

Curriculum Vitae

Martha Bohm
updated March 31, 2018

148 Roycroft Blvd.
Snyder, NY 14226

Hayes Hall 319
UB South Campus
Buffalo, NY 14214

e: marthabo@buffalo.edu
p: 347/574-1489

1.0 EDUCATION

University of Oregon, Master of Architecture, 2006

Harvard University, BA in Earth and Planetary Sciences, 1998

2.0 ACADEMIC APPOINTMENTS

University at Buffalo, Department of Architecture

Assistant Professor, studio, environmental systems, since 2011

Visiting Assistant Professor, studio, environmental systems, 2010—2011

Cornell University, Department of Architecture

Visiting Lecturer, environmental systems, 2006—2008

University of Oregon, Department of Architecture

Graduate Teaching Fellow, 2004—2006

3.0 PROFESSIONAL APPOINTMENTS

Sustainable Design Coordinator, William McDonough + Partners, Charlottesville, VA, 2008—2010. Responsible for sustainability research, consulting, and design work on international commercial projects.

Intern architect, Rowell Brokaw Architects, PC., Eugene, OR. 2005—2006

Policy Associate, Center for Best Practices, National Governors' Association, Washington, D.C. 1998—2000. Responsible for gubernatorial policy research and analysis in air quality, open-space planning, stewardship of nuclear waste, and transportation.

4.0 AWARDS + FELLOWSHIPS

UB President Emeritus and Mrs. Meyerson Award for Distinguished Undergraduate Teaching and Mentoring, 2017.

Food Equity Ideas Lab Scholar. Selected after University-wide call to participate in a three-day workshop to advance food-systems research in the global south, 2017.

AIA Western New York Chapter Design Award for GRoW Home, 2016.

Sustainability Leadership, Innovation and Collaboration Award. Faculty Award Winner for Sustainability in Higher Education for leadership on the GRoW Home at the 2015 Solar Decathlon. Awarded by the UB Office of Sustainability, 2016.

international U.S. Department of Energy Solar Decathlon in Irvine, CA. GRoW Home awarded second place overall. Also awarded first in Energy Balance, Comfort Zone, and Commuting; second in Appliances; third in Communications; fourth in Market Appeal and Home Life; and fifth in Architecture, Affordability, and Engineering. (941.191/1000 points), 2015.

Gary Day Award. Awarded by students in recognition of teaching excellence in the Department of Architecture at UB, 2015.

Ginsberg Research Fellowship. \$10,000 awarded by U.S. Green Building Council after national call, to support development and publication of a national research framework, 2007—2008.

5.0 SPONSORED PROJECTS + GRANTS **Solar Decathlon / GRoW Home**

From 2013 to present I have been the lead faculty member on a multi-year project involving over 300 students in the design, construction, operation, and testing of an high-performing house prototype, the GRoW Home.

Total funding

\$1,048,000 in grants, cash and in-kinds received from over 450 separate entities. To date I have been principally responsible for \$322,000 in cash and \$326,000 in in-kind sponsorship for three project phases.

- 2013— 2015: House design, construction, and competition. The house placed second at the international Solar Decathlon competition in Irvine, CA.
- 2018—2019: Temporary exhibition on UB's south campus.
- From 2019: Permanently installation as a Clean Energy Education Center on UB's North campus.

Funding sources:

New York State Energy Research & Development Authority, "*Localizing Buffalo's Renewable Energy Future*," a project to support development of renewable energy in Buffalo. Role: Project partner. (Contributed to proposal, advised on project design and execution, taught siting studio, advised student interns.) (Ryan McPherson and Tonga Pham, P.I.) \$1,000,000; \$290,000 for GRoW Home permanent reconstruction on UB North campus. 2016—2019.

John R. Oishei Foundation Grant, "*GRoW Home reconstruction*," a project to support the construction of a concrete foundation for the GRoW Home temporary installation on UB South Campus. Role: Project advisor. (Authored proposal language, advised on project design and execution.) \$10,000. 2016—2017.

Various (450+ individual, corporate, and institutional donors and sponsors), "GRoW Home construction funding." This effort fundraised cash and in-kind sponsorship for the GRoW Home. Role: Principal Investigator and lead faculty advisor. Managed project budget, target funder lists, and all fundraising outreach from the project team. \$690,000. 2014—2016.

U.S. Department of Energy, "GRoW Home", seed grant for one of 20 projects selected from an international call for proposals. Role: Principal Investigator and lead faculty advisor. \$50,000. 2014—2016.

State University of New York Sustainability Fund, "UBSD: University at Buffalo Solar Decathlon Incubation Project," a project to support development of a Solar Decathlon competition structure within UB. Role: Principal Investigator. \$8600. 2013.

Other Funding Received

UB's Community for Global Health Equity Seed Fund, "*GLASS: Ground-Level Agricultural Survey System*," a project leveraging deep-learning and Google Streetview images to provide detailed surveys of food production practices. Role: Co-Principal Investigator (John Ringland, P.I.) \$27,000, 2017—2018.

