Faculty Accomplishments in Research, Scholarship, and Creative Activity, 2020

The Architecture Research and Design Center (ARDC) facilitates and coordinates research and design activities within the College of Architecture (CoA). The Center assists faculty and students in their research/scholarship/creative endeavors, serves as a liaison to other research centers and institutes, and provides architectural/research services to the community.

The ARDC is headed by the Associate Dean for Research of the CoA and has one staff member. Physical resources include a fully equipped conference room and space for four research assistants. It also offers high-definition laser scanning equipment, ground-penetrating radar, and GPS survey instruments, among others. ARDC showcases faculty research, scholarship, and creative activities and houses a permanent collection of faculty productions. A list of faculty expertise is also available.

In the calendar year 2020, CoA faculty have published two books and re-printed one; eight book chapters; eighteen peer-reviewed journal articles; eleven conference proceedings; two technical reports. Faculty presented eight peer-reviewed papers at national and international conferences; were discussants at four conferences; gave thirty-one invited lectures in national and international venues. Faculty have exhibited their creative work in five international and national venues.

CoA faculty applied for a total of $15,806,359 in grants from international, national, and state entities. One faculty in collaboration with colleagues the College of Human Sciences has submitted as co-Principal Investigator a $15 million National Science Foundation, which is pending. Faculty have won $388,951 in grants, with an additional $256,903 pending review.

Additionally, faculty have organized conferences and workshops nationally, served as peer reviewers of journal articles and books, and served as panelists, nominators, and editors. Faculty also exhibited the work of their students at the local First Friday Art Trail and other venues. Full details of their research related activities are presented in the following pages.

Clifton Ellis, Ph.D.,
Associate Dean for Research
Elizabeth Sasser Professor of Architectural History

Books

Wood, A., Du, P., Safarik, D. (2020). *The Space Across: Skybridges and the Future City*.
     Chicago: Council on Tall Buildings and Urban Habitat.

Kripa, E., Mueller, S. (2020). *Fronts: Military Urbanisms and the Developing World*
     Applied Research + Design.

Book, Reprint

Flueckiger, U. P. (2020). *How Much House? Thoreau, Le Corbusier and the Sustainable Cabin*.
     Birkhauser.

Book Chapters

Flueckiger, U. P. (2020). Architectural Drawings. In Flavin Judd and Rainer Judd (Ed.), *Donald Judd Spaces* (pp. 17,105,187,201,221,257,273,285,311,329,and 367.). New York, NY: DelMonico/Prestel.

Flueckiger, U. P. (2020). Drawings. In Stockebrand, Marianne. (Ed.), *CHINATI The Vision of Donald Judd* (pp. 306,307,and 310).

Poerschke, U., Hadighi, M. (2021). Bill Hajjar's Air-Wall: A Mid-Twentieth-Century Four-Sided Double Skin Façade. In Clifton Fordham (Ed.), *Constructing Building Enclosures* (pp. 212-227). New York: Routledge.

Mueller, S. (2020). Airborne Agents. In Tatiana Bilbao + Nile Greenberg (Ed.), *Two Sides of the Border* (pp. 290-304). Lars Muller Publishers.

Taylor, C. (2021). Digging Clay in Mata Ortiz, Mexico, October 15, 2003. In Laura Bieger, Joshua Shannon, Jason Weems (Ed.), *Follow the Figure: Cauleen Smith Confronts Land Art* (vol. 6). Chicago: Terra Foundation Essays series, University of Chicago Press.

Taylor, C. Land Arts of the American West: Desert as Educational Tool. In Bassam El Baroni, Abinadi Meza, Ida Soulard (Ed.), *Manual for a Future Desert*.

Journal Articles

Wood, A., Du, P., Safarik, D. (2020). Skybridges: State of the Art. *CTBUH Journal* (III), 36-44.

Khan, Z., Du, P. (2020). Typologies of Outdoor Public Spaces at Street Level of Tall Buildings in

Chicago. *Prometheus*(04), 90-97.

