NATALIE RAM

University of Maryland Carey School of Law • 500 W. Baltimore Street, Baltimore, MD 21201 nram@law.umaryland.edu • 410-706-5241

ACADEMIC APPOINTMENTS

University of Maryland Carey School of Law, Baltimore, Md., July 2019–present

Professor of Law, July 2020–present

Associate Professor of Law, July 2019–June 2020

Courses: Advanced Bioethics, Civil Procedure, Property

Johns Hopkins University, Baltimore, Md., April 2019–present

Adjunct Faculty, Berman Institute of Bioethics

University of Baltimore School of Law, Baltimore, Md., July 2014–June 2019

Assistant Professor; Associate Director, Center for Medicine & Law

Courses: Civil Procedure, Property, Intellectual Property Survey, Law and Biotechnology

GRANTS

Polygenic Risk Scores in Child and Adolescent Psychiatry: Ethical, Clinical, and Legal implications, National Institutes of Mental Health (R01 grant), Legal Working Group, 2021-2024

Forensic Biobanking, Faculty Scholar in Bioethics, Greenwall Foundation, Principal Investigator, 2018-2021

Fellow in Bioethics and Health Policy, Greenwall Foundation, Principal Investigator, 2009–2010

CLERKSHIPS

Hon. Stephen G. Breyer, U.S. Supreme Court, Washington, D.C., July 2010–July 2011 *Judicial law clerk*

Hon. Guido Calabresi, U.S. Court of Appeals for the Second Circuit, New Haven, Conn., June 2008–June 2009 *Judicial law clerk*

EDUCATION

Yale Law School, New Haven, Conn.

J.D., June 2008

Honors: Margaret Gruter Prize for best paper on law and bioscience

Coker Fellow in Legal Writing and Constitutional Law

Activities: The Yale Law Journal, Articles & Essays Editor

Yale Journal of Health Policy, Law, and Ethics, Articles Editor

Princeton University, Princeton, N.J.

A.B., magna cum laude, public & international affairs, June 2004

Honors: Phi Beta Kappa

Gregory T. Pope '80 Prize for science writing

Thesis: British Policy Respecting Preimplantation Genetic Diagnosis for Tissue Matching

LEGAL EXPERIENCE

Morrison & Foerster LLP, Washington, D.C., November 2011–June 2014 *Associate, Appellate and Supreme Court Litigation Group.*

PROFESSIONAL ACTIVITIES AND BOARD MEMBERSHIPS

Elected member, American Law Institute (2022-present)

Contributing editor, Jotwell (2021-present)

Working Group for Microbiome-Based Diagnostics: Stakeholder Perceptions and Implications for the Regulatory Framework, Univ. of Maryland (2021)

Genetic Genealogy Working Group, Sen. Charles Sydnor, Maryland State Senate (2020-present)

Committee on Science, Technology and Law, National Academies of Sciences, Engineering and Medicine (2020-present)

Smart & Connected Communities Steering Committee, University of Maryland (2020-2024)

Working Group for Genetic Data Sharing in FTLD [Frontotemporal lobar degeneration], Univ. Cal. San Francisco (2020)

Constitutional Protections Advisory Board, Maryland Coordination and Analysis Center (2018-present)

LEGISLATIVE TESTIMONY

Written testimony in support of HB0240, An Act Concerning Criminal Procedure—Forensic Genetic Genealogical DNA Analysis, Searching Regulation, and Oversight, Before the Judiciary Comm., Md. House of Delegates (Feb. 23, 2021)

Written and oral testimony in support of SB0187, An Act Concerning Criminal Procedure—Forensic Genetic Genealogical DNA Analysis, Searching Regulation, and Oversight, Before the Judicial Proceedings Comm., Md. Senate (Feb. 4, 2021)

Legislative briefing regarding HB0030, An Act Concerning Public Safety—DNA Analysis—Search of Data Base, Before the Judiciary Comm., Md. House of Delegates (Nov. 7, 2019)

Written and oral testimony in support of HB0030, An Act Concerning Public Safety—DNA Analysis—Search of Data Base, Before the Judiciary Comm., Md. House of Delegates (Jan. 22, 2019)

LAW REVIEW PUBLICATIONS AND BOOK CHAPTERS

Familial Searches, the Fourth Amendment, and Genomic Control, 96 S. CAL. L. REV. POSTSCRIPT (forthcoming 2023) (with Jacob S. Sherkow & Carl Gunter).

