Curriculum Vitae

Sara Chandros Hull, PhD 10 Center Drive, Suite 1C118 National Institutes of Health Bethesda, MD 20892-1156 E-mail: shull@mail.nih.gov

CURRENT POSITIONS

2019-present Chair

NIH Intramural Institutional Review Board

2016-present Associate Investigator

NHGRI, NIH

2004-present Director

Bioethics Core, Office of the Clinical Director

National Human Genome Research Institute (NHGRI), NIH

2004-present Adjunct Assistant Professor

Johns Hopkins Bloomberg School of Public Health

Department of Health, Behavior, and Society, Baltimore, MD

2003-present Faculty

Section on the Ethics of Genetics and Emerging Technologies

NIH IRB Internship Program Director

Department of Bioethics, Clinical Center, NIH, Bethesda, MD

EDUCATION

Ph.D., 1999

Program in Law, Ethics, and Health Department of Health Policy and Management Johns Hopkins School of Public Health, Baltimore, MD

B.A., 1993

Department of Biology

Brandeis University, Waltham, MA

PREVIOUS POSITIONS

2003-2005 Associate Investigator

Social and Behavioral Research Branch, NHGRI, NIH

2000-2003 Bioethicist

Bioethics Research Section, Medical Genetics Branch NHGRI, NIH

1999-2000 Bioethicist

Office of Bioethics and Special Populations Research Office of the Clinical Director, NHGRI, NIH

1999-2003 Special Expert

Section on Ethics and Genetics, Department of Clinical Bioethics, Clinical Center, NIH

1995-1999 Project Director

"Privacy, Confidentiality, and Health Insurance" Johns Hopkins Bioethics Institute, Baltimore, MD

1994-1995 Research Associate

Advisory Committee on Human Radiation Experiments, Washington, DC

1994 Research Assistant

"Societal Responses to the Reproductive Decisions of HIV-Infected Women," Johns Hopkins School of Public Health, Baltimore, MD

ACTIVE BOARDS AND OTHER POSITIONS

Since 2020 Co-Chair

IRB Working Group on Genomic Research Results, NIH

Since 2020 Member

Sub-Committee on Harmonizing NIH Informed Consent Language Options for Broad Data Sharing, EAWG-OSP, NIH

Since 2014 Member

NHGRI Genomic Data Sharing Policy Governance Committee

Since 2013 Member

Observational Safety Monitoring Board, Pediatric Cardiac Genomics Consortium, Bench-to-Bassinet Program, NHLBI, NIH

Since 2011 Member

Ethics Working Party, International Stem Cell Forum

Since 2011 Member

Administrative Review Committee (for Research with hESCs), NIH

Since 2003 Member

Ethics Committee, Clinical Center, NIH

PAST BOARDS AND OTHER POSITIONS

2018-2019 Co-Chair

NIH General Medicine IRB Panel #1

2017-2019 Member

Core Conference Planning Committee

Public Responsibility in Medicine and Research (PRIM&R)

2016-2019 Member

Exceptions Subcommittee, NIH Single IRB Policy Implementation

Committee

2014-2018 Chair (member since 2003)

NHGRI Institutional Review Board, NIH

2014 Member

NHGRI Genomic Data Sharing Implementation Working Group

2007-2014 Vice-Chair

NHGRI Institutional Review Board, NIH

2013-2014 Member

Trans-NIH Genomic Data Sharing Policy Implementation Committee

2013-2015 Member

External Advisory Group, Autosomal Dominant Polycystic Kidney Disease

(ADPKD) Modifiers Study, NIDDK, NIH

2010-2013 Member

Human Subjects Working Group, NIH Genomic Data Sharing

Policy, NIH

2013-2015 Member

External Advisory Group, Autosomal Dominant Polycystic Kidney Disease

(ADPKD) Modifiers Study, NIDDK, NIH

2012 Co-Chair

Conference on Whole Genome Approaches to Complex Kidney Diseases,

NIDDK, Rockville, MD

2010-2012 Editorial Board Member

American Journal of Bioethics – Primary Research

2007-2010 Bioethics Consultant

Collaboration, Education, Test Translation Program, ORD, NIH

2008-2009 Member

Genetic Information Advisory Group

National Center for Biotechnology Information and DDIR, NIH

2004-2007 Member

Human Tissue/Specimen Banking Working Group

National Cancer Institute/Public Responsibility in Medicine & Research

2003 Member

National Collaborative Network for Ophthalmic Research and Diagnostic

Genotyping, National Eye Institute, NIH

2001 Section Chair

Forum on Bioethics, American Public Health Association

2000 Program Chair

Forum on Bioethics, American Public Health Association Annual Meeting

and Exposition

1997-1998 Member

Committee on Human Research, Johns Hopkins University School of

Public Health

1993-1994 Member

Animal Care/Use Committee, Johns Hopkins School of Public Health

AWARDS AND HONORS

2019 Director's Distinguished NHGRI Group Award, Bioethics Core, "For extraordinary group contributions in advancing the mission of the National

Human Genome Research Institute"

2019 NIH Director's Award "In recognition of the successful formation of the

first consolidated IRB, General Medicine 1, paving the path towards development of a fully centralized Institutional Review Board for the NIH."

