DOCIOR OF DESIGN

DDES FALL
SYMPOSIUM 2025
DECEMBER 5-7



SCHOOL OF ARCHITECTURE, PLANNING + LANDSCAPE



DOCTOR OF DESIGN

The School of Architecture, Planning and Landscape (SAPL)

at the University of Calgary offers Canada's first online, designbased doctoral degree. The Doctor of Design (DDes) is a unique three-year program for architects, landscape architects and planners who want to leverage their expertise in a specific topic area into an innovation with real-world impact.

The program helps bold design professionals to rethink the status quo ways that buildings, communities and landscapes are designed, built and operated. Students formulate a design-based research question from their existing practice-based knowledge and professional experience.

They develop their research through online studio-based pedagogy with a cohort of fellow practitioner-students, working closely with assigned supervisors and participating in dedicated design research symposia to test their work with recognized external experts and thought leaders.

Through this research framework, practitioners identify and develop innovations that make ideas 'project-ready' for integration into practice. The findings of the DDes research contribute new knowledge to the design community and can be used to transform the student's practice and effect real change.

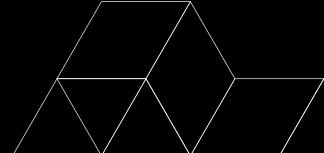
Welcome to the **DDes Fall Symposium** 2025!

Welcome, and thank you for joining us at the SAPL DDes Fall Symposium 2025. Our Doctoral candidates have been diligent in pushing the boundaries of professional practice-based research and are eager to share their findings and insights with our community.

Please note that the symposium is fully online. As per DDes tradition, participants should note that each session is recorded, as a study aid for students to access after the symposium.

...the DDes is aggregating a unique ecosystem of candidates with a decidedly interdisciplinary approach across the globe, yet galvanizing consistently around both orthodox and novel sophisticated problemsolving methodologies harvested from the tacit knowledge of these master practitioners.

Dr. Marcelo Stamm Program Critic



Message from the Dean

Panelists

Candidates

Research Abstracts

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Message from the Dean



Dr. John Brown

PhD, Architect, FRAIC Dean and Professor, School of Architecture, Planning and Landscape

The climate crisis, rising social inequality, and the digital revolution of smart cities, computational design, and robotic fabrication are rewriting the way cities are being designed, built, and operated. This creates enormous opportunities for architects, planners, and landscape architects to expand their practice, increase their value to clients, and make a bigger and more positive impact in the world. Midcareer professionals have the experience to identify and capitalize on these opportunities but often need a framework to help bring these ideas to life.

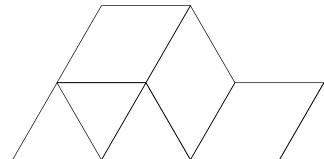
Our new **Doctor of Design (DDes)** program is a place for motivated professionals to develop their particular response to these opportunities and get them 'project-ready' for integration into practice.

DDes graduates use the knowledge generated through their research to open up new areas of innovation, create competitive advantages, and more clearly articulate their value proposition to clients and the broader public. The Doctor of Design also provides an appropriate terminal academic credential for design-based professionals interested in applying for post-secondary teaching positions.

The new Doctor of Design program is distinct from traditional PhD programs because the research is practice-focused and designbased, with candidates developing a workintegrated research program centered around a unique enquiry emerging from their experience and insights in practice. Students remain fully engaged in their working life while pursuing a research program in an intense and rigorous format that is distinct from, but parallel to, their professional work.

The DDes is structured to specifically accommodate the needs of active professionals. Candidates from around the world can complete the degree while remaining embedded in their professional offices. The semi-annual symposia, held in Calgary over long weekends in the spring and fall of each year, are important and exciting opportunities for students to come together to share their work and get feedback from their fellow students, their supervisors, and a cohort of experts.

Canada's first doctoral degree for practicing architects, planners, and landscape architects, a Doctor of Design, is open to mid-career professionals with at least five years of work experience. Applicants are encouraged to apply early. Significant professional experience will be considered in lieu of a graduate academic degree.



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Dr. Maher **BArch, MUD, DDes DDES Alumni**

Dr. Maher Alrez, a qualified architect and urban designer with a DDes degree from the University of Calgary, has 23 years of experience in architecture and master planning for both public and private sectors. His expertise includes urban planning, architectural design, and project management. Maher operated a design studio in Damascus, Syria, from 2002 to 2011, winning several architectural and urban design competitions and having his work published in three design magazines.

He has lectured in architectural design and history at the International University for Science and Technology (IUST) in Damascus and participated in urban design workshops across Germany, Spain, Lebanon, Saudi Arabia, and the UAE. Maher is a member of the Damascus Order of Engineers and the Saudi Council of Engineers and is currently a principal at K&A's Western Province Management Office.



Dr. Taghreed Al-Zubai **Accessibility and Compliance** Specialist, City of Mississauga. **DDES Alumni**

Dr. Taghreed Al-Zubai is a Senior Accessibility Consultant and architectural designer with over 15 years of experience in advancing accessibility and inclusive design across municipal governments, post-secondary institutions, and international organizations. Her work focuses on applying Universal Design principles to enhance accessibility compliance in both built and digital environments. As Accessibility and Compliance Specialist for the City of Mississauga, Taghreed leads AODA reviews, conducts accessibility assessments, contributes to policy development, and delivers specialized training.

In addition to her consulting role, she is an Adjunct Professor, teaching courses such as Social Justice for the Built Environment and Global Architecture & Design. Taghreed holds a Doctor of Design from the University of Calgary and a Master of Design in Inclusive Design from OCAD University. Her work has received several awards, including the Alberta Graduate Excellence Scholarship.



Dr. Getachew Assefa **Associate Professor** & EDIA Director. SAPL

Dr. Getachew Assefa is an Associate Professor of Sustainable Design at SAPL. His prolific academic writing and teaching experience spans Canada, Sweden, China, and Ethiopia. He is the former Athena Chair in Life Cycle Assessment at the Faculty of Environmental Design, and currently consults in product sustainability positioning and life cycle assessment. He was the winner of the University of Calgary's Sustainability Award for 2017 in the Campus as Learning Lab Category, and the Outstanding Teaching Performance Award from the Schulich School of Engineering in 2015 and 2016.

His research interests include sustainable design, life cycle sustainability assessment, energy services, climate change, and industrial ecology. He believes that design and technology should be used to advance human economic and social development in a holistically sustainable way that addresses issues of equity and environmental impact.



Dr. John PhD, Architect, FRAIC **Dean and Professor,** SAPL

John Brown is Dean of the School of Architecture, Planning and Landscape at the University of Calgary. He is also a registered architect and a founding principal of both Housebrand Construction and FABhome. He is a recognized authority on residential practice, new models of architectural practice, and age-in-community design. He completed a PhD entitled Going Home: Future Adaptive Building for Agingin-Place in 2016 through the Royal Melbourne Institute of Technology, Australia.

This research explored new forms of age-in-place housing that combines mass customization and design democratization with digital monitoring/sensing and next generation homebased medical support to create a new approach to housing our older adult population and keep them out of structured care facilities for as long as possible. In 2018, Professor Brown began commercialization of this research and launched FABhome in 2020 to deliver this innovative age-in-community architectural initiative to seniors across Canada.



Trevor Boddy

FRAIC, Critic and curator of contemporary architecture

Trevor Boddy FRAIC is a critic and curator of contemporary architecture and a Vancouver-based consultant to architects, developers and museums. His books, articles, exhibitions and consulting are dedicated to exploring the relationship between design and contemporary city-building. The clarity, insights and public-mindedness of his writing on buildings and cities have earned accolades like the Alberta Book of the Year and the Jack Webster Journalism Awards.

At the 2011 UIA World Congress of Architecture in Tokyo, Boddy's essay (for A/V in Madrid) on contemporary design in his country entitled "MEGA + MICRO: Canada, Innovation at the Extremes" was commended for the UIA/CICA's Pierre Vago Prize for best architectural criticism published worldwide. He is a Fellow of New York's Institute for Urban Design and the Royal Architectural Institute of Canada.



Gian-Carlo Carra

Former Councillor, Ward 9, City of Calgary

Gian-Carlo Carra was first elected in 2010 as Councillor and served 4 terms representing the great neighbourhoods of Ward 9 from 2010 until October 2025. With roots in both Calgary and New York City, GC believes that empowered communities drive a city to achieve success. He obtained a Masters in Environmental Design/Urban Design at the University of Calgary and served on the City's Standing Policy Committee on Land Use Planning & Transportation.

In his service to the citizens of Ward 9, Gian-Carlo made significant progress in shifting the dialogue at City Council, with city administration, local leaders, and a diverse range of community members. Gian-Carlo remains committed to building a better future together.



Dr. Darryl Condon

Managing Principal, hcma architecture + design.

DDES Alumni

Darryl Condon is passionate about design as a catalyst for positive social change. As Managing Principal at Vancouver-based hcma architecture + design, he has created engaging public spaces across Canada for over 30 years, including community centers, libraries, swimming pools, and high-performance sport facilities. His work has received international recognition, amassing over 80 awards, including four World Architecture Festival (WAF) Awards.

Darryl's DDes research focused on developing an alternative practice model to ensure long-term public good from public spaces and buildings. He has lectured extensively across North America, South America, Europe, and Australia. A registered Architect, Darryl is a WRLDCTY Global Fellow, a Senior Fellow of the Design Futures Council, and a Fellow of the Royal Architectural Institute of Canada. He is a Past-President of the Architectural Institute of British Columbia and has served as an Adjunct Professor at the University of British Columbia's School of Architecture and Landscape Architecture.



