

LIVING ARCHITECTURE SYSTEMS GROUP

Symposium 2019
Program



Social Sciences and Humanities
Research Council of Canada



Canada Council
for the Arts
Conseil des arts
du Canada



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Keynote

Less Interference/ More Dance

Paul Pangaro

*Carnegie Mellon University,
Pittsburgh, USA*

When the MFA Interaction Design Department at the College for Creative Studies fabricated a full-scale replica of Gordon Pask's "Colloquy of Mobiles," we imagined how astonishing it must have been when he first presented it at the groundbreaking 1968 exhibition *Cybernetic Serendipity*. Life-sized mobiles interacted with each other and the audience through light and sound, "conversing" in multi-layer engagements. Colloquy brings continuity between Pask's interactive machines of the 1950s and his rigorous *cybernetic theory of conversations* of the 1970s. He was always asking, what is conversation? And how can novelty in conversation lead to new experiences and novel concepts? Yet we were unprepared for its impact in 2018: audiences of interaction designers, media artists, students, scholars and the general public all found Colloquy's organic, analog presence to be utterly seductive. Why? What would he be saying to us today?

Paul Pangaro has been designing conversational interfaces for forty years. At MIT he received a BS degree in Humanities/Computer Science and then was hired by Nicholas Negroponte at the MIT Architecture Machine Group. There Pangaro met Gordon Pask with whom he earned a PhD in Cybernetics at Brunel University (UK). He then pursued a career as entrepreneur, teacher, researcher and consultant. His most recent project is the full-scale replica of Pask's Colloquy of Mobiles at the College for Creative Studies in Detroit, while he was Chair of the MFA Interaction Design program. In January 2019 Pangaro became Professor of the Practice in the Human-Computer Interaction Institute at Carnegie Mellon University.

Keynote

Envisioning the Internet of Things

Katy Börner

*Indiana University, Bloomington, USA
with Andreas Bueckle, PhD*

We present two streams of collaboration between the LASG and the Cyberinfrastructure for Network Science Center (CNS) at Indiana University (IU) that revolve around the Amatria sentient sculpture on display at Luddy Hall, IU Bloomington (<https://cns.iu.edu/amatria.html>).

First, we will introduce our joint work on Dendrite and Moth kits that resemble Amatria and are meant to introduce Internet of Things (IoT) setups to general audiences.

Second, we will present Tavola, an app visualizing the location of sensors and actuators in Amatria as well as the value of one infrared (IR) sensor. We will discuss the research and development process of Tavola that uses the data visualization literacy framework (DVL-FW) to design insightful visualizations, together with challenges and future developments.

Katy Börner is the Victor H. Yngve Distinguished Professor of Engineering and Information Science in the School of Informatics, Computing, and Engineering, an Adjunct Professor at the Department of Statistics in the College of Arts and Sciences, a Core Faculty of Cognitive Science, and the Founding Director of the Cyberinfrastructure for Network Science Center at Indiana University Bloomington.

Andreas Bueckle is a Ph.D. candidate in Information Science in the School of Informatics, Computing, and Engineering at Indiana University Bloomington.

Presenters

Introduction

Anne Bordeleau, *O'Donovan Director,
University of Waterloo School of Architecture*
Philip Beesley, *University of Waterloo &
European Graduate School*
Sara Diamond, *President,
Ontario College of Art and Design University*

Keynote Speakers

Paul Pangaro, *Carnegie Mellon University*
Katy Börner with Andreas Bueckle, *Indiana University*

Resurgence of Organicism Exhibition

Sarah Bonnemaïson, *Dalhousie University*

Scoping the Future of Design,

Architecture and Living Systems: A Research Workshop

Carole Collet, *Central Saint Martins, UAL*

Collaborative Capacity Building

Through Structured Dialogue

Edgar Cardenas, Michael O'Rourke & Stephanie Vasko
Toolbox Dialogue Initiative, Michigan State University