2018 NHGRI GREAT Award (Group/Bioethics Core Pilot IRB Transition

Team) "For extraordinary leadership and collegial engagement in support of the NIH IRB reorganization and the successful creation of a new

consolidated pilot IRB"

2018 OD Honor Award (Group) as part of the Pilot Institutional Review Board.

2017	NIH Director's Award (Group) "For exceptional initiative in enhancing the cultural competency and sensitivity of the NIH IRB Internship Program"
2016	NIH Director's Award "For exceptional performance as Director of NHGRI's Bioethics Core and Chair of NHGRI IRB, and a role model for the entire NIH Intramural Research Program"
2016	NIH Director's Award (Group) "For developing the trans-NIH Clinical Center Genomics Opportunity (CCGO) program, which establishes the first NIH Clinical Center genomic test with CLIA-compliant exome sequencing."
2014	NHGRI GREAT Award/Diversity and Community Outreach "For developing an innovative internship program to increase Native American and Alaska Native involvement in the NIH IRB community."
2011	NIH Director's Award "For significant achievements in helping intramural researchers and IRB's navigate the complex ethical terrain associated with next generation sequencing research."
2011	NHGRI GREAT Award/Scientific Medical Achievement "For the significant efforts to help intramural researchers and IRB's navigate the complex ethical terrain associated with next generation sequencing research."
2007	NIH Award of Merit "For outstanding performance in organizing the NHGRI IRB Office"
2006	NIH Award of Merit "For advancing NHGRI's public education and outreach mission"
2001	NIH Award of Merit "For organizing a monthly ethics case conference for NHGRI"
1999-2003	NIH Loan Repayment Program for General Research
1999	NIH Award of Merit "For outstanding effort in establishing & organizing the NHGRI IRB"
1997-1998	Cystic Fibrosis Foundation Student Traineeship Grant
1997-1999	Maryland State Senatorial Scholarship
1989-1993	Justice Louis D. Brandeis Scholar's Program
1989-1993	Evelyn Fraites Scholarship for Liberal Arts

1991-1992 Brandeis University Undergraduate Fellows Program

PUBLICATIONS

BOOKS AND BOOK CHAPTERS

Hull SC and Rodriguez LL (in press) "Return of Results – Secondary Findings," in Liz Bankert, Bruce Gordon, Elisa Hurley, and Sharon Shriver, eds. *IRB Management and Function, 3rd Edition.* Jones and Bartlett Learning.

Hull SC (2017) "Informed Consent for Genetic Research on Rare Diseases: Insights from Empirical Research," in I. Glenn Cohen, H Lynch, and B. Bierer, eds. *Specimen Science: Ethics and Policy Implications*. MIT Press.

Danis M, Largent E, Wendler D, **Hull SC**, Shah S, Millum J, Berkman BE, Grady C (2012) *Research Ethics Consultation: A Case Book*, Oxford University Press.

Berkman BE and **Hull SC** (2012) "Ethical Issues in Genomic Databases," Encyclopedia of Applied Ethics (Second Edition), Elsevier, 488-496.

Taylor HA, **Hull SC**, and Kass NE (2010) "Qualitative Research," in J. Sugarman and DP Sulmasy, eds. *Methods in Medical Ethics, 2nd Edition*, Washington, DC: Georgetown University Press, pp. 193-214.

Hull SC, Taylor HA, and Kass NE (2001) "Qualitative Research," in J. Sugarman and DP Sulmasy, eds. *Methods in Medical Ethics, 1nd Edition*, Washington, DC: Georgetown University Press, pp. 146-168.

JOURNALS

Hull SC (2019) Changing the Conversation about The Ethics of Genomics and Health Disparities Research with American Indian and Alaska Native Communities: A Report from the Field. *Journal of Health Care for the Poor and Underserved*. 30(4) Supplement, 21-26.

Walajahi H, Wilson DR, **Hull SC** (2019) Constructing Identities: The Implications of DTC Ancestry Testing for Tribal Communities. *Genetics in Medicine. Epub ahead of print.*

Hull SC and Schiffenbauer AI (2019) Single IRBs Are Responsible to Ensure Consent Language Effectively Conveys the Local Context. *Am J Bioeth*. 19(4):85-86.

Sullivan HK, Bayefsky M, Wakim P, Huddleston K, Biesecker BB, Hull SC, Berkman BE (2019) Non-Invasive Prenatal Whole Genome Sequencing: Pregnant Women's Views and Preferences. *Obstetrics and Gynecology*. 133(3):525-32.

Splinter K, **Hull SC**, Holm IA, McDonough TL, Wise AL, Ramoni RB; Members of the Undiagnosed Diseases Network (2018) Implementing the Single Institutional Review Board Model: Lessons from the Undiagnosed Diseases Network. *Clin Transl Sci.* 11(1):28-31.

Hull SC, Wilson DR (2017) Beyond Belmont: Ensuring Respect for Al/AN Communities Through Tribal IRBs, Laws, and Policies. *Am J Bioeth*. 17(7):60-62.

Doernberg S and **Hull SC** (2017) Harms of Deception in FMR1 Premutation Genotype-Driven Recruitment. *American Journal of Bioethics*. 17(4):62-63.

Chen S, Berkman BE, **Hull SC** (2017) Recontacting Participants for Expanded Uses of Existing Samples and Data: A Case Study. *Genetics in Medicine*.19(8):883-889.

Bayefsky MJ, White A, Wakim P, **Hull SC**, Wasserman D, Chen S, and Berkman BE (2016) Views of American OB/GYNs on the ethics of prenatal whole genome sequencing. *Prenatal Diagnosis* 36(13):1250-1256.

Koretsky M, Bonham VL, Berkman BE, Kruszka P, Adeyemo A, Muenke M, **Hull SC** (2016) Towards a More Representative Morphology: Clinical and Ethical Considerations for Including Diverse Populations in Diagnostic Genetic Atlases. *Genetics in Medicine* 18(11):1069-74.