Dr. Michael Donaldson

Founder, Design Workshop Architects. **DDES Alumni**

Michael Donaldson is an architect, artist, and designer. He is the founder of the creative practice Design Workshop, in Toronto, Canada. Design Workshop was founded to explore the fundamental basis and methods of the architectural profession, and to understand how it fits into the various ecosystems in which it participates. Now approaching its 10th year, the practice is currently engaged in a variety of project types and scales, including public art, service innovations, design and construction support and traditional full-spectrum architectural and interiors projects.

Michael completed bachelor's degrees in Fine Art and Art History at Queen's University in Kingston, Ontario, prior to undertaking a Master of Architecture at the University of Toronto. Michael's design approach combines a unique awareness of the Continuum of history and culture with a fluent understanding of contemporary issues of technology and innovation.



Dr. D'Arcy Jones Architect AIBC, MArch, MRAIC. **DDES Alumni**

D'Arcy Jones is the Principal of D'Arcy Jones Architects (DJA), a Vancouver-based architecture practice founded in 2000, known for design excellence and award-winning work across various scales. He received his Doctor of Design from the University of Calgary in 2024 and is the editor of the upcoming book series Architectural Experiments, published by Dalhousie Architectural Press. His current Prix de Rome research focuses on solid wood construction, integrating traditional craft with contemporary technologies, which he will expand at Montana State University in 2026 as a visiting scholar.

Jones's research and editorial work aim to challenge conventional design processes through an optimistic yet contrarian lens. DJA is engaged in diverse projects, including infill housing, heritage restoration, and an art gallery. D'Arcy has contributed to design culture as a juror for various awards, with DJA receiving accolades such as the 2024 Prix de Rome and the 2017 RAIC Emerging Architectural Practice Award.



Dr. Teresa Goldstein

RPP. Sessional Lecturer, SAPL. **DDES Alumni**

Dr. Teresa Goldstein is the Director of Community Planning for the City of Calgary, Chair of the Calgary Planning Commission, and an Adjunct Professor at the University of Calgary. With over 20 years of experience, she is a Registered Professional Planner and a member of the Canadian Institute of Planners and the Alberta Professional Planners Institute. Specializing in affordable housing, community and land use planning, and policy development, Dr. Goldstein has made significant contributions to urban planning and community development.

In 2024, she was appointed to the National Housing Council, advising on strategies to address housing challenges across Canada. An accomplished educator, she has taught at the University of Calgary's School of Architecture, Planning, and Landscape for eight years. In 2023, she defended her Doctorate, exploring the emotional dimensions of local area



Daniel **Hapton Assistant Professor,** SAPL

Daniel Hapton is a teaching-focused Assistant Professor at SAPL and the founder of AITCH Design, a Calgarybased studio that specializes in creative renovations. His entrepreneurial spirit and love for expressive design are also reflected in his restoration of musical instruments and passion for improvisational music. Daniel's innovative approach to design is guided by the values of humor, history, multiplicity, disciplinarity, and projectivity, which also shape his work as an educator. He is committed to refining pedagogy, strengthening curricula, and enhancing course coordination.

Through collaboration, hands-on studio experience, and value-informed innovation, Daniel bridges the gap between architectural practice and education, inspiring students to rethink and transform the field of architecture.



CEO and Founding Partner, **Future Fit**

Greg is a lifetime entrepreneur who has been studying, applying and innovating in the area of behaviour-based design for thirty years. He has applied these approaches in over 200 different challenging design settings from manufacturing to software and even urban spaces. His original background is in ergonomics and he also completed formal education in Critical Thinking. Greg has presented at conferences around the world and has published papers as an independent scholar in the areas of ergonomics and human behaviour as well as the relationship between cognitive diversity and democratic choice.

He is a founding partner in Thin Air Labs, an integrated investment and design company, and the co-founder of InceptionU - an unschool that connects essential design and thinking skills to in-demand technical skills like software development and machine learning. When he wants to relax, he referees lacrosse.



Dr. Barry Johns

BArch, AAA, MAIBC, FRAIC, RCA, (Hon)FAIA, LEED* AP. DDES Alumni

Barry Johns is a Canadian Architect who has maintained a modest design studio in Edmonton, Alberta, Canada since 1981 after a lengthy tenure with Arthur Erickson in Vancouver; serving clients or the profession either as an independent architectural practice or, as a design consultant to other national and international architectural firms. A registered Architect since 1974 and now retired from active practice, Barry Johns developed an international reputation as an innovative and collaborative design professional.

Some of his projects include schools, offices, community facilities, colleges, university and recreational buildings and urban design - each with a commitment to excellence, a pursuit towards authenticity and 'treading lightly on the earth' through a portfolio of environmentally driven, sustainable design.



Dr. Viren Kallianpur

Program Manager for Urban Design, City of Richmond, BC. DDES Alumni

Dr. Viren Kallianpur is passionate about cities, with two decades of experience in architecture, urban design, and planning. He currently serves as Program Manager for Urban Design with the City of Richmond, BC, after transitioning from consultancy to the public sector. Viren advocates for an interdisciplinary approach and incorporates systems thinking into his design and research projects. Originally trained as an architect, his passion for city building has taken him across continents, working in various cities and becoming a registered planner in the U.S. This diverse experience has enriched his design process, grounding it in context and cultural nuances.

Viren holds accreditations in sustainability (LEED AP BD+C), resilience (RELi AP), and health and wellbeing (WELL AP), enabling him to positively impact the communities he serves.



Andrew King

Professor of Practice, McGill University's School of Architecture

Andrew King has developed a globally recognized interdisciplinary design practice that integrates speculative small practice, large firm design leadership, and academic research. His work has garnered numerous accolades, including the Canada Council for the Arts Prix de Rome, four Canadian Architect Awards of Excellence, and two AIA Progressive Architecture Awards. King is a Professor in Practice at McGill University's School of Architecture and has lectured and exhibited internationally at prestigious institutions such as the Danish Royal Academy and the Tate Gallery. He will speak at C2MTL, RAICMTL, and WRLDCTY copenhagen in 2025. King leads AKAFLDWRK, a design research practice focused on critical design solutions in public spaces and cultural identity.

He has been recognized as one of Canada's design leaders by The Globe and Mail and has served as Chief Design Officer at CANNON DESIGN and Lemay, overseeing influential projects like the Bosa Film Centre and the Centre Hospital University Montreal (CHUM).



Dr. Marie Cecile Kotyk

Assistant Professor, SAPL, DDES Alumni

Dr. Marie Cecile Kotyk is an award-winning social planner, housing practitioner, and design justice scholar with over 15 years of experience advancing equity in the public and non-profit sectors. Her work addresses systemic forces that produce racial inequities in the built environment, particularly for Black, Indigenous, and marginalized communities.

Dr. Kotyk is the founder of Kotyk Consulting and serves as Assistant Professor and Design Justice Research Chair at the University of Calgary's School of Architecture, Planning and Landscape Architecture. Her doctoral research led to the Black Housing Equity Framework, Canada's first framework addressing anti-Black racism in housing policy and design. Her work has received national and international recognition, including the Alberta Human Rights and Multiculturalism Doctoral Scholarship. Through the UDesign Justice Initiative, she builds a transdisciplinary hub for equity-centered solutions in spatial and social transformation.



Dr. Graham Livesev Professor, SAPL

Graham Livesey is a Professor Emeritus of Architecture at the University of Calgary, where he taught design, architectural history, and theory for over thirty years. He holds a B.Arch and M.Arch from McGill University and a doctorate from the Technical University of Delft in the Netherlands. In 2019, he was elected to the College of Fellows of the Royal Architectural Institute of Canada. He previously served as Associate Dean (Academic - Architecture), Director of the Architecture Program, and principal at Down + Livesey Architects, working on projects including the Vulcan County Administration Building Expansion and the Art Gallery of Calgary renovation.

Graham has been involved with the Association of Collegiate Schools of Architecture and the Alberta Association of Architects. He has published extensively, including *Modern* Architecture: The Basics (Routledge, 2024), and co-received the RAIC President's Medal in 2021 for the Canadian Modern Architecture: 1967 to the Present book.



Diarmuid

BES, M.Arch., OAA(PP), AIBC, AAA, FRAIC(PP), HON AIA, HON FCARM

His substantial expertise in the planning, design, and construction of cultural landmarks is demonstrated in projects such as the Canadian War Museum in Ottawa (with GRC Architects, Governor-General's Medal in Architecture 2008); the National Museum of Saudi Arabia, and the Etihad Museum in Dubai. He chaired the jury for the 2020 Gold Medal and the 2019 RAIC International Prize. He has recently completed a three-year term as Chancellor of the RAIC College of Fellows and is currently on the College's Foundation with a focus on fundraising for student scholarships.

Diarmuid is currently coordinating and teaching the Professional Practice Course in the Masters of Architecture program at the Daniels School of Architecture. Active on committees and Boards of the profession's provincial selfgoverning and national advocacy organizations, he has served as President of the Ontario Association of Architects (OAA) and the Royal Architectural Institute of Canada.



Matthew North Co-Founder,

Garden Loft

Matthew North is a Registered Architect and one of the founding principals of Housebrand - a design/build practice based in Calgary. With more than 25 years of experience, he has completed over 250 new homes, renovations, multifamily and mixed use buildings. His technical expertise is in modular fabrication and systems optimization with a mandate to improve construction speed, quality and performance. Matthew is currently shifting his focus to Garden Loft - where he designs and fabricates modular housing for seniors and people with disabilities.