New York State Energy Research & Development Authority, "*Climate Change Impacts on the Building Sector in New York State*," a project to write and disseminate an integrated assessment, economic report, and strategy document. Role: Co-Investigator. (Authored major report, advised on others, oversaw student writing.) (Nicholas Rajkovich, P.I.) \$200,000; \$140,050 to UB, 2015—2018.

Rigidized Metals Corporation, "Hive City student design competition," a semester-long multiphase competition to select and permanently install a project at Silo City. Role: Co-coordinator (with Joyce Hwang and Chris Romano) ~\$10,000 in-kind, 2012.

Martell Fund at UB School of Architecture and Planning, "Beyond Patronage" symposium and book based thereon, Role: Co-coordinator (with Joyce Hwang and Shannon Phillips). \$20,000, 2012.

UB Gender Institute, "Beyond Patronage" symposium and book based thereon. Role: Co-coordinator (with Joyce Hwang and Shannon Phillips) \$5,000, 2012.

UB Department of Architecture, Building diagnostic equipment, Role: Faculty lead. \$5,000, 2010.

6.0 SCHOLARSHIP

Refereed Journals

Ringland, John; Bohm, Martha, and Baek, So-Ra. "Proximate Sensing of food cultivation in Thailand using Google Street View imagery and deep learning," *Computers and Electronics in Agriculture*. Submitted March 2018.

Bohm, Martha. "Energy technology and lifestyle: A case study of the University at Buffalo 2015 Solar Decathlon Home," *Renewable Energy*, Volume 123, August 2018, p92-103.

Bohm, Martha. "Urban Agriculture In and On Buildings in North America: The Unfulfilled Potential to Benefit Marginalized Communities." *Built Environment*, 2017. 43-3: p309-329.

Books

Bohm, Martha; Hwang, Joyce; and Printz, Gabby (eds.), *Beyond Patronage: Reconsidering Models of Practice* (New York, NY: Actar D, 2015)

Book chapters

Okour, Yasmein; Rajkovich, Nicholas; and Bohm, Martha. "Balancing Adaptation and Mitigation in the Building Sector of New York State" in *Handbook of Climate Change Resilience*, Walter Leal et al. eds. (Springer). Forthcoming in 2018.

Bohm, Martha. "GRoW Home: Case Study" in Alison Kwok and Walter Grondzik (eds.) *The Green Studio Handbook: Environmental Strategies for Schematic Design, 3rd Edition* (New York/London: Routledge, 2018), p333-339.

Hwang, Joyce and Bohm, Martha; "Introduction" in *Beyond Patronage: Reconsidering Models of Practice* (New York, NY: Actar D, 2015), p9-12.

Martha Bohm, "Architect as Detective" in *Beyond Patronage: Reconsidering Models of Practice* (New York, NY: Actar D, 2015), p55-62.

Peer-Reviewed Conference Proceedings

Bohm, Martha. "Thermal Performance of Novel Ventilation Apertures in a High-Performance Single-Family House," 7th International Building Physics Conference, Syracuse, NY, September 23-26, 2018. Forthcoming in 2018—abstract accepted.

Bohm, Martha and Heckman, Nate. "GRoWing Smarter: Broadening Frameworks for Residential Energy Design," 36th International Conference on Passive and Low-Energy Architecture, Los Angeles, CA, 11-13 July, 2016.

Bohm, Martha. "A Haptic, High-Performance House: The GRoW Home," 3rd Residential Building Design and Construction Conference, Penn State University, University Park, PA, 2-3 March 2016.

Bohm, Martha. "Energy Simulation in Passive Design: Tools for Considering the Invisible," Solar 2013 (42nd ASES Annual Conference, 38th National Passive Solar Conference), Baltimore, MD, 16-20 April, 2013.

Bohm, Martha. "Sliding Scales: A Case Study in Metrics Selection," Architectural Research Centers Consortium Conference, Detroit, MI, 20-23 April 2011.

Zhang, K. Max; Thomas, Robert J.; Bohm, Martha and Miller, Marc. "An Integrated Design Approach for Sustainable Community Development," 42nd Hawaii International Conference on System Sciences (HICSS-42), Manoa, Hawaii, 5-8 January 2009.

Bohm, Martha. "Real Stories from Real Buildings: No Pane, No Gain," American Solar Energy Society Conference, Cleveland, OH, 8-12 July 2007.

Peer-Reviewed Conference Presentations

Bohm, Martha. "Cloudforest impact: A cross-sectional study of an interdisciplinary design service learning study abroad program in Costa Rica," Architectural Research Centers Consortium Conference, Philadelphia PA, May 16-19, 2018. *Forthcoming—Abstract accepted.*

Bohm, Martha. "Thermal Performance of Novel Ventilation Apertures in a High-Performance Single-Family House," 7th International Building Physics Conference, Syracuse, NY, September 23-26, 2018. *Forthcoming—Abstract accepted.*

Bohm, Martha and Heckman, Nate. "GRoWing Smarter: Broadening Frameworks for Residential Energy Design," 36th International Conference on Passive and Low-Energy Architecture, Los Angeles, CA, 11-13 July, 2016.