Ortiz R, **Hull SC**, Colloca L (2016) Patient Attitudes about the Clinical Use of Placebo: Qualitative Perspectives from a Telephone Survey." *BMJ Open* 6(4):e011012.

Darnell AJ, Austin H, Bluemke DA, Cannon RO 3rd, Fischbeck K, Gahl W, Goldman D, Grady C, Greene MH, Holland SM, **Hull SC**, Porter FD, Resnick D, Rubinstein WS, Biesecker LG (2016) A Clinical Service to Support the return of Secondary Genomic Findings in Human Research. *Am J Hum Genet* 98(3):435-41.

Gliwa C, Yurkiewicz I, Lehmann LS, **Hull SC**, Jones N, Berkman BE (2016) Institutional Review Board Perspectives on Obligations to Disclose Genetic Incidental Findings to Research Participants. *Genetics in Medicine* 18(7):705-11.

Berkman BE, **Hull SC**, Biesecker LG (2015) Scrutinizing the Right Not to Know. *Am J Bioeth* 15(7): 17-19.

Freeman B, Butler K, Bolcic-Jankovic D, Clarridge B, Kennedy C, LeBlanc J, **Hull SC** (2015) Surrogate Receptivity to Participation in Critical Illness Genetic Research. *CHEST.* 147(4):979-988.

Lomax GP, **Hull SC**, Isasi R (2015) The DISCUSS Project: Revised Points to Consider for the Derivation of Induced Pluripotent Stem Cell Lines from Previously Collected Research Specimens. *Stem Cells Transl Med.* 4(2):123-9.

Berkman BE, **Hull SC**, Eckstein L (2014) The unintended implications of blurring the line between research and clinical care in a genomic age. *Per Med.* 11(3):285-95.

Isasi R, Andress PW, Baltz JM, Bredenoord AL, Burton P, Chui IM, **Hull SC**, Jung JW, Kurtz A, Lomax G, Ludwig T, McDonald M, Morris C, Ng HH, Rooke H, Sharma A, Stacey GN, Williams C, Zeng F, Knoppers BM (2014) Identifiability and Privacy in Pluripotent Stem Cell Research. *Cell Stem Cell*. 14(4):427-30.

Berkman BE and **Hull SC** (2014) The "Right Not-to-Know" in the Genomic Era: Time to Break from Tradition? *Am J Bioeth* 14(3):28-31.

Bharti K, Rao M, **Hull SC**, Stroncek D, Brooks B, Feigal E, van Meurs J, Huang C, Miller S (2014) Developing cellular therapies for retinal degenerative diseases. *Investigative Opthalmology & Visual Science* 55(2):1191-202.

Hull SC and Berkman BE (2014) Ahead of the Curve: Grappling with Genomic Incidental Findings in the Clinical Realm. *CHEST* 145(2):226-230.

Shah SK, **Hull SC**, Spinner MA, Berkman BE, Sanchez LA, Abdul-Karim R, Hsu AP, Claypool R, Holland SM (2013) What does the duty to warn require? *Am J Bioeth* 13(1):62-3.

Lomax GP, **Hull SC**, Lowenthal J, Rao M, Isasi R. (2013) The DISCUSS Project: Induced pluripotent stem cell lines from previously collected research biospecimens and informed consent. Points to Consider. *Stem Cells Transl Med* 2(10):727-30.

Lowenthal J and **Hull SC** (2013) Framing the "Right to Withdraw" in the Use of Biospecimens for iPSC Research. *Ethics in Biology, Engineering, and Medicine: An International Journal* 4(1): 1–14.

Hull SC, Colloca L, Avins A, Gordon NP, Somkin CP, Silver P, Kaptchuk TJ, Miller FG (2013) A Survey of Patients' Attitudes about the Use of Placebo Treatments. *BMJ* 347:f3757.

Abdul-Karim R, Berkman BE, Wendler D, Rid A, Khan J, Badgett T, **Hull SC** (2013) Disclosure of incidental findings from next-generation sequencing in pediatric genomic research. *Pediatrics*. 131(3):564-71.

Donley G, **Hull SC**, Berkman BE (2012) Prenatal Whole Genome Sequencing: Just Because We Can, Should We? *Hastings Cent Rep.* 42(4):28-40.

Lowenthal J, Lipnick S, Rao M, **Hull SC** (2012) Specimen Collection for Induced Pluripotent Stem Cell Research: Harmonizing the Approach to Informed Consent. *Stem Cells Transl Med.* 1(5):409-421.

Hull SC, Chan B, Biesecker LG, Berkman BE (2012) Response to Open Peer Commentaries on "Genomic Inheritances: Disclosing Individual Research Results from Whole-Exome Sequencing to Deceased Participants' Relatives." *Am J Bioeth.* 12(12):W9-W10.

Chan B, Fabio F, Eidem H, Biesecker L, **Hull SC**, Berkman BE (2012) Genomic Inheritance: A Case for Disclosing Research Results Deceased Participants' Relatives. *Am J Bioeth*. 12(10):1-8.

Lowenthal J, **Hull SC**, Pearson SD (2012) The Ethics of Early Evidence: Preparing for a Possible Breakthrough in Alzheimer's Disease. *NEJM*. 367(6): 488-90.

Isasi R, Knoppers BM, Andrews PW, Bredenoord A, Colman A, Hin LE, **Hull SC**, Kim OJ, Lomax G, Morris C, Sipp D, Stacey G, Wahlstrom J, Zeng F; International Stem Cell Forum Ethics Working Party (2012) Disclosure and Management of Research Findings in Stem Cell Research and Banking: Policy Statement. *Regen Med*. 7(3):439-48.

