

# CURRICULUM VITAE

---

Herminia Silva Machry | 2025

## EDUCATION

**Doctor of Philosophy (Ph.D.), Planning, Design & the Built Environment**, Dec 2019  
Clemson University, USA

**Master of Science (M.Sc.), Architecture and Urban Planning**, Mar 2010  
University of Sao Paulo, Brazil,

**Bachelors (B.Arch), Architecture and Urban Planning**, Sep 2004  
Federal University of Santa Catarina, Brazil

## LICENSURES & PROFESSIONAL TRAINING

**Professional License**, 2004  
Architecture and Urban Planning Council, Brazil

**Evidence-based Design Accreditation and Certification (EDAC)**, 2018  
Center for Health Design, USA

## EMPLOYMENT HISTORY

### 1. ACADEMIC

**UNIVERSITY OF KANSAS, 2022-present**  
Assistant Professor, full-time, Interior Architecture Program, School of Architecture (Aug 2022 - Present)

**GEORGIA INSTITUTE OF TECHNOLOGY, 2020-2022**  
Research Scientist II (Dec 2021 – July 2022), full-time, SimTigrate Design Lab  
Postdoctoral Research Fellow (Feb 2020 – Dec 2021), full-time

**CLEMSON UNIVERSITY, 2015-2019**  
Graduate Research Assistant, part-time, Center for Health Facilities Design and Testing (CHFDT)

**UNIVALI, Baln. Camboriú, SC, Brazil, 2014-2015**  
Lecturer, part-time, School of Architecture and Urban Planning

**FATENP, Palhoca, SC, Brazil, 2014**  
Lecturer, part-time, College of Technology of Interior Design

**SENAC, Sao Paulo, SP, Brazil, 2011-2013**  
Lecturer, part-time, Management in Healthcare Services, 2013  
Lecturer, part-time, Hospitality in Healthcare Services, 2012-2013  
Lecturer, part-time, Hospitality in Healthcare Services, 2011

**FMU, Sao Paulo, SP, Brazil, 2011-2012**

Lecturer, part-time, College of Healthcare Management, 2012

Lecturer, part-time, School of Architecture and Urban Planning, 2011

Lecturer, part-time, College of Technology in Interior Design, 2011

**ISRAELI INSTITUTE OF EDUCATION & RESEARCH, Sao Paulo, SP, Brazil, 2012-2022**

Lecturer, part-time, Management Hospitality in Healthcare Services, 2012

**UnC, MBA in Management Hospitality and Health Services, Concordia, SC, Brazil, 2011**

Lecturer, part-time

**2. PROFESSIONAL****Duarte Schahin Architecture, Sao Paulo, SP, Brazil, 2010-2014**

Architect, Project Architect, full-time

**Foundation for Research in Architecture and Environment, USP, Sao Paulo, Brazil, 2009-2010**

Architect, part-time

**Borelli & Merigo Architecture and Urbanism, Sao Paulo, Brazil, 2007-2009**

Architect, Project Architect, full-time

**Heart Institute, Clinics Hospital of Sao Paulo, Architecture Dept, Sao Paulo, SP, 2005-2006**

Architecture Intern, full-time

**TEACHING RECORD****1. LIST OF COURSES TAUGHT**

Course Number and Title	Semester / Year	Number Enrolled	% Taught
<b>University of Kansas</b>			
<b>Design Studios</b>			
IA 209: Interior Architecture Design Studio II	Spring / 2025	17	100%
IA 308: Interior Architecture Design Studio III	Fall / 2024	12	100%
IA 309: Advanced Interior Design Studio IV	Spring / 2024	17	100%
IA 508: Interior Architecture Design Studio III	Fall / 2023	9	100%
IA 509/609: Interior Architecture Design IV/V (vertical)	Spring / 2023	15	100%
IA 508: Interior Architecture Design Studio III	Fall / 2022	11	100%
<b>Seminar Courses</b>			
ARCH 558: Programming & Pre-design Issues	Summer / 2025	12	100%
ARCH 958: Research Practicum Preparation	Spring / 2025	3	100%
ARCH 558: Programming & Pre-design Issues	Fall / 2024	91	100%
ARCH 799: Independent Study	Fall / 2024	1	100%
ARCH 600: Interior Design Innovation for Health	Spring / 2024	7	100%
<b>Study Abroad Courses</b>			
IA 609/ARCH 590/699: Study Abroad in Southern Europe	Summer / 2025	33	50%
IA 609: Study Abroad in Southern Europe	Summer / 2024	29	30%

Course Number and Title	Semester / Year	Number Enrolled	% Taught
<b>Georgia Institute of Technology</b>			
<b>Seminar Courses</b>			
ARCH 8833: Evidence-based Design	Spring / 2022	11	50%
ARCH 8833: Evidence-based Design	Spring / 2021	18	50%
ARCH 6271: Healthcare Design of the Future	Fall / 2021	28	50%
ARCH 6271: Healthcare Design of the Future	Fall / 2020	22	50%
ARCH 8833: Evidence-based Design	Spring / 2020	34	50%
<b>Clemson University</b>			
<b>Seminar Courses</b>			
ARCH 1510: Architecture Communication Studio	Spring / 2018	13	100%
ARCH 4010: Architectural Portfolio	Fall / 2017	20	100%
<b>UNIVALI</b>			
<b>Design Studios</b>			
Projeto Arquitetônico IX	Fev-Jun / 2015	19	50%
Projeto Arquitetônico IX	Fev-Jun / 2014	28	50%
Projeto Integrado IV	Fev-Jun / 2015	20	50%
Projeto Integrado IV – Section 1	Aug-Dec / 2014	29	50%
Projeto Integrado IV – Section 2	Aug-Dec / 2014	30	50%
Projeto Integrado IV	Fev-Jun / 2014	34	50%
Projeto Arquitetônico V	Aug-Dec / 2014	36	50%
Projeto Arquitetônico V	Fev-Jun / 2014	27	50%
<b>FATENP</b>			
<b>Seminar Courses</b>			
Projetos de Design de Interiores: Comercial	Fev-Jun / 2014	21	100%
Projetos de Design de Interiores: Conclusão de Curso	Fev-Jun / 2014	25	50%
<b>SENAC</b>			
<b>Seminar Courses</b>			
Gerenciamento de Espaço Físico e Arquitetura Hospital	Aug-Dec / 2013	17	100%
Hotelaria Hospital: Planejamento Físico e Infraestrutura	Aug-Dec / 2013	19	100%
Hotelaria Hospital: Planejamento Físico e Infraestrutura	Fev-Jun / 2012	12	100%
Hotelaria Hospital: Planejamento Físico e Infraestrutura	Aug-Dec / 2012	19	100%
<b>FMU</b>			
<b>Design Studios</b>			
044004: Projeto IV - Desenho e Espaço	Aug-Dec / 2011	39	50%
03200G: Projeto de Interiores III - Serviços	Aug-Dec / 2011	33	100%
05400D: Atelier Arquitetura V - Construção	Aug-Nov / 2011	45	50%
05400D: Atelier Arquitetura V - Construção	Fev-Jun / 2011	38	100%
Projeto Interiores III	Fev-Jun / 2011	29	100%
<b>Seminar Courses</b>			
Arquitetura e Engenharia Hospitalar	Fev-Jun / 2012	23	100%
<b>EINSTEIN</b>			
Arquitetura Hospitalar		17	100%
<b>UnC</b>			
Planejamento e Programação do Espaço Físico em Serviços de Saúde		22	100%