Bohm, Martha. "A Haptic, High-Performance House: The GRoW Home," 3rd Residential Building Design and Construction Conference, Penn State University, University Park, PA, 2-3 March 2016.

Bohm, Martha. "Energy Simulation in Passive Design: Tools for Considering the Invisible," Solar 2013 (42nd ASES Annual Conference, 38th National Passive Solar Conference), Baltimore, MD, 16-20 April, 2013.

Bohm, Martha. "Sliding Scales: A Case Study in Metrics Selection," Architectural Research Centers Consortium Conference, Detroit, MI, 20-23 April 2011.

Zhang, K. Max; Thomas, Robert J.; Bohm, Martha and Miller, Marc. "An Integrated Design Approach for Sustainable Community Development," 42nd Hawaii International Conference on System Sciences (HICSS-42), Manoa, Hawaii, 5-8 January 2009.

Bohm, Martha. "Real Stories from Real Buildings: No Pane, No Gain," American Solar Energy Society Conference, Cleveland, OH, 8-12 July 2007.

Reports

Bohm, Martha; Rajkovich, Nick and Okour, Yasmein. "Climate Adaptation by Design: An Overview for New York State Building Professionals" (Albany, NY: NYSERDA, 2018). *Forthcoming in 2018—in review.*

Rajkovich, Nick; Bohm, Martha; Tuzzo, Mike; Heckman, Nate; Macy, Krista; and Tanner, Harlee. "Climate Resilience Strategies for Buildings in New York State" (Albany, NY: NYSERDA, 2018). *Forthcoming in 2018—in review.*

Rajkovich, Nick; Ray, Paul; Tuzzo, Mike; and Bohm, Martha. "Regional Costs of Climate-Related Hazards for the New York State Building Sector" (Albany, NY: NYSERDA, 2018). *Forthcoming in 2018—in review.*

Bohm, Martha and US Green Building Council Research Committee *A National Green Building Research Agenda* (Washington DC: USGBC, 2007)

Invited Conference Presentations

"Aquatic Decathlon: Water in the 2007 Cornell Solar Decathlon House" at "Confluence" the 14th annual Holistic Options for Planet Earth Sustainability Conference, University of Oregon, Eugene, OR. April 2007.

"Theory for Advancing Green Design" at the Architectural research Centers Consortium research conference, University of Oregon, Eugene, OR. April 2007.

Convener, "Solar Decathlon: Green Design for Tomorrow's Professionals" at the US Green Building Council's GreenBuild Conference, Chicago, IL. November 2007.

Invited Presentations—non-UB

"Buffalo's New Solar Legacy" at a panel on solar power at Buffalo's Canalside, sponsored by the Buffalo Heritage Carousel. Burchfield Penney Art Center, Buffalo, NY. September 2017.

"Crowdfunding: A New Source of Funding," (With Geoff Bartlett and Dawn Baumgarten) at *Breakthrough to Excellence*, 2017 Research Administrators Symposium, Research Foundation for SUNY, Albany, NY. April 2017.

"elements | principles | constraints: The GRoW Home: UB's 2nd-place winner in the US DOE 2015 Solar Decathlon," at Rochester Institute of Technology, Rochester, NY. September 2016.

"The GRoW Home: The University at Buffalo's Entry into the 2015 Solar Decathlon," (with Nick Rajkovich, Mike Tuzzo, and Pranav Hardas) New York State Society of Professional Engineers eWeek Seminar, Buffalo, NY. February 2016.

"GRoW Home: UB's Entry to the US DOE 2015 Solar Decathlon," at Design Block, Buffalo, NY. May 2015.

"Let's GRoW Buffalo" (with Colleen Creighton and Brad Wales) at Hallwalls Contemporary Art Center, Buffalo, NY. April 2014.

"Cradle to Cradle Materials Selection," at US Green Building Council, National Capital Region Chapter, Washington, D.C. October 2008.

"Designing Green Buildings," NewPAGE lecture series, Old Dominion University, Norfolk, VA. November 2007.

Invited Presentations—UB

"GRoW by the Numbers," UB Gifted Math Program, March 2018.

"GRoWing Sustainable Designers," UB Prosperity Fellows introductory week, January 2018.

"Beyond Net Zero Buildings," at Korean-American Research Symposium on Urban Environments, March 2017.

Moderator, "Professional Perspectives on Resilience" at "From Sandy to Snowvember: Climate Change and Buildings in New York State", November 2016.

Moderator, "International Experiences" panel, Hayes Hall grand re-opening, September 2016.

"elements | principles | constraints: The GRoW Home," Fox Run lecture series, School of Medicine and Biomedical Sciences, Orchard Park, NY. March 2016.

"Home GRoWn: Energy-savvy Residential Architecture," Global Health Initiatives Seminar Series, February 2016.

"elements | principles | constraints: The GRoW Home: UB's 2nd-place winner in the US DOE 2015 Solar Decathlon," Insights Lecture Series, January 2016.

"elements | principles | constraints: The GRoW Home," at Architexx "Sustaining the Well-Tempered Environment" event, November 2015

Moderator, "Architect as Detective," at Martell Symposium | Beyond Patronage: Reconsidering Models of Practice, UB. October 2012.