Rubinstein YR, Groft S, **Hull SC**, Kaneshiro J, Karp B, Lockhart NC, Marshall PA, Moxley RT, Pollen GB, Miller VR, Schwartz J (2012) Informed Consent Process for Patient Participation in Rare Disease Registries Linked to Biorepositories, *Contemporary Clinical Trials* 33: 5-11.

Tabor HK, Berkman BE, **Hull SC**, Bamshad MJ (2011) Genomics Really Gets Personal: How Exome and Whole Genome Sequencing Challenge the Ethical Framework of Human Genetics Research. *Am J Med Genet A*. 155A(12): 2916-24.

Goldenberg AJ, **Hull SC**, Wilfond BS, Sharp RR (2010) Patient Perspectives on Group Benefits and Harms in Genetic Research. *Public Health Genomics*. 2011;14(3):135-42.

Rubinstein YR, Groft SC, Bartek R, Brown K, Christensen RA, Collier E, Farber A, Farmer J, Ferguson JH, Forrest CB, Lockhart NC, McCurdy KR, Moore H, Pollen GB, Richesson R, Miller VR, **Hull SC**, Vaught J. (2010) Creating a Global Rare Disease Patiaent Registry Linked to a Rare Diseases Biorepository Database: Rare Disease-HUB (RD-HUB) *Contemp Clin Trials*. 31(5):394-404.

Adikes KA, **Hull SC**, Danis M. (2010) The views of low-income employees regarding mandated comprehensive employee benefits for the sake of health. *Soc Work Public Health*. 25(1):102-23.

Sapp JC, **Hull SC**, Duffer S, Zornetzer S, Sutton E, Marteau TM, Biesecker BB. (2010) Ambivalence toward undergoing invasive prenatal testing: an exploration of its origins. *Prenatal Diagnosis*. 30(1):77-82.

Goldenberg AJ, **Hull SC**, Botkin JR, Wilfond BS. (2009) Pediatric Biobanks: Approaching Informed Consent for Continuing Research after Children Grow Up. *J Pediatr*. 155(4):578-83.

Hull SC, Sharp RR, Botkin JR, Brown M, Hughes M, Schwinn D, Sankar P, Sugarman J, Bolcic-Jankovic D, Clarridge BR, Wilfond BS (2008) Patients' Views on Identifiability of Samples and Informed Consent for Genetic Research. *Amer J of Bioeth.* 8(10): 62–70.

Kass NE, Medley AM, Natowicz MR, **Hull SC**, Faden RR, Plantinga L, Gostin LO (2007) Access to Health Insurance: Experiences and Attitudes of those with Genetic versus Non-Genetic Medical Conditions. *Am Journal Med Genet*. 143A(7): 707-717.

Grady C, Horstmann E, Sussman JS, **Hull SC** (2006) The Limits of Disclosure: What Research Subjects Want to Know about Investigator Financial Interests. *Journal of Law, Medicine & Ethics*, 34(3): 592-599.

King NM, Henderson GE, Churchill LR, Davis AM, **Hull SC**, Nelson DK, Parham-Vetter PC, Rothschild BB, Easter MM, Wilfond BS. (2005) Consent Forms and the Therapeutic Misconception: The Example of Gene Transfer Research. *IRB*. 27(1):1-8.

Leib JR, Gollust SE, **Hull SC**, Wilfond BS (2005) Carrier Screening Panels for Ashkenazi Jews: Is More Better? *Genetics In Medicine*. 7(3):185-90.

Hurst S, **Hull SC,** Duval G, Danis M (2005) Physicians' Responses to Resource Constraints. *Archives of Internal Medicine*. 165(6):639-44.

Hurst S, **Hull SC**, Duval G, Danis M (2005) How Physicians Face Ethical Difficulties: a Qualitative Analysis. *Journal of Medical Ethics*. 31(1):7-14.

Hull SC, Glanz K, Steffen A, Wilfond (2004) "Recruitment Approaches for Family Studies: Attitudes of Index Patients and Their Relatives." *IRB: Ethics & Human Research*, 26(4): 12-18.

Hull SC, Gooding H, Klein AP, Warshauer-Baker E, Metosky S, Wilfond BS (2004) Genetic Research Involving Human Biological Materials: A Need to Tailor Consent Forms. *IRB: Ethics & Human Research* 26(3): 1-7

Kass NK, **Hull SC**, Natowicz NR, Faden RR, Plantinga L, Gostin LO, Slutsman J (2004) Medical Privacy and the Disclosure of Personal Medical Information: The Beliefs and Experiences of Those With Genetic and Other Clinical Conditions. *American Journal of Medical Genetics*, 128A: 261-270

Kass NE, Natowicz MR, **Hull SC**, Faden RR, Plantinga L, Gostin LO, Slutsman J (2003) The Use of Medical Records in Research: What Do Patients Want? *Journal of Law, Medicine & Ethics*. 31:429-433

Gollust SE, Wilfond BS, **Hull SC** (2003) Direct-to-Consumer Sales of Genetic Services on the Internet. *Genetics In Medicine*. 5(4):332-337

Plantinga L, Natowicz NR, Kass NE, **Hull SC**, Gostin LO, and Faden RF (2003) "Disclosure, Confidentiality, and Families: Experiences and Attitudes of Those with Genetic *Versus* Non-Genetic Medical Conditions," *American Journal of Medical Genetics*, 119C:51-59.

Gollust S, **Hull SC**, Wilfond B, (2002) "The Limitations of Direct-to-Consumer Advertising for Clinical Genetic Testing," *JAMA*, 288(14): 1762-1766.