Research Poster Presentations

Zeynep Aksoz, *University of Applied Arts Vienna*
Lancelot Coar, *University of Manitoba*
James Forren, *Dalhousie University*
Adam Francey, *University of Waterloo*
Parisa Hassanzadegan, *University of Waterloo*
Thibaut Houette, *University of Akron*
Mike Hu, *Indiana University*
Luke Kimmerer, *University of Waterloo*
Brian Lilley, *Dalhousie University*
Daiwei Lin, *University of Waterloo*
Brandon Mechtley, *Arizona State University*
Lingheng Meng, *University of Waterloo*
Richard Mui, *University of Waterloo*
Nima Navab, *Concordia University*
Michael Palumbo, *York University*
Soo Woo, *University of Waterloo*

Paper Presentations

Open Boundaries and Expanded Dimensions

Simone Ferracina, *University of Edinburgh*
Alexander Webb, *University of New Mexico*
Barbara Imhof, *LIQUIFIER Systems Group GmbH*
Douglas MacLeod, *Athabasca University*
J. Eric Mathis, *Institute for Regenerative
Design and Innovation*
Codrin Talaba, *Independent Design Researcher*

Paper Presentations Continued

Subtle Phenomena and Expanded Perception

Catie Newell, *University of Michigan*
Salavador Breed, *Poul Holleman and
Paul Oomen, 4DSOUND*
Michael Awad, *Artist, Architect and Independent Academic*
Navid Navab, *Concordia University*
Robert Bean, *Nova Scotia College of Art and Design*
Alan Macy, *Biopac Systems Inc.*

Making Vibrant Matter

Maria Paz Gutierrez, *University of California, Berkeley*
Martyn Dade-Robertson, *Newcastle University*
Neil Forrest, *Nova Scotia College of Art and Design*
Dana Cupkova, *Carnegie Mellon University*
Mette Ramsgaard Thomsen,
Royal Danish Academy of Fine Arts
Tim Miller, Ross Stevens, Bernard Guy,
Victoria University of Wellington
Petra Gruber, *University of Akron*
Michael Fox and Juintow Lin, *FoxLin Architects*
Andrew Wit, *Temple University*

Hybrid Nature

Carole Collet, *Central Saint Martins, UAL*
Phil Ayres, *Royal Danish Academy of Fine Arts*
Mitchell Joachim, *Terreform ONE and NYU*
Andrew Kudless, *California College of the Arts*

Synthetic Cognition

Dana Kulić, *Monash University*
Matias del Campo, *University of Michigan*
Haru Ji and Graham Wakefield,
OCAD U and York University
Matt Gorbet, *Gorbet Design Inc.*
Thomas Jaśkiewicz, *TU Delft*
Brandon Mechtley, Julian Stein, Todd Ingalls,
Connor Rawls and Sha Xin Wei,
Synthesis, Arizona State University

Kinetic Architectures

Henriette Bier, *TU Delft*
Axel Kilian, *Massachusetts Institute of Technology*
Vera Parlac, *University of Calgary*
Manuel Kretzer, *Anhalt University of Applied Sciences*

Past and Future Living Architecture

Sarah Bonnemaïson, *Dalhousie University*
Colin Ellard, *University of Waterloo*
Mark-David Hosale, *York University*
Val Rynnimeri, *University of Waterloo*
Ellen Hlozan and Matthew Spremulli,
Autodesk Technology Center
Michael Stacey, *The Bartlett School of Architecture*
JD Talasek, *National Academy of Sciences*

Schedule

Friday March 1

9:00–9:30 AM	Registration, Coffee
9:30 AM	Welcome & Resurgence of Organicism Exhibition Opening
10:00 AM	Poster Sessions
11:30 AM	Lunch
12:30 PM	Introductions
1:00–3:15 PM	Paper Presentations: Making Vibrant Matter
3:15–3:45 PM	Break
3:45–5:00 PM	Paper Presentations: Synthetic Cognition
5:00–6:15 PM	Paper Presentations: Subtle Phenomena & Expanded Perception
6:15 PM	Dinner Reception
7:15 PM	Opening Keynote
8:30 PM	Reception

