

Annual Meeting 2020

International Neuroethics Society
October 22-23, 2020
Virtual Conference



Each year we convene experts, researchers, and up-and-coming leaders in the field of neuroethics.



Overview

For the first time in 2020, the INS meeting was fully online, providing unique opportunities and formats for innovative discussion and interaction. Early career researchers and senior academics alike from a variety of disciplines and from 30 countries participated, sharing their science and insights with global colleagues.

This year's theme was 'Our Digital Future: Building Networks Across Neuroscience, Technology and Ethics.' Sessions addressed the many areas in which technologies and data concerning the brain are developed, deployed, utilized and regulated. A priority was also made to include discussions about social justice and diversity throughout the program.

The 2-day online program was packed with virtual lectures and panel discussions. Young scholars showcased their research as part of recorded talks and poster presentations.

2020 Program Committee

Co-chairs

- Adrian Carter, Monash University (Australia)
- Nicole Martinez-Martin, Stanford University (USA)
- Anna Wexler, University of Pennsylvania (USA)

Members

- Martha Farah, University of Pennsylvania (USA)
- Stephanie Hare, University of Maryland, Baltimore (USA)
- Marcello Jenca, ETH Zurich (Switzerland)
- Philipp Kellmeyer, University Medical Center Freiburg (Germany)
- Eric Racine, Montreal Clinical Research Institute (Canada)
- Karen Rommelfanger, Emory University (USA)
- Arleen Salles, Uppsala University (Sweden)
- Francis Shen, University of Minnesota (USA)
- Laura Specker Sullivan, Fordham University (USA)

Staff

- Karen Graham, INS Executive Director
- Robert Beets, INS Communications Director

Message from the INS Program Committee

Thank you so much for supporting the 2020 INS Annual Meeting — either by attending, providing sponsorship, or simply by being a member of the International Neuroethics Society. Although this has been a challenging year for all of us and it was unfortunate that we could not hold an in-person meeting, the virtual format had a number of benefits.

This was the largest meeting that the INS has held to date, with nearly double the number of attendees and from 30 countries around the world. Many people indicated that this was the first time they were able to attend an INS meeting because it was online.

We were also able to increase the number of topics and sessions covered over two days by scheduling four sets of concurrent sessions. The [recordings](#) of a majority of the sessions are available on the website for all INS members.

This was our first attempt at a fully online meeting. While the team was apprehensive and very busy in the preceding days, we are extremely pleased overall with the event. Of course, there are plenty of opportunities for improvement and lessons for the future.

Let us know of any aspects that you thought worked well and those that did not. We want to know how to make future online and hybrid activities a success. You can provide this feedback by emailing staff (administrator@neuroethicssociety.org).

Again, many thanks to all who made the virtual [2020 INS Annual Meeting](#) a success.

Sincerely,

Adrian Carter
Co-chair, Program Committee
on behalf of co-chairs Nicole
Martinez-Martin and Anna Wexler
and the full Program Committee



Carter



Martinez-Martin



Wexler

“This virtual format gave us the opportunity to embrace the potential of technology to bring people together, especially those who may not have been able to attend under normal circumstances.”

Nicole Martinez-Martin, Program Committee co-chair

Participants

Thank you to everyone who joined us for two days of online, interactive sessions. We had a great turnout with over 350 attendees from 30 countries. Notably, there were 79 recorded oral talks and [poster presentations](#) and the Program Committee awarded 28 stipends and 9 prizes to authors thanks to the generous support from our sponsors (see last page).

Visit the [meeting highlights](#) and [program](#) webpages for additional information about all speakers, the content of their lectures, and supporting resources and reading materials.

Featured Speaker

Fred Kavli Distinguished Neuroethics Lecture

Ruha Benjamin

Ruha Benjamin is Associate Professor of African American Studies at Princeton University, Founding Director of the Ida B. Wells Just Data Lab, and author of the award-winning book 'Race After Technology: Abolitionist Tools for the New Jim Code.' For more information visit her website at: ruhabenjamin.com.