Davis A, **Hull SC**, Grady C, Wilfond B, and Henderson G (2002) The Invisible Hand in Clinical Research: The Study Coordinator's Critical Role in Human Subjects Protection. *Journal of Law, Medicine, and Ethics.* 30(3): 411-419.

Hull SC and Prasad K (2001) Reading Between the Lines: Direct-to-Consumer Advertising of Genetic Testing. *Hastings Center Report*, 31(3): 33-35 [reprinted in *Reproductive Health Matters*. 2001;9(18):44-48].

Silverman H, **Hull SC**, and Sugarman J (2001) Variability Among Institutional Review Boards' Decisions Within the Context of a Multi-Center Trial. *Critical Care Medicine*. 29(2):235-241.

Hull SC and Kass NE (2000) Adults with Cystic Fibrosis and (In)fertility: How Has the Health Care System Responded? *Journal of Andrology*. 21(6): 809-813.

PRESENTATIONS

Professional Conferences:

"Complex Institutuional Relationships--Going Beyond the Multi-Site Model," 11/2019, Panelist, PRIM&R Annual Advancing Ethical Research Conference, Boston, MA

"Sovereignty in Research" Moderator, 11/2017
PRIM&R Annual Advancing Ethical Research Conference, San Antonio, TX

"Exceptional Cases and Broad Consent for Genomic Research: What Can Data Tell Us?" as part of a panel discussion on "Changing the Model—Participant Permissions for Broad Data Sharing: Pros, Cons, and Practice in Real Life," 10/16

18th Annual Meeting of the American Society for Bioethics and Humanities, Washington, DC

Moderator, "Preserving a Role for Tribal Review of Research in the Context of Single IRB Policies." 9/16

PRIM&R Webinar (see http://www.primr.org/webinars/sept2016/)

"Overview of Human Subjects Protections," 6/16

Preconference Workshop: IRB Training, 26th National Native Health Research

- Conference, Native Research Network, Cherokee, NC
- "Opportunities and Obstacles in the Commercialization of Induced Pluripotent Stem Cells: Cell Sourcing," 2/14 Annual Meeting of the Association of University Technology Managers, San Francisco, CA
- "Commercialization of Induced Pluripotent Stem Cells: Ethical Considerations," 3/13
 Annual Meeting of the Association of University Technology Managers, San
 Antonio, TX
- "Emerging Issues in WGS: Informed Consent and Beyond," 12/11 PRIM&R Advancing Ethical Research Conference, National Harbor, MD
- "The \$1,000 Genome: Ethical Implications of Whole Exome and Whole Genome Sequencing," 10/10 12th Annual Meeting of the American Society of Bioethics and Humanities Annual Meeting, San Diego, CA
- "Biobanks: Public Concerns about Financial Interests and Policy Options," 10/06 American Society of Bioethics and Humanities Annual Meeting, Denver, CO
- "Hope in Clinical Trials" (moderator), 10/04

 American Society of Bioethics and Humanities Annual Meeting, Philadelphia, PA
- "How Much Should Public Preferences Count in Crafting Public Policy?" 6/04 Bioethics 2004: 16th Annual Bioethics Retreat, Wintergreen, VA
- "Great Expectations: Describing Media Representations of Genetics and their Influence on Consumers' Perceptions" (moderator), 10/02

 American Society for Bioethics and Humanities Annual Meeting, Baltimore, MD
- "The Invisible Hand in Clinical Research: The Study Coordinator's Critical Role in Human Subjects Protection", 10/01
 American Society for Bioethics and Humanities Annual Meeting, Nashville, TN
- "Variations in Informed Consent Practices for Genetic Research," 10/01 American Society of Human Genetics Annual Meeting, San Diego, CA
- "Reproductive Experiences and Plans of Adults with Sickle Cell Disease and Cystic Fibrosis: A Qualitative Study," 11/98

 American Public Health Association Annual Meeting, Washington, DC
- "Reproductive Decision-Making & Counseling of Adults with Cystic Fibrosis & Sickle Cell Disease," 11/97

 American Public Health Association 125th Annual Meeting, Indianapolis, IN

- "Electronic Mailing Lists and Research Ethics: The Case of an Electronic Cystic Fibrosis Discussion Group," 11/97 Joint Meeting of the American Association of Bioethics, Society for Bioethics Consultation, and Society for Health and Human Values, Baltimore, MD
- "Reproduction and Adults with Genetic Conditions: Perspectives of Adults with Cystic Fibrosis and Sickle Cell Disease and Their Health Care Providers," 11/97 Joint Meeting of the American Association of Bioethics, Society for Bioethics Consultation, and Society for Health and Human Values (Baltimore, MD)

Invited Seminars and Workshops:

- "Ethics of Ancestry Testing in Cancer Clinical Research" 10/1/2019 ENRICH Forum, National Cancer Institute, Rockville, MD
- "Invited Plenary: The Unnatural Causes of Health Inequalities and Inequity," 1/24/2019
 Second Conference on Bioethics Issues in Minority Health and Health Disparities
 Research, U54 Morehouse School of Medicine/Tuskegee University/University of
 Alabama at Birmingham Cancer Research Partnership, Opelika, AL
- "NIH Data Sharing Policies: Honoring the Exceptions and Alterantives," 7/2018 Alaska Native Genomics Research Workshop, Southcentral Foundation, Anchorage, AK
- "Bioethics and Research Regulation: The Evolution of Human Subjects Protections in the U.S." 7/2018 Educational Session, Alaska Native Tribal Health Corporation, Anchorage, AK
- "The Changing Landscape of IRBs: From Barbarians to All of Us" 10/2017
 Annual NHGRI Symposium, NIH
- "The Ethics of Genetic Research with Stored Samples," 9/2016, 9/2017 NHGRI International Summit in Human Genetics and Genomics, NIH
- "NIH sIRB and GDS Policies: Honoring Exceptions, Limitations, & Alternatives" 9/2017 Tribal Advisory Committee Meeting, NIH
- "IRB Review and Approval of Research, Including Research with Tribal Populations" 2/2017
 Consultation with Tribal Nations, NIH
- "The IRB's Role in Risk Determinations for Genomic Research IDEs," 6/16 NHGRI IDEs and Genomics Workshop, Rockville, MD
- "The Ethics of Research with Human Participants: Tuskegee and Today," 5/16