Saturday March 2

9:00–10:30 AM	Paper Presentations: Open Boundaries & Expanded Dimensions
10:30–10:45 PM	Break
10:45–12:00 PM	Paper Presentations: Hybrid Nature
12:00–12:15 PM	Break
12:15–1:15 PM	Keynote
1:15–2:30 PM	Lunch & LASG General Meeting
2:30–3:45 PM	Paper Presentations: Kinetic Architectures
3:45–4:15 PM	Break Paper Presentations:
4:15–6:15 PM	Past & Future Living Architecture
6:30–7:00 PM	Transfer to LASG Studio
7:00–8:00 PM	LASG Studio Dinner Reception
8:00 PM	4DSOUND Studio Presentation
8:15 PM	LASG Studio Reception

Sunday March 3

9:00–10:30 AM	Research Workshop: Scoping the Future of Design, Architecture and Living Systems
10:30 AM	Break
10:45–12:45 PM	Research Workshop: Collaborative Capacity Building Through Structured Dialogue
12:45–1:45 PM	Lunch & Workshop Completion
2:00 PM	Next Steps & Closing Remarks

March 1

9:00–9:30 AM 9:30 AM	Registration, Coffee Welcome, Resurgence of Organicism Exhibit Opening <i>Sarah Bonnemaïson, Dalhousie University</i>	Reid Room Reid Room
10:00 AM 11:30 AM 12:30 PM	Poster Sessions Lunch Introductions <i>Anne Bordeleau, O'Donovan Director, University of Waterloo School of Architecture</i> <i>Philip Beesley, Director, LASG, University of Waterloo and European Graduate School</i>	Reid Room Reid Room Main Auditorium
1:00–3:15 PM	Making Vibrant Matter Live Matter: Live Agency and Design <i>Maria Paz Gutierrez, UC Berkeley</i> Living Construction <i>Martyn Dade-Robertson, Newcastle University</i> Porøs: Phenomenon + Apparatus <i>Neil Forrest, Nova Scotia College of Art and Design University</i> New Materials for an Era of Material Change <i>Mette Ramsgaard Thomsen, CITA, The Royal Danish Academy of Fine Arts</i> 4D Printing: Design and Dynamic Forms <i>Tim Miller, Ross Stevens, Bernard Guy Victoria University of Wellington</i> Research Exposed: Living Wall System Prototype <i>Petra Gruber, University of Akron</i> Feasibility Fueled Experimentation <i>Michael Fox & Juintow Lin, Cal Poly Pomona and FoxLin Architects</i> Knit, Wound, Woven: Recontextualizing Architectural Typologies and Assemblies Through Fibrous Composites <i>Andrew Wit, Temple University</i> Darkness by Day <i>Catie Newell, University of Michigan</i>	Main Auditorium
3:15–3:45 PM	Break	Reid Room

3:45–5:00 PM	<p>Synthetic Cognition</p> <p>Learning Through Interaction <i>Dana Kulić, Monash University</i></p> <p>Toward Playful Intelligence in Shared Reality Haru Ji and Graham Wakefield, <i>OCAD University and York University</i></p> <p>Toward a Unified Behaviour Previsualization and Control System for Living Architecture Systems Matt Gorbet, <i>Gorbet Design</i></p> <p>Engaging People in Interactive Architectural Ecosystems Tomasz Jaskiewicz, <i>TU Delft</i></p> <p>Improvisatory Events Using SC: A Modular Software Suite for Composing Continuously-Evolving Responsive Environments Todd Ingalls, Brandon Mechtley, Connor Rawls, Sha Xin Wei, Julian Stein <i>Synthesis, Arizona State University</i></p>	Main Auditorium
5:00–6:15 PM	<p>Subtle Phenomena & Expanded Perception</p> <p>Integrating Sound in Living Architecture Systems Salvador Breed, Poul Holleman, Paul Oomen, <i>4DSOUND</i></p> <p>In Theoretical Physics: PB, IvH, and the LASG Michael Awad, <i>Artist, Architect and Independent Academic</i></p> <p>Chaosing into Balance Navid Navab, <i>Concordia University</i></p> <p>Being-in-the-Breathable: Field Work in Mobility and Atmosphere Robert Bean, <i>Nova Scotia College of Art and Design University</i></p> <p>Biometrics in Participatory Collective Arts Alan Macy, <i>Biopac Systems</i></p>	Main Auditorium
6:15 PM	<p>Dinner Reception</p>	Main Auditorium
7:15 PM	<p>Opening Keynote</p> <p>Introduction Sara Diamond, <i>President, OCAD University</i></p> <p>Less Interference / More Dance Paul Pangaro, <i>Carnegie Mellon University</i></p> <p>Respondent Omar Khan, <i>University at Buffalo</i></p>	Main Auditorium
8:30 PM	<p>Reception</p>	Main Auditorium