America's Hidden National DNA Database, 100 Texas L. Rev. 1253 (2022).

The Future of Wastewater Monitoring for the Public Health, 56 U. RICH. L. REV. 911 (2022) (with Lance Gable & Jeffrey L. Ram).

Mass Surveillance in the Age of COVID-19, reprinted in PANDEMIC SURVEILLANCE (Margaret Hu, ed.) (Edward Elgar Publ'g 2022) (with David Gray).

Investigative Genetic Genealogy and the Problem of Familial Forensic Identification, in Consumer Genetic Technologies: Ethical and Legal Considerations (I. Glenn Cohen, Nita Farahany, Henry T. Greely, and Carmel Shachar, eds.) (Cambridge Univ. Press 2021) (book chapter).

Incomplete Commodification in the United States, in OXFORD HANDBOOK OF COMPARATIVE HEALTH LAW (David Orentlicher & Tamara K. Hervey, eds.) (Oxford Univ. Press 2021) (invited book chapter).

Legal and Ethical Issues of Wastewater SARS-CoV-2 Monitoring for COVID-19 Surveillance, 7 J. L. & BIOSCIENCES, at Isaa039 (2020) (with Lance Gable & Jeffrey L. Ram) (peer reviewed).

Mass Surveillance in the Age of COVID-19, 7 J. L. & BIOSCIENCES, at Isaa023 (2020) (with David Gray) (peer reviewed).

Genetic Privacy After Carpenter, 105 VA. L. REV. 1357 (2019).

Innovating Criminal Justice, 112 Nw. U. L. REV. 659 (2018).

Science as Speech, 102 IOWA L. REV. 1187 (2017).

Inside Inside the Cell, 3 J. L. & BIOSCIENCES 426 (2016) (book review) (invited).

Body Banking from the Bench to the Bedside, 129 HARV. L. REV. 491 (2015) (book review).

DNA by the Entirety, 115 COLUM. L. REV. 873 (2015).

Fortuity and Forensic Familial Identification, 63 STAN. L. REV. 751 (2011) (cited in five amicus briefs in Maryland v. King (2013)).

The Mismatch Between Probable Cause and Partial Matching, 118 YALE L.J. POCKET PART 182 (2009).

Assigning Rights and Protecting Interests: Constructing Ethical and Efficient Legal Rights in Human Tissue Research, 23 HARV. J. LAW & TECH. 119 (2009).

Tiered Consent and the Tyranny of Choice, 48 JURIMETRICS J. 253 (2008) (peer reviewed).

Regulating Consent to Human Embryo Research: A Critique of Health Canada's Proposal, 14 Health L. Rev. 19 (2005).

PEER-REVIEWED PUBLICATIONS

Get Law Enforcement Out of Biospecimen Authentication, 376 SCIENCE 1274 (2022) (with Debra J.H. Mathews).

• Response to Letter, 377 SCIENCE 827 (2022) (with Debra J.H. Mathews).

Regulating Forensic Genetic Genealogy, 373 SCIENCE 1444 (2021) (with Erin E. Murphy and Sonia M. Suter).

Forensic Genealogy and the Power of Defaults, 37 NATURE BIOTECH. 707 (2019) (with Jessica L. Roberts).

Genealogy Databases and the Future of Criminal Investigation, 360 SCIENCE 1078 (2018) (with Christi J. Guerrini and Amy L. McGuire).

Compensation for Gamete Donation: The Analogy with Jury Duty, 16 CAMBRIDGE Q. HEALTHCARE ETHICS 35 (2007) (with Lynette Reid & R. Blake Brown).