## **1. UNDERGRADUATE ADVISING (University of Kansas)**

PhD Student Chair Advisor, Marzieh Rajabian, 2024

International Interior Design Association (IIDA) KU Student Chapter Co-advisor, 2024

Undergraduate Research Award (UGRA) Application Mentor, Fall 2024

Student Portfolio Mentor, 2022-2024

Health Wellness Symposium AI Student Competition Mentor, Spring 2024

Student Design Charrette Mentor, Healthcare Design Conference (HCD), 2022

## **2. GUEST LECTURES FOR OTHER CLASSES**

“Design for Cognitive Aging.” ARCH 600: Design for All Ages. Prof. Xiaobo Quan, School of Architecture and Design, University of Kansas, Spring 2025.

“Practicing Physical Mock-up Simulations in Interior Architecture.” IA 310: Contemporary Issues in Interior Architecture. Prof. Ann Hossler, School of Architecture and Design, University of Kansas, Spring 2025.

“Assessing Project Needs and Efficiency in Interior Architecture.” IA 310: Contemporary Issues in Interior Architecture. Prof. Ann Hossler, School of Architecture and Design, University of Kansas, Spring 2025.

“Programming Application in Interior Architecture.” IA 310: Contemporary Issues in Interior Architecture. Prof. Ann Hossler, School of Architecture and Design, University of Kansas, Spring 2025.

“Design for Health & Wellness: Influencing Perceptions and Behaviors with the Built Environment.” ARCH 103: Introduction to Architecture. Prof. Jae Chang, School of Architecture and Design, University of Kansas, Fall 2024.

“Women in Design: Practice, Research & Community Engagement” (presented with Nilou Vakil and Amy Van de Riet). Architecture Lecture Series, School of Architecture and Design, University of Kansas, Spring 2024.

“Design for Cognitive Aging.” ARCH 600: Design for All Ages. Prof. Xiaobo Quan, School of Architecture and Design, University of Kansas, Spring 2024.

“PhD Motivations, Journey and Research in Architecture.” ARCH 930: Doctoral Seminar. Prof. Keith Van De Riet, School of Architecture and Design, University of Kansas, Fall 2023.

“Building a Successful Portfolio in Interior Architecture”. IA Portfolio Mentoring. Prof. Ann Hossler, School of Architecture and Design, University of Kansas, Fall 2023 and Fall 2024.

“Building a Successful Portfolio in Interior Architecture”. IA Portfolio Mentoring. International Interior Design Association (IIDA) meeting, School of Architecture and Design, University of Kansas, Fall 2022.

“Home Design for Mild Cognitive Impairment.” ARCH 6271: Healthcare Design of the Future. Prof. Yousef Bushehri, School of Architecture, Georgia Institute of Technology, Fall 2022.

*"Practicing Healthcare Design and EBD Research"*. Healthcare Architecture Post-Graduate Course – Graduating class. Albert Einstein Education and Research Center (AEERC). Sao Paulo, SP, Brazil, 2021-2023.

*"Case Study Research."* ARCH 8903: Special Problems. Prof. Zorana Matic, School of Architecture, Georgia Institute of Technology, Summer 2021.

*"Design for Family Engagement in Single-Family Room NICUs."* ARCH 8860: Health Facilities Planning and Design Seminar. Prof. Byron Edwards and David Allison, School of Architecture, Clemson University, Fall 2021.

*"Exploring The Design of Single-Family Room NICUs: The Impact of the Built Environment on Family Engagement."* ARCH 8860: Health Facilities Planning and Design Seminar. Prof. Byron Edwards, School of Architecture, Clemson University, Fall 2020.

### 3. HONORS AND AWARDS FOR TEACHING

ISEP (International Student Exchange Program) COIL (Collaborative Online International Learning) Academy Seminar. Spring 2025.

Course Design Institute (CDI) grant for Human-centered and Evidence-based Design Studio with Specific Focus on Diversity, Equity, Inclusion, and Belonging Challenges. Competitive grant from the Center for Teaching Excellence (CTE) at the University of Kansas (KU). Amount: \$1,500.

Center for Teaching Excellence Faculty Seminar focused on Course Internationalization. Competitive grant from the Center for Teaching Excellence (CTE) at the University of Kansas (KU). Amount: \$3,500.

## RESEARCH RECORD

### 1. RESEARCH PUBLICATIONS

#### Major Publications

##### BOOK CHAPTERS

**Machry H.**, Joseph, A., Joshi, R., & Wingler, D. (2025). *Chapter: Interior Architecture for Healthcare Settings: Critical Human-centered Design Effects in High-risk Patient Care Spaces*. In Routledge Handbook of Interior Architecture (Fernando, N. A. Editor). [in press].

**Machry, H.** (2022). *Chapter 25: Research in Architecture for Health in the USA'*. In Knowing Hospital Architecture [Conhecendo a Arquitetura Hospitalar]. Zioni, E., Waksman, R. D., & Farah, O. G. D. Eds. 18 (225), 6-7. Editora Manole. Sao Paulo, SP, Brazil.

