

**Undergraduate Research Award
List of Researchers – Faculty of Architecture – for summer 2021**

DEPARTMENT OF ARCHITECTURE

Dr. Eduardo Aquino

Email: eduardo.aquino@umanitoba.ca

Bio: <https://umanitoba.ca/faculties/architecture/facstaff/faclist/aquino.html>

Eduardo Aquino is an Associate Professor and leads the research-based practice spmb (São Paulo-Manitoba). Eduardo's investigations are connected to Contemporary Architecture and Public Space—this suspended and fluid field, a terrain vague of sorts, a place with no fixed norms, ready for full potentials. Eduardo has an invested interest in “Architecture as Expanded Field,” connecting it with disciplines and practices beyond, looking at the transformations of architecture and public space in a critical moment in the evolution of the contemporary city. Along with ongoing investigations, Eduardo has an applied research practice, designing urban spaces and public art as a direct consequence of his academic research. Eduardo works with students with interests in design and critical issues in Art & Architecture, Contemporary Architecture & Urbanism, and Public Space.

Prof. Shawn Bailey

Email: Shawn.Bailey@umanitoba.ca

Bio: <http://umanitoba.ca/architecture/shawn-bailey>

Shawn Bailey is a registered Architect, an Assistant Professor and Indigenous Scholar with the Department of Architecture and the Faculty of Engineering. His research explores collaborative design processes that draws connection to the land through indigenous knowledge and perspectives. His work is community based and looks to develop an architectural understanding through a process rooted in story. Students employed under the URA will have an opportunity to work alongside Indigenous Communities and address housing issues concerning the cultural need, available stock, housing maintenance, energy security, economic self-sufficiency, skills development and training and self-reliance.

Prof. Lancelot Coar

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Bio: <http://umanitoba.ca/faculties/architecture/facstaff/faclist/coar.html>

Lancelot Coar is an Associate Professor in the Department of Architecture, a researcher at the Centre for Architectural Structures and Technology (CAST) at the University of Manitoba and is currently a PhD candidate (Architectural Engineering) at Vrije University, Brussels, on the subject of ice shells and bending active framed fabric formwork structures. His research explores how the dynamic properties of building materials can guide design and construction methods to produce highly efficient structures and unique architectural forms. His research has been published widely and has exhibited his work internationally in museums, galleries and in the public sphere.

Dr. Mercedes Garcia-Holguera

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Bio: <https://umanitoba.ca/faculties/architecture/facstaff/faclist/mercedesgarciaholguera.html>

Dr. Garcia Holguera is a registered architect (Spain) and LEED AP BD+C with professional experience in Europe, North and South America. She received her PhD from McGill University on the subject of biomimetic design for resource use optimization. Her research bridges across disciplines from science, and technology, architecture and environmental design, with a focus on energy efficiency and sustainability. She is currently working on developing mycelium and bacterial cellulose based materials to optimize buildings' hygrothermal performance, and her work also encompasses quantitative assessment of architectural solutions with a focus on BIM and energy simulation tools.

Dr. Lisa Landrum

Email: Lisa.Landrum@umanitoba.ca

Bio: <http://umanitoba.ca/architecture/lisa-landrum>

Lisa is a registered architect and published scholar. Her research advances social justice, climate justice, creative exuberance and ethical understanding through scholarship in architectural history, theory and design. Research areas include: architectural agency and representation; architectural intersections with theatrical arts, film and literature; myths and metaphors about architectural origins and creativity; and trans-historical topics concerning cultural memory, critical thinking and imagination. Current projects include: working with a national task force to develop an architecture policy for Canada – building on the successful *Canadian Architecture Forums on Education* (CAFÉ), <https://architecturecanada.ca/>; and working with international scholars on a symposium and publication entitled *Theatres of Architectural Imagination* > <https://www.marcofrascaridreamhouse.com/future-events>.