Britain's New Preimplantation Tissue-Typing Policy: An Ethical Defence, 32 J. MED. ETHICS 278 (2006).

Eligibility of Cryopreserved Human Embryos for Stem Cell Research in Canada, 27 J. OBSTETRICS & GYNAECOLOGY CAN. 949 (2005) (with Françoise Baylis).

Cryopreserved Human Embryos in Canada and Their Availability for Research, 25 J. OBSTETRICS & GYNAECOLOGY CAN. 1026 (2003) (with Francoise Baylis, Brenda Beagan & Josephine Johnston).

SHORTER WORKS

Letter: Ethical and Legal Wastewater Surveillance, SCIENCE, Feb. 17, 2023 (with William Shuster, Lance Gable & Jeffrey L. Ram).

Privacy Depends, JOTWELL, Aug. 11, 2022, https://cyber.jotwell.com/privacy-depends/ (reviewing Solon Barocas & Karen Levy, *Privacy Dependencies*, 95 WASH. L. REV. 555 (2020)).

Maryland Can Be a Model for Regulating Law Enforcement Use of Genetic Databases, WASH. POST, June 18, 2021, https://www.washingtonpost.com/opinions/2021/06/18/maryland-genetic-databases-law-enforcement-regulation-model/ (with Sonia M. Suter & Erin E. Murphy).

Gauging Genetic Privacy, JOTWELL, June 10, 2021, https://cyber.jotwell.com/gauging-genetic-privacy/ (reviewing James W. Hazel & Christopher Slobogin, "World of Difference"? Law Enforcement, Genetic Data, and the Fourth Amendment, 70 DUKE L.J. 705 (2021)).

Investigative Genetic Genealogy and the Future of Genetic Privacy, SCITECH LAWYER (ABA JOURNAL), Summer 2020, at 18.

DNA Collection at the Border Threatens the Privacy of All Americans, N.Y. TIMES, Jan. 23, 2020, https://www.nytimes.com/2020/01/23/opinion/dna-collection-border-privacy.html (with Daniel I. Morales & Jessica L. Roberts) (also in print on Jan. 24, 2020 at A25).

The Genealogy Site That Helped Catch the Golden State Killer Is Grappling With Privacy, SLATE, May 29, 2019, https://slate.com/technology/2019/05/gedmatch-dna-privacy-update-law-enforcement-genetic-geneology-searches.html.

The U.S. May Soon Have a De Facto National DNA Database, SLATE, Mar. 19, 2019, https://slate.com/technology/2019/03/national-dna-database-law-enforcement-genetic-genealogy.html.

One Shot Learning in AI Innovation, AI PULSE, Jan. 25, 2019, https://aipulse.org/one-shot-learning-in-ai-innovation/?pdf=142.

Incidental Informants: Police Can Use Genealogy Databases to Help Identify Criminal Relatives—But Should They?, Md. Bar J., July 2018, at 8.

DNA Testing on Separated Migrant Families Needs Robust Privacy Safeguards, SLATE, July 11, 2018, https://slate.com/technology/2018/07/dna-tests-on-separated-migrant-families-need-clear-privacy-safeguards.html.

You Can't Hide Your Genes, SLATE, May 4, 2018, https://slate.com/technology/2018/05/consumer-genetic-databases-arent-the-only-side-door-for-police-to-get-your-dna.html.

Review of Kara W. Swanson: Banking on the Body: The Market in Blood, Milk, and Sperm in Modern America, 33 Monash Bioethics Rev. 396 (2015).

O Brother, Where Art Thou?, SLATE, June 14, 2010, http://www.slate.com/id/2256966/ (with Michael Seringhaus).

DNA Confidential, SCI. PROGRESS, Oct. 2009, http://www.scienceprogress.org/wp-content/uploads/2009/10/dna_matching.pdf.

Britain Permits Controversial Genetic Test, HASTINGS CENTER REP., Sept. 2004, back cover, http://ssrn.com/abstract=2298335.