##### PEER-REVIEWED JOURNAL ARTICLES

**Machry, H.**, Motamed Rastegar, R., Gholami, Y., Yang, E., Little, E., Burke, M. A., ... & Zimring, C. (2025). Cognitive-Aging-in-Place: Home Design Factors Influencing Instrumental Activities of Daily Living for Older Adults Facing Mild Cognitive Impairment. *Journal of Aging and Environment*, 1-27.

Aflatoony, L., Dubose, J. R., Song, F., **Machry, H.**, & Burke, M. (2023). Exploring the value of multi-sensory aids in co-designing assistive home devices for older adults with cognitive impairment. *Assistive Technology*, 1-7.

**Machry, H.**, Joseph, A., White, R., & Allison, D. (2023). Designing for Family Engagement in Neonatal ICUs: How Is the Interior Design of Single-Family Rooms Supporting Family Behaviors, From Passive to Active?. *HERD: Health Environments Research & Design Journal*, 19375867231168651.

**Machry, H.**, Matić, Z., Oh, Y., DuBose, J. R., Morgan, J. S., Love, K. L., Jacob J. T. & Zimring, C. M. (2022). Healthcare Design to Improve Safe Doffing of Personal Protective Equipment for Care of Patients with COVID-19. *Infection Control & Hospital Epidemiology*, 1-22.

**Machry, H.**, White R., & Barton S. (2021). The Case of a NICU with Single-family Rooms: Design Recommendations to Support Family Engagement Behaviors. *Neonatology Today*. 16(9) 34-39. DOI: <https://doi.org/10.51362/neonatology.today/202191693439>.

Joseph, A., Mihandoust, S., Wingler, D., **Machry, H.**, Joseph, A., & Reeves, S.T. (2021). Comparing User Perceptions of Surgical Environments: Simulations in a High-Fidelity Physical Mock-Up Versus a Postoccupancy Evaluation. *HERD: Health Environments Research & Design Journal*. <https://doi.org/10.1177/19375867211044733>.

Allison, D., **Machry, H.**, & Joseph, A. (2021). Design Insights from a Research Initiative on Ambulatory Surgery Operating Rooms in the U.S. *Instituto de Pesquisas Hospitalares (IPH) Magazine* 17, 212-229, ISSN 2358-3630.

Mihandoust, S., Josh, R., Joseph, A., Madathil, K., Dye, C., **Machry, H.**, & Wilson, J. (2020). Identifying Key Components of Paper-Based and Technology-Based Home Assessment Tools Using a Narrative Literature Review. *Journal of Aging and Environment*.

**Machry, H.**, Joseph, A., & Wingler, D., (2020). The Fit between Spatial Configuration and Idealized Flows: Mapping Flows in Surgical Facilities as Part of Case Study Visits. *HERD: Health Environments Research & Design Journal*, 1937586720928350.

Taaffe, K., Joseph, A., Khoshkenar, A., **Machry, H.**, Allison, D., & Reeves, S., (2020). Proactive Evaluation of an Operating Room Prototype: A Simulation-Based Modeling Approach. *Journal of Patient Safety*.

Wingler, D., **Machry, H.**, Bayramzadeh, S., Joseph, A., & Allison, D. (2018). Comparing the Effectiveness of Four Different Design Media in Communicating Desired Performance Outcomes With Clinical End Users. *HERD: Health Environments Research & Design Journal*, 1937586718796626.

Joseph, A., Khoshkenar, A., Taaffe, K. M., Catchpole, K., **Machry, H.**, & Bayramzadeh, S. (2018). Minor flow disruptions, traffic related factors, and their effect on major flow disruptions in the operating room. *BMJ Quality & Safety*, bmjqs-2018.

Chambers, E. C., Bafna, S., & **Machry, H.** (2017). The Association Between Apartment Layout and Depressive Symptomology among Hispanic/Latino Residents in Low-Income Housing: the AHOME Study. *Journal of Urban Health*, 1-10.

Ornstein, S. W., Ono, R., Lopes, M. E., Monteiro, R. Z., Gill, A. A., & **Machry, H. S.** (2007). Health care architecture in Sao Paulo, Brazil: evaluating accessibility and fire safety in large hospitals. *International Journal of Architectural Research*, 1(1), 13-25.

## PEER-REVIEWED CONFERENCE PROCEEDINGS

Gholami, Y., Rastegar, R., **Machry, H.** & Tonetto, L. (2024, June 19-22). 'Could Social Space Design Boost Social Interactions Among Older Adults with Mild Cognitive Impairment?' To be published at the Environmental Design Research Association (EDRA) 55 conference proceedings. Portland, OR.

Da Rosa, V. M., **Machry, H.**, & Tonetto, L. M. (2023, October 9-13). Designing Therapeutic and Social Spaces for Older Adults Facing Mild Cognitive Impairment: Priorities in Spatial and Furniture Layout. In *Proceedings of the 10th International Association of Societies of Design Research Congress (IASDR)*. Milan, Italy.

**Machry, H.**, Bayramzadeh, S., Joseph, A., & Allison, D. (2018, Oct 30 - Nov 2). Developing and Evaluating an Operating Room Design Prototype: The Use of a Mock-up Simulation Approach Integrated to an Iterative Evidence-Based Design Process. In *Proceedings of the VIII Brazilian Conference for the Development of Healthcare Buildings*. Curitiba, PR, Brazil.

**Machry, H.** (2014, Aug 27-29). Scenario of architectural transformation in hospitals: the role of humanization and healthcare hospitality in oncology treatment. In *Proceedings of the VI Brazilian Conference for the Development of Healthcare Buildings*. Florianopolis, SP, Brazil.

**Machry, H.** (2012, Sep 4-7). The impact of technological advances in medical buildings architectural changes. In *Proceedings of the V Brazilian Conference for the Association for the Development of Healthcare Buildings*. Sao Paulo, SP, Brazil.

**Machry, H.** (2008, Oct). Medical Equipment and Hospital Architectural Configuration. In *Proceedings of the 20<sup>th</sup> International Federation of Healthcare Engineering - IFHE*. Barcelona, Spain.