March 2

9:00–10:30 AM

Open Boundaries & Expanded Dimensions

Auditorium 230

Metabolic Design:

Towards Radical Co-authorships

Simone Ferracina, *University of Edinburgh*

Would You Like to Wake up From This Dream?

Yes, I'm Terrified: An Argument for a Machinic REM

Alexander Webb, *University of New Mexico & European Graduate School*

Space Architecture

Barbara Imhof, *LIQUIFER Systems Group*

Living Infrastructure

Douglas MacLeod, *RAIC Centre for Architecture at Athabasca University*

Bioregional Innovation Lab:

A Brief Sketch of the Coming Restoration Economy

J. Eric Mathis, *Institute for Regenerative Design and Innovation & European Graduate School*

Applying 3D Scanning and 360° Technologies to Complex Physical Environments

Codrin Talaba, *Independent Design Researcher*

10:30–11:00 AM

Break

Reid Room

11:00–12:00 PM

Hybrid Nature

Auditorium 230

Botanical Fur

Carole Collet, *Central Saint Martins UAL*

flora robotica: Investigating a Living

Bio-Hybrid Architecture

Phil Ayres, *Royal Danish Academy of Fine Arts*

Monarch Sanctuary

Mitchell Joachim, *Terreform ONE and NYU*

Wild & Domestic:

Architecture and the Nonhuman

Andrew Kudless, *California College of the Arts*

Sensibilities of Artificial Intelligence: An Examination of Architecture in a Posthuman Design Ecology