As co-founder of Garden Loft, he is responsible for the technical performance and factory production of the Garden Loft dwelling units. He is also the creator and host of Plan Attack, which publishes videos and architectural design posts on social media to reach a global audience. The goal with Plan Attack is improve overall design quality through entertainment and education.



Matthew **Parker**

Assistant Professor, SAPL

Matthew Parker stands as a distinguished three-time alumnus of the University of Calgary, having earned his BSc in 2003, followed by a MArch in 2012, and culminating with an MEDes Thesis in 2016 that explored the role of machine vision in the production of architecture and the city. Currently serving as an Assistant Professor with the School of Architecture, Planning, and Landscape (SAPL) - his alma mater - Matthew brings a wealth of academic and professional experience to the table.

As an award-winning and internationally published designer he has made significant contributions to the fields of architecture and education. His current research interests span a wide spectrum, encompassing the (re)production of architectural images within the contemporary mass-media landscape, innovative design pedagogies fostering alternative models of cultural and environmental sustainability, and the potentials of computation and digital fabrication to support distributed models of design-authorship.



Principal Architect & Interior
Designer, TDR Transforms.

Dr. Troy D. Rhodes is the principal architect and interior designer for TDR Transforms and the founder of XD Studio + Research Lab. TDR Transforms offers integrated architectural and design solutions, while XD Studio + Research Lab, advances research on the emotional connections people form with their environments. With over 25 years of professional experience, his curiosity about the psychological connections of the built environment led him to pursue doctoral research in human-centered university campus planning. His work explores how intangible experiential elements can shape physical spaces through Experience Design.

DDES Alumni

He earned his Doctor of Design from the University of Calgary and a B.Arch from the University of Oklahoma. He is a licensed Architect in Oklahoma, Texas, and Kansas, a registered Interior Designer in Oklahoma, member of the American Institute of Architects (AIA) and certified by the National Council of Architectural Registration Boards (NCARB).



Semple
Architect and CEO,
NORDEC Consulting
and Design

Bill is an architect and consultant who specializes in Northern (arctic and subarctic) housing and communities, as well as in the development of a culturally appropriate design process and the facilitation of design charrettes and integrated design process (IDP) with emphasis on northern Indigenous housing and communities. He has extensive experience working with First Nations and Inuit communities and in developing culturally appropriate designs for housing and institutional buildings on international and domestic projects.

Bill has a PhD from the University of Alberta. He sits on the Board of Directors of the Cold Climate Housing Research Center in Fairbanks, Alaska, is a member the (Scandinavian) Arctic Professional Network Group, and the Indigenous Task Force of the Royal Architecture Institute of Canada (RAIC). He is a member of the College of Fellows (FRAIC) of the RAIC.



Dr. Dawan Stanford President, Fluid Hive

Dr. Dawan Stanford drives innovation in higher education through human-centered design and qualitative research, leveraging over 15 years of experience as an education innovation leader. As President of Fluid Hive and host of the Design Thinking 101 podcast, he guides universities, nonprofits, and corporations in reimagining challenges through design thinking, breaking down problems into manageable parts that invite creative solutions.

His background combines technology, nonprofit, corporate, and legal expertise with design leadership at institutions like Ohio State University, Georgetown University, and Elon University, where he established the Center for Design Thinking. Recently, he has focused on AI development and workflow automation, blending design thinking methodologies with computational tools for sophisticated data analysis. His ongoing *Ask Like a Designer* article series emphasizes the importance of asking the right questions at the right time.



Sally Stewart

Head, Mackintosh School of Architecture, Glasgow School of Art

Sally Stewart is an educator and researcher working at The Glasgow School of Art where she is the Head of the Mackintosh School of Architecture and Professor of Architectural Education and Practice. She trained and practiced as an architect before becoming an academic. Her fascination with creativity began in childhood surrounded by parents, aunts and uncles engaged in creative practices for work and pleasure. This has fed a persistent curiosity in how we act when we are creative and informed her research interest in proactive based research.

Her core interest with students and collaborators is to understand what we do when we do the thing that we do as creative practitioners. Sally has been a external examiner and visiting lecturer in institutions across the UK, Japan and Europe. She is a member of the EAAE council, and project leader for the EAAE Education Academy established in 2015.



Stuhlmiller BAHons. MArch. Registered Architect, AAA

Keir Stuhlmiller holds a Master of Architecture and Bachelor of Arts Honors Art History. Her interior design and architectural experiences include institutional, municipal, health care, commercial and education projects, with recent focus on strategic space planning and inclusive design. Her interest in the influence of design thinking on the built environment is the basis for her educational approach.

As a post-secondary design and architecture educator with extensive professional experience, Keir's focus is on providing students with an understanding of the impact of design excellence on professional practice. She engages education as the foundation for how design advances wellbeing in our lived environment. As a result, Keir views the integration of design excellence, social awareness, and professional responsibility as core skills in the practice of architecture.



Associate Professor, SAPL

Joshua M. Taron is an Associate Professor of architecture at the University of Calgary's School of Architecture, Planning and Landscape where he runs the Laboratory for Integrative Design (LID). His current research focuses on structurally intelligent swarms as an alternative to conventional wholesale building demolition by grafting complex morphological assemblies into existing buildings. The work has been published internationally and orients itself toward finding new ways of revitalizing and sustaining the already-built environment.

Taron is also Principal of Synthetiques, an award-winning research +design+build outfit focusing on the hybrid ecologies afforded through the interface of computational and physical economies across multiple scales. He earned his undergraduate degree in architecture from the University of California, Berkeley and holds a Master of Architecture degree from the Southern California Institute of Architecture.



Dr. Sasha Tsenkova Professor, SAPL

A strong commitment to interdisciplinary research and scholarship has guided my career. I specialise in sustainable cities, urban planning and growth management, housing policy and comparative urban development. My research and professional activities in these areas for the World Bank, Council of Europe and the United Nations include a range of housing and urban projects in more than 30 countries in Central and Eastern Europe, Latin America and Central Asia.

I have published 25 books and research monographs and over 70 articles on urban policy, regeneration, urban sustainability and housing policy. My scholarship is internationally recognised by a number of other prestigious awards for international scholars, such as Killam Fellowship, Urban Studies Fellowship, Sasakawa Scholarship, International Peace Scholarship, and British Council Award. Over the last 25 years I have lectured worldwide on urban sustainability.



Brenda *N*ebster-Tweel

FRAIC. Senior Associate, Stantec

Brenda Webster is a leading advocate for regenerative urban renewal with over 30 years of experience in urban design and master planning. Known for her interdisciplinary "spongey" approach, she combines expertise in landscape architecture, architecture, and urban design to create resilient, peoplefirst environments. Brenda has served as the urban planning and design lead for Ontario's Transit Oriented Community Subway and Bus Infrastructure Design Guidelines, addressing the technical demands of Ontario's expanding transit infrastructure. Since 2019, she has been a Trustee at Trinity College, U of T, and is currently the Institutional Relations lead for the Federation of Architects for North, Central, and South America (FPAA). At Waterfront Toronto, she directed transformative projects, including the Port Lands Business and Implementation Plan. Brenda has published works like *Sponge City: An Argument for Urban Resilience* (2021) and has participated in notable forums, sharing her expertise in sustainable urbanism and public realm innovation.



Dr. Robb Whyte

Coordinator - Business and Technology Development, City Of Calgary. DDES Alumni

Robb Whyte is a multidisciplinary transportation planner and strategist based in Calgary. He has dedicated his career to public service, helping to shape the growth and change of the urban fabric of the Calgary community. Robb has worked on some of Calgary's most significant city-shaping projects of the last 20 years including West LRT, the City Centre Cycle Track Network, residential speed limits reset, the city's first pedestrian strategy and the data-driven decision-making framework for the parking system.

Recognizing that foundational shifts tend to come from the intersection of different areas of expertise, Robb has strived to work on the fringes of planning, bringing analytics, strategy, operations, management, and public policy into the discipline. He earned undergraduate degrees in economics and philosophy, a master's in planning and Doctor of Design, all from the University of Calgary. His doctoral research focused on the changing nature of cities and public policy responses to address the emerging issues that they face.



Barry Wylant

Graduate Program Director, SAPL

Barry Wylant is an Associate Professor and Graduate Program Director at SAPL, guiding thesis students in the Master of Design Research (MDR), PhD, and Doctor of Design (DDes) programs. He emphasizes the "how" of design thinking in his work and writings. With extensive experience as an industrial designer and consultant, Wylant explores the intersection of design, technology, and community impact. His design work has advanced innovation in medical devices, accessibility products, and consumer goods.

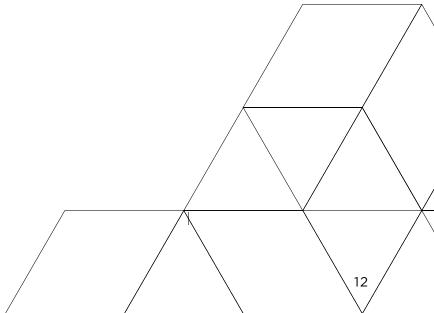
Wylant's research interests include thoughtfulness in design, diagramming, and technological innovation, particularly in aging-in-place and health-related initiatives. He regularly contributes to UCalgary's e2i (evolve to innovate) program and has published in prominent journals such as *CoDesign*, *Design Issues*, and *The Design Journal*. As an innovative thinker, Wylant's commitment to rigorous curiosity in the design process inspires a vision of interdisciplinary practice that shapes a brighter future.