CONFERENCE AND INVITED PRESENTATIONS

Legal and Ethical Considerations for Wastewater Surveillance, National Wastewater Surveillance System Utilities Community of Practice (Zoom), invited presenter, February 2023

The Risks of Law Enforcement Access in Newborn Screening, Association for Public Health Laboratories Newborn Screening Symposium, Tacoma, Washington, invited presenter, October 2022

Consumer Privacy and Third-Party Use of Data, Microbiome Testing Working Group, University of Maryland Carey School of Law, invited presenter, October 2022

Law and Ethics of Psychiatric Polygenic Risk Scores, ASLME Health Law Professors Conference, Arizona State University School of Law, presenter, June 2022

The Role of Empirical Information in IGG Policymaking: A Case Study, ELSIcon 2022, (Zoom), presenter, May 2022

Constitutional Confidentiality, Stanford Center for Law and the Biosciences BioLaw Conference (Zoom), presenter, May 2022

Consumer Genetics After Carpenter, Questioning Forensics Conference (Zoom), invited presenter, April 2022

The Future of Wastewater Monitoring for the Public Health, Richmond Law Review Symposium (Zoom), invited presenter, March 2022

Genetic Privacy and Genetic Relatives, National Institute of Standards and Technology (NIST) National Cybersecurity Center of Excellence (NCCoE) Workshop on the Cybersecurity of Genomic Data (Zoom), invited presenter, January 2022

Covid-19 and the Risks of Surveillance Infrastructure, Bander Center for Medical Business Ethics, St. Louis University (Zoom), invited presenter, November 2021

Charm City Colloquium, Berman Institute of Bioethics, Johns Hopkins University (Zoom), panel moderator, September 2021

America's Hidden National DNA Database

- Selected Topics in Health Law and Access to Medicines, NYU Law School, invited presenter, February 2022
- Harvard Journal of Law & Technology (Zoom), invited presenter, February 2022
- ASLME Health Law Professors Conference (Zoom), presenter, June 2021
- Law, Health, Technology and Society Workshop (Zoom), University of Haifa, invited presenter, June 2021
- Privacy Law Scholars Conference (Zoom), presenter, May 2021
- Regulation and Innovation in the Biosciences (RIBS) Workshop (Zoom), presenter, May 2021
- Junior-ish faculty workshop, University of Maryland, presenter, April 2021
- Big 10 Speaker Series (Zoom), presenter, March 2021

Genetic Privacy and the Law, Mount Vernon Genealogical Society (Zoom), invited presenter, June 2021

Genetic Privacy and the Law, African American Genealogy Group, Philadelphia (Zoom), invited presenter, May 2021

Pandemic Surveillance: Privacy, Security, and Data Ethics, Duke University, Kenan Institute for Ethics (Zoom), invited panelist, November 2020

Supreme Court Preview, University of Maryland Carey School of Law (Zoom), invited panelist, October 2020

Reflecting on the Life and Legacy of Justice Ginsburg, University of Maryland Carey School of Law (Zoom), invited panelist, September 2020

Privacy Laws & Private Companies: Protecting Genetic Data Processed by Private Companies, at Meeting on Privacy, Genetic Data & Missing Migrants, Berkeley Law School (Zoom), invited panelist, April 2020

CRISPR Regulation: An Uncertain Landscape, at Confronting CRISPR: Scientific, Ethical, Legal and Social Issues on the Path Forward, University of Maryland School of Medicine, invited panelist, January 2020

Emerging Issues of Privacy, Trust, and Societal Benefit from Consumer Genomics, Banbury Center, invited presenter, October 2019

Ethical Considerations in Big Data in Medicine: The Problem of De-Identification, National Academy of Medicine Emerging Leaders Forum, invited panelist, July 2019

Investigative Genetic Genealogy and the Problem of Familial Forensic Identification

- Drexel Law School faculty workshop, invited presenter, January 2020
- Maryland State Bar Association Annual Meeting, invited presenter, June 2019