Moderator, "Techniques: The Aesthetics of Communication," at "The Assembly of Trash" installation and salon, UB. April 2012.

Guest Critiques

Guest reviewer, fourth year Integrated Design Studio. Assistant Professor Joe Ferut, Jr. Kent State University College of Architecture and Environmental Design, Kent, OH. Spring 2017.

Guest reviewer of design development submissions of 2017 Solar Decathlon teams. SD2017 Competition Manager Joe Simon. Review via skype. October 2016.

Guest reviewer, third year studio, Assistant Professor Dana Cupkova, Carnegie Mellon, Department of Architecture, Pittsburgh, PA Fall 2015.

Guest reviewer, third year studio, Visiting Associate Professor Martin Hogue, SUNY School of Environmental Science and Forestry, Department of Landscape Architecture, Syracuse, NY, Fall 2012.

Guest reviewer, graduate option studio, Assistant Professor Joshua Cerra, Cornell University Department of Landscape Architecture, Ithaca, NY, Spring 2012.

Guest reviewer, third year studio, Visiting Associate Professor Martin Hogue, SUNY School of Environmental Science and Forestry, Department of Landscape Architecture, Syracuse, NY, Spring 2012.

Guest reviewer, comprehensive studio, University of Virginia, Department of Architecture, Charlottesville, VA, Fall 2009.

Guest reviewer, comprehensive studio, University of Virginia, Department of Architecture, Charlottesville, VA, Fall 2008.

Conference / Exhibit Coordination

Rajkovich, Nicholas and Bohm, Martha. "From Sandy to Snowvember: Climate Change and Buildings in New York State," a half-day symposium of academics and practitioners to discuss contemporary thinking on climate resilience in New York State. UB, Buffalo, NY. 12 invited speakers. November 2016.

Hwang, Joyce; Bohm, Martha; and Printz, Gabby. "Beyond Patronage: Reconsidering Models of Practice - Book Launch and Panel Discussion" at School of the Art Institute of Chicago, a partner program of the Chicago Architecture Biennial. December 2015.

Hwang, Joyce; Bohm, Martha; and Printz, Gabby. "Storefront Drawing Series: Armatures of Practice, Politics of Action." Symposium and book launch for Beyond Patronage" at Storefront for Art and Architecture, New York, NY. November 2015.

Hwang, Joyce; Bohm, Martha; Printz, Gabby; and Phillips, Shannon, "Martell Symposium | Beyond Patronage: Reconsidering Models of Practice," a one-and-a-half day symposium of academics and practitioners examining architectural patronage today. UB, Buffalo, NY. Included 8 invited guests, and approximately 200 attendees. October 2012.

Bohm, Martha and Torres, Anibal. "Foro Sobre Diseño Sostenible Monteverde (Monteverde Sustainable Design Forum)," a half-day symposium on emerging trends and trajectories of sustainable design in Costa Rica. Monteverde Institute, Costa Rica. Included 3 invited guests, and approximately 75 attendees. June 2012.

Goodman, Sara; Bohm, Martha and UB STOR. "Sustainable Buildings", part of the Business of Energy series, a one-day symposium on New York state sustainable design. UB, Buffalo, NY. Included 10 invited guests, and approximately 125 attendees. December 2011.

Bohm, Martha. "Light Transformations", an exhibition of 20 site-specific custom-fabricated luminaires designed by students of ARC 475/575: Environmental Controls 2. UB, Buffalo, NY. December 2011.

7.0 PUBLISHED RECOGNITION

National / International

Since 2015:

Images, drawings, and other documentation of the GRoW Home are permanently available from the US Department of Energy's Solar Decathlon website. <https://www.solardecathlon.gov/2015/competition-team-u-at-buffalo.html>

December 5, 2017

Inclusion of citation in *An Annotated Bibliography on Structural Racism Present in the U.S. Food System: Fifth Edition* by Michigan State University Center for Regional Food Systems. <https://www.canr.msu.edu/foodsystems/uploads/files/Annotated%20Bibliography%20on%20Structural%20Racism%20in%20the%20US%20Food%20System%205th%20Ed.pdf>

January 4, 2017

"Building Tomorrow's Eco-Home" by Jan Lee in *Triple Pundit*: <http://www.triplepundit.com/special/sustainability-whirlpool/building-tomorrows-eco-home/>

October 9, 2015

"These 14 Sleek Solar Homes Do More Than Produce Power" by Wendy Koch in *National Geographic*: <http://news.nationalgeographic.com/energy/2015/10/151009-14-Sleek-Solar-Homes-Do-More-Than-Produce-Power/>

October 7, 2015

"Stunning solar-powered GRoW Home has a thriving veggie greenhouse at its core" by Lucy Wang on *Inhabitat*: <http://inhabitat.com/ultra-efficient-grow-home-stays-green-year-round-with-solar-and-thermal-energy/>

August 20, 2015

"Solar Decathlon: The Search for the Best Carbon-Neutral House" in *Yale Environment 360 Digest*: https://e360.yale.edu/digest/solar_decathlon_the_search_for_the_best_carbon-neutral_house

Summer 2015

"2015 Solar Decathlon" in *Residential Architect*, volume 4, 2015.