## Minor Publications

## ABSTRACTS

**Machry, H.**, Gomes, L. M., & Chowdhury, M. (2024, Oct 4-8). The Multifaceted Single-Family Room: Rethinking Clustered Care in the NICU. Healthcare Design Conference Website. Indianapolis, IN. <https://www.hcdexpo.com/conference/conference-sessions/>

**Machry, H.** & Matic, Z. (2024, June 19-22). 'Designing for Pandemic Preparedness: What We Learned from Ebola and COVID-19 Outbreaks about Flexibility and Human-Centered Design'. Environmental Design Research Association (EDRA) 55 Conference Website and Program. Portland, OR. <https://edra.confex.com/edra/EDRA55/meetingapp.cgi/Paper/14879>

Rastegar, R., Gholami, Y., **Machry, H.**, & Tonetto, L. (2024, Apr 13-16). Building Bridges of Connection—Enriching Social Interaction in Space Among individuals with Mild Cognitive Impairment. Presented at the Environments for Aging (EFA) Conference Website and Program. Atlanta, GA.

<https://health.a2zinc.net/EFA2024/Public/SessionDetails.aspx?FromPage=Sessions.aspx&SessionID=21846&SessionDateID=1167>



Rastegar, R., Gholami, Y., **Machry, H.**, & Little, E. (2023, Apr 15-18). *Empowering Social Life: Redesigning Built Environment to Stimulate Socializing in People with Mild Cognitive Impairments*. Environments for Aging (EFA) Conference Website and Program. Charlotte, NC. <https://health.a2zinc.net/EFA2023/Public/SessionDetails.aspx?FromPage=Sessions.aspx&SessionID=19088&SessionDateID=1011>

**Machry, H.**, Little, E., Zimring, C. & Fain, B. (2023, Apr 15-18,). *Bridging gaps in Cognitive-Aging-in-Place: A Tool to Improve Home Environments for Older Adults Facing Mild Cognitive Impairment*. Environments for Aging (EFA) Conference Website and Program. Charlotte, NC. <https://health.a2zinc.net/EFA2023/Public/SessionDetails.aspx?FromPage=Sessions.aspx&SessionID=19057&SessionDateID=1009>

## PROFESSIONAL ORGANIZATION JOURNALS | NEWSLETTERS

**Machry, H.** (2012). *The impact of technological advances in healthcare architecture*. In Hosp Magazine, 18 (225), 6-7. Sao Paulo, SP, Brazil.

## 2. SCHOLARLY PRESENTATIONS

### Major Presentations

**Machry, H.**, Dastmalchi, M., & Hossler, A.. (2025, Mar 16-19). Teaching Human-centric Design Studios with VR and Physical Mockup Simulations. Presented at the IDEC (Interior Design Education Council) Annual Conference. Chicago, IL.

**Machry, H.** & Hay L. (2025, Mar 5-8). Examining the Single-family Room: Disruptive and Supportive Design for Family-centered Clustered Care in the NICU. Presented at the Gravens Conference. Clearwater, FL.

**Machry, H.**, Gomes, L. M., & Chowdhury, M. (2024, Oct 4-8). The Multifaceted Single-Family Room: Rethinking Clustered Care in the NICU. Presented at the Healthcare Design Conference. Indianapolis, IN. <https://www.hcdexpo.com/conference/conference-sessions/>

Rastegar, R., Gholami, Y., **Machry, H.**, & Tonetto, L. (2024, Apr 13-16). Building Bridges of Connection—Enriching Social Interaction in Space Among individuals with Mild Cognitive Impairment. Presented at the Environments for Aging conference. Atlanta, GA.

**Machry, H.** (2024, Mar 4-5). Embracing Family Engagement in the Neonatal ICU Through an Environmental Design Perspective: The role of Single-Family Rooms. IV World Nursing Congress. Orlando, FL.

Gholami, Y., **Machry, H.**, Rastegar, R., Little, & Tonetto, L. M. (2023, Sep 13-16). *Designing Therapeutic Settings to Support Social Interactions among People Living with Mild Cognitive Impairment (MCI)*. To be presented at the 20<sup>th</sup> Academy of Neuroscience for Architecture (ANFA) Conference. San Diego, CA. <https://anfarch.org/events/2023conference/>  
<https://www.youtube.com/watch?v=inDPtexZzuA&t=2164s>

Rastegar, R., Gholami, Y., **Machry, H.**, & Little, E. (2023, Apr 15-18). *Empowering Social Life: Redesigning Built Environment to Stimulate Socializing in People with Mild Cognitive Impairments*. Environments for Aging conference. Charlotte, NC.



**Machry, H.**, Little, E., Zimring, C. & Fain, B. (2023, Apr 15-18,). *Bridging gaps in Cognitive-Aging-in-Place: A Tool to Improve Home Environments for Older Adults Facing Mild Cognitive Impairment*. Environments for Aging conference. Charlotte, NC.

Yang E., Little E., **Machry H.**, Seth H., & Rastegar F. (2023, Apr 15-18,). *Aging in Place with Mild Cognitive Impairment – A Tool to Improve Quality of Life at Home Environments*. American Society on Aging Conference. Atlanta, GA.

**Machry, H.**, (2022, June 1-4). *Supporting Family Engagement in the Neonatal ICU: The Role of Single-Family Rooms*. Presented as part of a Symposia at the Environmental Design Research Association (EDRA) 53 conference. Greenville, SC.

**Machry, H.**, Rastegar, F.M., Burke, M., & Zimring, C. (2022, June 1-4). *Introducing Home Environment Features Associated with Environmental Mastery for People Living with Mild Cognitive Impairment*. Presented at the Environmental Design Research Association (EDRA) 53 conference. Greenville, SC.

**Machry, H.**, Allison, D., Zimring, C., Moore, K.D., Norouzi, N., Burpee, H. & Sachs, Naomi. (2022, June 1-4). *Preparing the Next Generation in Design – How Can Health be Integrated and Prioritized in Design Education?* Workshop facilitated at the Environmental Design Research Association (EDRA) 53 conference. Greenville, SC.