Laura Young MArch, Bsc Arch, RIBA

Laura is an award-winning, creative and personable urban designer and architect with significant experience in delivering innovative, sustainable projects within sensitive contexts. Laura has held sessional and guest teaching positions at University College London, Royal College of Arts London, Royal Institute of British Architects, and University of Calgary. Laura is the Associate Urban Designer and Design Team Coordinator with B&A, based in Calgary and working throughout North America and Europe.

Laura is a UK-trained architect and has worked on various internationally acclaimed projects of varying scales in North America, Europe and Asia, with a background in constructed and conceptual mixed-use, residential, commercial, cultural and resort urban design projects. Laura was previously Principal at LLY Design (UK/Canada) and Co-Founder of Debicki-Young Design Partnership, a successful Calgarybased firm.



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Sarmad Al-Mashta AIBC, OAQ, AAA, MRAIC, AIA Int. Assoc., LEED AP BD+C

Sarmad is an architect and award-winning lecturer in Concordia University's Department of Building, Civil, and Environmental Engineering. He holds degrees in Architecture from the University of Baghdad and Building Engineering from Concordia, along with a Graduate Certificate in Business Administration. Sarmad is a member of several professional organizations, including the Architectural Institute of British Columbia (AIBC), the Alberta Association of Architects (AAA), and the Royal Architectural Institute of Canada (MRAIC). He is also a LEED Accredited Professional (BD+C).

His design philosophy emphasizes creating sustainable, human-centric built environments that enhance well-being and quality of life. With over 30 years of international experience, Sarmad's portfolio includes transportation, institutional, educational, sports, and residential projects, including high-rises. He is recognized for integrating aesthetics, user experience, and technical constraints into cohesive designs.



Sylvain Bilodeau Architect

Architecturama

Sylvain has been engaged in architecture-based creative projects through Architecturama, the design duo he cofounded in 2012. Inspired by both material and immaterial contexts, he manipulates programs, places, and ideas to create sensitive constructions and spaces, His explorations often focus on raw materials and characteristics such as movement and comfort. Experimentation and cross-disciplinarity are central to his approach, enabling the development of a unique architecture where matter, geometry, and perception play

Since 2018, Sylvain has taught design studios at the University of Montreal and Laval University, developing workshops on perception in architecture. Last summer, he was a guest professor at the University of Montreal's Faculty of Planning, where students created public artworks for the Réseau Express Métropolitain light rail transit system. Sylvain also explores auditory aspects of architecture.

key roles. His work has received awards from the Ordre des

architectes du Québec and the AZ Awards.



Peter Braithwaite NSAA, OAA, MRAIC, AIA, MArch, BEDS, BA, CPHD

Peter Braithwaite is the owner and operator of Peter Braithwaite Studio, an architecture and construction firm in Halifax, Nova Scotia. Trained as a carpenter and cabinetmaker prior to pursuing architecture, Peter believes that a dedication to craft and the act of making facilitates the production of buildings that are both environmentally and culturally sustainable. After completing his M.Arch at Dalhousie School of Architecture in 2012, he received the Royal Architectural Institute of Canada Student Medal for achieving the highest level of academic excellence in his graduating class.

Since establishing Peter Braithwaite Studio in 2014, he has received several honours including the RAIC Emerging Architectural Practice Award, Architecture MasterPrize Small Firm of the Year Award in Residential Architecture, Best Global X-Small Firm by Architizer A+ Awards, Emerging Talent distinction by Twenty + Change, and the Ronald J. Thom Award for Early Design Achievement presented by the Canadian Council for the Art.



Susan Carter Partner and

designer,

DIALOG

Susan is a partner at an international design firm in Calgary and a designer with over 30 years of experience. Large scale retail developments and mixed-use projects have been the focus of her work over the years. The evolution of the enclosed shopping center has lead to a particular interest in the repositioning of these large mall sites. The complexity of uses in a large, previously single use, site is something that intrigues and excites Susan. She is passionate about the role mixed-use environments play in our everyday lives. Her work focuses on creating places where people can thrive.

Susan believes we have a responsibility as designers to contribute to the wellbeing of our communities and the environment we all share. When Susan isn't working on these large mixed-use sites, she enjoys spending time with her family, traveling, and enjoying a good glass of wine and some cheese on a great patio somewhere.



Selina Chen Senior Planner. City of Calgary

Selina Chen holds a Master's degree in Planning and brings over 20 years of experience in statutory planning, land-use amendments, downtown incentive programs, and municipal census work. Her extensive professional background has provided a strong foundation for her doctoral research.

She has been actively involved in industrial land development through the preparation of municipal development policies and area structure plans, the updating of zoning bylaws for industrial districts, and the creation of strategies and action plans aimed at improving the competitiveness of industrial lands. This practical expertise has significantly informed the focus and direction of her research.



Alkarim Devani Co-Founder and CEO. mddl

Alkarim Devani, co-founder of mddl and RNDSQR, is a passionate innovator and design advocate redefining what it means to be a developer and housing advocate. His work has earned national and international recognition, including multiple awards such as the Canadian Architecture Awards, BILD Awards, the American Architecture Prize, and the MUDA Awards. As a frequent guest lecturer, Alkarim has spoken at top universities including The University of California, Berkeley, and The University of Calgary.

Alkarim regularly contributes his time to numerous volunteer organizations as well as a number of industryled boards and communities including D.Talks and Calgary Housing Company. Now pursuing a Doctorate at the University of Calgary, he is focused on scaling the delivery of middle housing across Canada, with mddl as a finalist in CMHC's housing supply challenge.



Δzin Dilmaghani Senior Manager, **WSP Canada**

With over two decades of experience in lighting design and architecture, Azin has developed an interdisciplinary background through work in North America, Europe, and the Middle East. She holds dual master's degrees in architecture and is both Lighting Certified (LC) and a Project Management Professional (PMP), integrating technical, environmental, and managerial expertise across diverse projects, including public realm developments, transportation infrastructures, and healthcare facilities. Azin currently leads the Lighting Studio at WSP Canada, supporting a national team of designers and promoting responsible, research-informed design practices.

She is completing her Doctor of Design (DDes) at the University of Calgary, where her research focuses on sustainable outdoor lighting, bridging professional practice with evidence-based design. Her works are committed to advancing knowledge in lighting, fostering inclusive design processes, and contributing to environmentally conscious illumination strategies in the built environment.



David Finch

Professor and Senior Fellow, MRU Institute for **Community Prosperity**

Dr. David J. Finch holds a Ph.D. in management and is an active educator, scholar, and practitioner. He has numerous academic appointments, including as a Professor and Senior Fellow at Mount Royal University's Institute for Community Prosperity, and a Visiting Fellow at the Henley Business School at the University of Reading (UK). He has also taught at the University of Calgary and Ohio University.

Dr. Finch specializes in labour market dynamics, focusing on the increasing demand for adaptive and open learning systems. He sits on the Government of Alberta's Minister's Council for Higher Education and Skills. In addition, Dr. Finch is the Research and Policy Director at the LearningCITY Collective. Before this, he was seconded to Calgary Economic Development, leading studies on labour market issues. His DDes research explores the intersection of regional economic development and adaptive learning systems.



Tom Gallagher

PLA, LFA. Founder and Director of Design, urban theory design

Tom is an energetic design professional dedicated to creating next-generation urban places that connect to living systems, provide a sense of permanence across time, and are crafted with exceptional artistry. He is an award-winning designer with proven talent for leading interdisciplinary projects with complex challenges requiring unconventional solutions.

Trusted for his thought leadership and collaborative approach, he previously served as Director of Design for an international, six-studio interdisciplinary firm, championing design within ecoregional contexts and deep understanding of People and Place to inspire meaningful places full of vitality, opportunity, well-being, and extraordinary experiences. His knowledge is anchored in landscape architecture, psychology, and over thirty years of practice, during which he has taught, written about, and led urban design practice. In 2025, he founded urban theory design, devoted to urban design as a "grand unifying theory of everything," in service of a flourishing human existence harmonized with local ecologies.



Md Fahad Islam

Designer, BArch, MEL in High Performance Building

Fahad is a Bangladeshi Canadian designer with over 12 years of experience in residential, commercial, and institutional projects. His residential portfolio includes small-scale homes and expansive high-rise developments. He also taught housing design studio to undergraduate students at a leading creative technology university in Bangladesh. Fahad earned a B.Arch degree in Bangladesh and a Master of Engineering Leadership in High-Performance Building at the University of British Columbia, where he focused on sustainability and regenerative design principles. Across Canada, he has worked on affordable housing, mixed-use developments, and senior living projects including several missing-middle housing projects in Toronto.

His work explores the intersection of affordability, sustainability, and contextual design. Currently, Fahad focuses on small- to mid-scale projects that integrate environmental responsibility and social equity, redefining regenerative design for compact residential developments.



Matt Grace

Principal,Matt Grace Sustainability
Inc.

Matt is a Professional Engineer and LEED Fellow with over 30 years of experience in sustainable buildings across Europe and Canada. His diverse background has enabled him to create innovative solutions for sustainable design, emphasizing the importance of both technical and people-centered approaches. Throughout his career, Matt has guided teams in understanding their sustainability goals, measuring success, and evaluating the impact of their design options.

