

Gene editing, sexual reproduction, and the arts: the present, the future and the imagined

Following the call for proposals for the special session **On human enhancement and genome editing: the scope of Art & Science** within **GeNeDis 2018** Conference, **Roberta Buiani**, ArtSci Salon, The Fields Institute for Research in Mathematical Sciences, joins instigators **Dalila Honorato**, Interactive Arts Lab @Department of Audio & Visual Arts, Ionian University, and **Antonia Plerou**, Bioinformatics and Human Electrophysiology Lab @Department of Informatics, Ionian University, with her proposal composed of a panel **Gene editing, sexual reproduction and the arts: the present, the future and the imagined** and an exhibition **Edited - Reimagining sexual reproduction, fertility, and the future. In the present...**

On human enhancement and genome editing: the scope of Art & Science proposed to present at a conference organized mainly by and to science researchers: a. an alternative scope on two issues extremely influential in today's society, b. to provoke the dialogue between both sides of the research spectrum, science and art, and c. hopefully, incite new ideas concerning future inquiring possibilities and collaborations. Both events take place on Saturday November 27th, 2018 and are included in the program of GeNeDis 2018: at 4:00 pm the opening of the exhibition Edited with works by **Andrew Carnie**, **Samira Daneshvar**, **Byron Rich & Liz Flyntz** and **Adam Zaretsky** at the Koffler Student Centre and at 6:00 pm the panel Gene editing, sexual reproduction and the arts: the present, the future and the imagined with **Byron Rich**, **Samira Daneshvar**, **Adam Zaretsky**, **Dolores Steinman** and **Roberta Buiani** (chair) at Lennox Hall, Theatre.

More about the Panel

In recent years, popular culture has been graced with countless news announcing new developments in genome editing. While many experiments are still in their early stages, media seem to be already very excited about the potentials that genome editing could bring. Often betraying a sensationalist and triumphant tone, news often focuses on the potentials that these developments will have for the betterment of the human species: the eradication of disease; the extension of life; the improvement of the body and its appearance etc.. the future looks hopeful and unproblematic according to these accounts. On the opposite end of the spectrum, pessimists see in these developments a potential worsening of the human condition: are these developments safe? What are the ethical implications? Who will these developments benefit? Given today's social divisions and cultural conflicts, these voices predict a rather bleak future and warn against the pursue of innovation at any cost.

What these radically opposed positions share is that they all tend to make predictions and look at the future: a shiny, beautiful, perfect future on the one hand, and a bleak, problematic and battled future on the other. With this panel, it is proposed to take a step back: before we look at what genome editing will bring us in the future, how about we look at the present? In particular, it is asked: what are the unresolved issues in the present that we should address before launching ourselves into the future? Can we find interesting ways to draw attention to them and re-dress how they are currently treated through creative interventions? More specifically, we would like to explore issues regarding sexual reproduction, fertility, and sexual technologies: we argue that artistic interventions pertaining to these topics, in addition to raising awareness about sexism, sexual rigidity and the medicalization of the body, may be suggestive of ways in which we might rethink the role of human enhancement and genome editing in the sciences as well as everyday life.



@ GeNeDis 2018
3rd World Congress on Genetics, Geriatrics and Neurodegenerative Diseases Research
Bioinformatics and Human Electrophysiology Laboratory (BiHELab)
Department of Informatics, Ionian University

Speakers:

Byron Rich, Allegheny College, USA

Samira Daneshvar, artist and designer, Toronto CAN, University of Miami, USA

Adam Zaretsky, Marist College, USA

Dolores Steinman, University of Toronto, Canada

Chair: **Roberta Buiani**, ArtSci Salon, Fields Institute, Canada

Schedule: October 27th (6:00-7:30pm)

Location: Lennox Hall, 77 Adelaide Street West, Toronto.

More about the Exhibition

The potentials of genome editing techniques have brought us predictions and critiques that couldn't look any different: shiny, beautiful, perfect and disease-free prospects of life on the one hand, and a bleak, problematic, segregated, and battled future on the other. These are all projections that look at a maybe-not-so-distant future. But what about the present?

In the exhibition "edited", four artists rethink the future by critically reflecting on the present. Focusing on themes revolving around sexual reproduction, fertility and sexual technologies, their artworks question unresolved issues in the present that we should address before launching ourselves into the future. Can we find interesting ways to draw attention to them and re-dress how they are currently treated through creative interventions?

In addition to raising awareness about sexism, sexual rigidity and the medicalization of the body, each of these artworks suggests ways in which we might address, redress, hack and reimagine gynecological practice, hormonal management, human enhancement and sexual and cultural identity through the arts.

Artists:

Andrew Carnie, UnFolding Sheets

Samira Daneshvar, Armamentarium of (counter) creation

Byron Rich & Liz Flyntz, Epicurean Endocrinology, Cooking Sex

Adam Zaretsky, centiSperm, mutaFelch, biPolar Flowers.