'Race to the Future? Reimagining the Default Settings of Technology & Society'

From everyday apps to complex algorithms, technology has the potential to hide, speed, and deepen discrimination, while appearing neutral and even benevolent when compared to racist practices of a previous era. In this talk, Ruha Benjamin explored a range of discriminatory designs that encode inequity — what she terms the 'New Jim Code.' Her presentation took us into the world of biased bots, altruistic algorithms, and their many entanglements, and provided conceptual tools to decode tech promises with historical and sociological insight in the context of neuroscience. It also considered how race itself is a kind of tool designed to stratify and sanctify social injustice and discussed how technology is and can be used toward liberatory ends. In doing so, Ruha challenged us to question not only the technologies we are sold, but also the ones we manufacture ourselves.

Sponsor

THE  KAVLI FOUNDATION

Sessions and Speakers

Plenary Sessions

Leveraging Neuroethics in the Pursuit of Justice and Equity

A recent surge in awareness of systemic racism and long-standing injustice has renewed efforts worldwide to advance social progress. Lead discussants Nita Farahany and Iliana Singh canvassed how the neuroethics community and its practitioners can foster an inclusive and diverse culture, and collectively advance justice and equity through their contributions to neuroscience and society. The session continued with a guided discussion organized by Laura Specker Sullivan and featuring Timothy Brown, Laura Cabrera, Juhi Farooqui, Nicole Martinez-Martin, Roland Nadler and Nicholas Sinclair-House.

Charting the Path to Ethical Neurotechnology

Neurotechnology is rapidly advancing. New consumer products and therapeutic applications of brain–computer interfaces in particular are forcing an industry to navigate ethical concerns such as data protection, consent, and accountability without clear guidelines or standards. This conversation with leaders of neurotechnology companies examined issues raised by advancing device technologies and their potential applications, as well as looked at opportunities to increase interdisciplinary collaboration.

- Mark Chevillet, Facebook (USA)
- Ana Maiques, Neuroelectrics (Spain)
- Dan Rizzuto, Nia Therapeutics (USA)
- Nicole Martinez-Martin, Stanford University (USA)
- Anna Wexler, University of Pennsylvania (USA)

Neuroethics in a Time of Crisis

A fuller understanding of the impact of COVID-19 on the brain, and associated neurological and mental health impacts, is still emerging. At the same time, the pandemic has raised difficult ethical questions in terms of triage and allocation of scarce resources for people with neurological and mental health conditions, as well as issues related to telehealth. This panel brought together experts in neurology, psychiatry, and ethics to address these complex ethical issues affecting people with neurological and mental health disorders during the pandemic. (Organized by the INS Emerging Issues Task Force.)

- Christine Grady, NIH Department of Bioethics (USA)
- Pietro Pietrini, Scuola IMT Alti Studi Lucca (Italy)
- Michael Rubin, The University of Texas Southwestern Medical Center (USA)
- Introductions: Philipp Kellmeyer, University Medical Center Freiburg (Germany)
- Moderator: Karola Kreitmair, University of Wisconsin–Madison (USA)

Concurrent Sessions

Governing Brain Data in the Infosphere

This session aimed to broaden the discussion on international governance of brain data and the use of big data analytics in neuroscience. Special focus was given to non-medical uses such as direct-to-consumer neurotechnology. The panelists explored, among many topics, potential conflicts of data sharing and privacy; potential divergences between different stakeholder perspectives; confidentiality issues arising from data use for medical informatics and private ventures; and cultural views on mental privacy.

- **Ciro Colombara**, Lawyer, RCZ Law Firm (Chile), Pro Bono Network of the Americas
- **Mary Lou Jepsen**, Openwater (USA)
- **Fruzsina Molnár-Gábor**, Heidelberg Academy of Sciences (Germany)
- **Rafael Yuste**, Columbia University (USA)

Prospects for AI-Enabled Diagnostic Imaging

Long considered unrealistic, brain imaging for the purpose of psychiatric diagnosis appears more plausible with applications of artificial intelligence, leading to questions about its possibility to aid in differential diagnosis and treatment response. The following panelists examined the state of the technology and likely challenges, the ethical concerns that may arise when applied to psychiatric diagnosis, and how diagnostic systems and conceptions of psychiatric disorders may change.

- **Vince Calhoun**, Center for Translational Research in Neuroimaging & Data Science (USA)
- **Martha Farah**, University of Pennsylvania (USA)
- **Stephanie Hare**, University of Maryland, Baltimore (USA)
- **Steven Hyman**, Stanley Center for Psychiatric Research at Broad Institute (USA)

Linking Social Justice and Brain Injuries Through Theology

Religious and theological traditions of ethics provide an opportunity to expand and enrich approaches to social justice in neuroethics, particularly in the context of brain injury and disorders of consciousness. The following panelists examined how different religious traditions approach ethical issues surrounding brain injuries through a social justice lens.