His comprehensive approach to sustainability includes various frameworks and certifications, such as LEED, Built Green, WELL, Fitwel, BREEAM, Green Globes, and the Living Building Challenge. With an undergraduate degree in Aeronautical Engineering and a Master of Science in Energy and the Environment, Matt has blended creativity with engineering rigor since the early '90s, contributing to the green building movement in the UK. Based in Calgary since 2007, he has collaborated with major architects, engineers, and developers, and has served on the boards of Alberta Ecotrust and Green Economy Calgary.



Yulia Korobkova

Associate, Project Director OAA, LEED AP

Dynamic and ambitious architect OAA, with more than 15 years of experience in various scale projects from residential, commercial, and industrial, to institutional buildings and urban design. Yulia Korobkova is fully involved in project development from the initial design concept to completion.

Korobkova is an OAA licensed architect specializing in mid to large-scale commercial and light industrial projects. Korobkova's diverse portfolio includes designing and building distribution centers for the clients like Amazon, Walmart, Loblaw, Metro, and dealerships across Canada (BMW, Toyota, Honda, Acura, Audi etc.), as well as retail plazas such as Smart Centers and smaller retail outlets for Loblaws.



Gerry Lang OAA, RA (NY), AIA, TSA, FTI

With nearly 50 years of experience, Gerry has collaborated with prominent Canadian architects like Arthur Erickson and KPMB, developing expertise in high-performance building envelope design and construction techniques. He spent a decade in New York as Design Principal at HOK NYC, where he completed a Master's degree and worked as a Senior Façade Consultant for Arup Facades NYC. His work on projects such as the Peter Munk Cardiac Centre and the Harvard Art Museum has explored the relationship between design aesthetics, building performance, and operational function.

Since returning to Toronto in 2009 and joining architects-Alliance in 2012, Gerry has contributed to complex signature facades, collaborating with firms like Cobe and Henning Larsen. He holds a B.Arch from the University of Toronto and a M.Arch from the University of Pennsylvania. As an adjunct professor and speaker, he mentors students and discusses new building technologies and architectural facade development at conferences in Canada and the U.S.



Allyse Yiran Li Founding Principal. **RAAW Design** Group

Allyse is a second-year doctoral candidate working on her DDes project, "Tenure Hacking for Equitable Urban Development." She is a multidisciplinary design research scholar, practitioner, and middle-density developer. As a Canadian entrepreneur, her decade-long commitment to design spans both interior and urban fields, integrating design with implementation. As the founding principal of RAAW Design Group, she leads multidisciplinary teams in design and construction while conducting interdisciplinary research to equip design students with tools to navigate capital dynamics in the built environment, promoting socially just built forms.

Trained in Urban Land Economics with a focus on Real Estate Development, her academic background is complemented by years of experience in the Canadian market, bridging practice and research. By critically examining the systems shaping built environments, she seeks alternative futures for housing that promote equity and social mobility.



Paige Lloyd **Principal Architect, ARCCADD Architecture**

Paige is the Principal of ARCCADD Architecture, a Winnipeg-based architectural practice that specializes in plan-to-permit services for developers of high performance commercial and industrial assets in Canada. She is the creative force behind many notable projects in Manitoba and Saskatchewan, and as far north as Nunavut. Passionate about all that her city has to offer, Paige is the co-host of a podcast called Made From What's Left, a funny, irreverent and sometimes factual exploration of some of Winnipeg's most iconic buildings, people and snacks.

Paige is active in her community and industry and, since 2010, has been volunteering as a studio instructor with the Royal Architectural Institute of Canada, where she helps young designers on their path to becoming architects and enriching the built environment. As well, for the past five years, she has served her industry as a volunteer member of the Manitoba Association of Architects Practice Committee.



Daniel Mercer Urbaniste, RPP, **MCIP**

Daniel is a Registered Professional Planner in Ontario and an urbaniste in Québec. A ruralist at heart, he has focused his career on conservation-oriented projects and helping small communities transform conventional planning tools into local investments. Most recently, he served as Division Leader of Community Planning for the Municipality of Lakeshore, Ontario, overseeing GIS, development approvals, and policy planning while implementing initiatives through intergovernmental housing accelerator funding.

With 20+ years in municipal and federal government, including nearly a decade as the senior planner at Parks Canada, Daniel received the Public Service of Canada Award of Excellence for his leadership in legislative reform. He has served on the Canadian Institute of Planners' Board of Directors and continues to work on the Standards Advisory Committee. Through his work, Daniel advocates for a more dynamic model of planning that repositions planners as catalysts of change, exemplified by his emerging PlaceStory Toolkit project.



Nadi (Narjes) Miri Principal, m+ Architecture Inc.

Nadi is an Architect AIBC and Principal of m+ Architecture Inc., with over 2 decades of experience in creating sustainable, community-focused environments. Her work encompasses residential, mixed-use, light industrial, and commercial interior projects, guided by design excellence and meaningful client collaboration. In Metro Vancouver and beyond, Nadi has led projects including an 83-unit mixed-use development, multiple small-scale housing projects aligned with the new SSMUH policy, and over 20 custom single-family homes. Her designs balance function and beauty, transforming complex urban sites into efficient spaces that maximize natural light and adaptability, integrating energy-efficient strategies with architectural clarity, responding to local context and future needs.

Nadi has contributed to municipal design panels and mentor with the Architectural Institute of British Columbia since 2019. Currently, she is pursuing a Doctor of Design (DDes) at the University of Calgary to deepen her professional insight and theoretical foundations.



Simon
Raper
FCSD, BA.
Executive Director, Head of
Savills Design, APAC

Simon is a Fellow of the Chartered Society of Designers (FCSD) and an Architectural and Interior Designer originally from Yorkshire, UK. He has worked globally and is now based in Singapore. Simon is currently pursuing a Doctor of Design (DDes) at the University of Calgary's School of Architecture, Planning and Landscape. With 37 years of experience in Workplace Strategy and Design, Simon focuses on creating environments that help people thrive. He studies the factors influencing the future of work and regularly contributes to industry workshops and events. He also writes for Savills Global Research publication, *Savills Impacts*, covering workplace topics affected by social, political, and economic trends.

A specialist in design thinking and workplace strategies, Simon addresses the future of workplaces by designing for flexibility and choice, including hybrid work models. His expertise spans architecture, interior design, and strategic property.



Jody Patterson MArch, BAS, RHFAC

Jody is a faculty member and former program head in the Bachelor of Architectural Science at the British Columbia Institute of Technology (BCIT), as well as a registered Rick Hansen Foundation Accessibility Certification (RHFAC) Professional. She is recognized for her leadership in sustainable design pedagogy and commitment to an ethical built environment. Jody holds a Bachelor of Architectural Studies and a Master of Architecture from the University of Waterloo. Her personal experiences navigating temporary disabilities as an architecture student have shaped her design philosophy, inspiring her dedication to advancing accessibility beyond technical standards.

With 20+ of teaching experience in North America and Europe, Jody has integrated accessibility into a sustainable design framework at BCIT. Her interdisciplinary studios have explored urban design and public buildings through the lens of mobility and cognitive accessibility, encouraging students to design for equity.



Emmanuel Ssinabulya

Principal Architect, Studio 1 Group

Emmanuel is the principal architect at Studio 1 Group Ltd., with offices in Kigali and Kampala, Uganda. With over 15 years of experience in Norway, Rwanda, and Uganda, he advocates for harmony between design and the environment. Emmanuel also serves as Vice Chair of the Construction Sector Skills Council, which promotes vocational and tertiary education in Uganda's built environment to empower youth, a vital part of Kampala's urban informal economies.

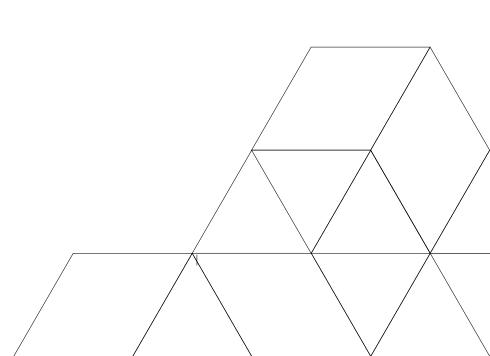
He is recognized for his role in notable projects, including the Nyandungu Urban Wetland Eco-tourism Park, Kigali's carfree zone redevelopment, and the Nyanza Kicukiro Genocide Garden of Memory. Emmanuel envisions community-based welfare initiatives, believing that the poor and marginalized deserve decent living conditions and social infrastructure. His philosophy emphasizes establishing actionable relationships in urban planning, advocating for humane living standards as policy drivers for both informal and formal developments.



Francis Wang **Head of Future** Research, FW. Vision

Francis is a multipreneur with over a decade of experience leading multiple companies to successful exits (\$70M & \$650M) in both engineering and product roles. Francis creates and coaches sustainable impact ventures in domains such as sustainability, education, and health. Leveraging his diverse background and expertise in strategic foresight, Francis cross-pollinates ideas from fields like futures studies, AI, design thinking, sustainability, and entrepreneurship to foster innovative solutions for greater societal resilience.

DOCTOR OF DESIGN



Ministration (Same) (Sa

Sarmad Al-Mashta

This research reimagines sustainable transportation as a design practice that embeds climate action and urban resilience at every stage of development. It seeks to develop a comprehensive framework for environmental impact evaluation, investigate adaptive strategies that account for ecological and social costs alongside financial ones, and explore multimodal integration in transit infrastructure.