Curated by: **ArtSci Salon - The Fields Institute for Research in Mathematical Sciences**

Schedule: **Opening** Saturday, October 27th, 4:00pm

Opening speakers: Roberta Buiani, Stephen Morris and Dalila Honorato

The SciArt Cabinets Gallery is open Mon-Fri 9:00am-7:00pm & Sat-Sun 12:00pm-5:00pm

Location: The SciArt Cabinets Gallery, Koffler Student Centre, 214 College Street, Toronto



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Participants' short bio:

Roberta Buiani is an interdisciplinary artist, media scholar and curator based in Toronto. She is the co-founder of the ArtSci Salon at the Fields Institute for Research in Mathematical Sciences (Toronto) and a co-organizer of LASER Toronto. Recently, she has launched a series of curatorial experiments in “squatting academia”, aiming at repopulating abandoned spaces inside the university with collaborative works in art and science and at filling formal spaces of research with site-specific installations and performances. She is a Research Associate at the Centre for Feminist Research, York University. <http://atomarborea.net>

Andrew Carnie is an artist and academic. He is currently part of the teaching team in Fine Arts at Winchester School of Art, University of Southampton, England. He studied chemistry and painting at Warren Wilson College, North Carolina, then zoology and psychology at Durham University, before starting and finishing a degree in Fine Art at Goldsmiths College, London. His artistic practice often involves a meaningful interaction with scientists in different fields as an early stage in the development of his work. <http://andrewcarnie.org.uk/>

Samira Daneshvar is a lecturer at School of Architecture, University of Miami. She holds a Master of Science from University of Michigan and Master of Architecture from University of Toronto. She joined the realm of architecture after five years of medical studies. Her research and design work is directed towards an interdisciplinary field of architecture and medical sciences. <https://samiradaneshvar.com/>

Liz Flyntz is a curator and writer focusing on media art, networks, and emergent technologies. She studied art and communications at Antioch College, media art history and theory in the Media Study Department at SUNY Buffalo, and media art and design at the Bauhaus University Weimar. Liz has organized exhibitions, festivals, and symposia in Baltimore, MD, Washington, DC, Olympia, WA, Buffalo, NY and Weimar, Germany. www.lizflyntz.net

Dalila Honorato, Ph.D., is Assistant Professor in Media Aesthetics and Semiotics at the Department of Audio and Visual Arts of the Ionian University in Greece. She is a guest faculty at the Institutum Studiorum Humanitatis in Alma Mater Europaea, Slovenia, and a guest member of the Science Art Philosophy Lab in the Center of Philosophy of Sciences, University of Lisbon, Portugal. Her research focus is on embodiment in the intersection of performing arts and new media.

Antonia Plerou, Ph.D., is a member of the Laboratory of Bioinformatics and Human Electrophysiology (BiheLab) of the Ionian University with the field of expertise “Pattern recognition analyst for Neuroeducational studies”. Her research focuses on the fields of Educational Neuroscience, Cognitive Science and Learning Difficulties (Dyscalculia, Algorithmic Thinking Difficulties), Neurofeedback Training, Neuronal Disorders rehabilitation with Neuroinformatics, and Artificial Intelligence.

Byron Rich is an artist, professor, and lecturer whose work uses the tools of biological science, space science, and robotics to critique culturally entrenched modes of marginalization. He was born in Western Canada and is currently living in Pennsylvania where he serves as Assistant Professor of Art, and Director of Art & Technology at Allegheny College. www.byronrich.com



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Dolores Steinman was trained as a Paediatrician and, upon relocating to Canada, obtained her PhD in Cell Biology. Currently she is a Senior Research Associate in the Department of Mechanical Engineering at the University of Toronto and a volunteer Docent at the Art Gallery of Ontario. In her research she observes the rapport and the connection between medical imagery and its non-scientific counterparts. Her pursuit is driven by her keen interest in placing the ever increasingly technology-based medical research in the larger context of the humanities.

Adam Zaretsky, Ph.D. stages lively, hands-on bioart production labs based on topics such as: foreign species invasion (pure/impure), radical food science (edible/inedible), jazz bioinformatics (code/flesh), tissue culture (undead/semi-alive), transgenic design issues (traits/desires), interactive ethology (person/machine/non-human) and physiology (performance/stress). His art practice focuses on an array of legal, ethical, social and libidinal implications of biotechnological materials and methods with a focus on transgenic humans. <https://vimeo.com/vastal>

Program Committee of On human enhancement and genome editing: the scope of Art & Science

Andrew Carnie, Winchester School of Art, University of Southampton, UK

Bill Kapralos, University of Ontario Institute of Technology, Canada

Ingeborg Reichle, Institute for Fine Arts and Media Art, University of Applied Arts, Vienna, Austria

Kathy High, Rensselaer Polytechnic Institute, Troy, New York, USA

Luís Graça, Institute of Molecular Medicine, University of Lisbon, Portugal

María Antonia González Valerio, Universidad Nacional Autónoma de México

Marta de Menezes, Cultivamos Cultura, Portugal

Gunalan Nadarajan, University of Michigan, USA

Polona Tratnik, Alma Mater Europaea, Slovenia

Avi Rosen, Technion, Israel Institute of Technology, Israel

Adam Zaretsky, School of Communication and the Arts, Marist College, USA.



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