Dora Epstein Jones, "Models In and Out," Log 50:

Dora Epstein Jones, "A Shared Umbrella," New York Review of Architecture

Dora Epstein Jones, Invited Contributor, "So Much for Meaninglessness," Mechudzu 2, University of Lincoln,

Flueckiger, U. P. (2020). In Phillips, Lauren (Ed.), *Landscape of Nothingness* (8.5 tl:dr ed.). Houston: Rice University, School of Architecture.

Key, S., Gross, M. D. (in-press for print, published online January 2021). From Architects' Terms to Computable Descriptions of Spatial Qualities. *Spatial Cognition and Computation*. Taylor & Francis

Kripa, E., Mueller, S. (2020). Contested Energies. *Bracket, 4*, 260-267.

Matic, Z., Oh, Y., Lim, L. (2020). Using Design to Make Doffing of Personal Protective Equipment Safer for Healthcare Workers. *Korea Institute of Healthcare Architecture*.

Lim, L., Kanfer, R., Stroebel, R., Zimring, C. (2020). The Representational Function of Clinic Design: Staff and Patient Perceptions of Teamwork. *Health Environments Research & Design Journal*.

Lim, L., Kim, D., Kim, Y. (2020). The Role and Direction of Healthcare Facility Design in Infection Control and Prevention. *Journal of the Architectural Institute of Korea*.

Lim, L., Kanfer, R., Stroebel, R., Zimring, C. (2020). Beyond Co-location: Visual Connections of Staff Workstations and Staff Communication in Primary Care Clinics. *Environment and Behavior*.

Matic, Z., Humphreys, B., Oh, Y., Lim, L., Dubose, J. (2020). Design Strategies for Biocontainment Units: Creating Safer Environments. *Korea Institute of Healthcare Architecture*.

Lim, L., Moore, M., DuBose, J. R., Obeidat, B., Stroebel, R., Zimring, C. (2020). Spatial Influences on Team Awareness and Communication in Two Outpatient Clinics: A Multiple Methods Study. *Journal of General Internal Medicine*.

Lim, L., Zimring, C. (2020). A Conceptual Visibility Framework for Linking Spatial Metrics with Experience and Organizational Outcomes. *Health Environments Research & Design Journal*.

Mueller, S. (2021). Biotic Borderlands: Transboundary Biosurveillance Geographies. *Manifest: A Journal of the Americas, Vol. 3*.

Taylor, C. Drawing Time: making the Rio Meander Map. *A/R Architecture, Research: The Line, Notes on Politics*,

Zook, J. Balancing Support for Staff and Patient Centeredness Through the Design of Immediate and Relational Space: A Case Study of Ambulatory Care Center Layouts. *Health Environments Research and Design*.

Conference Proceedings

Hadighi, M., Duarte, J. (2020). Local Adaptation of the International Style: Contextualizing Global Architecture between East and West. In Liss C. Werner and Dietmer Koring (Ed.), *Anthropological Architecture and Fabrication in the Cognitive Age* (vol. 2, pp.

Haq, Saif (2020), Grid Geometry and core structure: Space Syntax analysis of small and medium 'grid-like' US cities, published in the proceedings of *2nd Valencia International Biennial of Research in Architecture*, EAAE-ARCC International Conference, Valencia, Spain

Haq, Saif, (2020), Book Review, Healthcare Architecture as Infrastructure: Open Building in Practice, in *Health Environments Research and Design Journal*, 13 (2), pp. 264.266,

Imai, N. "Building with Bloom: A Format for Higher Order Thinking in the Context of COVID-19." (Submitted to the 2021 National Conference on the Beginning Design Student, November 23, 2020).

Imai, N. "'Flipped' Representation: Formatting Representation Courses for COVID-19 Using the Flipped Classroom Model." (Submitted to the 2021 National Conference on the Beginning Design Student, November 23, 2020).