The project emphasizes the creation of interactive toolkits that translate lifecycle metrics into actionable design decisions, enabling transit agencies, architects and planners to move from theoretical assessment to applied practice. Anticipated contributions include new methodologies for sustainability performance assessment, rigorously validated design tools tested through participatory workshops, and intuitive decision-support instruments. By aligning with the SAPL DDes program's interdisciplinary and flexible structure, this research bridges industry and academia, positioning the researcher as a thought leader capable of transforming transportation architecture into a catalyst for climate-responsive urban design.

Sylvain Bilodeau

Designing with Sound: Toward an Aural Methodology for **Architectural Practice**

The one who listens to the sound, by virtue of this listening, also belongs to this space; he is not only in the world, but of the world and to the world, he can inhabit and invest it.

- Alexandre Chèvremont (2024)

Architecture is traditionally perceived as a visual and tactile discipline, yet spatial experience is inherently multisensory. Sound profoundly shapes how we perceive and inhabit space, influencing cognition, emotion, and well-being (Pallasmaa, 2012). Still, sound design, outside specialized contexts, is considered optional or overly complex. Most interventions focus on noise control rather than enhancing auditory experience. Although sound is addressed in studies, architectural theory and practice lack strategies for integrating it as a design element (Rémy, 2005).

Although sound can have a profound impact on the urban experience, it is an underrepresented component when it comes to its integration in everyday design practice.

- Steele, Kerrigan & Guastavino (2019)

This research seeks to advance the role of sound in architectural conception by moving beyond nuisance management and positioning aurality as a creative medium enriching the artistic language of architecture and aligning with human sensibility.

Practically, this involves developing strategies and methods for embedding aurality throughout the design process (Pelzer et al., 2010). Ultimately, the project seeks to transform aurality from an intangible concept into design practices and actionable knowledge.

Would it be possible to treat the sound environment not as a source of nuisance, but as a cradle of strong creative and experimental potential that has yet to be fully explored?

– Carlotta Darò (2013)

Yes, why not use sound as building material? - Bernhard Leitner (2008)

Central question: Through what strategies can architects integrate sound into the creative and conceptual framework of design to enhance spatial experience, emotional resonance, sensory engagement, and overall well-being? Secondary inquiries: sound as design material; limitations of auralization tools: sound simulation incorporation into workflows; importance of geometry and materiality; implications for diverse audiences.

Peter Braithwaite

Drawing on Ecological Benefits

Interdisciplinary design strategies are required to deviate from the current rate of habitat fragmentation and biodiversity loss resulting from anthropogenic activity. Once established, the physical form and land use patterns of built environments can be difficult to change. Environmental protection strategies administered by architects should extend beyond the building scale and address more than the energy efficiency or thermal properties of individual buildings. In pursuit of truly sustainable built environments architects, designers and builders should begin to view buildings as participants within overarching ecological systems rather than independent design endeavors.

This research endeavours to establish a tool for architects, designers, and builders that aids in the interpretation of design decisions through the lens of established ecological principles, refined construction logistics and efficient building services incorporation. The intended outcome is greater integration between natural and anthropogenetic systems resulting in reduced ecosystem disturbance at the site, community, and urban scale. Leveraging architects well established aptitude with drawing, this research aims to develop a framework through which drawn information can be layered, revised, and altered with considerations from disciplines such landscape ecology, forest ecology, silviculture, geology, fluid dynamics and construction logistics. .

Susan Carter

Change and the City

Her DDes project focusses on the intersection of mental wellbeing and the built environment, particularly the commercial, private sector world of development. Art and Nature are often elements of a development that get cut to reach a return on investment, but art and nature contribute to places that provide refuge, reprieve and beauty that is proven to contribute to mental wellbeing.

How can we demonstrate a mutual value for the investment where the measurements of the return on the investment is money but also the wellbeing of the community?

Selina Chen

Unlike residential development, industrial land is often overlooked in urban planning and public discourse, frequently perceived as obsolete or environmentally harmful. This misperception undermines its strategic value and presents a significant challenge to sustainable urban growth in 21st-century Canadian cities.

This dissertation proposes a new planning framework—Dynamic Zoning—to reposition industrial land as a vital component of urban resilience and economic development. The framework offers a flexible, future-oriented approach that enables cities to maintain a ready supply of industrial land while adapting its use in response to evolving economic, social, and environmental needs. Through policy tools and strategic branding, Dynamic Zoning aims to elevate the visibility and perceived value of industrial areas among policymakers, politicians, and the public.

The project's anticipated impacts include equipping decision-makers with adaptable land-use strategies, reframing public perceptions of industrial zones, and fostering broader support for their revitalization. Ultimately, this research contributes to the evolving field of urban planning by demonstrating how industrial land can be reimagined as dynamic, inclusive, and sustainable spaces within the urban fabric.

Alkarim Devani

Scaling mddl Housing across Canada: Empowering Everyday People to Build the Future of Housing

Across North America, momentum continues to grow to end exclusionary zoning and introduce more diverse housing typologies into established neighbourhoods.

Yet, despite policy shifts, the adoption of missing middle housing remains painfully slow. At the heart of this challenge is not just technical feasibility; it's cultural, emotional, and systemic.

This research and creative project explore how to reimagine the delivery of middle housing through a citizen-led, DIY framework that empowers homeowners, aligns with community values, and unlocks the potential of existing infrastructure. As urban land becomes increasingly inaccessible to new buyers and traditional developers struggle to deliver smaller-scale projects, we focus on equipping everyday people (middle-class citizens, entrepreneurs, and emerging builders) to take action.

Drawing on key informant interviews, design science research, and a series of community-based pilot projects, this work doesn't just ask "how do we build more homes?", it asks "how do we help more people build them?". By working across sectors and creating an integrated ecosystem of education, policy tools, financing supports, and storytelling, we aim to mobilize a new generation of craft developers. Inspired by movements like craft beer and slow food, we believe middle housing won't scale through top-down policy alone. It must be seeded through grassroots empowerment and cultivated with care, transparency, and trust.

| Azin Dilmaghani

Many construction and urban development projects treat lighting design as a secondary consideration, often addressed too late in the process and constrained by budget, time, or limited expertise. This reactive approach has led to cities that unintentionally compromise ecological integrity, diminish urban quality, and overlook the well-being of people and other living beings who share the environment. While regulations and standards exist to guide responsible lighting, they are frequently misunderstood, underutilized, or applied in ways that overlook their underlying environmental intentions.

This research project addresses these challenges by developing a framework for a practical, knowledge-based tool that makes responsible outdoor lighting design more accessible to a broad range of design and professional stakeholders—including architects, landscape architects, urban developers, engineers, and electrical/lighting inspectors. The goal is not to replace lighting designers, but to democratize access to essential knowledge, enabling more practitioners to design in ways that align with environmental stewardship, community needs, and the preservation of the night environment.

David Finch

Unlocking Regional Potential: A Policy Guide to Open Learning

Historically, an economic region's competitive advantage was determined by its proximity to scarce natural resources, such as lumber, oil, or iron ore, and access to navigable waterways. These natural advantages facilitated regional economic growth through commodity extraction, trade, and manufacturing. However, today, the competitive advantage of many regions has shifted from proximity to natural resources to the quality of its human capital.

Over the past several decades, socio-cultural factors including technological advancements, globalization, and the lasting effects of the COVID-19 pandemic—have disrupted long-held learning and labour market paradigms. Collectively, these elements contribute to heightened labour market volatility and uncertainty, widening the gap between regional human capital supply and demand.

Over thirty years ago, Ari De Geus argued that an organization's "ability to learn faster than [their] competitors may be the only sustainable competitive advantage." This principle now extends to regional labour markets. The challenge is that education, training, and workforce development systems remain fragmented in many regions.

Building on the principles of open innovation, open learning recognizes that learning is highly dynamic and can take infinite forms, from traditional classroom learning to lived experiences. However, optimizing an open learning system demands that all stakeholders, including learners, learning providers, employers, credentialing bodies, and policymakers, collaborate as part of a broader human capital ecosystem. Thus, this project is guided by the following question:

How can a regional human capital ecosystem be optimized to meet dynamic labour market demand?

The creative outcome of this project will be A Policy Guide to Open Learning. This guide will provide regional stakeholders a holistic framework to unlock their region's human capital potential. It is anticipated that this guide will incorporate three operational roadmaps:

- 1. The Open Learning Regulatory Roadmap
- 2. The Open Learning Navigation Roadmap
- 3. The Open Learning Passport Roadmap

Tom Gallagher

In their Global Status Report for 2017, the International Energy Agency introduced their calculated prediction that the world would double its building floor area by 2060, a rate equivalent of an additional New York City every month, a new Paris every week or a new Japan every year for the next 40 years. North American alone, where the development will be the least intense of the top 5 regions seeing gains, will add the equivalent of 62 new "gateway" cities in that time. Environmental scholar David Orr said it simply, "we will build more in the next 50 years than we have in the last 5000."

The opportunity and urgency are clear. Plainly however, our existing forms of human settlement are not built to facilitate a contemporary society living in harmony with itself and the ecology. Of course, we have known this for some time. Yet, in the previous 50 years, we have made only incremental strides that are not keeping up with the pace of development. Truly new solutions that are necessary if our future is to not just survive but flourish are few or have struggled to gain a foothold.

This proposed research asks a fundamental question, our brains are built for community, traits that have been essential to human survival success so, why do we run from it? The desire is to bring a stronger focus to understanding the human psychological aspects that lead us to predominantly choose adversarial relationships with others and the ecology.

Importantly, our role as designers in the making of places that reinforce this oppositional behavior will be examined with the hope of proposing new forms and methods of human settlement that encourage harmony with society and the planet.