Dr. Carlos Rueda

Email: Carlos.Rueda@umanitoba.ca

Bio: <https://umanitoba.ca/faculties/architecture/facstaff/faclist/CarlosRueda.html>

Dr. Rueda is scholarly interested in generative processes, particularly disciplinary crossings between architecture, cognitive theory and other creative disciplines. Through these bridges or crossings, Rueda explores ideas of imagination in creative activity. Dr. Rueda is working on a project on architectural theory titled *Poetics & Historicity through the Modern Sieve*, with case studies on A. Siza, R. Salmons, P. Zumthor, R. Moneo, V. Olgiati, Caruso-St. John, and Shim-Sutcliffe. Carlos Rueda holds a selective creative practice as cofounder-associate in Monumental Arquitectura: <http://www.monumental.com.co>

DEPARTMENT OF CITY PLANNING

Dr. Rae St. Clair Bridgman

Email: rae.bridgman@umanitoba.ca

Bio: <http://umanitoba.ca/architecture/rae-bridgman>

Rae's current research focuses on child friendly cities in relation to the invention and marketing of architectural and building toys. Ideas about childhood as a time for learning and education – and a time for play – intersect with ideas about architecture, the design of cities and cultural values. She is presently cataloguing and gathering documentation about her extensive collection of toys, games and books for kids, highlighting themes and identifying gaps in the collection.

Dr. Richard Milgrom

Email: richard.milgrom@umanitoba.ca

Bio: <http://umanitoba.ca/faculties/architecture/facstaff/faclist/milgrom.html>

Dr. Milgrom's research addresses the social impact of urban form, from the local to regional scale. In recent years, this has focused primarily on social inequity as has been exacerbated by Winnipeg's development, and on the production of age-friendly communities. He has led student groups that have studied walkability, access to transit and quality open space, options in housing, and appropriate services in Manitoba's cities and towns. He is currently working to expand this work to a regional scale. He is examining the unequal demographic changes that are emerging at a regional scale within the Winnipeg Metropolitan Region, and how the needs of an aging population can be accommodated in areas with declining populations and services across the province. Dr. Milgrom is interested in working with students with interests in social equity and the relationship between built environments and health. GIS and strong graphic skills would be assets.

DEPARTMENT OF INTERIOR DESIGN

Dr. Shauna Mallory-Hill

Email: S.Mallory-Hill@umanitoba.ca

Bio: <https://umanitoba.ca/faculties/architecture/facstaff/faclist/mallory-hill.html>

Dr. Mallory-Hill undertakes research work in the area of understanding the impact of building design on occupant health, wellness and productivity. Students employed under the undergraduate research award will have the opportunity to work alongside other graduate research assistants in organizing, collecting, and analyzing data related to one of two active research projects: aging-in-place ergonomic kitchen design or pre- and post-renovation design evaluation of persons living with Alzheimer's and related dementia.

DEPARTMENT OF LANDSCAPE ARCHITECTURE

Prof. Kamni Gill

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Bio: <http://umanitoba.ca/faculties/architecture/facstaff/faclist/gill.html>

Kamni Gill is currently examining the cultural implications of green infrastructure, especially in relation to urban tree systems and animals. Her research will examine traditional landscapes shaped by human and animal interdependencies through archival research and literature reviews. The human-animal interface in human settlement will be examined and a position paper developed exploring how human-animal interactions were instrumental in landscape design and management. Her research will explore the human-animal interface in contemporary urban settings through setting up a wildlife observation stations in Winnipeg and the creation of a citizen science project for documenting wildlife. The aim of the research is to understand how mammals coexist with people in urban environments and how they make use of cities. At the same time, Kamni maintains an ongoing interest in tree planting types and is currently developing a lexicon of urban tree spaces. The potential for new open space tree typologies will be explored through case studies from the fine arts, landscape architecture, urbanism, ecology, ethnography and agriculture as well as through a series of test sites/installations.