**Machry, H.**, Rastegar, F.M., & Burke, M. (2022, April 2-5). *Cognitive-Aging-in-Place: Designing Home Environments to Support People Living with Mild Cognitive Impairment*. Presented at the Environments for Aging conference. Milwaukee, WI.

**Machry, H.**, White, R., Barton, S., & Joseph, A. (2021, Oct 23-26). *Improving Family Engagement Experiences in the Neonatal ICU - Is the Single-family Room Enough?* Presented at the Healthcare Design Conference. Cleveland, OH.

**Machry, H.**, Joseph, A., Wingler, D. & Allison, D. (2021, July 20-22). *Mapping Flows in Surgical Facilities as Part of Case Study Tours – A Systematic Approach*. Presented at the 40th UIA-Public Health Group Seminar at UIA2020RIO, in conjunction with the 27th UIA World Congress. Virtual, Rio de Janeiro, RJ, Brazil.

**Machry, H.** & Joseph, A. (2021, May 19-23). *Designing for Family Engagement in the Neonatal ICU: An in-Depth Look at Single-Family Room*. Environmental Design Research Association (EDRA) 52 conference. Virtual, Detroit, MI.

Joseph, A., Mihandoust, S., Allison, D., Wingler, D. & **Machry, H.** (2021, May 19-23). *Comparing the Clinical Team's Perception of the Surgical Environments between a High-Fidelity Physical Mock-up and a Post-Occupancy Evaluation*. Environmental Design Research Association (EDRA) 52 conference. Virtual, Detroit, MI.

Rastegar, F., Oh, Y., Dabrowska, M. & **Machry, H.** (2021, May 19-23). *Using Spatial Analysis on an Environment Designed to Empower People Living with Mild Cognitive Impairment*. Environmental Design Research Association (EDRA) 52 conference. Virtual, Detroit, MI.

**Machry, H.**, White, R., Barton, S., & Joseph, A. (2020, Mar 4-7). *How the Single-Family Room Design Model is Impacting Family Engagement in the NICU*. Presented at Gravens Conference. Clearwater, FL.

**Machry, H.**, & Joseph, A. (2019, Aug 14-17). Family Engagement in the Neonatal ICU: How the Design of Single-family Rooms is Influencing Parental Behaviors. Presented at the Inaugural International Nursing Conference for Excellence in Healthcare Design: History, Design and Innovation. Greenville, SC.

**Machry, H.** & Wingler, D. (2019, May 22-26). Translating research into practice: Developing an operating room design tool to support evidence-based decision-making between multiple stakeholders. Environmental Design Research Association (EDRA) 50 conference. Brooklyn, NY.

Wingler, D. & **Machry, H.** (2019, May 22-26). Developing a systems-based observation toolkit for evaluating high-fidelity scenario-based simulation testing in OR environments. Environmental Design Research Association (EDRA) 50 conference. Brooklyn, NY.

Joseph, A., Khoshkenar A., **Machry, H.** & Taaffe, K. (2019, Mar 17-20). How large should the OR be? Using a multi-disciplinary systems approach to designing safer operating rooms. American Society of Healthcare Engineers Conference- Planning Design and Construction (ASHE PDC) Summit. Phoenix, AZ.

**Machry, H.**, Bayramzadeh, S., Joseph, A., & Allison, D. (2018, Oct 30 - Nov 2). *Developing and Evaluating an Operating Room Design Prototype: The Use of a Mock-up Simulation Approach Integrated to an Iterative Evidence-Based Design Process*. Presented at the VIII Brazilian Conference for the Development of Healthcare Buildings. Curitiba, PR, Brazil.

**Machry, H.**, & Joseph, A. (2018, Sep 28). *Understanding Family Engagement in the NICU from the Built Environment Perspective*. Presented at the 15<sup>th</sup> Research Symposium: Transforming Clinical Practice & Education. Greenville, SC.

**Machry, H.**, (2018, Jun 6-9). *Examining the Role of the Built Environment on Family Engagement in the Single-Family Room NICU*. Presented at the Environmental Design Research Association (EDRA) 49 Conference. Oklahoma City, OK.

Wingler, D., Joseph, A., Bayramzadeh, S., **Machry, H.**, (2018, Jun 6-9). *Engaging end-users in architectural design decision-making: A comparison of four design communication media*. Presented at the Environmental Design Research Association (EDRA) 49 Conference. Oklahoma City, OK.

Joseph, A., Wingler, D., Zook, J., **Machry, H.**, (2018, Jun 6-9). *Evaluating the Impact of Spatial Configuration on Dynamic Care Interactions in Ambulatory Surgical Environments*. Presented at the Environmental Design Research Association (EDRA) 49 Conference. Oklahoma City, OK.

Joseph, A., Bayramzadeh, S., **Machry, H.**, Wingler, D., & Jafari, R. (2017, Nov 11-14). *Realizing Improved Patient Care through Human Centered Design in the OR: Phase 2 Findings*. Presented at the Healthcare Design Conference (HCD). Orlando, FL.

Joseph, A., Wingler, D., Bayramzadeh, S., & **Machry, H.** (2017, Aug). *Using a Systems Framework and Methodology for Observing Behavior in Operating Room Environments*. Presented at the 48<sup>th</sup> Annual Conference of the Association of Canadian Ergonomists & 12th International Symposium on Human Factors in Organizational Design and Management. Banff, Canada.

Bayramzadeh, S., Joseph, A., & **Machry, H.** (2017, Jul 17-21). *Operating room layout configuration: a tool to improve staff experience, performance, and efficiency*. Presented at the 8<sup>th</sup> International Conference on Applied Human Factors and Ergonomics (AHFE). Los Angeles, CA.

**Machry, H.**, & Joseph, A. (2017, May 31-June 3). *The built environment as a factor in the engagement process in healthcare*. Presented and organized half-day intensive workshop at the Environmental Design Research Association (EDRA) 48 Conference. Madison, WI.

**Machry, H.**, Joseph, A., Wingler, D., & Mathews, R. (2017, May 31-June 3). *Spatial Implications of Essential Surgical Flows in Ambulatory Surgery Centers*. Presented at the Environmental Design Research Association (EDRA) 48 Conference. Madison, WI.