April 10, 2015

"This Season-Shifting Solar House is Surrounded by a Greenhouse" by Ben Schiller in *Fast Company*: <https://www.fastcoexist.com/3044394/this-season-shifting-solar-house-is-surrounded-by-a-greenhouse>

February 6, 2015

"Solar Decathlon 2015: U at Buffalo GRoWs Solar House" by Amber Archangel for *CleanTechnica*: <http://cleantechnica.com/2015/02/06/solar-decathlon-2015-u-buffalo-grows-solar-house-new-roster/>

February 4, 2015

"University at Buffalo, The State University of New York Grows a Solar House" by Ernie Tucker on DOE Solar Decathlon Blog: <http://www.solardecathlon.gov/blog/archives/3836>

Local / Regional

November 17, 2015

"Dream house for urban gardeners built by UB students took second place in competition" in *Buffalo-Niagara Gardening*: <http://buffalo-niagaragardening.com/2015/11/17/the-ideal-dream-house-for-urban-gardeners-built-by-ub-students-took-second-place-in-competition/>

October 20, 2015

"UB's energy-efficient home takes second place in competition" by David Bertola in *Buffalo Business First*: <http://www.bizjournals.com/buffalo/news/2015/10/20/ubs-energyefficient-home-takes-second-place-in.html>

October 18, 2015

"Solar home earns recognition for UB" by Chris Jamele on WBFO: <http://news.wbfo.org/post/solar-home-earns-recognition-ub>

October 18, 2015

"University at Buffalo takes second place in national Solar Decathlon" by Nancy Fischer in the *Buffalo News*: <http://www.buffalonews.com/city-region/university-at-buffalo/university-of-buffalo-takes-second-place-in-national-solar-decathlon-20151018>

October 18, 2015

"UB's GRoW Home Takes 2nd in US Department of Energy Solar Decathlon" in *Energy News Cyprus*: <http://www.energynewscyprus.com/ubs-grow-home-takes-2nd-in-us-department-of-energy-solar-decathlon/>

October 17, 2015

"University at Buffalo takes second place at Solar Decathlon" by Dan Schrack on WIVB: <http://wivb.com/2015/10/17/university-at-buffalo-takes-second-place-at-solar-decathlon/>

October 12, 2015

"UB's Solar Decathlon Project | GRoW Home" in *Buffalo Rising*: <http://www.buffalorising.com/2015/10/ubs-solar-decathlon-project-grow-home/>

October 11, 2015

"WNY Students compete in solar decathlon in California, promotes 'green' living" by Marissa Perlman on WIVBL: <http://wivb.com/2015/10/11/wny-students-compete-in-solar-decathlon-in-california-promotes-green-living/>

October 11, 2015

"UB and Alfred State Compete in Solar Decathlon" by Katie Gibas on TWC News: <http://www.twcnews.com/nys/buffalo/news/2015/10/11/ub-and-alfred-state-compete-in-solar-decathlon.html>

October 11, 2015

"College Students compete in solar decathlon to promote 'green' living" by Marissa Perlman on WDTN Channel 2: <http://wdtn.com/2015/10/11/college-students-compete-in-solar-decathlon-to-promote-green-living/>

October 11, 2015

"UB Students compete in national solar competition" on WGRZ: <http://www.wgrz.com/news/ub-students-compete-in-national-solar-competition/14290168>

September 11, 2015

"UB Architecture Students to Head West for GRoW Home Solar Decathlon" by Kevin Jolly on TWC News: <http://www.twcnews.com/nys/buffalo/news/2015/09/11/ub-grow-home-solar-decathlon.html>

September 11, 2015

"UB team builds home that makes energy" by Dave Greber on WIVB: <http://wivb.com/2015/09/11/ub-team-builds-home-that-makes-energy/>

August 20, 2015

"UB solar-efficient home headed to California for global competition" by David Bertola in *Buffalo Business First*: http://www.bizjournals.com/buffalo/blog/morning_roundup/2015/08/ub-solar-efficienthome-headed-to-california-for.html

July 30, 2015

"Ultra-efficient UB GRoW Home a model for the future" by Chris Caya on WBFO: <http://news.wbfo.org/post/ultra-efficient-ub-grow-home-model-future>

July 22, 2015

"Model home promotes urban farming" in *Buffalo News*: <http://buffalo.com/2015/07/26/buffalo-magazine/model-home-promotes-urban-farming/>

April 15, 2015

"UB'S Grow Home" by Frank Pacella on WKBW: <http://www.wkbw.com/am-buffalo/ubs-grow-home>

April 12, 2015

"University of Buffalo Enters Solar Decathlon" by Terry Ettinger on TWC News: <http://www.twcnews.com/nys/watertown/news/2015/04/12/university-of-buffalo-enters-solar-decathlon.html>

March 24, 2015

"UB Students look to make home solely powered by solar energy" by Dave Greber on WIVB Channel 4: <http://wivb.com/2015/03/24/ub-students-seeking-top-prize-for-solar-home/>

