



2016-2017

**MILIEUX**

institute for arts · culture · technology



UNIVERSITÉ  
**Concordia**  
UNIVERSITY





2016-2017

MILIEUX

institute for arts · culture · technology

## Message from the Director

Even though I have been writing them for eight years, I have never really understood the annual report. Most reports are about collecting information (the most difficult part), collating and editing it (the most political part), and then mashing it all together using the driest and most bureaucratic genre conventions ever imagined (the most boring part). The report is dutifully filed and then we are done until the next year. I am pretty sure I can count the number of people that have ever fully read one of my reports on two hands (shout out to my diehard fans!). We can do better. The annual report is a genre of writing like any other, and it can be played with, and reconfigured to speak to greater things. We can do what annual reports are supposed to do and make it as clear as possible why we deserve resources and support, and why the work we do is valuable. We can also treat the content of our report as more than just evidence of research performance; we can make an argument for how research activities might be differently articulated for our stakeholders, for our members, for our professional networks, and for the public. Consider that the annual report might be a chapter in the story of an organization charting its narrative arc and articulating its character as a collective actor. The genre is, by definition, romance and not tragedy. You know that despite all the day-to-day challenges, failures, disputes, and confusions everything turns out well. There is sincere industriousness and productivity, but what is the character of this research excellence? What

are its qualities and values? How can it engage with the world beyond the university? 2016-2017 has been our inaugural year. Technically we launched Milieux on March 30, 2016 but because we follow the cycles and rhythms of the academic year (not the fiscal year, nor even the administrative year) we tell our story from September 2016 through August 2017. This has been a year of building spaces, finding our feet and developing a sense of what an institute might be beyond the simple aggregation of its members. As researchers and artists we had been used to working as individuals and small groups in our studios and labs. The mandate of Milieux requires us to squish together more, to activate the interstices of the studio-labs, and articulate the idea of a research commons that could carry the weight of the disciplinary mixing, resource sharing and engaged foot traffic that we aspire to. We reimaged and recreated the spaces that many of us were used to before Milieux; building operational bases, infrastructure, and culture for the kind of research and research-creation we hope to cultivate. What follows in this report is an avalanche of activity, productivity, and experience in words and images that provide a glimpse of the promise of what we are building. In 2016-17 it was enough for us to want to demand more from ourselves, from the idea of Milieux, and from what the University might become. My hope is that in this report we have managed to convey a reasonable sense of our collective experience, our work and our impact. The saga of a research institute in the making.

Bart Simon,  
Montreal, August 2017





Let's restart this  
Okay looking okay  
Black box of the  
microphone  
Looks good







# What is Milieux?

Milieux is a unique interdisciplinary graduate research institute for new media arts, digital culture and information technology at Concordia University in the heart of downtown Montreal. Drawing on a legacy of media arts research-creation, Milieux aims to mess with the boundaries of creative experimentation, interdisciplinary training and progressive critical thought and practice. We work with partners and collaborators from all sectors and across the world to examine, co-create and share ideas, prototypes, experiences and practices that challenge technological assumptions about what is possible to be, to do and to imagine in a rapidly changing world.

2016  
september

october

november

december

2017

january

february

march

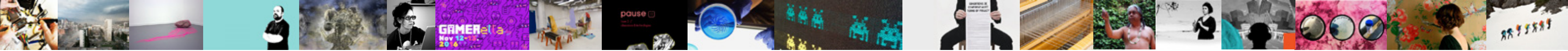
april

may

june

july

august



Milieux Institute Open House  
5a7 Launch Of Your Place Or Minecraft? Web Series  
John Durham Peters On John Lilly, Dolphin Voices, And The Tape Medium  
Closed Loop 3d Printing Workshop With Keeley Hafner  
**University Of The Streets Café**  
**Advanced Arduino Workshop With Massimo Banzi**  
Massimo Banzi Explores Maker Culture At Milieux  
The Uneasy History Of The Soviet Internet: Beyond The Book  
Public Screening Of Your Place Or Minecraft?  
Jason Edward Lewis Plenary Lecture at IVA  
Textiles And Materiality Art Exhibition at IVA  
Milieux Tours & Demonstrations at IVA  
Cabinet Shuffle Launch

**Future Imaginary Lecture Series Inaugural Speaker: Kim Tallbear**  
Jacquard : Weaving Information Session  
Milieuxmake Workshop: Altered Perceptions  
Artist Talk And Reception With Kathy High  
Intimate Narratives In Twine Workshop  
Making Things And Making Things Private  
Stephane Querrec Artist Talk  
Textiles And Materiality Talk With Debera Johnson  
Scott Chandler Exhibition And Reception  
Ehldrigohr: Designing Alternative Indigenous Timelines Using Roleplaying Games

David K. Ross Talk: The Traces Of Lost Facts  
**GAMERella**  
Milieux At Concordia's Research Sector Showcase  
**Exploiting The Full Potential Of Solvent Inkjet Printing: Opaque Inks And Materiality**  
Libremapping Creative Video Mapping Workshop

**Pause Button Preview Party**  
**I/o [Input/output] Symposium**  
The Literary Audio Symposium  
Milieux In The World: Post Image Jessica Auer at the Yukon Arts Centre Gallery  
Milieux In The World: Joanna Berzowska Discusses Startups  
5a7: Tag Art Up Speakers Hangout Roundtable Discussion  
Post Image's Mitch Epstein Artist Talk

Bernd Scherer Talk: 'Art In The Time Of Tricksters And Monsters'  
Milieux In The World: Kathleen Vaughan At Multispecies Publics  
**Textiles And Materiality Present Game Weavings At Tag Research Centre**  
Milieux In The World: "Documentar, Contar, Mentir"  
Milieuxmake: Introduction To Bioplastic 3d Printing  
Global Game Jam At Tag

Milieux In The World: Eric Simon Presents Les Mille Et Une Phrases  
Aboriginal Rights Are Not Human Rights : Peter Kulchyski Talk  
Milieux In The World: Conversations In Contemporary Art With Velibor Božović  
Lighthouse: Glassworks By Alice Jarry And Shroud For An Ancient Sea By Sarah Nance  
Idealab: Micro-presentations And Macro-explorations In The Fine Arts  
Narrative, Aesthetics, And Politics In The Work Of Hannah Arendt With Dr. Ewa Ziarek

Velibor Božović At The Ismaili Center In Toronto  
Photography And Indigenous Time With Jolene Rickard  
Bacterial Painting Workshop With Nurit Barshai Part 1  
An Artist Talk By Jessica Eaton

**Artist Talk: Nurit Bar-shai**  
Bacterial Painting Workshop With Nurit Barshai Part 2  
Seminar: How Economic Models Are "Fictions" With Dr. Philip Mirowski  
How To Lose Your Anime Boys In Eleven Days: A Primer On Otome Games In English  
**A Philip Mirowski Talk: “What Is ‘Open Science’ Supposed To Fix?”**  
Milieux In The World: "She Photographs"

An Artist Talk By Zuhaitz Akizu And Jessica Auer  
Milieux In The World: Marisa Portalese At Mccord Museum Round Table  
Milieux In The World: Sarah Nance At Kathrin Cawein Gallery  
Northern Atmospheres Earth Observatory Array Action Workshop  
5a7 - Motion Capture & Movement Theory

**ARCADE 11**  
Anny Schneider Herbalist Talk On Fibrous Plants Of Quebec  
Milieux In The World: Sarah Nance At Kathrin Cawein Gallery  
“Gold Mine Between Your Ears” Lecture By Claudia Mareis  
Speaker Series With David Lee Carlson And Monica Monin  
Heather Mackenzie Talk

**An Artist Talk By Nicolas Sasseon**  
Milieux In The World: Ennuyé Par L'art // Art Matters X Art Souterrain  
Milieux In The World: Barbara Layne And Lauren Osmond Exhibit At Craft Council Of Newfoundland & Labrador Gallery  
Adventures In Algorithmic Culture Minisymposium  
Bad News!