- ASLME Health Law Professors Conference, Loyola Chicago School of Law, presenter, June 2019
- Privacy Law Scholars Conference, University of California, Berkeley, School of Law, presenter, May 2019
- Consuming Genetics conference, Petrie-Flom Center, Harvard Law School, presenter, May 2019
- Promega Technology Tour, Virginia Department of Forensic Science, invited presentation, April 2019
- Forensic Science Colloquium, Duke Law School, invited presented, March 2019

Genetic Privacy After Carpenter

- University of Houston Law Center faculty workshop, invited presenter, February 2019
- Health Law Workshop, Harvard Law School, invited presenter, October 2018
- University of Maryland/University of Baltimore junior faculty workshop, presenter, September 2018
- Wiet Life Science law scholars conference, Loyola Chicago School of Law, presenter, September 2018

Forensic Biobanking

- ASLME Health Law Professors Conference, Case Western Reserve University School of Law, presenter, June 2018
- Stanford Center for Law and the Biosciences BioLaw Conference, presenter, March 2018
- University of Baltimore faculty RED talks, presenter, February 2018

Incomplete Commodification

 ASLME Health Law Professors Conference, Case Western Reserve University School of Law, presenter, June 2018

One Shot Learning

 AI in Strategic Context: Development Paths, Impacts, and Governance, UCLA School of Law, invited presenter, May 2018

Innovating Criminal Justice

- Trade Secrets and Algorithmic Systems, New York University School of Law, invited presenter, November 2018
- Wiet Life Science law scholars conference, Loyola Chicago School of Law, presenter, October 2017
- University of Maryland/University of Baltimore junior faculty workshop, presenter, September 2017
- ASLME Health Law Professors Conference, Georgia State University School of Law, presenter, June 2017
- Stanford Center for Law and the Biosciences BioLaw Conference, presenter, April 2017

• University of Baltimore faculty RED talks, presenter, February 2017

Inside the Black Box: How Secret Algorithms Control Health, Finance, and Justice, Baltimore Legal Hackers, invited panelist, October 2017

Death and Dying in Maryland Law, University of Baltimore School of Law, moderator, February 2017

Predicting Health Law, at *The Presidency According to Trump*, University of Baltimore School of Law, invited panelist, January 2017

Science as Speech

- Marquette University Junior Scholars Works-in-Progress Conference, invited presenter, September 2016
- Northern Kentucky University Faculty Workshop, invited presenter, March 2016

New Uses in DNA Forensics, Greenwall Reunion Workshop, discussant, December 2016

Love and Death in the Supreme Court, University of Maryland Carey School of Law, invited panelist, September 2015

Body Banking from the Bench to the Bedside

- Greenwall Reunion Workshop, discussant, May 2015
- University of Maryland/University of Baltimore junior faculty workshop, presenter, March 2015
- Dalhousie University Biobanking Eggs and Embryos for Research, invited presenter, December 2014

Supreme Court Preview, University of Baltimore School of Law, invited panelist, September 2014

PRESS

Quoted in Emily Mullin, *Police Used a Baby's DNA to Investigate its Father for a Crime*, WIRED, Aug. 15, 2022, https://www.wired.com/story/police-used-a-babys-dna-to-investigate-its-father-for-a-crime/.

Quoted in Marco Poggio, *NJ Suit Shines Light On Police Use Of Infant Blood In Probes*, LAW360, July 27, 2022, https://www.law360.com/pulse/articles/1512695/nj-suit-shines-light-on-police-use-of-infant-blood-in-probes.

Quoted in Crystal Grant, *Police Are Using Newborn Genetic Screening to Search for Suspects, Threatening Privacy and Public Health*, ACLU NEWS, July 26, 2022, https://www.aclu.org/news/privacy-technology/police-are-using-newborn-genetic-screening.

Quoted in Aaron Schaffer, *Hacks of genetic firms pose risk to patients, experts say*, WASH. Post: Cybersecurity 202, July 21, 2022, https://www.washingtonpost.com/politics/2022/07/21/hacks-genetic-firms-pose-risk-patients-experts-say/.