- Wheaton High School Biomedical Academy, Wheaton, MD
- "On Becoming the Central IRB of Record for a Multi-Site Study: Opportunities, Challenges, and Lessons Learned," 4/16
 Protocol Navigation Training Program, NIH
- "Ethical Review of Research with Tribal Communities: NIH Training Opportunities," 2/16
 Tribal Consultation Advisory Committee, NIH
- "Informed Consent for Genetic Research on Rare Diseases: Insights from Empirical Research" 11/15
 Specimen Science: Ethics and Policy Implications, The Petrie-Flom Center for Health Law Policy, Biotechnology, and Bioethics at Harvard Law School, Cambridge, MA
- "IRB Perspectives on Genomic Data Sharing and Informed Consent at NIH," 10/15 Combined NeuroSciences IRB Retreat, NIH
- "The Ethics and Wisdom of Broad Consent for Genomic Research," 6/15 Second International Conference on Rare and Undiagnosed Diseases, Budapest, Hungary
- "Ethical Considerations in Research involving the Collection and Analysis of Human Genetic Data," 2/15 Genetic Testing and Research Agency Policy Meeting, NASA, Houston, TX
- "Planning the Study: ELSI Issues in Study Design and Governance" (Moderator), 1/15 Workshop to Explore the Ethical, Legal, and Social Implications of Citizen Science Related to the NIH Mission, NIH, Rockville MD
- "The Ethics of Genetic Research with Stored Samples and Data," 10/14 Office of Minority Health Lecture Series, FDA, Silver Spring, MD
- "Whole Genome Sequencing in the Clinical Setting: The Ethics of "Too Much"
 Information", 5/14
 Workshop on Philosophical Problems in Personalised Medicine; Department of Philosophy, Logic, and Scientific Method; London School of Economics, UK
- "The Ethics of Genetic Testing in the Research Setting: The Challenge of Informed Consent" 12/13
 NINDS Grand Rounds Lecture, NIH
- "Biospecimen Donation, iPSCs, and Informed Consent: Anticipating Future Therapeutic Applications" 6/13
 Tissue Sourcing Session, Working Together Towards A Cell-Based IND, National Eye Institute and National Institutes for Regenerative Medicine, NIH

- "Anticipating the Ethics of Genomic Research," 5/13
 Process of Discovery Series, Medical Research Scholars Program, NIH
- "The Impact of *The Immortal Life of Henrietta Lacks* on the Field of Bioethics" 3/13 Drew University, Madison, NJ.
- "Protecting Human Subjects in Genomic Research" 12/12 International Bioethics Symposium, Peking Union College of Medicine Beijing, China.
- "Stem Cell and Regenerative Medicine Research and Informed Consent" 12/12 International Bioethics Symposium, Peking Union College of Medicine Beijing, China.
- "Deceased Donor Specimens, iPS Cell Research, and Next-of-Kin Authorization," 11/12 Berman Institute of Bioethics Seminar Series, Johns Hopkins, Baltimore, MD
- "Ethical and IRB Issues Related to Whole-Genome Sequencing," 10/12 NCI Technology Transfer Seminar Series, Rockville, MD
- "Stem Cell Research and Informed Consent: Balancing Hope and Uncertainty" 5/12 STEP Forum: Stem Cell Therapy: Hype and Reality, NIH
- "Pediatric Biospecimens and Informed Consent when Children Reach Adulthood: Preferences and Practices" 3/12 NIH Biospecimens Interest Group, NIH
- "Ethical Challenges Associated with Genomic Sequencing in the Clinical Setting" 5/11 STEP Forum: Knowing our DNA Sequence: What it Means for You and Me, NIH
- "Identifiability: A Useful or Decrepit Concept in Research Ethics? 10/10
 DHHS Secretary's Advisory Committee on Human Research Protections,
 Washington, DC
- "Ethics Review of Next Generation Sequencing Research at NIH: A Primer and a Proposal" 7/10

 Human Subjects Research Advisory Committee, NIH
- "Ethics and Genomic Research: Scrambling Through the Bottleneck" 4/10 SoCRA Legal, Ethical and Practical Considerations in Protecting Human Research Participants Workshop, Philadelphia, PA
- "Ethics and Genomic Databases: Scrambling Through the Bottleneck" 3/10

 Departmental Colloquium in Bioinformatics and Computational Biology, George
 Mason University, Manassas, VA

