Alto Unified School District." May 2, 2017
3. "Disputes continue over foundational patents for gene editing." April 18, 2017
4. "An Update on Chadam v. Palo Alto Unified School District." January 24, 2017
5. "FDA Issues Guidance for Next Generation Sequencing," August 4, 2016
6. "The EEOC's Final Rule on GINA and Employer-Sponsored Wellness Programs to Take Effect This Month" July 14, 2016
7. "Litigating the Accountability of Clinical Genomics Laboratories." May 31, 2016.
8. "Genetic Information as 'perceived disability': Chadam v PAUSD." February 23, 2016
9. "The Patent Dispute Over Gene Editing Technologies: The Broad Institute, Inc. vs. The Regents of the University of California." February 4, 2016
10. "Genetic Discrimination Case Against School District is Appealed to Ninth Circuit." February 2, 2016
11. "EEOC Tries to Harmonize ACA's Promotion of Employer Wellness Programs with GINA's Ban Against Employer Access to Genetic Information of Employees and Employees' Family Members." January 25, 2016
12. "Australia revokes Myriad's three patent claims on isolated BRCA1 DNA." October 19, 2015.
13. "Groundhog Day: FDA and Proposed Oversight of LDTs." January 22, 2015.
14. "Long Awaited Announcement from the FDA on LDTs." August 1, 2014.
15. "FTC Takes Action to Protect Consumers from False Genetic Advertising Claims." July 3, 2014.
16. "Property Rights and the Human Body." June 11, 2014.
17. "Judicial and Legislative Reactions in California to Maryland v. King, 133 S. Ct. 158 (2013)" Mar. 31, 2014.
18. "What does the FDA Approval of the MiSeqDx Platform Mean for DTC" Dec. 31, 2013.
19. "Update: 23andMe Appeals FDA." Dec. 6, 2013.
20. "Troubles Keep Coming for 23andMe." Dec. 5, 2013.
21. "The Sky is Falling on Personal Genomics! Oh, nevermind. It's just another cease & desist letter from the FDA to 23andMe. Dec. 3, 2013.
22. "Revisions to the Ethical Standards for Research," Nov. 1, 2013.
23. "Genomics Research Ethics: Special Rules for HeLa Cells," Aug. 27, 2013.
24. "Ninth Circuit Orders Rehearing of Haskell v. Harris," Aug. 19, 2013.
25. "Approved North Carolina State Budget Includes Funds to Compensate Sterilization Victims," Aug. 1, 2013.
26. "Looking back at Myriad: A User's Guide." June 19, 2013.
27. "DNA Fingerprinting as Routine Arrest Booking Procedure Upheld as Anticipated," June 10, 2013.
28. "EEOC Files and Settles Its First GINA-based Employment Discrimination Lawsuit on May 7, 2013," May 13, 2013
29. "All Eyes on Maryland v. King: Recapping the Supreme Court Oral Argument." Feb. 27, 2013
30. "ENCODE, CODIS, and the Urgent Need to Focus on What is Scientifically and Legally Relevant to the DNA Fingerprinting Debate." Sept 21, 2012, co-authored with Sara Katsanis.

31. "The Burden of Enforcing GINA: *EEOC v. Nestle* Illustrates One Challenge in Pursuing Genetic Discrimination Claims." June 20, 2012, co-authored with Daniel Vorhaus
32. "Courts in Unsettled Territory Turn to the Map Available: *United States v. Mitchell*." Apr. 2, 2012
33. "On Genetic Rights and States: A Look at South Dakota and Around the U.S.," Mar. 20, 2012, co-authored with Daniel Vorhaus
34. "Ninth Circuit Issues Long-Awaited Ruling on Constitutionality of DNA Fingerprinting." Feb. 27, 2012
35. "Minnesota the Latest to Weigh in on DNA Fingerprinting of Arrestees," Feb. 22, 2012
36. "Alabama's 'Genetic Information Privacy Act' & the Ongoing Need for Personal Genomics Leadership," Feb. 16, 2012, co-authored with Daniel Vorhaus
37. "North Carolina One Step Closer to Compensating Victims of its Eugenics Program," Feb. 13, 2012
38. "Pennsylvania Joins Growing List of States to License Genetic Counselors," Feb. 6, 2012
39. "Pennsylvania Seeks Expansion of its Forensic DNA Database," Jan. 9, 2012
40. "A New Law to Raise GINA's Floor in California," Dec. 7, 2011