Quoted in Elizabeth Wadas & Andrew McMunn, *Authorities Solve 13-Year-Old Cold Case Using New DNA Technology, Sparking Privacy Concerns*, CLEVELAND 19 NEWS, May 25, 2022, https://www.cleveland19.com/2022/05/25/authorities-solve-13-year-old-cold-case-using-new-dna-technology-sparking-privacy-concerns/.

Quoted in Kashmir Hill, *The True Crime-Obsessed Philanthropists Paying to Catch Killers*, N.Y. TIMES, Mar. 27, 2022, https://www.nytimes.com/2022/03/27/technology/dna-tests-crime-solving.html.

Quoted in Stephanie K. Baer, We Asked Police Labs If They'd Use Sexual Assault Victims' DNA to Implicate Them in Crimes. One Agency Wouldn't Rule It Out., BUZZFEED NEWS, Feb. 18, 2022, https://www.buzzfeednews.com/article/skbaer/san-francisco-police-sexual-assault-victims-dna.

Quoted in Michael S. Rosenwald, *Woodlawn Jane Doe: How Scraps of DNA and a Genealogy Website Solved a 45-Year-Old Mystery*, WASH. POST, Oct. 2, 2021, https://www.washingtonpost.com/history/2021/10/02/woodlawn-jane-doe-genealogy-dna/.

Quoted in Kjerstin Johnson & Alexandra Beguez, *It's All Relatives: DNA Consumer Testing Sites May Mean the End of Family Secrets*, THE NIB, Aug. 2021 (posted online Dec. 13, 2021), https://thenib.com/its-all-relatives/.

Quoted in Megan Molteni, *Sewage Sleuths Helped an Arizona Town Beat Back Covid-19*. *For Wastewater Epidemiology, That's Just the Start*, STAT, June 16, 2021, https://www.statnews.com/2021/06/16/sewage-sleuths-helped-an-arizona-town-beat-back-covid-19-for-wastewater-epidemiology-thats-just-the-start/.

Quoted in Tim Prudente, *New Legislation Limits Police Use of Genealogy Websites*, WASH. POST, June 8, 2021, at B6, https://www.washingtonpost.com/local/legal-issues/maryland-limit-police-genealogy-websites/2021/06/07/179b5a3c-c7a2-11eb-a11b-6c6191ccd599_story.html.

Quoted in Tim Prudente, *Maryland Among First in U.S. to Limit How Police Use Genealogy Websites*, BALTIMORE SUN, June 7, 2021, https://www.baltimoresun.com/news/crime/bs-md-cr-police-genealogy-searches-20210607-4ptcdnpzpbbuja3fmdu7nmdxo4-story.html.

Quoted in Virginia Hughes, *Two New Laws Restrict Police Use of DNA Search Method*, N.Y. TIMES, May 31, 2021, https://www.nytimes.com/2021/05/31/science/dna-police-laws.html.

Interviewed on *Family Tree DNA Data Crack Cold Cases*, BBC News WORLD SERVICE, May 31, 2021, https://www.bbc.co.uk/programmes/w3ct1j4r.

Quoted in Megan Molteni, *Cops Are Getting a New Tool for Family-Tree Sleuthing*, WIRED, Dec. 16, 2020, https://www.wired.com/story/cops-are-getting-a-new-tool-for-family-tree-sleuthing/.

Quoted in Brishette Mendoza & Amadou Diallo, *The Best DNA Testing Kit*, WIRECUTTER (N.Y. TIMES), Aug. 20, 2020, https://www.nytimes.com/wirecutter/reviews/best-dna-test/.

Quoted in Lindsey Van Ness, *DNA Databases Are Boon to Police But Menace to Privacy, Critics Say*, STATELINE, Feb. 20, 2020, https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2020/02/20/dna-databases-are-boon-to-police-but-menace-to-privacy-critics-say.

Interviewed on *Collecting DNA at the Border: A Thin Line Between Security and Privacy*, IMMIGRATION NERDS, Feb. 13, 2020, https://player.captivate.fm/b674ff8d-51a8-4a4f-b2e9-e7834b1346cb.