Concretely, the proposal imagines the establishment of an institute with a course of study dedicated to a unified theory for the design of human settlement connected to physical, social, psychological and ecological wellness outcomes designing for relationships, including those with natural systems essential for our longevity, rather than simply onedimensional metrics and mechanisms.

Moreover, the institute will use the power of experiences to make the recommendations accessible to those outside the profession in order to accelerate the conditions necessary for change.

Matt Grace

Typically, the success of a building has been measured in terms of improvement over "standard practice" or marginal improvements over what is mandated by building codes or mainstream green building rating systems. Living or regenerative buildings provide paths for construction projects that measure success in terms of positive contributions rather than reduced harm. Such projects aim to be free of toxic substances, net positive for energy and water, equitable, safe and resilient.

The urgency of the need for action is underscored by Canada's national commitment to retrofit 600,000 homes annually to meet its net-zero targets, ongoing climate crises and the polarization of green issues within many sectors of society.

There is a disconnect between various policy instruments affecting building projects. For instance, heritage tax credits, energy efficiency incentives, and federal building codes do not promote regenerative outcomes.

This project proposal will enable my established consulting practice to reshape and reframe the approach to sustainability in buildings by valuing positive contributions rather than reduced environmental impacts. It will address these complex, interconnected challenges by bridging the gaps between decarbonization efforts, cultural preservation imperatives, and the broader goal of enhancing community vitality.

Living or regenerative buildings provide an opportunity for the built environment to make positive contributions regarding climate change. By redefining building projects as opportunities for holistic regeneration, this project aims to contribute to a more sustainable, resilient, and equitable built environment.

The proposed DDes work may focus on building retrofits or may explore solutions that apply to the built environment as a whole and will consider:

- 1. What needs to change within funding mechanisms and how developers and builders evaluate a "return" on their investments to enable more regenerative buildings?
- How can regenerative and living building design principles, including circularity, biophilia, and resilience, be systematically applied to maximize environmental, social, and economic benefits?
- "Fixing" the language of sustainable and regenerative buildings to be make it appeal more broadly.
- Addressing known flaws in the green building consulting model.

Md Fahad Islam

Regenerative Missing Middle Md Fahad Islam

Since 2023, the City of Toronto has permitted multiplexes citywide, creating opportunities for 'missing middle' housingmedium-density developments that enhance affordability and urban vitality. A primary challenge in these projects is community opposition, often arising from concerns about increased density, parking, and changes to neighborhood character. Even fully code-compliant developments can face significant resistance, highlighting the tension between city objectives and residents' perceptions of livability. Another pressing issue is the limited integration of meaningful sustainability in housing development. Many developers pursue only the minimum standards required to access incentives, which undermines the government's 2050 sustainability goals and impedes long-term environmental progress. Achieving a balance between affordability, sustainability, and community-centered design is critical yet difficult, particularly within tight budget constraints.

This research envisions a regenerative approach to the missing middle—design that not only minimizes harm but creates positive, lasting value. Such an approach considers environmental impact alongside the social, cultural, and historical context of each site, fostering resilient communities and generating more value than it consumes. By applying systems thinking, regenerative design can be made practical and accessible, even in projects with limited resources, challenging the perception that sustainability is feasible only for large-scale or well-funded developments.

The proposed Doctor of Design research at the University of Calgary aims to bridge the gap between regenerative design and missing middle housing, integrating sustainability, affordability, and community well-being. This study will explore strategies to implement regenerative principles in medium-density housing, ensuring environmental integrity, social equity, and enhanced quality of life. Ultimately, the research seeks to redefine architectural practice for the missing middle, promoting resilient, vibrant communities that prioritize ecological health, social inclusion, and meaningful urban transformation.

Yulia Korobkova

Building envelope is a massive crucial element to focus for architects, engineers, developers and builders. My experience working on various projects in Canada has provided me with insights into the entire project lifecycle, from feasibility studies to occupancy and commissioning.

This exposure has enabled me to anticipate potential challenges and pitfalls across all phases. I was always wondering of areas of building envelope design improvements to meet different criteria. DDes program will allow me the opportunity to utilize my experience gained as an Architect to address a significant gap in design tools during the schematic and design development stages of projects.

Oftentimes, architects specify building envelope components during the early design phase without considering the diverse energy performance and cost impacts of various layers. On the other hand, energy simulation engineers typically become involved later in the design process, making it challenging to adjust the entire envelope to meet unique requirements. This gap may be resolved by creation of a simple architectural tool to optimize buildingenvelope components to meet energy requirements. Indeed, giventhe pivotal role of the building envelope in energy consumption, budget allocation, and long-term sustainability, early decision-making regarding its composition is crucial in the design process.

The overall objective of the research is to streamline the design decision-making process, with a focus on implementing efficient façade systems that minimize energy consumption and cost while maximizing occupant comfort.

Gerry Lang

The Artisan Architect | November 2025

One of the most enduring attractions almost 50 years of architectural practice, for someone who loves to solve the problems of making stuff, is the collaborative process that sees hundreds of interesting people (sometimes from all over the world) come together to lend their expertise to the realisation of a construction project. Dozens of consultants, perhaps 75 trades, manufacturers, builders, city officials, financiers and clients can act together on a single large building over a period of several years.

Toronto, where I have practiced for about 40 years (in addition to a decade in New York), is an especially star-struck city which often exhibits a small-town design insecurity that results in a need to import foreign talent for status. When most new architectural requests for proposals (public or private) are released in this city and others in Canada, the finalist groups are frequently dominated by well-known international firms.

Since the 1990s, two events have changed the way multi-firm projects operate: greatly compressed schedules and the internet's creation of a class of architectural stars who can practice anywhere, regardless of their understanding of the location of the project and its building culture.

A new player in the multi-firm project is needed to ensure that the design will be fortified by local constructability, lest the design intent founder in the face of costing and the inertia of 'we've never done it that way' builder expediency. The Artisan Architect, as I have named the new team member, assumes two duties - the aforementioned strengthening of the design firm's proposal in the early stages and the overseeing of the executive firm's detail realisation of that design in a more efficient process that has been streamlined by the early refinements, leading to fewer revisions in the expensive contract documents phase.

Our Toronto practice - architectsAlliance (aA) - is approached often by international firms seeking to compete for work in what is currently the busiest construction centre in the world.

Although most of our projects in the office are executed entirely by aA, we also work in association with six European and US firms; each has different priorities in the realisation of their designs.

I have participated in mid-project hand-off partnerships; rarely is the experience the best it could be. My proposal is based on the idea of Values and Value. The artisan's first duty in the project comes with early design discussions about the project's values and fortifying the proposed architecture with greater understanding of its constructability. Following these early design stages and the costing and constructors' reviews, the second duty to the project is that of refining and streamlining the contract documents stages in concert with the executive architect, creating Value for all team members by reducing the late-project re-designs that often slow down projects which proceeded without mature, vetted documents.

The careful defining of this new role and its value, with the ultimate goal of the artisan's role becoming a new part of the architects' contract language, is the object of my study going forward.

| Allyse Yiran Li

Global cities face a paradox: housing markets simultaneously drive wealth accumulation for property owners and systemic exclusion for renters and non-owners, fuelling inequality and eroding social cohesion. The same housing markets that created wealth for homeowners in the last several decades are now creating structural inequality for renters and aspiring young buyers.

Speculative land markets in the recent years have priced out the teachers, librarians, nurses, amongst other essential workers in the urban workforce who form our social foundation. When those who sustain our collective life cannot participate in housing's wealth-building potential, we don't just create inequality —we undermine democracy itself. This is especially true for young Canadians, who without generational wealth (the 'bank of mom and dad') face significant barriers to homeownership.

This doctoral project confronts the hyper-financialization of land Rent where urban affordability is examined beyond a supply and demand dogma3 for globalized Canadian cities. Where existing solutions (e.g., subsidies, inclusionary zoning) fail to address land speculation as a root cause, this project looks to an alternative model: a market-based yet socially calibrated system that delivers not only affordability, but also attainability.

Drawings on critical theory and borrowing from non-Western values, historic and contemporary cases the research examines structural inequality both economically and meta-economically through embedded spatial and design thinking. Through the Design Science Research method, this project uncovers critical system level failures in its problem space and looks to canvas alternative futures through practical implementation innovating in business models, policy interfaces and incremental phasing strategies.

Paige Lloyd

Mitigating our Landscape of Risk

A new set of practice principles and construction mock up strategies for improving the fidelity of communication across temporary project organisations working in intermediated transactions across the architecture, engineering and construction industries as a strategy for mitigating risk.

Design-Build, a widely accepted project delivery model in Canada, supports cost efficient and timely design and construction projects, but contributes to a breakdown in communication between stakeholders. This research examines the spaces between AEC stakeholders, identifies the ways in which communication falls apart in those spaces, and develops a new set of practice principles and construction mock up strategies that will bridge those gaps in order to foster collaboration, reduce risk, and ensure timely, cost efficient and high-quality project delivery for all stakeholders.

There is extensive research on communication in design and construction, but few resources are available to effectively communicate this knowledge to engineering, and architectural practitioners, construction project managers, and their clients. A review of the available data and innovative techniques for delivery are the key ways in which I will dispatch the breadth of knowledge on this topic including critique of existing standard forms of contract, stakeholder alignment workshops and construction mock-ups.