Art And Speculative Commons Lecture By Cornelia Sollfrank  
Everything Is Fine - An Artist Talk By Margaret Haines  
Pokemon Go Shinposium With Adriana De Souza  
**Mobile Culture In Brazil: Creative Uses Of Mobile Technologies In Art, Games, & Low Income Communities**  
Patrie Fish Futures: Métis Legal Traditions And Refracting Extinction  
Milieux In The World: Sophia Borowska Part Of Potentially "Flawless" At Vans, Toronto

American Silk / Soie D'amérique Publication Launch  
Workshop > Machine Learning For Artists  
Grow Your Own Cellulose

Let's Talk Gaming! - Representation In Video Games  
Tools For Media Activism: Insertions Into Mediatic Circuits  
Data : Salon Xxx

Milieux In The World: Velibor Božović Exhibition At Dazibao  
Seminar In Media And Political Theory: Capture  
Sound Environments Workshop Series: Critical Listening, Field Recording, And Sound Processing  
**Preview | It Fell On Deaf Ears**

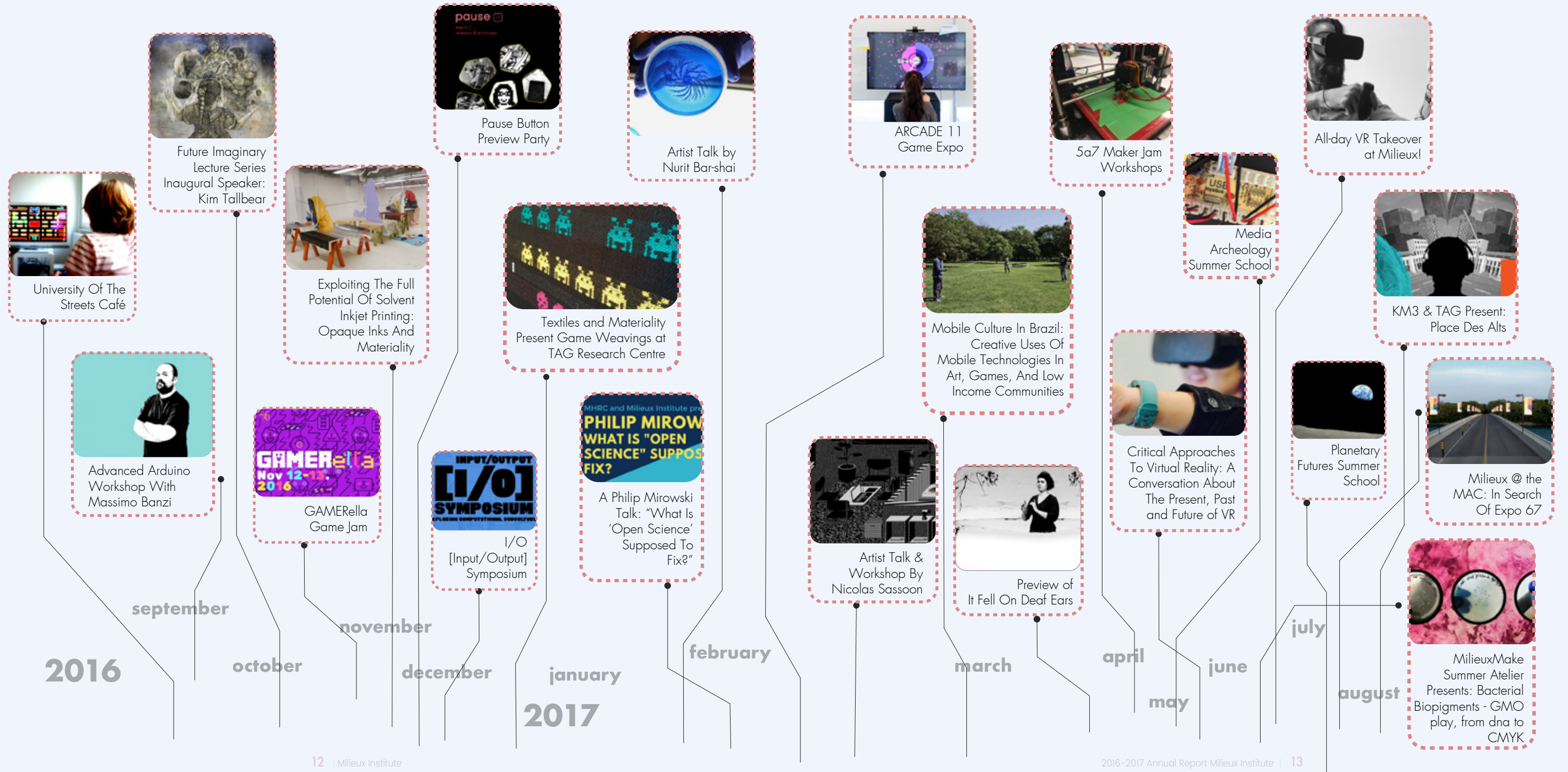
Emotions And Entanglements In The Field  
The K Archive | Les Archives De K  
Level Up Presents: Blender Workshop!  
**5a7 Maker Jam Workshops**  
The Representation Of Atomic Fears In Resident Evil & Fallout"  
**Electronics Workshop - Textiles & Materiality Cluster**  
Grimposium Presents #paysagedelaine / #landscapeofhate  
Rescheduled: Do-It-Together Incubator Workshop - Milieuxmake Workshop

**Critical Approaches To Virtual Reality: A Conversation About The Present, Past and Future of VR**  
Developing Audience Insights: What Does It Mean For A Public Broadcaster?  
Experiments In Photography With Strobe Lighting: A Workshop With Paul Litherland  
Mobiledanse Workshop: Dance And Wearable Technology  
Ivsa - Framing/reframing: Visual Sociology, Goffman & The Everyday  
Goat & Monkey Workshop: Games And Immersive Theatre

**Milieuxmake Summer Atelier Presents: Bacterial Biopigments - Gmo Play, From Dna to Cmyk**  
**All-day Vr Takeover At Milieux!**  
Milieuxmake Summer Atelier Presents: Bacterial Biopigments - Gmo Play, From Dna To Cmyk  
At Now Livestream

Milieuxmake Summer Atelier Presents: Bacterial Biopigments - Gmo Play, From Dna To Cmyk  
**Planetary Futures Summer School**  
**Milieux In The World: In Search Of Expo 67**  
The Long Moment Exhibition Features Four Members Of The Post Image Cluster  
Textiles And Materiality Presents: An Artist Talk By Bhakti Ziek  
**Km3 And Tag Present: Place Des Alts**