March 24, 2015

"UB students building home powered completely by solar energy" by Katie Gibas on Time Warner Cable News: <http://www.twcnews.com/nys/buffalo/news/2015/03/24/solar-grow-home.html>

March 18, 2015

"UB Solar house selected to be part of federal competition" by Jay Moran and Cheryl Hagen on WBFO: <http://news.wbfo.org/post/ub-solar-house-select-ed-be-part-federal-competition>

March 8, 2015

"Nature Watch: UB students building GRoW Home to compete in Solar Decathlon" in *The Buffalo News*: <http://www.buffalonews.com/opinion/nature-science/nature-watch-ub-students-building-grow-home-to-compete-in-solar-decathlon-20150308>

February 3, 2015

"Help Send the UB Architecture Solar Decathlon House to California" by STEEL in *Buffalo Rising*: <http://www.buffalorising.com/2015/02/help-send-the-ub-architecture-solar-decathlon-house-to-california/>

October 10, 2014

"UB Students design house with Buffalo gardener or urban farmer in mind" by Connie Oswald Stofko in *Buffalo-Niagara Gardening*: <http://buffalo-niagaragardening.com/2014/10/07/ub-students-design-house-with-buffalo-gardener-or-urban-farmer-in-mind/>

February 24, 2014

"UB hopes solar house is a green model" by Dan Miner in *Buffalo Business First*: <http://www.twcnews.com/nys/watertown/news/2015/04/12/university-of-buffalo-enters-solar-decathlon.html>

February 19, 2014

"UB to Design Solar-Powered Home for Competition; Will Find Permanent Home In Buffalo" in *Buffalo Rising*: <http://www.buffalorising.com/2014/02/ub-to-design-solar-powered-house-for-competition-will-find-permanent-home-in-buffalo/>

8.0 REVIEWED WORK

Books

March 9, 2017

"Book Review: Beyond Patronage: Reconsidering Models of Practice" by Christina Gray in *Canadian Architect*. <https://www.canadianarchitect.com/features/book-review-beyond-patronage-reconsidering-models-of-practice/>

April 1, 2016

"Book Briefs # 25: Six Actar Books" by John Hill in *A Daily Dose of Architecture*. <http://archidose.blogspot.com/2016/04/book-briefs-25-six-actar-books.html>

Articles

November 30, 2017

"Justice in city-regional food systems? Start here!" by Susan Parham in *Alexandrine Press Blogged Environment*. <http://www.alexandrinepress.co.uk/review/justice-city-regional-food-systems>

9.0 TEACHING

Courses Taught at University at Buffalo, Department of Architecture

Ecological Practices Graduate Research Group

ARC 585 "Questions of Sustainable Thinking," Intellectual Domain Seminar Fall 2015, Fall 2016, Fall 2017

ARC 607-1 "GRoWing Roots: From Ephemeral Exhibition to Enduring Campus Gateway," Studio, Fall 2017

ARC 606-4 "Building Resilience", Studio, Spring 2016

ARC 607-1 "Solar Decathlon: Construct | Commission | Compete", Studio, Fall 2015

ARC 608-SD "Solar Decathlon: Construct | Commission | Compete," Studio, Summer 2015

ARC 608-2 "Solar Decathlon: CD | Construction," Studio, Spring 2015

ARC 607-1 "Solar Decathlon: DD | CD Studio," Studio, Fall 2014.

ARC 608 "SD³: Solar Decathlon Schematic Design Sustainable Decision-making," Studio, Spring 2014

ARC 606 "Infrastructural Palimpsests," Studio, Spring 2012.

ARC 592 "Tools for the Invisible: Energy Simulation in Design," Technical methods seminar, Fall 2012.

Core Curriculum

ARC 302 "Incorporations," Studio, Spring 2018; "Time Based Architectures_LifeCycles", Spring 2011

ARC 301 "Gated Community," Fall 2012; Fall 2011; "Composite Systems," Fall 2010

ARC 473/573 "Environmental Controls 1: Thermal Environmental Systems," Spring 2011—2018

ARC 404 "NetZERO Buffalo," Spring 2013.

ARC 475/575 "Environmental Controls 2: Lighting and Acoustics," Fall 2011.

Electives

ARC 448/588 "Solar Decathlon Construction Intensive," January 2015

ARC 598 "Solar Decathlon Collaboration and Integration," Fall 2014.

Study abroad

Costa Rica Study Abroad Architectural Studio, 2011, 2012, 2013, 2014, 2017

Costa Rica Study Abroad Sustainable Design Seminar, 2011, 2012, 2013, 2014, 2017

Costa Rica Study Abroad Research Seminar, 2011, 2012, 2013

Costa Rica Study Abroad program coordination: 2012, 2013, 2014, 2016, 2017

Courses taught at Cornell University, Department of Architecture

ARCH 361/661 "Environmental Systems 1: Thermal Environmental Systems," Fall 2006, Fall 2007.

ARCH 362/662 "Environmental Systems 2: Lighting and Acoustics" Spring 2007, Spring 2008.

ARCH 464 "Buildings Out of Control" Spring 2008.

ARCH 464 "Solar Decathlon 2007-2009" Fall 2007.