Imai, N. "Projecting the Unseen: Developing Interdisciplinarity Through the Internet of Things in Architectural Design." (Submitted to the ACSA 109th Annual Meeting, July 1, 2020).

Maher, T., Imai, N. "Recursive Traces: Structuring Exchange Between Analogue and Digital Technology." (Submitted to the ACSA 109th Annual Meeting, July 1, 2020).

Mueller, S. Irradiated Shade: Mapping, Modeling, and Measuring Urban UVB Exposure. *ACADIA 2020 Distributed Proximities [Conference Proceedings]*.

Mueller, S. Synoptic Tactics: Mapping Territorial Transgressions. *ACSA 109th Annual Meeting [Conference Proceedings]*.

Mueller, S. Synoptic Optics: Computational Representation at the Synoptic Scale. *ARCC 2021*

Conference: Performative Environments [Conference Proceedings].

Mueller, S. Designing for Irradiated Shade. *ACSA 2020 AIA/ACSA Intersections Research Conference: Carbon [Conference Proceedings].*

Professional Journals and Publications

Flueckiger, U. P. (2020). UNTITELD 2020. *Texas Architect Magazine, 70* (315), 29-34.

Hadighi, M. (2020). Space is Z. *Texas Architect, 70*(4), 66-71.

Technical & Research Reports

Kripa, E., Mueller, S. (2020). US Detention Map, Original Photography. *USA: We Are Adrift About to Sink. The Looming COVID-19 Disaster in United States Immigration Detention Facilities*.

Stiphany, K. (2020). *Housing as Infrastructure - The São Paulo Studio*.

Conference Presentations

Haq, Saif (2020), Grid Geometry and core structure: Space Syntax analysis of small and medium 'grid-like' US cities, in *2nd Valencia International Biennial of Research in Architecture*, EAAE-ARCC International Conference, 11-14 Nov, 2020, Valencia, Spain

Haq, Saif (2020), Educating Healthcare Design Architects: View from the Profession, in *Health Educators Conference*, Chicago, July, 2020

Haq, Saif (2020), Transformation of profession and discipline: towards a pedagogical model for healthcare and wellness design, in Transform: Socially Embedded Collaboration, 51st Annual Conference of the *Environmental Design Research Association (EDRA)*, April 4-7, 2020, Tempe, Arizona

McReynolds, V. (Author Only), National Conference on the Beginning Design Student / After Form, Texas A&M University, College Station, TX, "Formal Performance: Tracking Solar Alignment from Renaissance to Heliomorphism," National, peer-reviewed/refereed, published in proceedings. (April 2, 2020).

McReynolds, V. (Author Only), Association of Collegiate Schools of Architecture / OPEN, San Diego, CA, "Tangent to the Earth: Mapping Site Conditions According to Horizontal Solar Light," International, peer-reviewed/refereed. (March 12, 2020).

Mueller, S., ACADIA 2020 Distributed Proximities, ACADIA, "Irradiated Shade: Mapping, Modeling, and Measuring Urban UVB Exposure," International, peer-reviewed/refereed. (October 28, 2020).

Mueller, S., ACSA 2020 AIA/ACSA Intersections Research Conference: Carbon, AIA/ACSA, "Designing for Irradiated Shade," International, peer-reviewed/refereed. (August 30, 2020).

Mueller, S. (2020). *Three Faces of Disruption / ACADIA Conference*.

Conference Discussants

Dora Epstein Jones. Contributor + Discussant, "Pivot to Online Learning Discussion Sessions," ACSA (Spring and Summer 2020)

Dora Epstein Jones. Invited Panelist and Discussant, "ACADIA 2020: Distributed Proximities" (October 2020)

Dora Epstein Jones. Invited Discussant, "OPEN: ACSA 108th Annual Meeting," Border Consortium (March 2020)

Dora Epstein Jones. Invited Keynote Discussant, "Blackboxing Banham," The Ohio State University (March 2020

Invited Lectures

David Driskill. "City Model based on Quality-of-Life Mapping, Sustainability and a 3-mile Transect". The Sixteenth International Conference on Environmental, Cultural, Economic, and Social Sustainability, Pontifical Catholic University of Chile, Santiago, Chile. (29-31 January 2020).