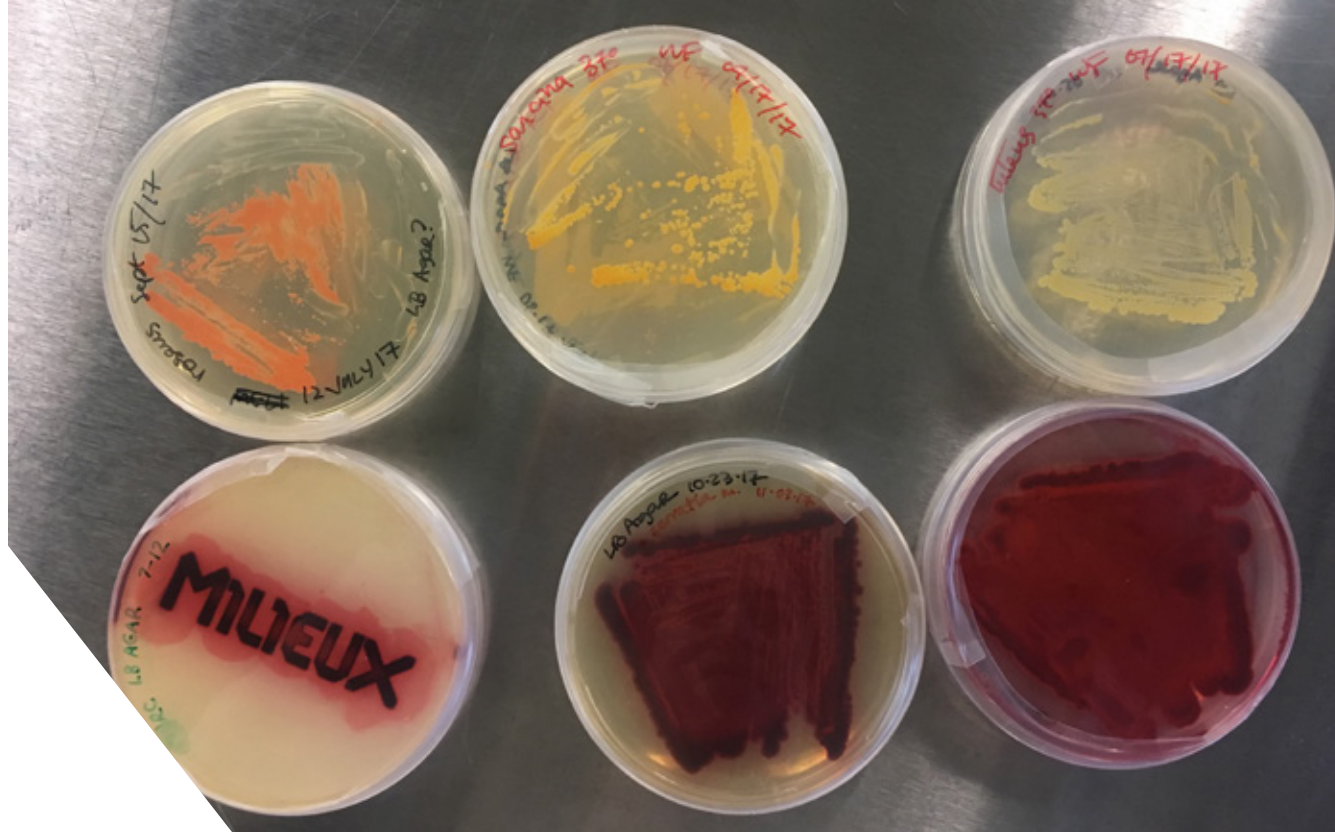


## An Institute of Things

While reviewing images from Milieux's first year, a group of us lamented the overabundance of images of smiling people talking in groups, sitting at talks, working at desks. Universities are made of gatherings of people in lecture halls and seminars, offices, labs, studios, hallways and cafes. Why shouldn't our images confirm this? But as we pored over our photographs looking for narrative themes somebody remarked that most of our images are of people clustered around objects. We began to notice the gestures, the pointing, the touching and manipulating. The critical elements anchoring this uniquely large interdisciplinary project of building the Milieux Institute were these objects, holding us together like some magic glue. This insight may not be earth-shattering, but the context in which we engage with these objects here is unique. Objects are the focus of conversation in fine arts, natural sciences and engineering, but rarely do they command such interdisciplinary attention as they do at Milieux. Our images are not of groups of painters huddled around a painting, or electrical engineers focused on a circuit board. The groups at Milieux are mixed up across the humanities, social sciences, fine arts, design, natural sciences and engineering, which complicates the role of the objects. Sometimes the objects are alien and strange, sometimes warm and comforting. Sometimes they are objects of fascination, sometimes of speculation. Sometimes the objects are a problem, sometimes they are a solution. But always, they are gathering people together in the spaces and



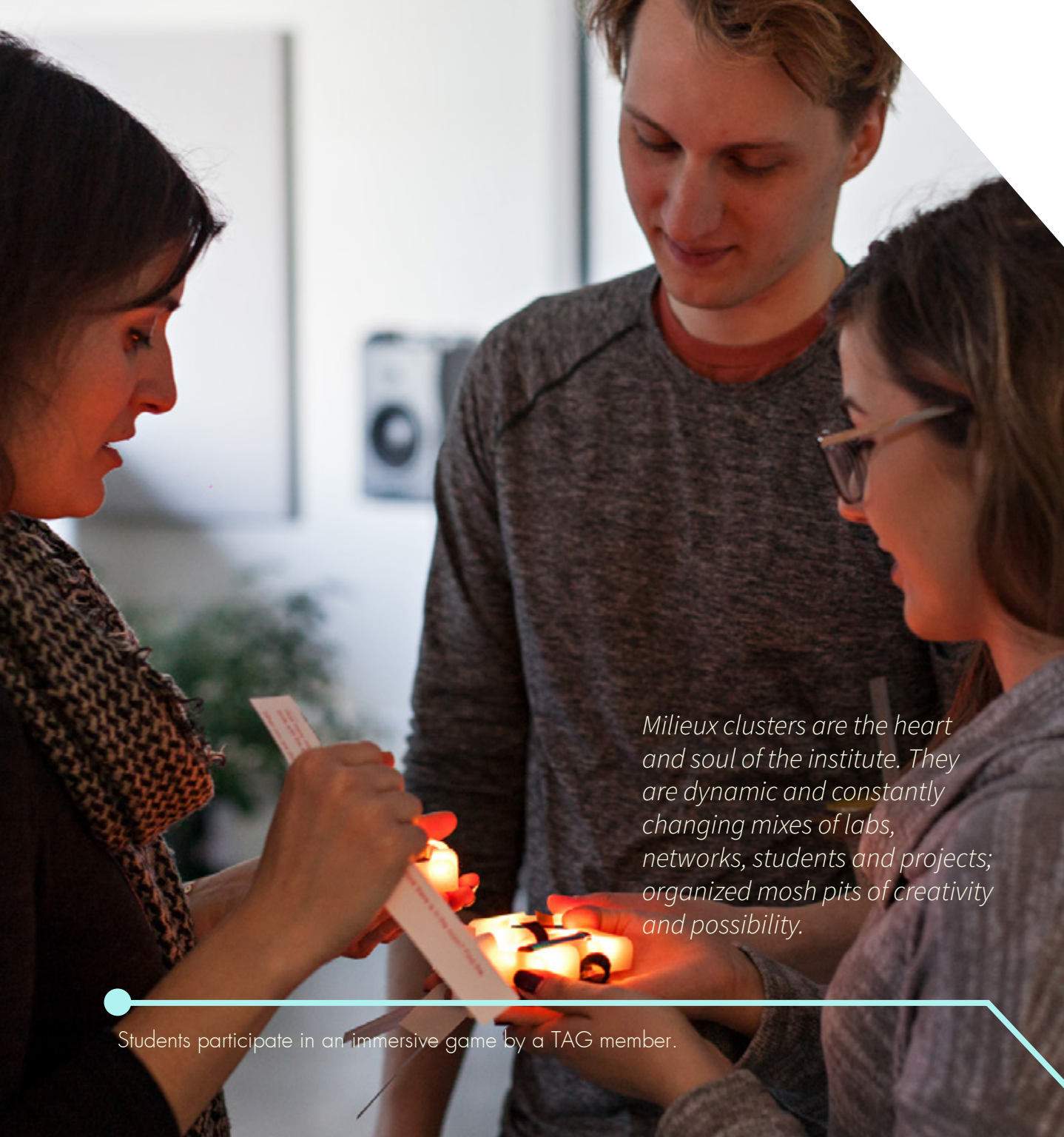




structures we are building. Our first year has been about acknowledging the role of these things that bring us together. In Speculative Life, the ethnography lab enacted this process literally when a group of sociology, anthropology, art history, and design students built a table from reclaimed wood. TAG created the The Truly Terrific Traveling Troubleshooter, a physical/digital hybrid roleplaying game about emotional labour and otherness. Games are wonderful boundary objects but more curious perhaps are the Speculative Life biolab's petri dishes of bacteria at the centre of a conversation about micro-biology, the co-agency of microbes, and new natural dyes for textiles. Curation often concerns objects so it makes sense that Post-Image could help generate the public exhibition, Artists Animate the Expo 67 Archives. Digital objects can do this work too as evident in the Indigenous Futures cluster's continued work on Abtec Island in Second Life. The Media History cluster's Residual Media Lab, a collection of old game consoles, has become the focal point for a variety of media archeology projects. Finally, objects come home to roost in the Community and Differential Mobility cluster's exploration of 3D printing but it's not printed objects that are fascinating so much as the collaborative challenge of building the printers. We would not be doing justice to our work at Milieux to say that we use these objects simply to make art, or make technology, or make culture. Our culture of research/creation certainly strives to put art, technology and culture into the world but to do that we need strange objects to hold us together, to launch our conversations rather than finish them. Things to think with, things to work with; partners in interdisciplinary exploration and imagination.







*Milieux clusters are the heart and soul of the institute. They are dynamic and constantly changing mixes of labs, networks, students and projects; organized mosh pits of creativity and possibility.*

Students participate in an immersive game by a TAG member.

**Speculative Life** is a cluster working at the intersection of **art and the life sciences**, architecture and design, and computational media. Our research group is unique in Milieux in our emphasis on fostering science and technology studies, a focus on ecology and environment, our interest in scale and networks, and finally, our commitment to futurity and imagination as critical to design, art, and scholarship. Members of our ethnography lab have been developing new methodologies through projects in collaborative carpentry, object oriented storytelling and photovoice. The main cluster space also includes **"The Living Gallery"**, an open and experimental space for ethnographic and curatorial practice.