Fall 2018	ASHG Science and Law mentor at the Career Paths in Genetics Reception at ASHG 2018. October 19, 2018. San Diego.		
Spring 2016	Resident & Fellow Scholarship Days, Volunteer Judge of Oral Presentations, May 5, 2016		
2015, 2016, 2017, 2018, 2022	AAAS Science & Technology Policy Fellowship Program Reviewer/Scorer of Applications for 2016-17, 2018-19, 2019-20, 2023-24 Congressional Fellowship and 2017-18 Health, Education, and Human Services Fellowship.		
Spring 2014	Duke Science & Society Blog, Guest Contributor "Vaping, Slurping, & Spitting: Vexing Regulatory Issues for the FDA." Apr. 7, 2014. Available at <a href="http://scienceandsociety.duke.edu/vaping-slurping-spitting-vexing-regulatory-issues-for-the-fda/">http://scienceandsociety.duke.edu/vaping-slurping-spitting-vexing-regulatory-issues-for-the-fda/</a>		
Feb 2012	6-7 <sup>th</sup> Grade Essay Judge; Centre County Bar Association Civics Essay Contest		
Spring	2009, 2010, 2012, 2013, 2014, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023	PA Bar Association/Young Lawyers Division Statewide High School Mock Trial Competition – Volunteer Juror at District Level	
Spring	2011, 2014, 2015 2016, 2017, 2018	DNA Day Essay Contest; American Society of Human Genetics Volunteer Judge – Round 2 Judge in 2011; Round 1 Judge in 2014-2018	
Spring	2008, 2010	Landlord Rights Seminar. State College Borough.	
Spring	2010	Guest blogger, The Mermaid's Tale, <a href="http://ecodevoevo.blogspot.com/">http://ecodevoevo.blogspot.com/</a> "Enforcing Forced Definitions of Race," Feb. 17, 2010	
Summer	2009	Guest columnist, The Daily Collegian	
Spring	2008	Moot Court Judge; Pennsylvania State University-Dickinson School of Law	
Fall	2004, Fall 2005	Glenn, Mills & Fisher, P.A.	Durham, NC Pro-Bono Project
Fall	2005	J. Anderson Little, Esq.	Chapel Hill, NC Pro-Bono Project
Spring	2004	Immigration Outreach Project	Chapel Hill, NC Pro-Bono Project

## PROFESSIONAL SOCIETIES

IEEE Society on Social Implications of Technology	member 2021-present
Digital Medicine Society	member 2021-present
American Society of Law, Medicine & Ethics	member 2019-present
American Association for the Advancement of Science	member 2009-present
American Society of Human Genetics	member 2008-present

American Association of Biological Anthropologists	member 2008-present
American Association of Anthropological Genetics	member 2007-present
Centre County Bar Association	member 2007-present
Pennsylvania Bar Association	member 2007-present
American Bar Association	member 2004-present
American Constitution Society	member 2004-present

## AWARDS AND RECOGNITION

2021	One of eight women recognized by Geisinger for Women’s History Month (“incredible women who exemplify the same spirit of service, strength, vision and compassion as our founder, Abigail Geisinger”)
2018	Selected member of the Emerge Pennsylvania 2018 Cohort
2016-2017	Selected member of the PBA Bar Leadership Institute
2015	Selected as the 2015-2016 AAAS Judicial Branch Fellow (declined)
2014-2015	AAAS Congressional Science and Engineering Fellowship
2010	William S. Pollitzer Student Travel Award, AAPA
2009	Illinois Biology and Politics Summer Institute NSF Fellow
2008-2009	Graduate Student Travel Grants (four), PSU Dept of Anthropology
2007	Certificate of Merit for highest grade in Privacy Law, Spring 2007, University of North Carolina
2004-2007	Merit-based Scholarship and Dean’s List, University of North Carolina School of Law
2002	Student Marshal, Department of Anthropology, Pennsylvania State University
2002	Nominee for <i>Pigment Cell Research</i> Young Investigator of the Year Award
1998-2002	Phi Kappa Phi Internship Support Grant; Ambassador Award from Schreyer Honors College; Student Enrichment Award from PSU College of Liberal Arts; Scholarship from the Susquehanna Chapter of the Penn State Alumni Association; Memorial scholarship from PSU Class of 1922