Quoted in Peter Aldhous, *A Court Tried To Force Ancestry.com To Open Up Its DNA Database To Police. The Company Said No.*, BUZZFEED NEWS, Feb. 3, 2020, https://www.buzzfeednews.com/article/peteraldhous/ancestry-dna-database-search-warrant.

Quoted in Ed Cara, *A Controversial DNA Database Used to Solve Crimes Has Gone Commercial*, GIZMODO, Dec. 10, 2019, https://gizmodo.com/a-controversial-dna-database-used-to-solve-crimes-has-g-1840341074.

Quoted in Aaron Mak, We May Be Entering a New Era for Using Consumer Genetic Information to Solve Crime, SLATE, Nov. 8, 2019, https://slate.com/technology/2019/11/gedmatch-warrant-dna-ancestry-23andme.html.

Interviewed in Jocelyn Kaiser, *A Judge Said Police Can Search the DNA of 1 Million Americans Without Their Consent. What's Next?*, SCIENCE, Nov. 7, 2019, https://www.sciencemag.org/news/2019/11/judge-said-police-can-search-dna-millions-americans-without-their-consent-what-s-next.

Quoted in Jack Herrera, *The Government's Plan to Collect Migrant DNA Could Send Us Down a Slippery Slope for Surveillance*, POPULAR SCIENCE, Oct. 22, 2019, https://www.popsci.com/ICE-detainment-camp-DNA-test-CODIS/.

Interviewed on *Catch a Killer with Your DNA*, REVEAL, Oct. 5, 2019, https://www.revealnews.org/episodes/catch-a-killer-with-your-dna/.

Quoted in Jocelyn Kaiser, *New Federal Rules Limit Police Searches of Family Tree DNA Databases*, SCIENCE, Sept. 25, 2019, https://www.sciencemag.org/news/2019/09/new-federal-rules-limit-police-searches-family-tree-dna-databases.

Cited in Heather Murphy, *Why This Scientist Keeps Receiving Packages of Serial Killers' Hair*, N.Y. TIMES, Sept. 16, 2019, at A1, *available at* https://www.nytimes.com/2019/09/16/science/hair-dna-murder.html.

Quoted in Amy Dockser Marcus, *Customers Handed Over Their DNA*. *The Company Let the FBI Take a Look*., WALL St. J., Aug. 22, 2019, at A1, *available at* https://www.wsj.com/articles/customers-handed-over-their-dna-the-company-let-the-fbi-take-a-look-11566491162.

Interviewed on *Briefly 3.3 – Genealogy Databases and the Fourth Amendment*, U. CHI. L. REV. ONLINE (July 17, 2019), http://bit.ly/2LYSoxd.

Quoted in Rachel Weiner, *Alexandria Rape Suspect Challenging DNA Search Used to Crack Case*, WASH. POST, June 10, 2019, https://www.washingtonpost.com/local/public-safety/alexandria-rape-suspect-challenging-dna-search-used-to-crack-case/2019/06/10/24bd0e34-87a5-11e9-a870-b9c411dc4312_story.html.

Interviewed on *The At-Home DNA Test Craze Is Putting Us All at Risk*, VERGE SCI., Apr. 16, 2019, https://www.youtube.com/watch?v=7q8Oa97a04g.

Quoted in Mary Lynn Smith, *Should Police Turn to Genealogy Sites to Catch a Long-Sought Killer?*, MINNEAPOLIS STAR TRIB., Feb. 24, 2019, http://www.startribune.com/should-genealogy-sites-be-used-to-catch-a-killer/506274462/.

Quoted in Natalie Jones, *Bill Seeks to Prohibit Using DNA Databases to Solve Crime*, ASSOC. PRESS, Feb. 20, 2019, https://www.apnews.com/ddfa055f09e842bdbbbd38c2fba74a1a (reprinted in, inter alia, *Baltimore Sun*, *Washington Post*, and *WTOP.com*).