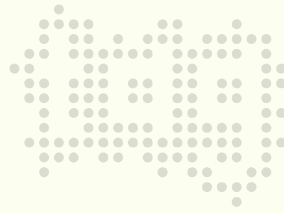
In our bio lab, a hybrid space for exploring the relationship between living and built systems, we have been growing mycelium on designed scaffolds to be used as building materials for prototype eco-furniture. In another project we are investigating food fermentation processes such as lacto-fermentation. In the Planetary Futures group we co-curated the exhibition **YMX: Migration, Land and Loss after Mirabel** and a group of six cluster members ran workshops and created an exhibit on "Elusive Life" at the **Natural History Museum and HKW in Berlin** this February, in the context of **Transmediale 2017**.

## The **Technoculture, Art & Games**

research centre was founded on the idea that digital games are perfect boundary objects that are at once easy to recognize and difficult to understand. 2016-2017 was another year of growth in membership, public activity and research productivity.

TAG's popular annual events **Global Game Jam**, **Arcade 11** and **Gamerella** returned. In June 2016, a group of TAG members travelled to London to work with ZU-UK, a participatory theatre studio, and in April 2017 they came to Milieux. We shared practices and perspectives in co-creating new playful interactive experiences.

Ongoing TAG research projects include **Streaming @ The Margins of Play**, **Speculative Play**, **LabLabLab** and **Indie Interfaces**. With the emergence and popularity of videogame live-streaming experiences, *Streaming's* research asks "who is streaming their gameplay, and how do they make sense of this experience?" *Speculative Play* combines concepts of speculative design with experiences of play to imagine alternative futures that break free from our current and, at times, invisible cultural assumptions. *LabLabLab* explores new avenues for conversations with non-playing-characters (NPC) in digital games and *Indie Interfaces* looks at the role of cultural intermediaries like the Indie MEGABOOTH in creating a sustainable game industry.



### Did you know?

TAG has created around a 100 game prototypes over the last 3 years.



## **Textiles and Materiality** investigates new

ways that materials and wearables can change how we relate to one another and to the world around us. Historic and digital technologies, including complex weaving, electronic fabrics and interactive garments are examined alongside crucial questions of sustainability, ethics, and the environmental footprint of material practices.

TM members regularly present and exhibit at festivals and galleries around Canada and the United States and our cluster is notable for its successful implementation of **student grants, and for providing seed funding, and travel grants for collaborative projects**. In 2016-17, we funded many great projects, including: **Tactual Realities: Weaving Virtual Environments**, a collaboration with the TAG research center, which explores how VR technology and weaving can inform one another.

**American Silk** studies fibres produced by the asclépiade plant, which is also called the "American silk" plant. The team hopes to gain a comprehensive understanding of the state of its development into threads and fluff, and to study its water-repellent qualities.

Through a residency at the **Icelandic Textile Centre**, we worked to creatively materialize biogeographical data obtained through genomic sequencing. This included exploring geo-specific, natural/ ecological dye methods.





A student at work in the TAG hacker corner.



Textiles and Materiality co-director Joanna Berzowska

**Media History** is an interdisciplinary research centre engaging with the historical development of media change and communication. The centre focuses on nascent yet robust subfields such as **media archaeology, variantology, new materialism, circulation theory, and technology writing.**

Following an exciting year that saw the Media History Research Centre welcome speakers like John Durham Peters (Yale University) and Johanna Drucker (UCLA), the cluster ran its **Media Archaeology Summer Institute** for the second year in a row, drawing students from around the globe.

Inspired by **Project Arclight**, a web-based tool that allows users to analyze millions of pages of digitally scanned magazines and newspapers for trends related to a chosen media history subject, we helped publish The **Arclight Guidebook to Media History and the Digital Humanities**. Current projects include **Cinema's Military Industrial Complex**, an edited collection from University of California Press, edited by Haidee Wasson, and the ongoing development of the Residual Media Depot's collection of early video game consoles.

**Did you know?**

The earliest video game console available at Residual Media Depot complete-in-box dates back to 1972.

## The **Community and Differential Mobilities**

cluster is a hub for research-creation concerned with questions of social justice and accessibility. Members produce dynamic and participatory media with a shared interest in the visible and invisible webs that enable/restrict different bodies in terms of space, social class, citizenship, employment, etc.

Under the **Aging + Communication + Technologies** (ACT) research project, the cluster held **Age 3.0: The Creative Ageing Fair**. Over 1,000 people attended the one-day interdisciplinary event. A second Age 3.0 will take place this August.

ACT co-organized the **Open Living Lab Days** with community partner Communautique. The event brought hundreds of researchers, practitioners and other experts of living lab and co-creative methodologies to Montreal.

We hosted the first **Inviting Movements: Emerging Critical Disability & Deaf Perspectives and Practices** symposium at Concordia, wherein community members share perspectives and practices in the hopes of enabling populations to "move together." We held Making Things and Making Things Private as part of Media Literacy Week across Canada and in collaboration with LEARN Québec. The event comprised a mini-maker fair for participants to explore themes like electronic circuits, robotics and LEDs.





Artifacts at the Residual Media Depot



A workshop with the Community and Differential Mobilities cluster



In the studio with the Post Image cluster.



The **Post Image** cluster brings together artists and researchers involved in the creation, production, reflection around the current and future image-based practices in our contemporary world. Their work investigates the many aspects of visual representation, photography, **post photography** and image-making, around the themes of identity (portraiture, women identity, gender identity, cultural identity), narrative (storytelling, fiction) history / memory, cultural production and environmental issues (land/landscape, tourism, geopolitics). Beyond digital technologies, social media and the web, the current age sees researchers seek a renewed balance between the «new» technologies and the «classical» language and tools of image-making.

The Post Image Cluster offers a studio experience in **image making**, providing researchers and grad students with access to a high-end technical platform (printers, scanners, portable equipment) and supporting them in the production of artworks for exhibitions and publications.

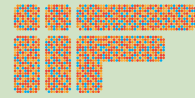
In 2016-17, the cluster organized seven artist talks, a roundtable, a workshop and an exhibition. We've welcomed internationally renowned artists including Mitch Epstein, Margaret Haines, Karen Kraven, and Nicolas Sassoon for engaging talks and workshops. Many cluster members have been featured in exhibitions across Canada and internationally.



The **Indigenous Futures** research cluster explores how Indigenous people are imagining the future of their families and communities. We are interested in narratives, frameworks, and technologies that help us articulate a continuum between our histories, our present, and the seventh generation and beyond. We take a **research-creation** approach to these issues, employing art- and technology-making coupled with scholarly analysis and conceptual development.

**imagineNATIVE Film and Media Festival** invited us to partner with them, **TIFF**, and Pinnguaq to produce six Virtual Reality works that would respond to Canada's 150th anniversary celebration by imagining the 150 years into the future from an Indigenous perspective. We hosted a week-long residency with artist collective Postcommodity, who got a crash course in VR from our Research Assistants. Their work, and that of multimedia artist Scott Benesiinaabandan, debuted at TIFF in June. Benesiinaabandan's year-long residency at Milieux was supported by a **Canada Council New Media Residency grant**.

Throughout the year the cluster has continued with two ongoing series: **Illustrating the Future Imaginary**, in which emerging artists are asked to create an illustration of the future; and the **Future Imaginary Lecture Series**, in which Indigenous scholars and artists are invited to share their thoughts on the future of Indigenous life in North America.



Working with VR at the Initiative  
for Indigenous Futures





The background image shows a person's legs in light blue jeans and bright blue sneakers. Their hands are holding a black smartphone and a small black device. A blue cable is connected to the phone. The floor is dark with white and green painted lines, and several QR codes are visible. A yellow line with a dot at the end points from the text area to a QR code on the floor.

## What We Do

The cluster spaces at Milieux host a remarkably diverse group of scholars and practitioners. On any given day, members are working with virtual reality, biotextiles, embroidered circuitry, 3-D printed bio-sensors, large-format digital printing, and historical archives of media technology. In Milieux's common spaces – our Atelier, Resource Center, kitchen, and lounge – our members encounter each others' works and attend each others' events. These spaces enable transdisciplinary collaboration to develop organically.