- "Ethical Issues in the Use of Stored Samples" 8/09 Fisher BioServices IRB Retreat, Rockville, MD
- "The Ethical Introduction of New Tests into Clinical Practice: XDR-TB and the Genotype MTBDR Line Probe Assay" 6/09
 Division of AIDS, NIAID, NIH, Rockville, MD
- "Ethical Issues in the Use of Stored Samples" 6/09 IRB Retreat, NIEHS, NIH, Chapel Hill, NC
- "Patient Attitudes Regarding Genetic Research with Stored Samples" 8/09 Trans-NIH Bioethics Committee, NIH, Rockville, MD
- "Genetic Research on Samples from the Deceased: Regulatory Ambiguities and Ethical Issues" 12/09
 Institutional Review Board, National Cancer Institute, NIH
- "The Genetic Information Nondiscrimination Act of 2008: Implications for Genetic Research and Informed Consent" (panel presentation), 11/08
 Inter-Institute Bioethics Interest Group, NIH
- "What Makes Genetic Research Ethical?" 9/08
 Prince George's County Community College, College Park, MD
- "Ethics and Regulation of Genetic Research with Stored Samples & Data" 4/08 NIH Intramural Sequencing Center, NIH
- "Research with Human Biological Materials," 9/05
 Conference on Emerging Issues in Research with Human Subjects,
 NIEHS/PRIM&R, Chapel Hill, NC
- "Issues Surrounding the Use of Human Biological Materials in Research," 7/05 NCI Combined Faculty Retreat, Cumberland, MD
- "Qualitative Research Design: Strategies for Genetic Counselors," 10/04
 National Society of Genetic Counselors 23P^{rdP} Annual Education Conference,
 Washington, DC
- "Patients' Perspectives on Genetic Research with Their Blood Samples;" 5/04 Conference on Conflicts of Interest, Privacy/Confidentiality, and Tissue Repositories, PRIM&R and Columbia University College of Physicians and Surgeons, Boston, MA
- "Bringing You the World of Genetics' The ethical implications of direct-to-consumer advertising and direct sales of genetic tests." 3/04

- NHGRI Workshop on Direct to Consumer Advertising Of Genetic Tests, Bethesda, MD
- "Q&A on Ethical Issues in Genetic Research," 9/03

 Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
- "Qualitative Research: Social Science in Genetics," 6/03
 National Society of Genetic Counselors Grant Writing Seminar, Baltimore, MD
- "Direct-to-Consumer Advertising of Genetic Testing: Some Ethical Issues," 4/03 Cornell-In-Washington Program, Bethesda, MD
- "Postmortem Confidentiality of Genetic Research Results," 9/01
 Division of Cancer Epidemiology and Genetics, National Cancer Institute, NIH,
 Bethesda, MD
- "Nurse Rivers' Dilemmas: Research Relationships, Ethics, and the Study Coordinator,"
 4/01
 AFFIRM Annual Meeting, Washington, DC
- "Ethical Implications of Human Genome Research and its Application," Conference on Brain Research and the Mapping of the Human Genome: Applications to Primary Care and Psychiatric Medicine, 3/00
 Co-sponsored by the Washington Psychiatric Society in collaboration with the Medical Society of the District of Columbia, George Washington University, Washington, DC
- "Research Ethics: The Goal of Informed Consent in Subject Recruitment and Retention," 9/99 AFFIRM Annual Meeting, Washington, DC
- "Special Issues in Genetic Research," 2/99
 Research Ethics Course (306.665), Department of Health Policy, Johns Hopkins School of Public Health
- "Genetic Exceptionalism, Privacy, and Public Policy," 11/98
 Science Studies Reading Group, Department of Science and Technology
 Studies, Cornell University, Ithaca, NY
- "Genetics, Public Policy, and Privacy," 4/98 Genetic Soup Seminar, Dept. of Medical Genetics, Johns Hopkins Hospital

TEACHING

Coursework

2015-present **Lecturer**—"The IRB: Purpose, Function, and Proposals for Improvement," annual session in Ethical and Regulatory Aspects of Clinical Research, Department of Bioethics, NIH 8/14 **Lecturer**—The Ethics of Involving Diverse Groups in Genomics Research: Balancing the Goals of Inclusiveness and Minimizing Harms, NIMHD Translational Health Disparities Course, NIH 5/12 Lecturer—Points to Consider in the Transition Toward Whole-Genome Sequencing in Human Subjects Research, Protocol Navigation Training Seminar, NIH 12/11 **Lecturer**—Ethics and IRB Issues Related to Whole-Exome Sequencing. Next-Gen 101: A How-To for Whole-Exome Sequencing Research, NIH 2006-present Lecturer— Ethical Issues in Genetic Research, Current Topics in Genomic Research Short Course, NHGRI, NIH 2003- present **Discussion Moderator**—Responsible Conduct of Research Training, Division of Intramural Research, National Human Genome Research Institute, NIH 2003-present Lecturer—"Ethical Issues in the Use of Stored Tissue," annual session in Ethical and Regulatory Aspects of Clinical Research, Department of Bioethics, NIH 1/04-3/04 **Instructor**—Introduction to Qualitative Research, Joint Genetic Counseling Training Program, Johns Hopkins Bloomberg School of Public Health and National Human Genome Research Institute, NIH 2002 Co-Instructor—Qualitative Research Methods (315.840 Special Studies and Research) Joint Genetic Counseling Training Program, Johns Hopkins Bloomberg School of Public Health and National Human Genome Research Institute, NIH 1999-present Lecturer—Joint Genetic Counseling Training Program, Johns Hopkins Bloomberg School of Public Health and National Human Genome Research Institute, NIH. Annual lecture on "The NHGRI Institutional Review Board;" topical lectures on reproductive decision making, research role conflicts and informed consent

1998 **Grader**—*The Physician and Society*, Professors Leon Gordis and Henry

Seidel, Johns Hopkins University School of Medicine

1997 **Teaching Assistant**—Introduction to Health Policy and Management,

Professor Donald Steinwachs, Johns Hopkins P/T Graduate Program

1997; 1999 **Teaching Assistant**—Research Ethics and Integrity, Professor Nancy

Kass, Johns Hopkins University School of Public Health

NIH IRB Internship Program Mentoring

Fall 2018 Maureen Kombe, Zambia

John Ipadeola, Nigeria

Rizki Harnawan, Indonesia

Fall 2017 Billy Wilson Nyambalo, M.S.