ARCH 464 "Case Studies in Sustainable Design" Spring 2007.

ARCH 464 "Solar Decathlon Team" Fall 2006.

Thesis Advising

Koudlai, Andrew. "In + Out of Control: An Exercise in the design of Low-Tech / High-Effect Responsive Building Facades," UB, M.S. Thesis Committee Member, 2014—2015.

Heckman, Nate. "Making LEED Buffalo Specific," UB, B.S. Honors Thesis committee chair, Nate Heckman, 2012—2013.

Abad, Ayla. "The Resilient Squatter Settlement in Damascus, Syria," UB, M. Arch Special Project Committee Chair, 2011—2012.

Mastalinski, Kyle. "(Re)Building a Shrinking City Through the Utilization of Urban Voids," UB, M.Arch Pre-Thesis Committee Chair, 2012.

Tonti, Pio. "Study on the exportability of sustainable building models from the US to Italy," Thesis advisor at UB to student from Polytechnic Institute of Bari, Italy, 2012.

Warren, Emily. "Elaborating and Building Upon (re)Solving Waste," UB, B.S. Honors Thesis committee member, 2010—2011.

Strahan, Patrice. "Favela Border | Bridge," Cornell University, B.Arch Thesis committee member, 2006—2007.

Independent Studies

Gamarra, Rebecca. "Ecological Potentials of a Manufacturing District," Spring 2017.

Heckman, Nate. "Frameworks for Residential Energy Design," Spring 2016.

Adesina, Idris; Cameron, Samson; Forrestel, John; and Lim, Hong. "Solar Decathlon Construction, Commissioning, Competition," Fall 2015.

Kes, Taras. "Solar Decathlon Construction," Fall 2015.

Knopp, Cortland. "Solar Decathlon Day in the Life Video," Fall 2015.

Koudlai, Andrew. "Solar Decathlon: Post Competition," Fall 2015.

Shin, Eunjin. "Solar Decathlon Shipping Logistics," Spring 2015.

Mumford, Amanda; Urban, Peter; Vella, Cornato; and Wawrzyniak, Nicole. "Solar Decathlon Collaboration," Fall 2014.

Goo, Hyeongmo; Kang, Taewoo. "Net Zero Housing Competition," Fall 2014.

Heckman, Nate. "Making LEED Buffalo-specific LEED," Spring 2013.

Catlin, Alyssa. Fall 2012.

Samanta, Anwasha. "Comparison of Energy Design Tools for Space Load Calculation," Spring 2012.

Warren, Duane. "Costa Rica Design Competition," Fall 2011.

Filardo, Anthony; Murray, Sara; and Piwowarski, Joseph. "Sustainable Design Analysis," Spring 2011.

Sevene, Joseph. "Building Systems and Due Care," Spring 2011.

Warren, Emily. "Elaborating and Building Upon (re)Solving Waste," Fall 2010—Spring 2011.

Guest Course Lectures

"Designing with Energy Hierarchy," END 302, UB, October 2016.

"Daylight Quality and Quantity," ARC 302 Junior Comprehensive Studio, UB, April 2014.

"Ecotect, Daylight Factor, and Shading," ARC 401 Senior Comprehensive Studio, UB, October 2012.

"Radiance + Ecotect for Daylight Analysis," ARC 475/575 Environmental Controls 2, UB, September 2012.

"Design Sustainability," Moving Toward Sustainability Honors Seminar, UB Honors College, September 2012.

"Introduction to Mechanical Systems," Introduction to Building Technology, UB, October 2012, 2011.

"[Frameworks for] Metrics," Questions of Sustainability seminar, UB, September 2012.

"Ecological Practices in Architectural Research," UB Discovery Seminar, February 2012.

"Ecotect, Daylight Factor, and Shading," ARC 401 Senior Comprehensive Studio, UB, November 2011.

"Waste," Questions of Sustainability seminar, UB, November 2011.

"Metrics," Questions of Sustainability seminar, UB, September 2011.

"Invisible Dimensions in Collaborative Space: Analysis and Communication," Comprehensive design studio, University of Virginia, October 2009.

"Invisible Dimensions" In Comprehensive design studio, University of Virginia, October 2008.

Student Project Advising

Project Advisor to Matt Geiger, Brittany Cohen and Nicole Nguyen for "Greywater Treatment Facilities in Costa Rica". Each awarded \$500 to support this work from UB's Center for Undergraduate Research and Creative Activities. 2012.

Project advisor with Joyce Hwang, and Chris Romano, to "Hive City," a funded design competition and installation. 2012.

Student Work Awards

Architizer A+ Jury prize awarded to "Elevator B" in the category of Student Design / Build Project, 2013.

Azure Magazine International AZ Award awarded to "Elevator B" in the category of Best Student Work, 2013.

Buffalo Architecture Foundation Pro Bono Publico Award in Design Excellence awarded to "Elevator B," 2012.

Second Place in Robert Bruce Thompson Annual Student Light Fixture Design Competition awarded to "ZED", by Brenda Petroff and Hilary Pinington, 2007.