# pause

Issue 1 /

new worlds / possibilities for research & creation



## Online Publishing Milieux-Style

Three times a year, Milieux publishes **Pause Button**, a student-led online journal about living and creating with technology. Pause Button is an experiment that aspires to reclaim public scholarship as a core function of the university. It works through our desire and need to collectively speak and be heard, as well as to listen. Pause Button is **an experiment in creating something more than just another communication platform, something that breaks free from being just another blog and has the potential to evolve beyond its current iteration.** This experiment develops in three parts: content coherence, student opportunity, and signal boost. Each issue is released around a theme, and includes four pieces of writing, for which students are paid. Pause Button provides a means for students to promote their work to a broad audience, simultaneously raising awareness about the work being done at Milieux. Pause Button's second and third issues were responsible for the highest traffic days on Milieux's website during the 2016-2017 academic year.

# Some Research Highlights

**T&M's** Joanna Berzowska was an invited speaker at the Masters of Tomorrow or **MOT Summit**, an invite-only event held in Miami during the week of Art Basel, in November 2016.

## Exhibitions

Monika Kin Gagnon curated **Artists Animate the Expo 67 Archives** at the Montreal Musée de l'Art Contemporain. Through a series of talks and open studio activities, as well as the production and exhibition of work, Gagnon highlighted four artists' processes of working in/with archives. These four artists contributed to In Search of Expo 67 at the Musée d'art contemporain de Montréal co-curated by Kin Gagnon and Lesley Johnstone.

**Textiles & Materiality** Cluster faculty members Barbara Layne and Kelly Thompson, as well as Research Assistant members Sophia Borowska and Gen Moisan, all presented work at the **Textile Society of America's 15th Annual Biennial Symposium**, held at the Savannah College of Art and Design in Savannah, Georgia.

## Artwork

PhD candidate Will Robinson and associate professor David Waddington launched the card game **Cabinet Shuffle**. Inspired by Prime Minister Justin Trudeau's decision to ensure a gender-equal cabinet, the card game focuses on governmental representation.

Gina Hara, award winning filmmaker and **TAG's** Creative Director, launched **"Your Place or Minecraft?"** Following the virtual lives of a handful academics playing Minecraft together, it is the first Minecraft documentary web series ever made.

Pippin Barr's speculative play project **"It Is As If You Were Doing Work"** was covered widely in technology media (The Verge, Digital Trends, Vice, Mic.com, among others).

**CDMC's** Ann-Louise Davidson co-authored "Examining the Integration and Inclusion of Syrian Refugees Through the Lens of Personal Construct Psychology", in **Personal Construct Theory & Practice** Volume 13, as well as "A PCP approach to conflict resolution in learning communities" in Personal Construct Theory & Practice Volume 14.

**Media History's** Fenwick McKelvey published "Porting the political campaign: The NationBuilder platform and the global flows of political technology" in New Media and Society in December 2016.

**Speculative Life's** Orit Halpern co-authored "Demoing unto Death: Smart Cities, Environment, and Preemptive Hope", in Fibreculture Issue 29 (June 2017), as well as "The Smartness Mandate: Notes Toward A Critique" in Grey Room Issue 68 (Summer 2017).

## Articles

Post Image cluster member Eric Simon co-wrote the book, **Espaces de Savoir**. In a practice of open exploration, each co-author outlined their take on accessing espaces de savoir, or environments of knowledge. The book won the literature prize, the Grand prix edition Grafika.

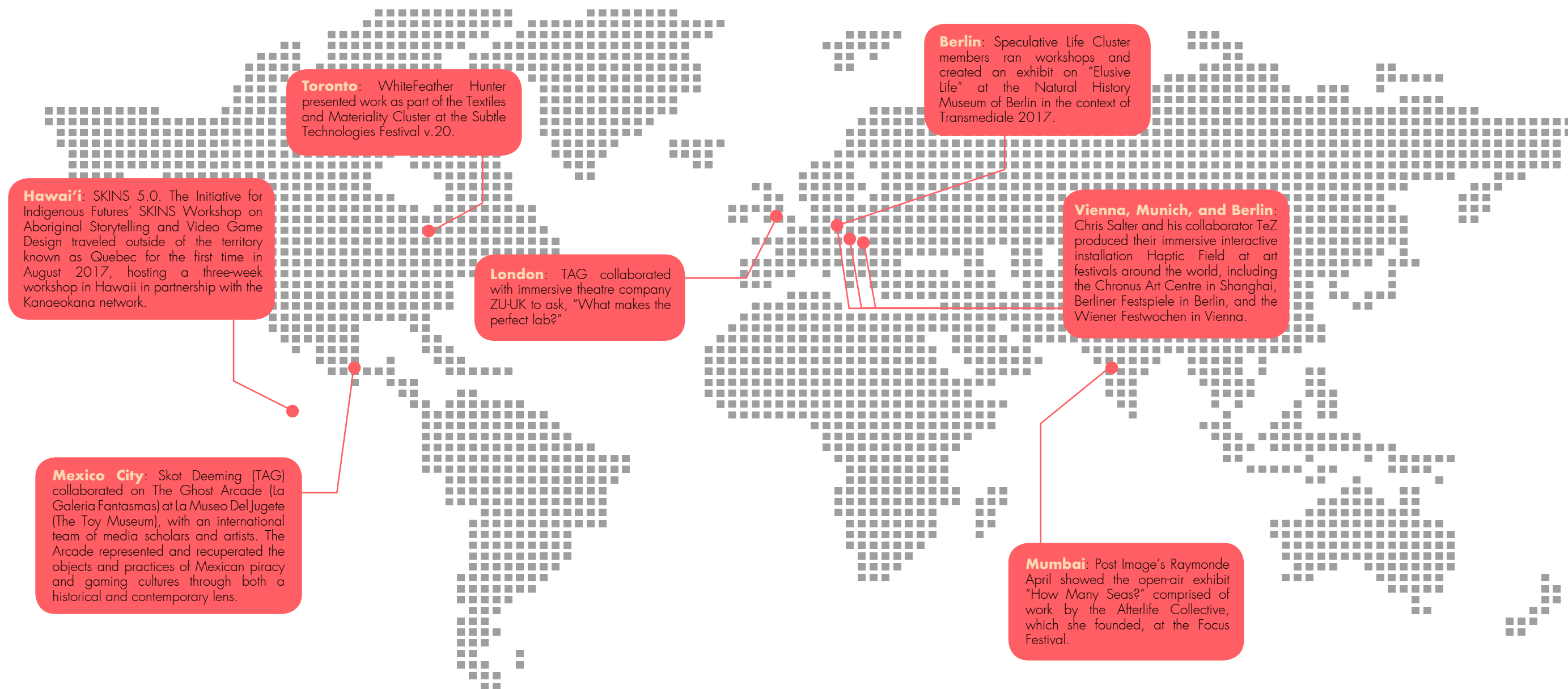
**TAG's** Mia Consalvo published **Atari to Zelda: Japan's Video Games in Global Contexts** in 2016 (The MIT Press).

**TAG's** Mark Steinberg co-edited **Media Theory in Japan** in April 2017, published by Duke University Press.

Giuliana Cucinelli and Ann-Louise Davidson, of the **Critical Disability and Differential Mobilities** Cluster, published "Intergenerational Learning Through A Participatory Video Game Workshop" in the **Journal of Intergenerational Relationships**.

## BOOKS





# Milieux Around the World

## MAXWELL'S EQUATIONS: APPAREL THAT SPEAKS THROUGH SCIENCE

*Interview reprinted and condensed from the Raw Finery Studio blog, originally published at [rawfinerystudio.com](http://rawfinerystudio.com)*

Commissioned for the 2016 Subtle Technologies Festival, Maxwell's Equations is the first collaboration by artist-designers Barbara Layne and Lauren Osmond. The front of each of three interactive garments is embellished with a diagram of an electromagnetic field, made by the 19th century Scottish physicist, James Clerk Maxwell. Made of conductive silver thread, these emblems function as a directional patch antenna that wirelessly connects the garments to one another.

When the movements and orientation of the wearers are aligned, the strength of the signal will trigger various messages that scroll through the flexible LED displays on backs of the garments. These texts, equations and poetry reference the work of Maxwell, whose theories in electromagnetic radiation led to the development of all wireless communications today.