Matias del Campo, *University of Michigan*

12:00–12:15 PM

Break

Reid Room

12:15–1:15 PM

Keynote

Auditorium 230

Envisioning the Internet of Things

Katy Börner with Andreas Bueckle, *Indiana University Bloomington*

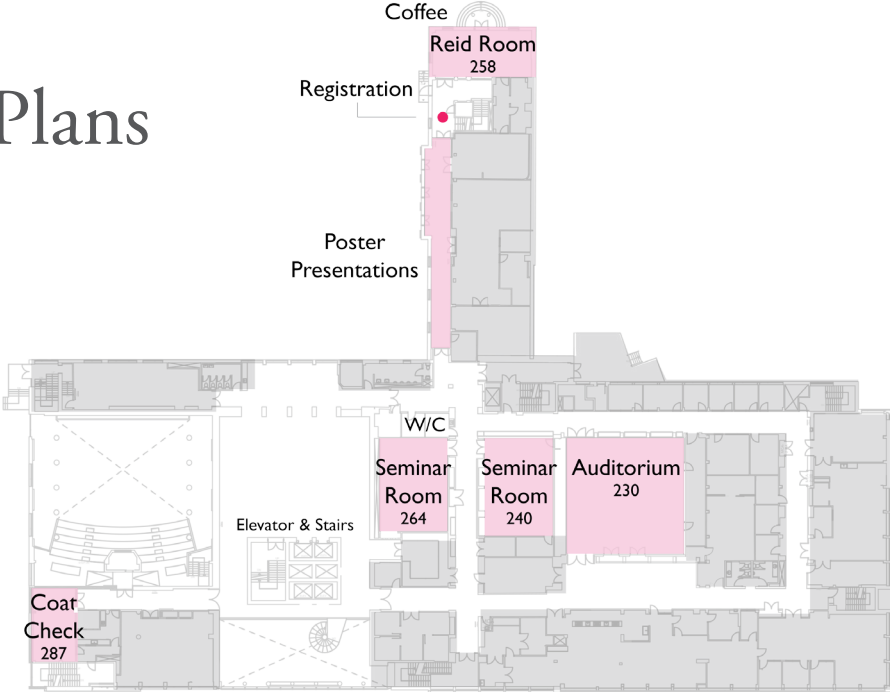
1:15–2:30 PM	Lunch & LASG General Meeting	Auditorium 230
2:30–3:45 PM	Kinetic Architectures	Auditorium 230
	Design-to-Robotic-Production and Operation <i>Henriette Bier, TU Delft</i>	
	Embodied Computation and Autonomous Architectural Robots <i>Axel Kilian, MIT</i>	
	Soft Kinetics <i>Vera Parlac, University of Calgary</i>	
	Breathe <i>Manuel Kretzer, Anhalt University of Applied Sciences</i>	
	Attuning Matter <i>Dana Cupkova, Carnegie Mellon University</i>	
3:45–4:15 PM	Break	Reid Room
4:15–6:15 PM	Past & Future Living Architecture	Auditorium 230
	Exploring Organicism <i>Sarah Bonnemaïson, Dalhousie University</i>	
	The Universal Human Attraction to Vitality <i>Colin Ellard, University of Waterloo</i>	
	Worldmaking as Techné: Participatory Art, Music, and Architecture <i>Mark-David Hosale, York University</i>	
	Sketches of Tectonic Culture <i>Michael Stacey, The Bartlett School of Architecture, UCL</i>	
	Form from Process: Jekabs Zvilna and Integrative Form-Languages <i>Val Rynnimeri, University of Waterloo</i>	
	Autodesk Technology Centers & Residency Program <i>Ellen Hlozan and Matthew Spremulli, Autodesk Technology Center</i>	
	The Future of the World Depends on Us Being Better Collaborators <i>JD Talasek, National Academy of Sciences</i>	
6:30–7:00 PM	Transfer to LASG Studio	213 Sterling Rd. Suite 200
7:00–8:00 PM	LASG Studio Dinner Reception	
8:00–8:15 PM	4DSOUND Studio Presentation	
8:15 PM	LASG Studio Reception	

March 3

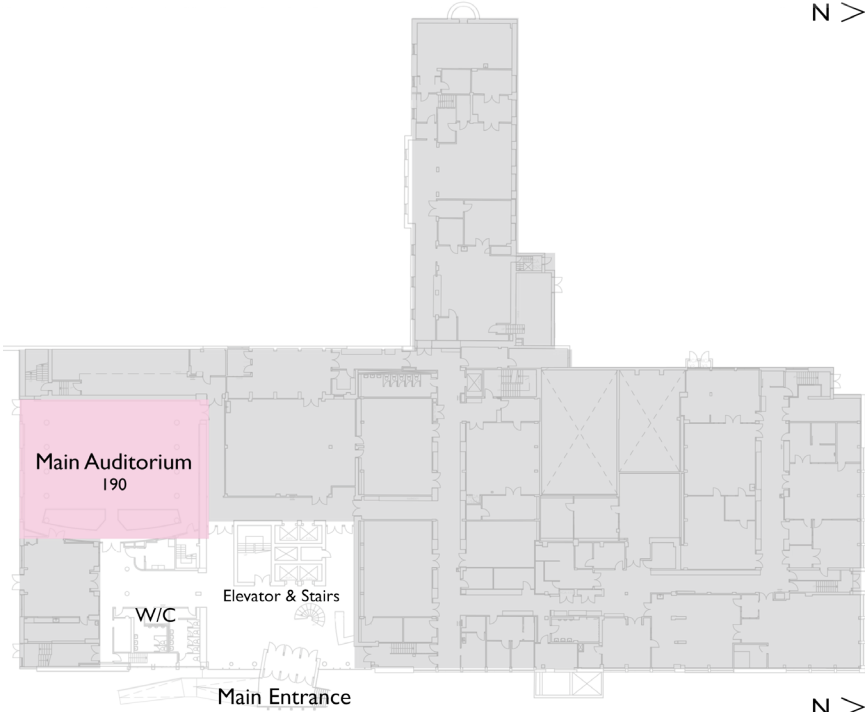
9:00–10:30 AM	Research Workshop: Scoping the Future of Design, Architecture and Living Systems <i>Carole Collet, Central Saint Martins UAL</i>	Seminar Room
10:30 AM	Break	Reid Room
10:45–12:45 PM	Research Workshop: Collaborative Capacity Building Through Structured Dialogue Edgar Cardenas, Michael O'Rourke and Stephanie Vasko <i>Toolbox Dialogue Initiative, Michigan State University</i>	Seminar Room
12:45–1:45 PM	Lunch & Workshop Completion	Seminar Room
2:00 PM	Next Steps Discussion	Auditorium 230
2:45 PM	Closing Remarks	Auditorium 230