- **Muhammad Mansur Ali**, Cardiff University (United Kingdom)
- **Ira Bedzow**, New York Medical College (USA)
- **Francisca Cho**, Georgetown University (USA)
- **Patrick Smith**, Duke University (USA)

Policing, Neurotechnology, and the Search for Truth

Over the past decade, brain-based methods of detecting lies and autobiographical memories have been introduced in neuroscience labs and applied police investigations in multiple countries. In this session forensic practitioners, scientists, and ethics and legal scholars examined from their different perspectives the latest technologies — including EEG memory detection — and debate if these tools can be applied fairly and ethically to aid accuracy and promote justice in police investigations and legal adjudication.

- Galit Nahari, Bar Ilan University (Israel)
- Federica Coppola, Columbia University (USA)
- Emily Murphy, UC Hastings Law (USA)

Life and Health Decisions with Experimental Brain Implants

Trials researching effective treatments for psychiatric and neurological ailments are increasingly using experimental devices implanted into the brain to record signals and stimulate activity. After the study, the fate of the device can lead to complex dilemmas: for patients faced with uncertain risks and benefits; for investigators concerned with long-term care and outcomes; and for ethicists tasked with determining responsibility and establishing an appropriate course of care. Panelists attempted to find consensus about patient care and device management after brain implant trials.

- Helen Mayberg, Icahn School of Medicine at Mount Sinai (USA)
- Saskia Hendriks, National Institutes of Health (USAs)
- Gabriel Lázaro-Muñoz, Baylor College of Medicine (USA)
- Moderator: Joseph J. Fins, Weill Cornell Medical College (USA)

Challenges of Artificial Intelligence and Neuroscience to Democracy

The possibilities offered by the combined insights of artificial intelligence and neuroscience raise profound questions for democracy. It's critical to ask if AI-neuroscience technologies and their applications might be able to improve democracy, encourage greater participation in public discourse, jeopardize the opinion-building process, or challenge our understanding of self-governance. Leading experts in artificial intelligence, big data neuroscience, democratic theory, and social studies of science led an open discussion on these issues.

- Alan Evans, McGill University (Canada)
- Sheila Jasanoff, Harvard Kennedy School (USA)
- Ralf J. Jox, University of Lausanne (Switzerland)
- Melanie Mitchell, Portland State University / Santa Fe Institute (USA)
- Eric Racine, Montreal Clinical Research Institute (Canada)

Professional Development

Career Tracks in Neuroethics


- Marcello Ienca, ETH Zurich (Switzerland)
- Khara Ramos, National Institute of Neurological Disorders and Stroke (USA)
- Francis Shen, University of Minnesota (USA)
- Yolonda Wilson, National Humanities Center / Encore Public Voices (USA)

Securing Funding and Grants

- Laura Cabrera, Michigan State University (USA)
- Judy Illes, Neuroethics Canada (Canada)
- Jonathan Pugh, University of Oxford (United Kingdom)
- Moderator: Anna Wexler, University of Pennsylvania (USA)

Reaching Out: Neuroethics at the Interface of Science, Art and Society

- John Aspler, Montreal Clinical Research Institute (Canada)
- Katherine Bassil, Maastricht University (Netherlands)
- Marion Boulicault, Massachusetts Institute of Technology (USA)
- Ricardo Chavarriga, Zurich University of Applied Sciences (Switzerland)
- Sunidhi Ramesh, Sidney Kimmel Medical College (USA)
- Moderator: Philipp Kellmeyer, University Medical Center Freiburg (Germany)



"I like that the paper and poster presentations are online publicly to share with other peers."

Meeting attendee

Public Program

Each year the INS collaborates with partners to host an event for public audiences. Previous events have featured talks on mental healthcare technologies, robots in society, neurogaming, and the neuroethics of advertising. The INS strives to organize an inclusive scientific program with a diverse representation of disciplines, viewpoints, and personal backgrounds.

In 2020, the INS and IEEE Brain organized a virtual film screening and panel discussion looking at the feature documentary 'I am Human,' which premiered at the 2019 Tribeca Film Festival. The film explores the co-evolution of humans and technology by following three subjects with implantable brain interfaces and the ethical implications of this technology on society.