Barbara Layne is a faculty member and the Director of Studio subTela, one of Milieux's research labs. Lauren Osmond, who has been trained in Fashion Design and Studio Arts, left her position as Head of Operations at the Milieux Institute to embark on a Masters in Art Conservation at Queens University in Kingston, where she will be focusing her studies on contemporary new media art and textiles.





**Q. Tell us about Studio subTela. What is its focus and mission?**

BL: Studio subTela is focused on the development of intelligent cloth structures for the creation of artistic, performative and functional textiles. Working with a team of graduate researchers in Studio Arts, Design and Engineering, the research is focused on new methods of combining digital technology and traditional textile materials to create interactive garments, objects and environments. The research includes touch-sensing systems, wireless technology and most recently, flexible antenna systems.

**Q. What challenges or difficulties did you overcome to make the dresses functional?**

BL: The research involves diverse areas of technical specialization, and since we are working in a university setting, the turnover of student research assistants each year would be the biggest challenge for this project. We brought in a new circuit designer, Donna Legault who first had to become familiar with our particular – and sometimes peculiar – systems. Once the circuit was determined, we needed to bring in a new programmer, Martin Peach, who built on code previously developed by Hesam Khoshnevis and Sareh Majidi.

Rytha Kesselring, also new to the team, is an undergraduate student whose meticulous handwork was indispensable to the project (there are 576 LEDs hand stitched into the arrays). Antennas were mathematically proven and tested in an anechoic chamber by Tahseen Mustafa and produced by Genevieve Moisan, a virtuoso on the Tajima Laying Machine where ideas become materialized. The team was continually

going back-and-forth with Lauren to accommodate the various electronic components in her developing designs. Given the many new team members and the pioneering technological developments, I was quite surprised that the project was completely finished, tested and debugged in time for the event.

**Q. Have you noticed an overlap in technology development and fashion design or are the two fields still very separate?**

BL: Great techno fashion still requires artisanal handcrafting, which is contrary to the fast changing styles of ready-to wear mentality. The enormous attention garnered by the 2016 Met Gala may have an influence on future techno fashion, although we can expect mainstream projects to be simplistic and perhaps even cheesy if they are to have quick commercial success.

**Q. What is the next step for your designs? What do you have in mind for your next project?**

BL: At Studio subTela, we will be expanding our antenna investigations to include not only garments, but objects for the development of a responsive environment. We have amassed a large archive of gold and silver laid textiles observed in some of the great textile collections of the world. By studying the techniques, materials and meanings of these objects, we hope to develop new ways in which people interact with textiles, with objects and with one another. I would also be delighted to have the opportunity to work once again with Lauren on a future project.



## Building a future in which Indigenous people are present and thriving

By Jason Edward Lewis and Skawennati

*Originally published in the Montreal Gazette, April 27 2016*

We started reading science fiction as teenagers. We fell in love with the fantastic worlds, the strange societies and the amazing technologies. As we got older, though, we began to notice the lack of native people in those futures. In fact, there were barely any non-white people at all.

The lack of images of us in science-fiction told us pretty clearly that there was no room for First Nations in the exciting futures being imagined by writers and artists, and being built by scientists and engineers. Today, decades later, we work with Indigenous youth who recognize that the dominant culture still doesn't see a future for them. In our conversations with them, and in the academic literature, we can see the connection between this erasure and the tragic statistics that plague First Nations: highest dropout rate, highest incarceration rate and, as has become painfully highlighted recently, highest suicide rate.

Kiowa author N. Scott Momaday wrote that the "greatest tragedy that can befall us is to go unimagined." A great tragedy has already befallen native people. We live in a society defined by greed for the land and



its resources, hate for our cultures and genocide of our peoples. This fact undermines any notion that settler Canadians live in a society that is fair and just for all. It is a foundation that poisons every institution that grows from it. Neither apologies nor reconciliation will rectify it.

To replace this damaged foundation, we must imagine deeply anew. We use the term “future imaginary” to describe the ideas that commonly come to mind when we think about the far future, things like jetpacks and intergalactic travel. The Initiative for Indigenous Futures (IIF) was developed as a catalyst and a forum for our communities to populate the future imaginary with native people who are present, vital and in charge of our own destinies. It is imperative that First Nations imagine how our cultures will grow and evolve, sustaining continuity with the past while exploring new cultural configurations that will enable us to not just survive, but thrive.

IIF conducts this work by instigating, encouraging and supporting art that illustrates alternative Indigenous futures; through public presentations by thinkers and makers who are actively imagining the future of everything from Indigenous governance to food sovereignty to language; and through workshops with Indigenous youth that develop the skills and confidence to build a future in which they see themselves.

Settler society must imagine a new relationship with us that is based on more than just apologies. Learn the treaties, which both our peoples signed, but only we taught to our children. When you know them, you

will understand that us Indians are not asking for “free” stuff; rather we are demanding that we be paid what we are owed. When you see how religious and legal frameworks brought from Europe cheated our people out of our humanity, you will understand our anger. When you look at even a fraction of the letters of appeal, land claims and lawsuits we have pursued to little avail for hundreds of years, you will know why we are exasperated.

Furthermore, it is not our job to educate you. The Royal Commission on Aboriginal Peoples report was published 20 years ago. The Truth and Reconciliation Commission criss-crossed this land for the last seven years. Our thinkers have been writing about this history for decades, our artists have been making artwork about it for even longer. In 2016, with Google at your fingertips, not knowing this history can only be due to willful ignorance. Educate yourself, and then, please, educate your children.

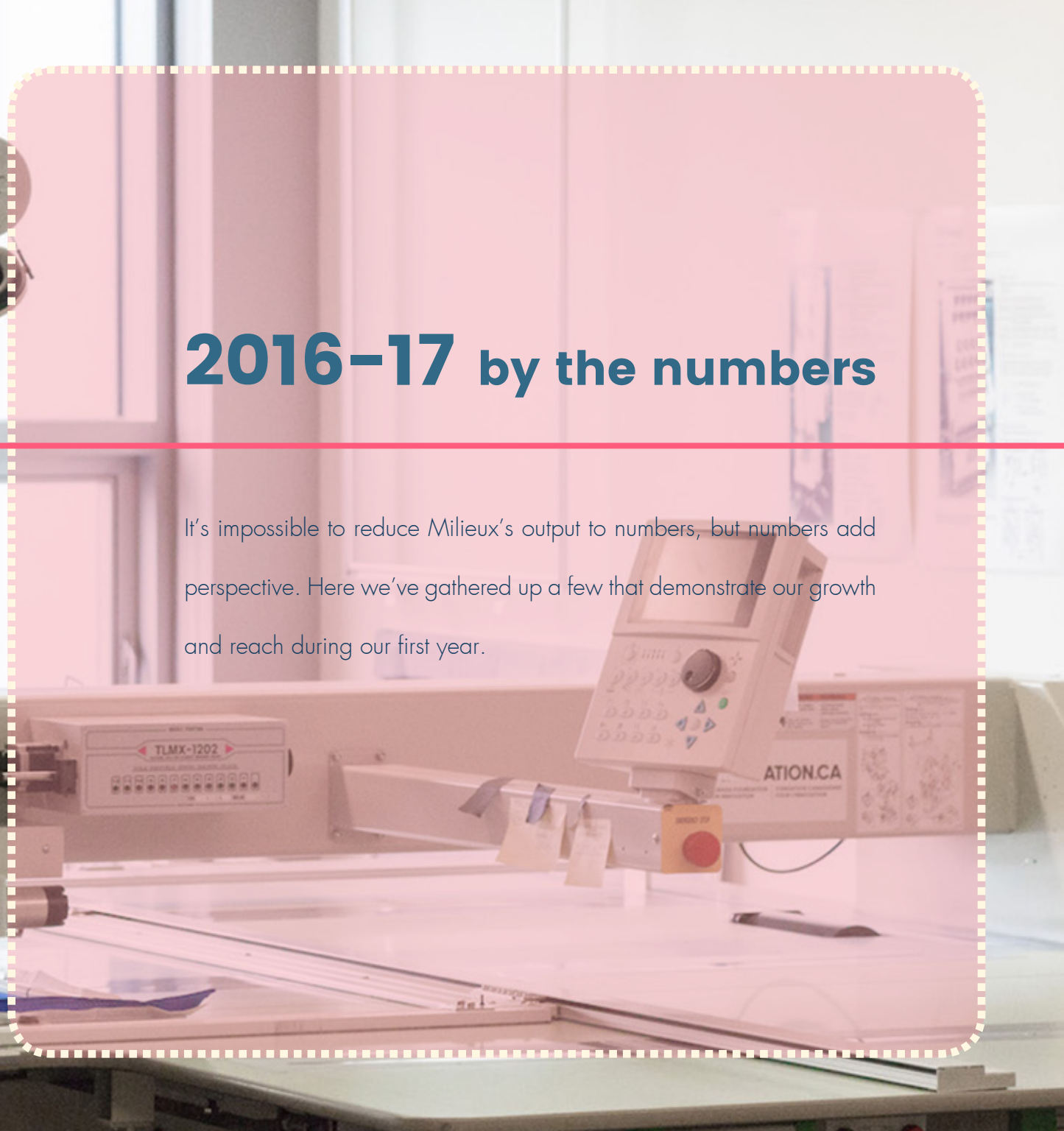
For 500 years we have refused to be assimilated. We will refuse for the next 500 years. What is more, we are imagining the next 500 years as a time when our people will assert themselves as primary actors in the evolution of Canadian society. We are busy building that future. Imagine that.