Du, P. (Panelist), 5th International Graduate Student Symposium, Illinois Institute of Technology, "Human Behavior and Building Performance," International. (November 2020).

Du, P., 2020 Smart and Healthy Cities Symposium, Jefferson Institute for Smart and Healthy Cities, "Housing & Smart Technology," International. (October 2020).

Hadighi, M. (Author Only), Chardaq, University of Tabriz, Tabriz, Iran (Virtual), "Local Adaptation of the International Style: A Search to Find a 'Desirable' Form," International, peer-reviewed/refereed. (April 22, 2020).

Kripa, E. (Presenter Only), Mueller, S. (Presenter Only), Disenar Habitar Pensar: XIII Seminario Internacional de Arquitectura y Artes, Unipiloto (La Facultad de Arquitectura y Artes de la Universidad Piloto de Colombia), "Hidden Urban Territories," International. (November 6, 2020).

Kripa, E. (Presenter Only), Mueller, S. (Presenter Only), First Fridays - Distance Edition, The Architectural League of New York, "Transboundary Practices," International. (December 3,

2020).

Kripa, E. (Presenter Only), Mueller, S. (Presenter Only), Guest Lecture, Washington University in St. Louis Sam Fox School of Design and Visual Arts, Michael Allen Seminar, "Border Dispatches," National. (November 18, 2020).

Kripa, E., Distributed Proximities, ACADIA, Zoom, "Architects' PPE Response," International, peer-reviewed/refereed, published in proceedings. (October 27, 2020).

Kripa, E. (Presenter Only), Mueller, S. (Presenter Only), AIA Arizona Virtual State Conference, AIA Arizona, "Speaking Through Change," National. (October 16, 2020).

Kripa, E. (Presenter Only), Mueller, S. (Presenter Only), Guest Lecture, University of Pennsylvania Weitzman School of Design, Daniel Barber PhD Seminar, "Fronts: Military Urbanisms and the Developing World," National. (October 5, 2020).

Kripa, E., Responsibility, New Jersey Institute of Technology, Zoom/ Newark, "Responsibility," National. (September 21, 2020).

Kripa, E. (Presenter Only), Mueller, S. (Presenter Only), Fronts Book Launch, The Cooper Union for the Advancement of Science and Art, "Fronts: Military Urbanisms and the Developing World," International. (September 15, 2020).

Bhatia, N. (Presenter Only), Kripa, E. (Presenter Only), Mueller, S. (Presenter Only), Velikov, K. (Presenter Only), Nesbit, J. (Moderator), Nature of Enclosure Session 5, Urban Next, "On the role of territory, nature, and technology," International. (September 10, 2020).

Kripa, E. (Presenter Only), Mueller, S. (Presenter Only), Guest Lecture, Architectural Association (AA), Neeraj Bhatia studio, "Actionable Spatial Research and Practice," International. (July 18, 2020).

Kripa, E. (Presenter Only), Mueller, S. (Presenter Only), Fronts Book Launch, Architectural Association (AA), "Fronts: Military Urbanisms and the Developing World," International. (July 16, 2020).

Kripa, E., Agency, Borders, and Immigration, Digital Futures World, Zoom, "Fronts," International, peer-reviewed/refereed. (July 2, 2020).

Kripa, E., Mueller, S., Loudreaders Trade School, Cruz Garcia and Nathalie Frankowski, Carnegie Mellon University, "Military Urbanisms," International. (June 21, 2020).

Kripa, E. (Presenter & Author), Mueller, S. (Presenter & Author), Graduation of the

M.S.A.A.D. Class, Columbia University GSAPP, On line / New York, "Graduation Talk," National. (May 14, 2020).