As researchers develop new brain implants and continue to unlock the secrets of the brain, society is forced to consider what it means to be human. Will the brain technologies used today in medicine eventually lead to super human abilities or to a revolution of our sense of self? Our panel of experts convened on December 2 to explore various technological and ethical issues raised in the film and address questions submitted by participants.

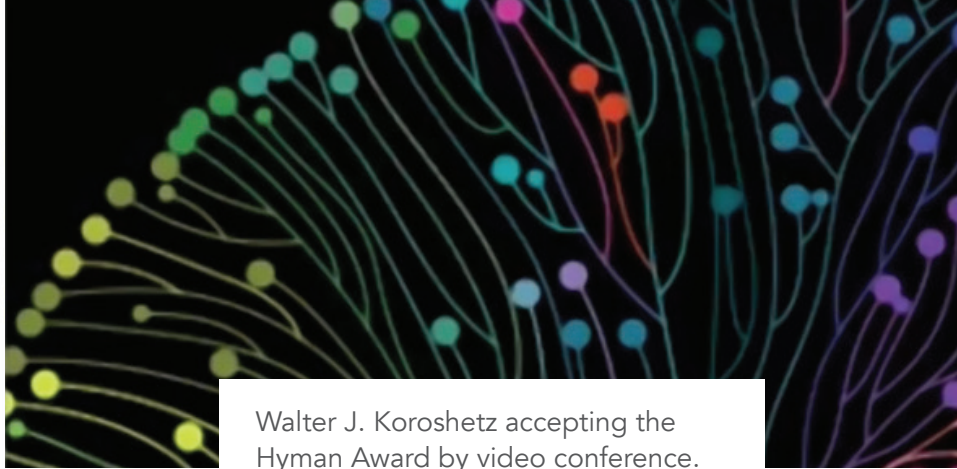
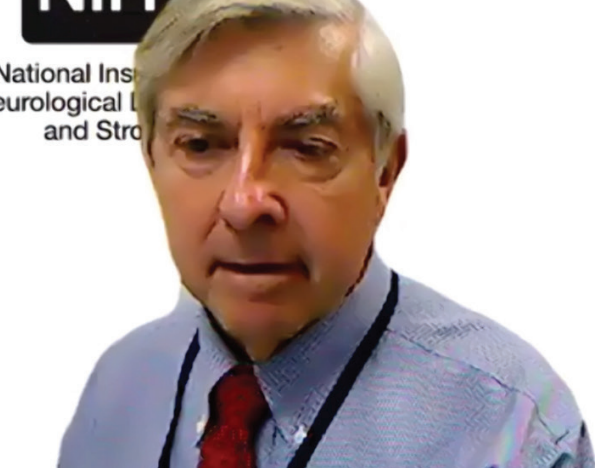
Speakers

- Nita Farahany, Duke Law School (USA)
- Jennifer French, Neurotech Network (USA)
- Jacob Robinson, Rice University (USA)
- Moderated by Joseph J. Fins, Weill Cornell Medical College (USA)

"IEEE Brain appreciated the opportunity to partner with INS to host the 'I am Human' virtual film screening and panel discussion public program. It is critical for the engineering community to recognize the ethical, legal, and social implications of their work as they advance research and develop technologies in neuroscience. We look forward to future collaboration with INS and further open discussions encouraging responsible advances in neurotechnologies."

Sin-Kuen Hawkins, IEEE Brain

Photo credit: iamhumanfilm.com



Walter J. Koroshetz accepting the Hyman Award by video conference.

Prizes and Recognitions

Steven E. Hyman Award for Distinguished Service to the Field of Neuroethics

Walter J. Koroshetz, director of the U.S. National Institute of Neurological Disorders and Stroke (NINDS), is the 2020 winner of the Steven E. Hyman Award for Distinguished Service to the Field of Neuroethics. The International Neuroethics Society presented the award at its annual business meeting (pictured above) held by video conference on November 12.

Neuroethics Essay Contest

The INS holds an annual essay contest for students and early career trainees. The contest is supported by **Dr. Michael Patterson**, former editor of the *Kopf Carrier* and long-time supporter of neuroethics. For the second year, the INS collaborated with the International Youth Neuroscience Association to offer the opportunity to high school students.