The findings of this research include the demonstrable need for engaging stakeholders in a meaningful way at key points throughout both the design and construction stages of a project. Focusing on engagement will ensure that the parties to the project become co-authors to their project-specific solution. Although the design-build contract is the focus of this study, improved communication strategies and alignment workshops could be beneficial for all project delivery formats, indicating that they are applicable to the larger community.

Daniel Mercer

Daniel Mercer's DDes creative project addresses the challenges facing small towns; challenges exacerbated by the rigidity of legislated town plans, which too often function as static documents instead of dynamic tools integrated into governance, budgeting, and placemaking. Many small towns face persistent barriers: limited capacity, shrinking populations, and a slow burning erosion of public trust in the planning system. Yet within these constraints lies opportunity. By reframing the purpose of the plan – from a technical document to persuasive and implementable tool – this research explores how small towns can chart a path toward place-based economic development.

The creative project will create a multi-functional plan rooted in a design-science research methodology. The resulting goal is to shift planning from a compliance-driven exercise to one that supports implementation, stimulates investment, and builds build public trust through action. Following the first round of Key Informant interviews, the prototype *PlaceStory Toolkit* has evolved from the June Symposium into a framework that now including five core components (Conductibility, Desirability, Feasibility, Visibility, and Viability) applied through a two-step Evaluation and Design process. Using it, the planner moves through the process – acting alternately as a disrupter, innovator, or agent of change – to bring energy back to place.

This approach is shaped by Daniel's professional experience in remote park communities, his leadership in legislative innovation in the federal government, and his most recent role in the southernmost region of Canada. The *PlaceStory Toolkit* hopes to draw lessons from places that have succeeded against the odds and apply them to Northern Ontario's unique geographic, cultural, and governance context.

Ultimately, this project challenges the assumption that small towns must rely on large-scale, top-down interventions to survive. Instead, it positions planners as strategic translators, individuals capable of activating local assets, catalyzing investment, and telling stories that attract people, purpose, and capital. By shifting the product from plan to place, this work aims to alter the trajectory of planning practice in small-town Northern Ontario and beyond while helping rebuild trust in the profession.

Nadi (Narjes) Miri

Adaptive Practice: Innovation and the Evolution of the Architect's Role in a **Changing World**

This research, presented by Nadi Miri to explore the necessary evolution of architectural practice through the lens of innovation to address critical shortcomings in the traditional linear work flow. The central ambition is the redefinition of the architect's value, partnership, product, and success by moving towards a "Viable New Offering".

Key Problem Areas: Traditional practice is characterized by four primary challenges that diminish the architect's social and economic impact:

- 1. Limited Collaboration: The architect's expertise is siloed, and the value chain excludes essential, cross-sectoral partners (like community groups and policy experts) necessary for broader impact.
- 2. Inefficient Process: The linear, non-adaptable delivery process leads to waste, delay, and expensive rework because key decisions occur too late.
- 3. Rigid Product: The resulting building is a static product, lacking the adaptability and community relevance needed for long-term ownership and permanence.
- 4. Disempowered User: Limited community and end users' engagement compromises long-term ownership and psychological well-being.

Proposed Innovation Strategy: The Connected Design Practice

The research proposes a Connected Design Practice that applies four core innovation areas; Network, Process, Product System, and Customer Engagement, to move from the current state of Isolation, Inefficiency, Rigidity, and the Disempowered User to a superior, viable offering:

- Network: The architect acts as the "hub" of a crosssectoral consortium, sharing risk and knowledge to unlock new pre-design and policy markets. This redefines partnership by including Community Leaders, Tech Developers, and Policy Experts.
- Process: The firm adopts a Superior Workflow by implementing iterative, data-driven, LeanDesign, and automation strategies to ensure continuous, efficient, on-time, and on-budget delivery, moving away from the linear model.
- Product System: The strategy is to create a Scalable & Adaptable Offering by generating reusable, open-source construction details and assembly files. This digital asset preserves the original design's value while integrating

with a superior, data-driven workflow that facilitates local fabrication.

Customer Engagement: The practice fosters Distinctive Interaction through co-creation and digital tools (VR/ AR, Citizen Science apps) to simplify complex choices, ensuring the design is community-validated and deeply valued

Jody Patterson

Climate change, social justice and housing crisis are inextricable from any discussion of architecture in and of our times. Within this context, there is growing demand for an ethical built environment - inciting design teams to produce more sustainable, inclusive, affordable projects. Among these broadening (and often diverging) considerations, accessibility is rarely a fundamental design driver: what would shift accessibility from constraint to core value?

Accessibility is a human right, recognized in Canada in 2010. In 2022, 27% of Canadians over 15 identified as disabled (up 5% from five years prior)[i] of which 1% use a mobility device for daily life[ii]: at least one in four Canadian adults has accessibility needs that wheelchair clearances don't address. Beyond legal compliance, professional ethics demand designing for safety, dignity, independence, and equal opportunities for all to use and benefit from services... but to deliver that, we need a clear picture of how all experience the built environment. What exposure would put informed design for all at the heart of every design decision?

As an emerging and expanding field, there is a gap between industry demand for inclusive design and professional expertise to deliver it - exacerbated by competing design considerations. What proficiencies must be gained to optimize (rather than compromise) design for all, providing accessibility without exacerbating economic barriers? Upgrading ways of doing presents an opportunity to evolve ways of being, and the academic/training environment offers fertile testing ground to study this feedback loop. What do we need to know to pursue an inclusive built environment, and perhaps more essentially - who do we need to be?

[i]https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2023063-eng.htm# [ii]https://pmc.ncbi.nlm.nih.gov/articles/PMC4992144/#:~:text=In%20 conclusion%2C%20more%20than%20288%2C000,day%2Dto%2Dday%20mobility.

Simon Raper

Reimaging the Future Workplace: Integrating Adaptive Design for Evolving Workplace Interiors

Research Idea: In the wake of rapid technological advancements and shifting paradigms, the traditional workplace/office environment is undergoing a transformative evolution. This research aims to explore and develop adaptive design strategies for future workplace/office interiors that respond to emerging trends such as hybrid work models, digital integration, and the emphasis on employee well-being. By examining current and projected workplace challenges, the study will investigate how design can foster flexibility, collaboration, and inclusivity within workplace/office spaces.

Through a practice-based approach, the research will involve the creation of design prototypes and frameworks that address these challenges, ensuring that future workplace/ office interiors are not only functional but also enhance the overall work experience.

Francis Wang

As innovation accelerates, it becomes a significant disruptive vector, demanding a foundational shift in our economic goals: from mere growth to cultivating deep societal resilience.

This dissertation addresses the current innovation economy's systemic myopia, a condition driven by a focus on rapid returns that often undermine societal well-being. This is exemplified by industry reports celebrating 5-7 year exit times in Silicon Valley while discouraging European ecosystems with 10-12 year timelines, signaling an overcorrection toward short-term gains (2024). This myopia is rooted in a systemic failure to accurately evaluate, capture, and invest in long-term value.

This systemic failure is analyzed within the specific context of Canada, which faces a five-front gap in its innovation economy that threatens its economic sovereignty. This manifests as a 73% leakage of taxpayer-funded intellectual property (2024) and a persistent "brain drain" of both STEM graduates and the associated legal and commercial talent required to build new ventures (2023).

To counteract these deep-seated challenges, a new "Foresight-Driven Innovation" framework is developed to enable collaborations and innovations that create long-term value. It proposes "Designing Innovation" to create ecosystems that counteract myopia. The goal is to foster a culture capable of sustaining, rather than being fractured by, accelerating innovations.

This framework explores a core mechanism in the continual aggregation of context. This moves beyond valuing discrete assets like patents to valuing the compounding knowledge,

data, and shared understanding that form the true basis of long-term projects.

Modes of collaboration are addressed such that complex projects manage issues with knowledge succession, where vital understanding is lost as people enter and leave communities, by ensuring past innovation efforts are effectively collected, aggregated, and leveraged to inform future collaborations. This provides a viable path toward economic sovereignty and enables maximum societal flourishing.

| Emmanuel Ssinabulya

Community Regenerative toolkit: Managing Kampala's Informal Urbanization through Community-driven approaches

Rapid urbanization across Global South cities has intensified uncontrolled urban sprawl, often driven by environmentally insensitive, top-down administrative strategies. Kampala, Uganda, exemplifies this trend, particularly within its watershed communities, where centralized planning models fail to reflect local realities, leading to declining public trust and persistent informalities within the built environment.

This doctoral research proposes a Smart Community
Toolkit—a participatory and data-informed planning
framework, designed to address the socio-economic and
environmental challenges, as an effect of urban sprawl.
Anchored in the Design Science Research (DSR) methodology,
the study progresses through three phases: the initial key
informant interviews to inform the toolkit's design; the design
and development process; and follow up interviews with
key informants for evaluation and refinement. The research
engages two categories of key informants: Content experts
with direct experience in managing urban sprawl challenges,
and Strategic experts specializing in smart innovations,
participatory design, and regenerative urban development.

This research is grounded in the researcher's more than 15 years of professional and academic practice in architecture and urban planning within East Africa, bringing practical insights into the project's design, testing and potential implementation. The project's anticipated impacts include a replicable toolkit that enhances community engagement, informs inclusive policy-making, and strengthens urban resilience, as well as equipping policy makers with adaptable urban planning and redevelopment strategies, reframing the public's perception of urban planning models for the informal settlements.

Ultimately, this research contributes to a collaborative discourse on sustainable urban development in the global south, by providing a contextualized model for managing effects of urban sprawl through community-driven planning, reimagining informal settlements as dynamic, functional and sustainable territories within the urban realm.







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