Venue Plans

OCAD University
100 McCaul Street



Second Floor



Ground Floor



Living Architecture Systems Group 2019

Background

The Living Architecture Systems Group was conceived nine years ago, amidst collaborations extending the work of individual and small-group architectural researchers and creators in Canada, USA and Europe, building on the interdisciplinary group that developed Hylozoic Ground, Canada's entry for the 2010 Venice Biennale for Architecture. The collective group began work with the support of a 2012 Social Sciences and Humanities Council (SSHRC) Partnership Development Grant (PDG). Funding from this first SSHRC PDG was combined with support from a series of museums and galleries, making it possible to launch a series of immersive interactive environments accompanied by experimental workshops during 2012-16. A full SSHRC Partnership Grant totaling \$2.45M was achieved in 2016, launching the public phase of the LASG. Multiple collaborators agreed to contribute with matching funding and in-kind contributions. The partnership formally began in April 2016. The group is now midway through its current funded program, with completion targeted for 2021. Museums and other institutions have provided significant additional resources for individual exhibition and installation projects. The combined funding has provided core support for full-time staff, studentships, materials and commissioned services, and space. Extensions beyond 2021 are now being pursued.

Five streams - Scaffolds, Synthetic Cognition, Metabolism, Human Experience, and Interdisciplinary Methods - were first positioned to organize the group. Aesthetics, scientific analysis, and innovative technical craft have been practiced in overlapping combinations within each of these streams. In early 2017, Theory was added, providing a stream enfolding philosophy and history. Disciplines and hybrid crafts that have emerged in the past two years include biologically inspired design, data visualization, fashion and wearables, augmented reality, performance and sound. Overlapping creative, technical and scientific developments within diverse media are continuing, inviting further extension of LASG 'stream' organization.

A special feature of LASG research and creation lies in the production of expressive testbed sculpture environments, hosted by numerous museums, galleries and schools. The experimental environments are now being extended to permit participatory design and open-ended creative exploration. Modular software and kits of custom components and controls have been drawn from these environments, supporting collaborative work on software and data visualizations from remote locations. Science, Technology, Engineering, Art and Mathematics (STEAM) programming has accompanied these activities, with 15 events staged to date. STEAM kits oriented to undergraduates and young students are now in development. These kits are being further extended for wide distribution.

The LASG has grown from an initial core of 40 members and 25 companies, and now numbers more than 160 contributors from 73 institutes and companies. Some 1500 students and volunteers have worked within LASG courses and workshops dedicated to production of testbed sculptures.

How to Contribute

Both academic and industrial partners can participate in LASG projects, with mutual sharing of research, creation and innovative technology. Contributions of expertise and collaborative funding are actively encouraged. Research relating to LASG topics is invited for publication. Students can associate with the LASG by pursuing topics under the supervision of LASG academic contributors. Student work can be published and integrated for LASG dissemination. The partnership of LASG with Riverside Architectural Press, associated with the School of Architecture at University of Waterloo, provides substantial flexibility in dissemination, including academic readers along with a wide public.

A third volume of White Papers will be announced at the 2019 symposium. The LASG website at www.lasg.ca will be substantially expanded during 2019 based

on current contributions from members. A new 'Folio' series of short monographs and reports authored by LASG researchers is now at the early stages of development. Folios would be produced for digital editions, minimizing cost. A sample Folio publication is being distributed at the LASG Symposium 2019, providing an example of this approach. LASG contributors are invited to propose future Folio publications.