We received the largest number of submissions yet and the 2020 winners (pictured at right) in each submission categories were:

- *Academic*: **Sarah R. Zinn**, University of Chicago (USA); 'Obesity, Cognition, and Society: Ethical Warnings from the Sordid History of Eugenics and Scientific Racism'
- *General Audience*: **Eddie Jacobs**, University of Oxford (UK); 'God, Politics, and Death: How a New Medicine Raises Age-Old Questions'
- *High School*: **Cherie Fernandes** (USA); 'Redefining Justice: Updating Criminal Law to Reflect a New Understanding of the Mind'



For the first time, due to unprecedented volume of excellent scholarship submitted to the contest, several essays from each category were named as honorable mentions. Authors receiving this honor included:

- *Academic*: Isobel Butorac, King's College London (UK), Asad Beck, University of Washington (USA), Justin Wong, Harvard University (USA), Anna Elizabeth Ulrey, University of Alabama at Birmingham (USA)
- *General Audience*: Inchara M., Christ University (India), Laure Tabouy, University of Paris-Saclay (France), Connie Y. Lu, Harvard Medical School (USA)
- *High School*: Yuanmeng Zhang (USA), Yashwanth Gokarakonda (USA), Angelina Xu (USA)



Presentations and Recognitions

Oral Presenters

The INS Program Committee selected 12 investigators from submitted abstracts to record a 10-minute video presentation about their research. The oral presenters included:

- Emily Castillo, Michigan State University (USA)
- Ishan Dasgupta, University of Washington (USA)
- Jayashree Dasgupta, Sangath / Samvedna Senior Care (India)
- Karen Deborah Davis, Krembil Brain Institute / University of Toronto (Canada)
- Saskia Hendriks, National Institutes of Health (USA)
- Lavina Kalwani, Rice University (USA)
- Natalie M. Lane, NHS Lanarkshire, Scotland (United Kingdom)
- Fenella McLuskie, Harvard Law School (USA)
- Abigail Presley, North Carolina State University (USA)
- Jonathan Pugh, University of Oxford (United Kingdom)
- Cassandra Thomson, Monash University (Australia)
- Abel Wajnerman Paz, Universidad Alberto Hurtado (Chile)

Recognitions

Abstracts

- Cassandra J. Thomson – Best Abstract
- Katrina A. Muñoz – Best Abstract Honorable Mention

Oral Presentations

- Abel Wajnerman Paz – Best Oral Presentation
- Jayashree Dasgupta and Georgia Lockwood Estrin – Best Oral Presentation
- Lavina Kalwani – Best Oral Presentation

Posters / Presentations

- Nicholas Sinclair-House and Sarah Osborn – Best Overall Poster
- Juhi Farooqui – Best Overall Video / Media
- Fatima Sabir – Best Overall Video / Media
- Andreas Schönau – Best Contribution: Philosophical Neuroethics
- Louise Harding – Best Contribution: Clinical Neuroethics
- Sunidhi Ramesh – Best Contribution: Neurolaw

Sponsor

Janssen Neuroscience provided support to organize and host the virtual poster session.



Sponsorship Opportunities

The International Neuroethics Society is a professional association of scientists, scholars, students, and practicing legal and health professionals who share an interest in the ethical, legal, and societal impacts of advances in brain science. Members come from many disciplines and are uniquely equipped to communicate the value and implications that new neuroscience knowledge, technologies, and potential applications bring to human health and wellbeing.

A task of this magnitude and importance requires the help and support of partners and sponsors. We can only carry out our programs with the help of others who share our vision and commitment to excellence in research and innovation, informed decision-making for health and quality of life, and justice in society for people of all ages and cultures.

Opportunities are available to support the mission of the INS at individual and institutional levels. Your involvement will make a difference. Individuals and organizations can support the INS annual meeting, our flagship event. Visit the website and contact leadership to discuss potential partnership and sponsorship opportunities.

Contact Us

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2020 Meeting Support

Sponsors

- The Dana Foundation
- Janssen Neuroscience
- Stanley Center for Psychiatric Research at Broad Institute
- The Kavli Foundation
- Penn Science & Society

Stipend Contributors

- Dr. Michael Patterson
- International Brain Research Organization
- Wellcome Centre for Ethics and Humanities

Poster Prize Donors

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