Bayramzadeh, S., Joseph, A., Wingler, D., & **Machry, H.** (2017, May 31-June 3). *Developing Methods to Observe and Analyze Behaviors in Operating Room Environments*. Presented at the Environmental Design Research Association (EDRA) 48 Conference. Madison, WI.

Catchpole, K., Joseph, A., **Machry, H.**, & Zamani, Z. (2016, Nov 12-15). *Realizing Improved Patient Care through Human Centered Design in the OR: Phase 1 Findings*. Presented at the Healthcare Design Conference (HCD). Houston, TX.

Joseph, A., Zamani, Z., & **Machry, H.** (2016, May 18-21). *Addressing patient safety outcomes associated with the operating room's built environment*. Presented at the Environmental Design Research Association (EDRA) 47 Conference. Raleigh, NC.

**Machry, H.** (2014, Aug 27-29). *Scenario of architectural transformation in hospitals: the role of humanization and healthcare hospitality in oncology treatment*. Presented at the VI Brazilian Conference for the Development of Healthcare Buildings (CBDEH). Florianopolis, SC, Brazil.

**Machry, H.** (2012, September 4-7). *The impact of technological advances in medical buildings architectural changes*. Presented at the V Brazilian Conference of the Association for the Development of Healthcare Buildings. Sao Paulo, SP, Brazil.

**Machry, H.** (2010, October). *The impact of technological advances in medical buildings architectural changes*. Presented at the International Seminar NUTAU. Sao Paulo, SP, Brazil.

**Machry, H.** (2008, October). *Medical Equipment and Hospital Architectural Configuration*. Presented at the 20<sup>th</sup> International Federation of Healthcare Engineering (IFHE) Conference. Barcelona, Spain.

Assen, L., Barcellos, G., **Machry, H.** (2004, July). *Dynamics of the Urban morphology in the 20th century: the case of the Island of Santa Catarina*. 11th Conference of the International Planning History Society (accepted abstract). Barcelona, Spain.

## Minor Presentations

### DIGITAL MEDIA SHORTS

**Machry, H.** & Matic, Z. (2024, June 19-22). *'Designing for Pandemic Preparedness: What We Learned from Ebola and COVID-19 Outbreaks about Flexibility and Human-Centered Design'*. Presented virtually at the Environmental Design Research Association (EDRA) 55 conference. Portland, OR. <https://edra.confex.com/edra/EDRA55/meetingapp.cgi/Paper/14879>

## POSTER PRESENTATIONS

**Machry, H.,** Matic, Z., & Jacobs, J. (2023, Jun 11-14). *Designing to Promote Safety and Occupational Health in COVID-19 Care: Lessons Learned About Areas for Doffing of Personal Protective Equipment in Inpatient Units*. European Healthcare Design Conference. London, UK.

**Machry, H.,** Joseph, A. & Allison, D. (2021, July 20-22). *Family Engagement Architecture in the Neonatal ICU: Design Recommendations about the Single-Family Room Design Model*. Poster presented at the 40th UIA-Public Health Group Seminar at UIA2020RIO, in conjunction with the 27th UIA World Congress. Rio de Janeiro, RJ, Brazil.

**Machry, H.,** & Joseph, A. (2020, Sep 15). *The Impact of Single-Family Design on Family Engagement in the Neonatal ICU*. Poster presented at the European Healthcare Design Conference. London, UK.

**Machry, H.,** & Joseph, A. (2019, April). *Examining the built environment as a contextual factor to Family Engagement in the NICU*. Poster presented at Graduate Research and Discovery Symposium (GRADs). Clemson, SC.

**Machry, H.,** & Joseph, A. (2018, Oct 7-10). *Examining the built environment as a contextual factor to Family Engagement in the NICU*. Poster presented at the International Conference on Person-centered Care (Planetree). Boston, MA.

Joseph, A., Allison, D., Bayramzadeh, S., Wingler, D., **Machry, H.,** Mathews, R., Ferguson, A., Dodd, L., Tuttle, W., & Dominic J. (Oct 13-15, 2017). *Realizing Improved Care through Human Centered Design in the Operating Room*. Work exhibited at the 2018 ACCelerate: ACC Smithsonian Creativity and Innovation Festival. Smithsonian Museum. Washington D.C.

## GUEST/INVITED PRESENTATIONS

**Machry, H.** (2024, Jan 18). How the built environment impacts resilient healthcare systems. Presented at the Resilient Health Care Society (RHCS) Webinar Series. Available at: [Built Environment | Machry & Cambra Rufino | Webinar Jan 2024 \(youtube.com\)](#)

**Machry, H.,** (2023, Jan 17<sup>th</sup>). *Exploring the Design of Single-Family Room NICUs: The Role of the Built Environment on Family Engagement*. Guest lecture for the AAH Next Gen Forum.

**Machry, H.** & Yang, E. (2022, Oct 27<sup>th</sup>). *Design & Construction for Aging*. Guest lecture presented virtually at the BK Seminar, South Korea Kyung Hee University. Invited by Professor Jun Ha Kim, Department of Housing & Interior Design. Seoul, South Korea.

**Machry, H.** (2022, Apr 7<sup>th</sup>). *My Journey in Evidence-based Design Research*. Healthcare Design and Evaluation Research Seminar, International Workshop, Department ABC, Architecture Built Environment Construction Engineering, Politecnico di Milano, Spring 2022.

Allison, D. & **Machry, H.** (2021, Jan 24). *Architecture + Health Program: Advancing the Discipline by Bridging Teaching, Research, and Practice*. Presented virtually at Healthcare Architecture Post-Graduate Course. Sao Paulo, SP, Brazil.

**Machry, H.,** Campiglia, G., & Binford, S. (2021, April). *Design for Cognitive Impairment: Creating Spaces for Optimal Living with Cognitive Impairment*. Interview for Alzheimer's Association Virtual Lunch & Learn. Atlanta, GA, US.

Wingler, D., & **Machry, H.** (Dec 19, 2018). *Comparing the Effectiveness of Four Different Design Media in Communicating Desired Performance Outcomes with Clinical End Users*. Presented at the Center for Health Design Research Corner Webinar.

**Machry, H.** (2013, Apr 13). *Healthcare Architecture in Brazil*. Presented at Texas A&M Lecture Series, MArch program. College Station, TX.