## 2016–17 by the numbers

It's impossible to reduce Milieux's output to numbers, but numbers add perspective. Here we've gathered up a few that demonstrate our growth and reach during our first year.

The Tajima machine was acquired with funding from the Canada Foundation for Innovation (CFI).





# Research profile


\$1.8M/year

internal & external funding for research at

MILIEUX

MILIEUX

co-hosts FQRSC Hexagram Network, with 37 member researchers.



MILIEUX faculty are PIs for

3 SSHRC Partnership grants

over \$6M

4


Canada Research Chairs

Digital Games Studies & Design (Tier 1)

Feminist Media Studies (Tier 2)

Global Emergent Media (Tier 2)

6



Concordia University Research Chairs

Computational Media & the Indigenous Future Imaginary (Tier 1)

Interactive Design and Games Innovation (Tier 1)

Mobile Media Studies (Tier 1)

Interactive Documentary Filmmaking (Tier 2)


Media & Contemporary Literature (Tier 2)

New Media, Technology & the Senses (Tier 2)


Relational Art and Philosophy (Tier 2)

2

Fellowships




Trudeau Fellowship



Bronfman Fellowship in Contemporary Art

# Social Media Reach

Milieux's social media feeds function to keep our community informed, and they work in concert with our events calendar. Event promotion on social media has generated our largest web traffic spikes and has fueled our steady follower growth.



@Milieux\_news


400 followers

2016 June

2017 May

~200 impressions/day

~700 impressions/day




@milieuxinstitute

2016 June

2017 May

181 likes

504 likes



subscriber rate

open rate

click rate

50 2016 December

420 2017 June

MILIEUX 41%

MailChimp 15%

MILIEUX 4%


MailChimp 1.7%

WEB TRAFFIC MILIEUX

13,174 pageviews December 2016 - June 2017.

page with the highest traffic (besides homepage)

Pause Button our technology and art publication.