How Projects are Developed

Inquiries about participation, proposals and invitations for exhibition and collaboration are received at info@lasg.ca. The full-time executive of the LASG works in weekly meetings to review and develop emerging projects. Projects are proposed by collaborators and potential host institutions, and are also initiated by the core group working with the Toronto-based LASG studio. Funding applications to support projects are developed in cooperation with host institutions. Projects usually involve a core of senior academic and industrial contributors working together with full-time studio members, collaborators and students. Individual initiatives can also be considered. The LASG is guided by program and research commitments governed by the Social Sciences and Humanities Research Council, the host institution of the University of Waterloo, and by priorities set by its partners. Decisions around development of projects are made by the executive group in collaboration with partners.

Resources Offered by LASG

Funding support offered by the LASG includes matching funding for projects initiated by partners, based on cooperative funding applications; seed funding for Folio publications; and special projects support including seed funds.

How We Communicate

Supplementing the public website at lasg.ca, LASG maintains multiple dialogues using online collaboration software at basecamp.com. Individual LASG Basecamp projects include participants, volunteers and client groups. A collective self-administered forum is maintained connecting to the entire membership. Inquiries can be launched at info@lasg.ca or addressed to individual LASG organizers shown within the listings included within this program.

Living Architecture Systems Group 2019

2019 Administration

Principal Investigator & Director
Engineering Systems Director
Systems Consultant
Design Director
Director of Operations
Comptroller
Creative Director, Exhibitions
Director of Dissemination and
Communications
Finance Administrator
Development Consultant

Philip Beesley
Rob Gorbet
Matt Gorbet
Timothy Boll
Melanie Neves
Anne Paxton
Karen Zwart Hielema

Sascha Hastings
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shastings@lasg.ca
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Research Stream Leaders

Human Experience
Interdisciplinary Methods
Metabolism
Scaffolds
Synthetic Cognition
Theory

Colin Ellard
Rob Gorbet
Rachel Armstrong
Philip Beesley
Dana Kulić
Sarah Bonnemaïson

2019 Design and Engineering Studio

Production Director
Engineering Director

Gabriella Bevilacqua
Michael Lancaster
Bria Cole
Mark Francis
Jonathan Gotfryd
Luke Kimmerer
Nikola Miloradovic
Niel Mistry
Farahan Monower
Severyn Romanskyy

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Living Architecture Systems Group Contributors

Andrew Adamatzky	University of the West of England
Moien Alizadehgiashi	University of Toronto
Donald Ardiel	Royal Architectural Institute of Canada
Rachel Armstrong	Newcastle University
Michael Awad	Independent Artist, Architect and Academic
Phil Ayres	Royal Danish Academy of Fine Arts
Ilia Baranov	Clearpath Robotics
Robert Bean	NSCAD University
Philip Beesley	University of Waterloo and European Graduate School
Zackery Belanger	Arcgeometer
David Benjamin	Autodesk Research
Henriette Bier	TU Delft
Nimish Bioria	TU Delft
Katy Börner	Indiana University
Sarah Bonnemaïson	Dalhousie University
David Bowick	Blackwell Structural Engineers
Aaron Paul Brakke	University of Illinois
Salvador Breed	4DSOUND
Andreas Bueckle	Indiana University
Sarah Jane Burton	Sheridan College
Antonio Camurri	University of Genoa
Edgar Cardenas	Michigan State University
Sandra Bond Chapman	University of Texas
Mark Cohen	UCLA
Beth Coleman	University of Waterloo