National Health Sciences Research Committee, Malawi

Kimberly Paul

Blackfeet Nation ("Piikanii"), Montana, U.S.

Gloria Maria Carmona Clavijo, MCH

National Institute of Health, Ministry of Health, Peru

Sithembile Ruzariro, MSc, MSocSC National Ethics Committee, Zimbabwe

Sarah Lucía Carracedo Uribe, MA, LL.L.

Institute of Tropical Medicine, National University of San Marcos, Peru

Fall 2016 Flavia Ayebazibwe

Uganda Virus Research Institute, Entebbe, Uganda

Elvira Rohland

Stellenbosch University, Cape Town, South Africa

Sharmella Roopchand-Martin, DPT, MSc

University of the West Indies, Kingston, Jamaica

Warunee ("Tukta") Thienkrua

Thailand Ministry of Public Health – US CDC Collaboration

Nonthaburi, Thailand

Fall 2015 Adebayo Adejumo, PhD, MS, MHS

Member, National Health Research Ethics Committee of Nigeria University of Ibadan, Nigeria

Ado Danladi, BSC

Scientific Officer – National Health Research Ethics Committee, Federal Ministry of Health, Nigeria

Julia M. Lysander, MSC

Assistant Director for Operations, Liberia-US Joint Clinical Research Program of the US NIH Ebola Response Program

Cecelia Morris, MSN Chair, University of Liberia IRB

Gloria Mason, BA

Coordinator, National Research Ethics Board, PREVAIL- Liberia- US Joint Clinical Research Program

Spring 2015 Naomi Lee, PhD (Seneca Nation of New York)

ASERT-IRACDA Postdoctoral Fellow

Molecular Genetics and Microbiology, University of New Mexico

Fall 2014 Helena Baidoo

Noguchi Memorial Institute for Medical Research, University of Ghana

Changping (Julie) Zhu

Sun Yat-sen University, Guangzhou, China

Segun Adevemo

West African Bioethics Training Program, Nigeria

Spring 2014 Deana Around Him, DrPH, ScM (Cherokee Nation of Oklahoma)

Johns Hopkins Bloomberg School of Public Health

Mariddie Craig

White Mountain Apache Tribe Tribal Council

Fall 2013 Noranjon Ayombekova, MA

PRISMA Research Center, Tajikistan

Winfred Badanga Nazziwa, BA

Uganda National Council for Science and Technology

Everlyne Ombati, BSc, MSc

Kenya Medical Research Institute (KEMRI) Center for Microbiology Research

Olubusola Onasile, BS

West African Bioethics Training Program, Nigeria

Fall 2012 Stellah Imot, BA, PG

Makerere University College of Health Sciences, Uganda

C.S. Sreepriya, LL.B., MA, MBA

Sree Chitra Tirunal Institute for Medical Sciences and Technology, India

Bailu Wang, M.D., PhD

Shandong University School of Medicine, China

Fall 2011 Thang Cong Tran, MD

Thai Bing Medical University, Vietnam

Xiaomei Zhai. PhD

Chinese Academy of Medical Sciences and Peking Union Medical

College, China

Fall 2010 Eunji Lee, BSc

Korea Ministry of Health & Welfare

Hyen Oh La, M.Sc, PhD

College of Medicine at the Catholic University of Korea

Graduate Student Advising

2007-11 Darlene Perkins, PhD Dissertation, Graduate Partnership Program, NIH and Johns Hopkins School of Nursing

Jaclyn Douyard, Master's Thesis (co-advisor): "Disclosure of a Cystic Fibrosis Diagnosis to a Dating Partner," Genetic Counseling Training Program, Johns Hopkins Bloomberg School of Public Health and National Human Genome Research Institute, NIH

2003 Karen Tam, Master's Thesis: "Genetic Information: Exploring the Value to Adult Adoptees," Genetic Counseling Training Program, Johns Hopkins Bloomberg School of Public Health and National Human Genome Research Institute, NIH

2002 Chieko Tamura, Master's Thesis: "Japanese-Americans' and Japanese People's Needs and Attitudes Toward Prenatal Genetic Counseling,"

Genetic Counseling Training Program, Johns Hopkins Bloomberg School of Public Health and National Human Genome Research Institute, NIH

Thesis Committee Participation

2010-11	Christy Haakonsen, Master's Thesis: "Assessing the Feasibility of Coping Effectiveness Training for Caregivers of Children with Autism Spectrum Disorders," Johns Hopkins Bloomberg School of Public Health and National Human Genome Research Institute, NIH
2005-6	Meredith Weaver, Master's Thesis: "How Do Genetic Counselors Define Advocacy in Their Profession?" Johns Hopkins Bloomberg School of Public Health and National Human Genome Research Institute, NIH
2003-4	Julie Chevalier Sapp, Master's Thesis: "Attitudes about amniocentesis among women of advanced maternal age," Johns Hopkins Bloomberg School of Public Health and National Human Genome Research Institute, NIH
2003	Valerie Brook Waggoner, Master's Thesis: "Exploration of Transitional Life Events in Individuals with Friedreich's Ataxia: Implications for Genetic Counseling," Genetic Counseling Training Program, Johns Hopkins Bloomberg School of Public Health and National Human Genome Research Institute, NIH
2002	Kira Apse, Master's Thesis: "Concerns about Genetic Discrimination: Origins and Effects," Genetic Counseling Training Program, Johns Hopkins Bloomberg School of Public Health and National Human Genome Research Institute, NIH