**Machry, H.** (2013, Apr 14). *Brazil: Healthcare Architecture and Pediatric Healthcare Facilities*. Presented at Texas A&M Lecture Series, MArch program. College Station, TX.

### 3. GRANTS AND FUNDED PROJECTS

#### Internal Grants (funded)

1. Scholars on Site grant. Co-investigator with Amy Van de Riet and Stephen Jackson. A Hidden Figure of Kansas: Telling the Story of Architect Georgia Louise Harris Brown. Hall Center for the Humanities, University of Kansas. Funding amount: \$14,734.72 (2025-2026).
2. New Faculty Research Development (NFRD) grant (Principal Investigator). Designing Safer Single-family Rooms in NICUs. School of Architecture and Design, University of Kansas. Funding amount: \$7,972.50 (2023-2024).
3. International Affairs Travel grant to present Poster at European Healthcare Design (EHD), London, UK. Funding amount: \$1,000 (Jul 2023).
4. Center for Latin American and Caribbean Studies' Travel grant for Internationalization of Spring 2023 Course, Sao Paulo, Brazil. Funding amount: \$2,000 (Dec 2023)

#### External Grants (funded)

1. Farmers Market Promotion Program. Co-Principal Investigator with PI Dr. Hui Cai. and co-PI Dr. Hugo Sheward. KU Sub-Award by the Johnson County Department of Health and Environment. US Department of Agriculture (USDA). Funding amount: \$20,000 (2025-2025)
2. Safe COVID-19 PPE Doffing Design. Co-Principal Investigator with PI Dr. Craig Zimring. CDC pass through Johns Hopkins and Emory University grant. Georgia Institute of Technology. Funding amount: \$49,000 (2020-2021)

### 4. GRANTS AND PROJECTS SUBMITTED (Not Received/Not Funded)

1. Racial Equity Research, Scholarship & Creative Activity Awards grant. Co-investigator with Amy Van de Riet and Stephen Jackson. A Hidden Figure of Kansas: Telling the Story of Architect Georgia Louise Harris Brown. University of Kansas. Funding amount: \$19,959 (2023-2024 / not received or funded).

### 5. CREATIVE/PROFESSIONAL WORK

**Firm:** Duarte Schahin Arquitetura (<http://duarteschahin.com.br/>)

**Role:** Project Architect (2010-14, Sao Paulo, Brazil)

**IX Award of Corporate Architecture / Best Built Healthcare Facility**, 12° Office Solution, Sao Paulo, Brazil, 2012.

**Oncology Institute**, Hospital Santa Paula – 2010-13, Sao Paulo, SP, Brazil

**Amil Hospital** – 2014, Sao Paulo, SP, Brazil

**Mega Imagem Diagnostics Clinic** – 2013-14, Santos, SP, Brazil

**Inpatient Unit, Hospital Bom Clima** – 2010-13, Sao Paulo, SP, Brazil

**Imaging Unit, Radiation Therapy, Ghelfond Diagnostics Clinic** – 2011-2013, Sao Paulo, SP, Brazil

**Hospital Samaritano Emergency Room** – 2012-13, Sao Paulo, SP, Brazil

**Dom Antonio de Alvarenga Hospital** – 2012-13, Sao Paulo, SP, Brazil

**Sao Marcos Hospital** – 2013, Sao Paulo, Brazil

**Ambulatory Center for Staff, SAMSS-SESMT, Clinics Hospital of Sao Paulo** – 2013, Sao Paulo, SP, Brazil

**InRad (Institute of Radiology), Clinics Hospital of Sao Paulo** – 2012-13, Sao Paulo, SP, Brazil

**New ICU floor ICHC (Central Institute), Clinics Hospital of Sao Paulo** – 2012-13, Sao Paulo, SP, Brazil

**DAP (Pathology Anatomy Division), Clinics Hospital of Sao Paulo** – 2012-13, Sao Paulo, SP, Brazil

**IOT (Orthopedic and Traumatology Institute), Clinics Hospital of Sao Paulo** – 2012-13, Sao Paulo, SP, Brazil

**Firm:** Foundation for Research in Architecture and Environment, University of Sao Paulo

**Role:** Project Analyst for Life Safety (2011-13, Sao Paulo, Brazil)

**Heart Institute, Clinics Hospital of Sao Paulo** – 2011-13, Sao Paulo, SP, Brazil

**Psychiatric Institute, Clinics Hospital of Sao Paulo** – 2011-13, Sao Paulo, SP, Brazil

**Firm:** Borelli & Merigo Arquitetura e Urbanismo (<https://www.borellimerigo.com.br/>)

**Role:** Architect (2005-07, Sao Paulo, Brazil)

**Piracicaba City Hospital** – Piracicaba, SP, Brazil

**Hospital Santo Antonio da Alegria** – 2007-08, Santo Antonio da Alegria, SP, Brazil

**Heart Institute, Clinics Hospital of Sao Paulo** – 2008, Sao Paulo, SP, Brazil

**Paulinia Cultural Center & Library** – 2007, Paulinia, Sao Paulo, SP, Brazil

**Public Bus Transportation Stations Campinas-Hortolandia** – 2008, Campinas, SP, Brazil

**TAM Airline Taxi Hangar** – 2007, Sao Paulo, Brazil

**Wurth Cultural Center** – 2007, Cotia, SP, Brazil



**Firm:** Clinics Hospital of Sao Paulo, Heart Institute ([Instituto do Coracao](#)), Architecture Unit  
**Role:** Architecture Intern (2005-06, Sao Paulo, Brazil)

**Echocardiology Research Center** – 2005-06, Heart Institute, Clinics Hospital of Sao Paulo –SP, Brazil

**Steam Cell Unit** – 2005-06, Heart Institute, Clinics Hospital of Sao Paulo – Sao Paulo, SP, Brazil

**Research Laboratory** – 2005-06, Heart Institute, Clinics Hospital of Sao Paulo – Sao Paulo, SP, Brazil

**Pediatrics ICU Unit** – 2005-06, Heart Institute, Clinics Hospital of Sao Paulo – Sao Paulo, SP, Brazil

## 6. HONORS AND AWARDS FOR RESEARCH

Best Student Paper Award, EDRA Conference – 2024.