Kripa, E., Lecture Series, USC School of Architecture, Los Angeles, "Technology is the Answer, but what was the Question?," International. (April 1, 2020).

Kripa, E., Equity in Architecture Symposium, Georgia Tech, Atlanta, Georgia, "Equity in Archi

Lim, L., Environment and Behavior, Myongji University, "Evidence-based Design," International. (October 27, 2020).

Lim, L., Invited Lecture at Healthcare Design of the Future, College of Design, Georgia Institute of Technology, "HEALTHCARE FACILITY LAYOUT AND DESIGN CAN SUPPORT TEAMWORK." (October 13, 2020).

Lim, L., Invited Lecture, Architecture and Urban Research Institute, Architecture and Urban Research Institute, Sejong, South Korea, "Age-friendly Community Policies and Initiatives in the US." (January 3, 2020).

Lim, L., International Symposium on Age-friendly Community Design, Architecture and Urban Research Institute, "Age-friendly Architecture in the United States." (December 9, 2020).

DuBose, J., Matić, Z., Oh, Y., Lim, L., 2020 CDRTR Annual Symposium, Center for Disaster Relief Training and Research, Yonsei University Severance Hospital, "How Design Research Can Reveal Solutions for Safe Environments: Focusing on PPE Doffing Area." (December 3, 2020).

McReynolds, V. (Author Only), Island Dynamics / Darkness, Nuuk, Greenland, "Violet Light Towards the Poles," International, peer-reviewed/refereed. (December 2, 2020).

Park, K. (Presenter Only), 2020 Busan International Architectural Design Workshop, Busan Metropolitan City, Busan Architecture Festival, Korean Institute of Architects Busan Branch, online, "Balcony and Violin, Life of Post-COVID-19," International, peer- reviewed/refereed, published in proceedings. (September 2020).

Taylor, C., Alps Art Academy, Art Safiental, Tenna, Switzerland, "Terminal Sound Pictures and Maps That Tell Time," International, peer-reviewed/refereed. (September 26, 2020).

Taylor, C., Diploma Class Presentation, Architecture Association, London, UK, "Terminal Sounds Pictures and Maps That Tell Time," International. (November 9, 2020).

Taylor, C., Architecture Association Summer School, Architecture Association, London, United Kingdom, "Pedagogy of Weather: learning from earthworks, duration, and difference,"

International. (July 17, 2020).

Zook, J. Visiting lecture at graduate seminar on society and space, University College London, Zoom, "The visual structure of nurse work," International. (December 10, 2020).

Exhibitions

Hadighi, M. "College Town Modernism," Hamer Center for Community Design at Penn State, State College, PA. (August 15, 2019 - January 1, 2020).

Kripa, E., Mueller, S. "Irradiated Shade," ACADIA. (October 2020 - Present).

Kripa, E. E., Mueller, S. "Headquarters Building (Confidential Client)," El Paso, TX. (December 2019 - Present).

Kripa, E. E., Mueller, S. "Study - Asylum Capacity at US-Mexico Border." (July 2019 - Present)

Kripa, E. E., Mueller, S. "Study - Chamizal Atmospheric Toxicity," developed for Familias Unidas / Chamizal neighborhood organization. (2019 - Present)

Awards

Dora Epstein-Jones. Nomination for Rome Prize Fellowship, American Academy in Rome (July 2020)

Kripa, E. E., Mueller, S. Nominee, ARCC 2021 Book Award, ARCC, National. (December 2020).

Kripa, E. E., Mueller, S. University Design Research Fellow, Exhibit Columbus, National. Awarded to leading professors of architecture, landscape architecture, and design from American universities who will create installations highlighting their research. (November 2020).

Sowell, J., Stiphany, K. M. *Brownie Neighborhood Park: Communities Constructing Change in Austin, Texas*. Environmental Design Research Association.