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ELEVATORS

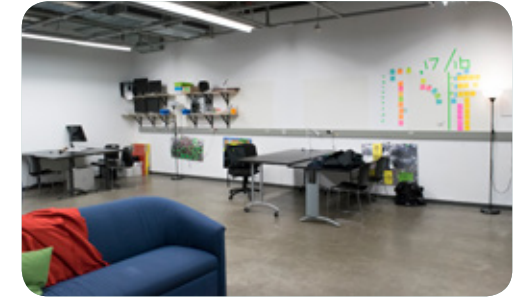
ELEVATORS



Technoculture, Art & Games



Indigenous  
Futures



Community  
& Differential  
Mobilities

ELEVATORS

ELEVATOR

Milieux Nerve  
Centre

VR  
Research  
Lab



Resource  
Centre



Learning  
Atelier



Milieux Atrium

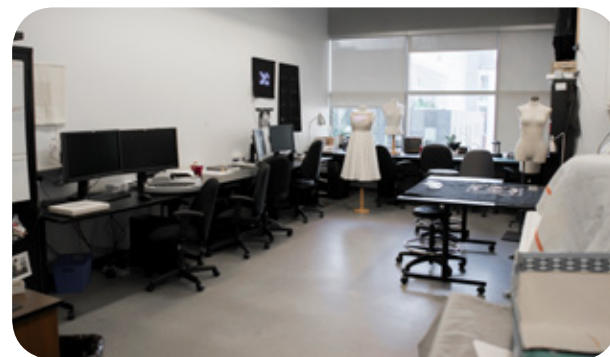


Kitchen & Lounge



ELEVATORS

ELEVATORS



Studio subTela



Speculative Life



Speculative  
Life Bio Lab

ELEVATORS

ELEVATOR

Residual Media Depot

Post Image



Textile & Materiality

Media History



SenseLab

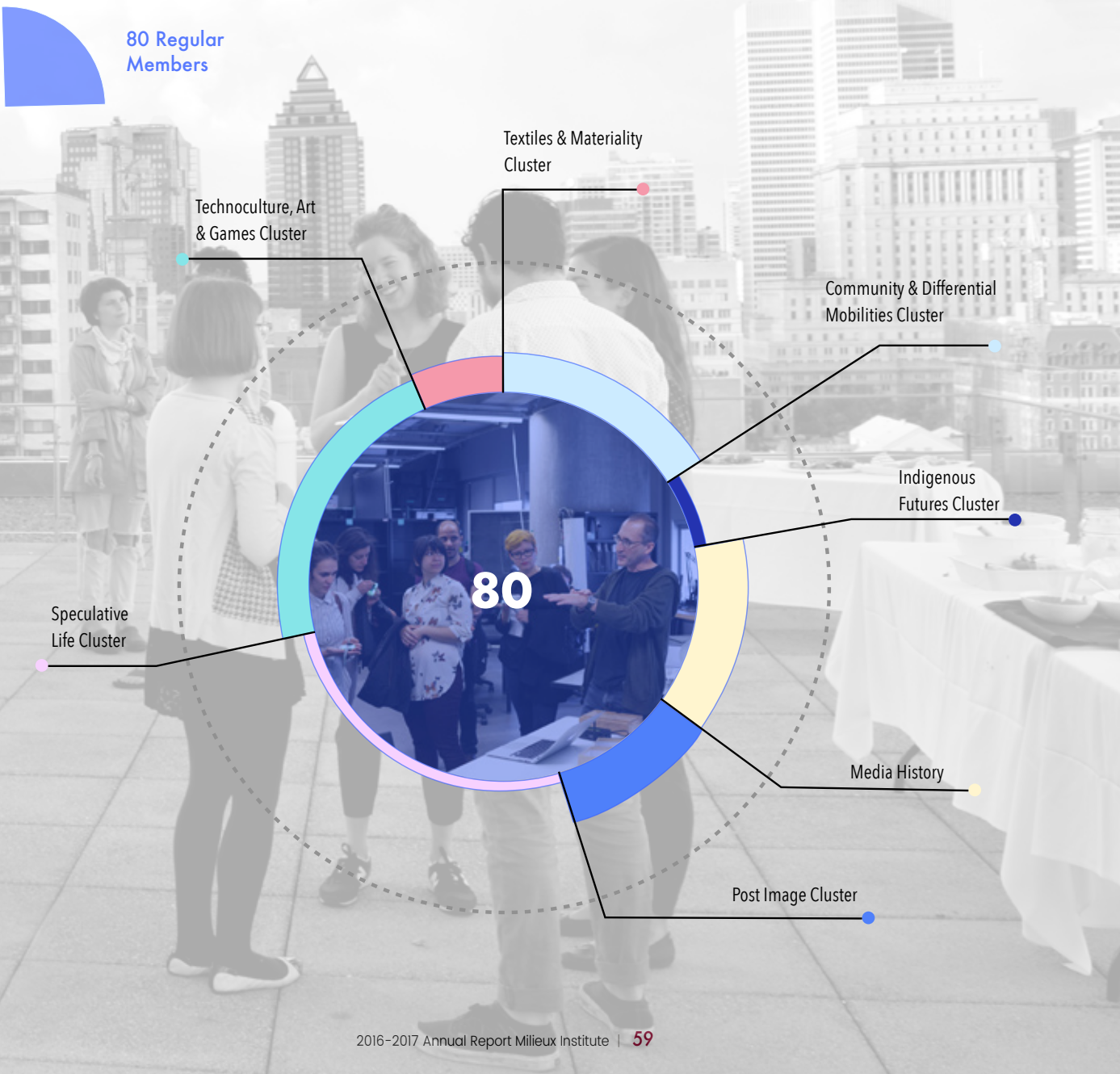
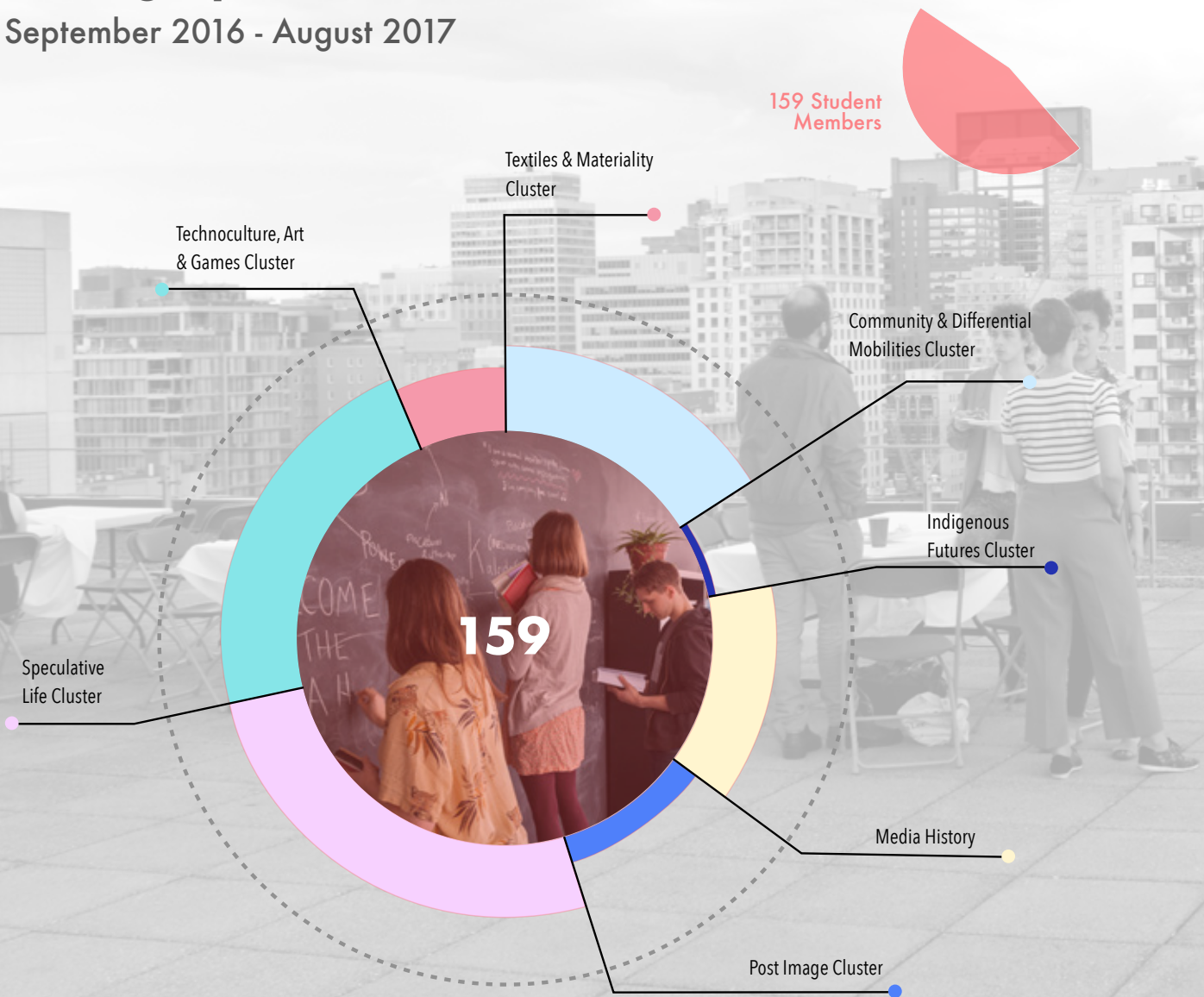


Textile  
Embroidery  
Room



# Demographics

September 2016 - August 2017





A young participant with brown hair in pigtails, seen from behind, looking at a large, colorful, pixelated screen. The screen displays a stylized, retro-style game character or object with a glowing green atomic symbol on its chest. The background is dark with many small, glowing purple and blue dots, creating a bokeh effect.

A young participant at TAG's Arcade 11 indie game expo.

## Looking forward

Milieux is, itself, a research-creation project. Our governance structure is unique, our infrastructure is dynamic and responsive, and our funding model is collectivist and lean. The members and the broader network we support represent a cross-section of academia, industry and community engaged in direct and critical interrogation and intervention in our possible futures. The project of the institute is more than an administrative patch, it's an exercise in the reorganization of knowledge production and practice for all participating students, faculty and collaborators. 2017-18 will bring new members, new clusters and new projects. We will focus especially on building our version of a Maker Space and a maker oriented research culture which privileges small, adaptive and appropriable technology, intimate experience with materials and tools, community engagement, and neo-materialist epistemologies. We will also enhance our existing biolab, interactive textiles, VR studio, residual media depot, and game labs providing training and access to equipment and expertise that is unique at Concordia and in Montreal. At the same time we will be working hard to introduce Milieux to the world with new programs for visiting scholars and artists, student exchanges



and residencies. Our cluster and commons spaces and diverse research communities combined with a central location in downtown Montreal provide an unprecedented opportunity for onsite collaboration with digital media artists and scholars from around the world. The same is true for potential industry and community partners. Milieux has the infrastructure, space and human resources to tackle any number of small and large projects and in 2017-18 we will see several of these launch, including a project on game discoverability with GamePlay Space, a nonprofit indie game co-working space in Montreal; a project to build a makerspace for disadvantaged youth with the Maison des Jeunes; and project on a new bio-textiles application. We invite prospective students and collaborators from Montreal, Canada and around the world to find out more about Milieux researchers, students, and projects. Engage with us and help us develop and sustain this unique organization and its promise.

Until next year.

Bart Simon







# MILIEUX

institute for arts • culture • technology

in 2016-2017

## STAFF

**Bart Simon**  
Director

**Chris Salter**  
Associate Director

**Lynn Hughes**  
Associate Director

**Marc Beaulieu**  
Head, Infrastructure & Technical Support

**Kathryn Jezer-Morton**  
Head, Communications & Public Engagement

**Harry Smoak**  
Head, Operations & Coordination

## STEERING COMMITTEE

**Mia Consalvo + Lynn Hughes**  
Technoculture, Art & Games

**Darren Wershler + Fenwick McKelvey**  
Media History

**Jason Lewis**  
Indigenous Futures

**Orit Halpern + Tagny Duff**  
Speculative Life

**Giuliana Cucinelli + Owen Chapman**  
Community & Differential Mobilities

**Raymonde April + Marisa Portolese**  
Post Image

**Kelly Thompson + Barbara Layne**  
Textiles & Materiality

## CREDITS

**Vjosana Shkurti**

Graphic Design

**Ann-Louise Davidson**  
**Darren Wershler**  
**Ethnography Lab**  
**Jess Marcotte**  
**Kathryn Jezer Morton**  
**Marc Beaulieu**  
**Matthew Brooks**

Photography

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p. 16 (fig. 1)

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**Nina Bouchard**  
**Skawennati**  
**Technoculture Art & Games**  
**Vjosana Shkurti**  
**[theghostarcade.tumblr.com](http://theghostarcade.tumblr.com)**





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RESEARCH & GRADUATE STUDIES  
FACULTY OF FINE ARTS  
FACULTY OF ARTS & SCIENCE



*Fonds de recherche  
Société et culture*  
Québec 





1515 rue Sainte-Catherine W.  
EV Building, 11.455  
Montréal, Quebec, Canada  
H3G 2W1

+1 514 848-2424 x5994  
[milieux.institute@concordia.ca](mailto:milieux.institute@concordia.ca)  
[milieux.concordia.ca](http://milieux.concordia.ca)