[https://www.edra.org/page/student\\_awards](https://www.edra.org/page/student_awards)

“Research Matters - Ten Picks for the Year”, Top 10 papers selected. Healthcare Design Conference, 2023. <https://www.healthdesign.org/events/534>

“Research Matters - Ten Picks for the Year”, Top 10 papers selected. Healthcare Design Conference, 2022. <https://www.healthdesign.org/events/415>

AIA Arthur N. Tuttle Jr. Graduate Fellowship in Health Facility Planning and Design - 2019

Research Fellowship, ZGF Architects – 2018

Professional Development Support, Clemson University, PDBE - 2016-2019

Doctorate Education Scholarship, CNPq – Ministry of Science & Technology, Brazil, 2015-2019

Master Education Scholarship, CAPES – Ministry of Education, Brazil, 2008-2010

Graduate Research and Discovery Symposium (GRADs), Best Poster Award, First Place / College of Architecture, Arts and Humanities, Clemson University, Clemson, SC, 2019

The Evidence Based Design Touchstone Award / Conceptual Design Category, Center for Health Design, Orlando, FL, 2017.

## 7. MEDIA COVERAGE

Presentation for Resilient Health Care Society (RHCS) Webinar Series (2024, Jan 18). How the built environment impacts resilient healthcare systems. Available at: [Built Environment | Machry & Cambra Rufino | Webinar Jan 2024 \(youtube.com\)](#)

Interview for a Asclepio Consultoria Podcast by architect Eleonora Zioni. “Evidence-based Design in the US”. Dec 2023, Sao Paulo, Brazil.



Work mentioned in the 2022 article “‘Work as done’ studies aid hospital design” (<https://www.hfmmagazine.com/articles/4628-work-as-done-studies-aid-hospital-design>). 2022 article (“Healthcare Design to Improve Safe Doffing of Personal Protective Equipment for Care of Patients with COVID-19”) mentioned as one of the “three recent articles focusing on exploring “work as done” included by the Center for Health Design’s Knowledge Repository.

Work mentioned in a 2021 article in The New York Times “Operating Rooms go Under the Knife” (<https://www.nytimes.com/2021/05/05/health/operating-rooms-change-technology.html>). Work is related to the team involved in the OR design project.

Work mentioned in a 2018 article in The Wall Street Journal “The Operating Room of the Future” (<https://www.wsj.com/articles/the-operating-room-of-the-future-1527559862>). Work is related to the team involved in the OR design project.

## **SERVICE RECORD**

### **1. UNIVERSITY SERVICE**

Member, Faculty Rights, Privileges and Responsibilities (FRPR) Committee, KU, Aug 2023-Present

### **2. SCHOOL SERVICE**

Jury, KU Undergraduate Research Symposium (Spring 2025)

Faculty Marshal, School of Architecture & Design Commencement Ceremony (Spring 2025)

Faculty Marshal, School of Architecture & Design Commencement Ceremony (Spring 2023)

### **3. DEPARTMENT SERVICE**

Chair, Student Success Committee, School of Architecture & Design, KU, Aug 2024-Present

Member, IA CIDA Task Force, School of Architecture & Design, KU, Aug 2024-Present

Member, IA Curriculum Sub-Committee, School of Architecture & Design, KU, Aug 2022-Present

Member, Graduate Studies Committee, School of Architecture & Design, KU, Aug 2022-Present

Member, Student Success Committee, School of Architecture & Design, KU, Aug 2022-2024

Mentor, Student Design Charrette at the Healthcare Design Conference (HCD), 2022

Member, Institute of Health & Wellness, School of Architecture & Design, KU, Aug 2022-Present

Reviewer, ARCH and IA Student Portfolios, 2022-Present

Reviewer, PhD and MA student applications, 2023-Present

#### **4. PROFESSIONAL SERVICE OUTSIDE THE UNIVERSITY**

Board Member, Foundation for Health Environments Research (FHER), Jan 2025-Present  
Chair of Fellowships, Foundation for Health Environments Research (FHER), Aug 2021-Present  
Member, Early Career Advisory Board, Journal of Environmental Psychology, Aug 2023-Present  
Juror, Joseph G. Sprague New Investigator Award, Center for Health Design, 2022-2024  
Juror, Healthcare Design Remodel/Renovation Award, 2022-2025  
Juror, Evidence-based Design Touchstone Award, 2022-2024  
Manuscript Reviewer, Health Environments Research & Design (HERD) Journal, 2019-2025  
Manuscript Reviewer, Journal of Environmental Psychology, 2023-2025  
Manuscript Reviewer, Architectural Research Centers Consortium (ARCC) conference, 2021-2022  
Manuscript Reviewer, Design Research Society (DRS) conference, 2023  
Manuscript Reviewer, International Journal of Nursing Studies, 2021  
Manuscript Reviewer, Journal of Engineering, Project, and Production Management, 2019  
Abstract Reviewer, Encontro Nacional de Tecnologia do Ambiente Construido (ENTAC), 2022  
Abstract Reviewer, Interior Design Educators Council (IDEC) Annual Conference, 2022  
Abstract Reviewer, ConCave Ph.D. Symposium, Georgia Institute of Technology, 2021  
Abstract Reviewer, Environmental Design Research Association (EDRA) Conference, 2018-2022  
Abstract Reviewer, Architectural Research Centers Consortium (ARCC) Conference, 2021-2022  
Student Presentation Reviewer, University of Kansas, School of Architecture & Design, 2022 - Present  
Student Presentation Reviewer, Boston Architectural College, 2022  
Abstract Reviewer, ACSA/ASPPH Fall Conference – Building for Health and Well-Being, 2016  
Student Presentation Reviewer, Georgia Institute of Technology, School of Architecture, College of Design, 2021  
Student Presentation Reviewer, Clemson University, School of Architecture, School of Landscape Architecture, 2016 - 2020

#### **5. PROFESSIONAL MEMBERSHIPS**

Interior Design Educators Council – IDEC (2024-Present)  
American Institute of Architects (2020-present)  
Center for Health Design (2015-present)  
Environmental Design Research Association (2015-present)  
Council of Architecture and Urbanism, Brazil (2004-present)