Grants:

Joe Aranha

Status	Title of Current Research or Grant	Granting Agency	Amount $	Chief Investigators & Faculty Members in order	Percent Contri-bution
New Award	TTU scholarship catalyst grant	TTU Office of Provost	$3,000	Aranha, J. (Lead Principal Investigator)	100%

Sora Key

Year	Title of Current Research or Grant	Granting Agency	Amount $	Chief Investigators & Faculty Members in order	Percent Contri-bution
2020	Making to Learn, Learning to Grow: Robotics Laboratory as the Educational Infrastructure for Integrating Architecture and Technology	The CH Foundation	$228,451	Key, S. (Lead Principal Investigator)	100%

Ersela Kripa and Stephen Mueller

Year	Title of Current Research or Grant	Granting Agency	Amount $	Chief Investigators & Faculty Members in order	Percent Contri-bution
2020	University Design Research Fellowship	Exhibit Columbus	$10,000	Mueller, S. (Principal Investigator), Kripa, E. (Principal Investigator)	50%
	COVID 19 Community Project	Project Vida	$40,000	Kripa, E. (Lead Principal Investigator)	100%

Kristine Stiphany

Year	Title of Current Research or Grant	Granting Agency	Amount $	Chief Investigators & Faculty Members in order	Percent Contri- bution
2019 ongoing	Transforming Cities through Infrastructures - Interdisciplinary Collaborator	Utrecht University, the Netherlands	$20,000	Friendly, A. (Supporting), Stiphany, K. (Supporting), Oosterbaan, M. (Supporting), Otsuki, K. (Supporting)	25%

Dora Epstein-Jones, Co-Principal Investigator, One Health Sustainable Regional Systems Research Network, $15m National Science Foundation grant co-author (submitted January 1, 2021)

Ben Shacklette. CH Foundation Grant Award $10,150.00 "The German Country Schools of Gillespie County, Texas" Completed February 2020

Other Funding

Status	Title of Current Research or Grant	Granting Agency	Amount $	Chief Investigators & Faculty Members in order	Percent Contri- bution
Received	Student support for Land Arts of the American West, and for building the Land Arts Support Vehicle.	Matti and Henry Brown	$12,000	Taylor, C.	
Received	Operational support for Land Arts of the American West 2020.	Andrea Nasher	$5,500	Taylor, C.	
Received	Funds to acquire and build the Land Arts Support Vehicle.	Owl Call Radio	$50,000	Taylor, C.	

Received	Student support for Land Arts of the American West.	James Family Foundation	$10,000	Taylor, C.	

Grants in the process writing

Grants currently under review and grants declined

Dora Epstein-Jones, Co-Principal Investigator, One Health Sustainable Regional Systems Research Network, $15m National Science Foundation grant co-author (submitted January 1, 2021)

Cited Research in Peer-Reviewed/Referred venues

Flueckiger, U. P. (2020). JUDD Exhibition Catalogue MoMA NYC. In Tempkin, Ann.(Ed.), *Donald Judd Architecture in Marfa, Texas* (pp. 263).

Haq, Saif: 55 citations in 2020. Dr. Haq's h-index = 9, i10 index = 9. See:
https://scholar.google.com/citations?hl=en&user=JHLymfQAAAAJ

Fronts: Military Urbanisms and the Developing World by Ersela Kripa and Stephen Mueller
Selected for inclusion in *Society of Architectural Historians Booklist and Reader's Advisory. (*Sep 2020).

Citations in Scientific Reports
Ersela Kripa and Stephen Mueller. Ainhoa Ruiz Benedicto, Mark Akkerman, Pere Brunet. A Walled World: Towards a Global Apartheid. Transnational Institute. (Nov 2020).

Ersela Kripa and Stephen Mueller.   Mention] Kathy Velikov and Geoffrey Thun. "Fluid Territories: Cultivating Common Practices Through the Design of Water Redistribution." *Journal of Architectural Education.* Vol. 74 (2020).

Cited in Media

Dora Epstein Jones, Interview, "Learning in the Time of Coronavirus," Texas Architect (September/October 2020)