Carole Collet	Central Saint Martins UAL
Paolo Coletta	University of Genoa
David Correa	University of Waterloo
Dana Cupkova	Carnegie Mellon University
Martyn Dade-Robertson	Newcastle University
Alberto De Campo	Universität der Künste Berlin
Sara Diamond	OCAD University
Colin Ellard	University of Waterloo
Sid Fels	University of British Columbia
Simone Ferracina	University of Edinburgh
Neil Forrest	NSCAD University
Michael Fox	FoxLin Architects
Adam Francey	University of Waterloo
Simon Fraser	Victoria University of Wellington
Kristen Gagnon	Royal Architectural Institute of Canada
Madeline Gannon	Carnegie Mellon University
Ruairi Glynn	Bartlett School of Architecture
Rob Gorbet	University of Waterloo
Petra Gruber	Akron University and Liquifer Systems Group
Maria Paz Gutierrez	University of California, Berkeley
Carl Haas	University of Waterloo
Trevor Haldenby	The Mission Business
Martin Hanczyc	University of Trento
Christiane Heibach	University of Applied Sciences and Arts Northwestern Switzerland
John Helliker	Sheridan College

Alexandra Hesse	The Leonardo Museum for Art, Science, and Technology
Paul Holleman	4DSOUND
Mark-David Hosale	York University
Thibaut Houette	Akron University
Barbara Imhof	Liquifer Systems Group
Lisa Jiang	Atelier Iris van Herpen
Mitchell Joachim	Terreform ONE
Haru Ji	York University
Jhave Johnston	City University of Hong Kong
Axel Kilian	Massachusetts Institute of Technology
Pia Kleber	University of Toronto
Bradly Klerk	Atelier Iris van Herpen
Branko Kolarevic	University of Calgary
Nicole Koltick	Drexel University
Manuel Kretzer	Anhalt University of Applied Sciences
Andrew Kudless	California College of the Arts
Dana Kulić	Monash University and University of Waterloo
Neil Leach	Tongji University
Daiwei Lin	University of Waterloo
Juintow Lin	FoxLin Architects
Vinny Luka	Clearpath Robotics
Douglas MacLeod	RAIC Centre for Architecture, Athabasca University
Alan Macy	Biopac Systems Inc.
Christine Macy	Dalhousie University
Adil Mansure	University of Toronto
Eric Mathis	Institute for Regenerative Design & Innovation
Areti Markopoulou	Institute for Advanced Architecture of Catalonia
Lingheng Meng	University of Waterloo
Tim Miller	Victoria University of Wellington
Michael Montanaro	Concordia University
Richard Mui	University of Waterloo
Navid Navab	Concordia University
Catie Newell	University of Michigan
Stig Anton Nielsen	IT University of Copenhagen
Paul Oomen	4DSOUND and Institute for Spatial Sound
Michael O'Rourke	Michigan State University
Paul Pangaro	Carnegie Mellon University

Simon Park	University of Surrey
Lucinda Presley	ICEE Success Foundation
Vera Parlac	University of Calgary
Zach Pearl	Subtle Technologies
Maya Przybylski	University of Waterloo
Neil Randall	University of Waterloo
Iris Redinger	University of Waterloo
David Rokeby	Independent Artist
Ala Roushan	OCAD University
Val Rynnimeri	University of Waterloo
Jenny Sabin	Cornell University
Petra Schuddeboom	Atelier Iris van Herpen
Pierangelo Scravaglieri	Newcastle University
Sha Xin Wei	Arizona State University
Sheida Shahi	University of Waterloo
Andreas Simon	University of Applied Sciences and Arts Northwestern Switzerland
Brian Smith	Drexel University
Matthew Spremulli	Autodesk Inc.
Michael Stacey	Michael Stacey Architects and Bartlett School of Architecture
Ross Stevens	Victoria University of Wellington
Kasper Stoy	IT University of Copenhagen
J.D. Talasek	National Academy of Sciences
Martin Tamke	Royal Danish Academy of Fine Arts
Jane Tingley	University of Waterloo
Mette Ramsgaard Thomsen	Royal Danish Academy of Fine Arts
Jan Torpus	University of Applied Sciences and Arts Northwestern Switzerland
Aadjan van der Helm	TU Delft
Iris van Herpen	Atelier Iris van Herpen
Stephanie Vasko	Michigan State University
Teun Verkerk	TU Delft
Michelle Viotti	NASA
Graham Wakefield	York University
Alexander Webb	University of New Mexico
Hope E. Wilson	University of North Florida
Andrew Wit	Temple University
Soo Woo	University of Waterloo
Klaus-Peter Zauner	University of Southampton
Mia Zhao	University of Waterloo