Quoted in Salvador Hernandez, *One Of The Biggest At-Home DNA Testing Companies Is Working With The FBI*, BUZZFEED NEWS, Jan. 31, 2019, https://www.buzzfeednews.com/article/salvadorhernandez/family-tree-dna-fbi-investigative-genealogy-privacy.

Quoted in Bryan P. Sears, *Lawmakers Weigh Extending Md. Restrictions on Police Use of DNA Databases*, DAILY RECORD, Jan. 22, 2019, https://thedailyrecord.com/2019/01/22/lawmakers-weigh-extending-md-ban-on-police-use-of-dna-databases/.

Quoted in Erika Check Hayden, *Genetics Extends the Long Arm of the Law*, KNOWABLE MAG., Jan. 18, 2019, https://www.knowablemagazine.org/article/technology/2019/genetics-extends-long-arm-law.

Interviewed on *After Comatose Woman Gives Birth, Police Test Worker DNA*, SMERCONISH (CNN), Jan. 12, 2019, https://www.cnn.com/videos/tv/2019/01/12/comatose-woman-gives-birth-police-test-worker-dna.cnn.

Interviewed on *If You Give Away Your DNA, Who Else Can Access It?*, GOOD LAW/BAD LAW (Dec. 14, 2018), https://www.goodlawbadlawpodcast.com/podcasepisodes/2018/12/14/good-law-bad-law-111-if-you-give-away-your-dna-who-else-can-access-it-w-natalie-ram.

Interviewed on Joy Lepola & Paul McGrew, *Family Trees Grow into Clues to Solve Crime*, Fox45 NEWS, Nov. 20, 2018, https://foxbaltimore.com/features/operation-crime-justice/family-trees-grow-into-clues-to-solve-crime.

Quoted in Nsikan Akpan, *DNA Ancestry Searches Can Now Identify Most White Americans*. *Here's Why That's Legally Questionable*, PBS NEWS HOUR, Oct. 12, 2018, https://www.pbs.org/newshour/science/dna-ancestry-searches-can-now-identify-most-white-americans-heres-why-thats-legally-questionable.

Quoted in Ashley Yeager, *Technique to Track Golden State Killer Suspect Could Find You Too*, THE SCIENTIST, Oct. 11, 2018, https://www.the-scientist.com/news-opinion/technique-to-track-golden-state-killer-suspect-could-find-you-too-64924.

Quoted in Jocelyn Kaiser, We Will Find You: DNA Search Used to Nab Golden State Killer Can Home in on About 60% of White Americans, SCIENCE, Oct. 11, 2018, https://www.sciencemag.org/news/2018/10/we-will-find-you-dna-search-used-nab-golden-state-killer-can-home-about-60-white.

Quoted in Chelsea Whyte, *Police Can Now Use Millions More People's DNA to Find Criminals*, NEW SCIENTIST, Oct. 11, 2018, at https://www.newscientist.com/article/2182348-police-can-now-use-millions-more-peoples-dna-to-find-criminals/.

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ACADEMIC SERVICE

Peer Reviewer

- Columbia Law Review
- Yale Journal of Health Policy, Law, and Ethics
- Journal of Law & the Biosciences
- Journal of Law, Medicine & Ethics
- PLoS One
- Nature Ecology & Evolution
- NPJ Digital Medicine
- Journal of Personalized Medicine

University of Maryland

Professional Affiliations

• University of Maryland Law and Health Care Program

Law School Committees

- Chair, Appointments Committee (2021-2022)
- Clerkship Committee (2019-2021, 2022-2023)
- Chair, Liaison Committee, Promotions Committee (2020-2021)
- Promotions Committee, Subcommittee on COVID-19 response (2020)

Activities

• Guest lecturer and judge, McDonogh High School moot court program

BAR ADMISSIONS

State of Maryland (2010), District of Columbia (2012, inactive), U.S. Supreme Court (2014), U.S. Court of Appeals for the Second Circuit (2012), U.S. Court of Appeals for the Ninth Circuit (2011), U.S. Court of Appeals for the Federal Circuit (2011)