Student Work Published Recognition

January 28, 2014

"Dazzling Digital Designs That Push The Limits of Parametrics" in *Architizer Journal*: <https://architizer.com/blog/inspiration/collections/parametrics/>

July 2013

"Welcome to the Animal House" by Beth Broome in *Architectural Record*: <http://archrecord.construction.com/features/2013/1307-Welcome-to-the-Animal-House.asp>

May 10, 2013

"Five High-Design Urban Beehives" by Jake Swearingen in *Modern Farmer*: <http://modernfarmer.com/2013/05/five-high-design-urban-beehives/>

May 9, 2013

"Student designed "Elevator B" tower to boost Buffalo's bee populations" by Kimberley Mok in *Treehugger*: <https://www.treehugger.com/green-architecture/elevator-b-skyscraper-bees-university-buffalo-students.html>

May 8, 2013

"Gallery: architecture students build 'skyscraper for bees'" by Ian Steadman in *Wired*: <http://www.wired.co.uk/news/archive/2013-05/8/tower-for-bees/viewgallery/303881>

May 8, 2013

"A Skyscraper for Honeybees" by Rapti Gupta in *Realty Today*: <http://www.realtytoday.com/articles/4284/20130508/skyscraper-honey-bees-photos.htm>

May 8, 2013

"The University at Buffalo's Skyscraper for Bees is a Towering Hive" by Brandon Bastaldo in *Trendhunter Art & Design*: <https://www.trendhunter.com/trends/skyscraper-for>

May 7, 2013

"This Bee Skyscraper Could Help Decimated Populations Thrive" by Kelsey Campbell-Dollaghan in *Gizmodo*: <http://gizmodo.com/this-bee-skyscraper-could-help-decimated-populations-th-493702507>

May 6, 2013

"Skyscraper for bees by University at Buffalo students" by Amy Frearson in *Dezeen*: <http://www.dezeen.com/2013/05/06/skyscraper-for-bees-by-university-at-buffalo-students/>

August 15, 2012

"A Gorgeous, Towering Hive to Save Our Dying Bees" by Anita Hamilton in *Fast Company, Co.EXIST*: <http://www.fastcoexist.com/1680215/a-gorgeous-towering-hive-to-save-our-dying-bees#1>

August 15, 2012

"For Buffalo's Grain Elevators, an Experimental Second Act" by Joann Greco in *CityLab*: <http://www.theatlanticcities.com/design/2012/08/buffalos-grain-elevators-experimental-second-act/2949/>

August 15, 2012

"Buzz Surrounding Bee Colony in Silo City" by Heather Ly in *WGRZ*: <http://www.wgrz.com/news/article/177944/13/Buzz-Surrounding-Bee-Colony-in-Silo-City>

August 2, 2012

"Courtney Creenan, Kyle Mastalinski, Daniel Nead, Scott Selin, Lisa Stern / Hive City" in *Arthitectural*: <http://www.arthitectural.com/courtney-creenan-kyle-mastalinski-daniel-nead-scott-selin-lisa-stern-hive-city/>

July 11, 2012

"Building Sweet Buzz in an Urban Wasteland" by Newell Nussbaumer in *Buffalo Rising*: <https://www.buffalorising.com/2012/07/building-sweet-buzz-in-an-urban-wasteland/>

July 10, 2012.

"A Tower for the Bees" by Elizabeth Pagliacolo in *Azure Magazine*: http://azuremagazine.com/newsviews/blog_content.php?id=2115

July 6, 2012, updated May 10, 2013 and August 1, 2016

"Bee Tower, Silo City, Buffalo" by Isabelle Lomholt in *e-architect*: http://www.e-architect.co.uk/buffalo/bee_tower_silo_city.htm

June 29, 2012, updated March 26, 2017

"Building sweet buzz in an urban wasteland" by Lisa Rochon in *The Globe and Mail*:

<http://www.theglobeandmail.com/arts/art-and-architecture/building-sweet-buzz-in-an-urban-wasteland/article4380988/>

June 28, 2012

"A Tower for Bees" by Blaine Brownell in *Architect*: <http://www.architectmagazine.com/architecture/a-tower-for-bees.aspx>

June 22, 2012

"A New Home for a Bee Colony" by Jared Green in *The Dirt*: <http://dirt.asla.org/2012/06/22/animal-architecture/>

June 18, 2012

"'Elevator B' is a Gleaming Skyscraper Home for Bees!" by Lori Zimmer in *Inhabitat*: <http://inhabitat.com/elevator-b-is-a-gleaming-skyscraper-home-for-a-bee-colony-in-buffalo/>

June 9, 2012

"Bees at home in work of art" by Michelle Kearns in *Buffalo News*: <http://www.buffalonews.com/city/communities/buffalo/article894502.ece>

June 1, 2012.

"Creating a buzz on the waterfront" by Michelle Kearns in *Buffalo News*: <http://www.buffalonews.com/city/communities/downtown/article883458.ece>

April 30, 2012

"Hive City Winners Announced" in *Animal Architecture*: <http://www.animalarchitecture.org/hive-city-winners-announced/>

10.0 DESIGN / CONSULTING

Design consulting

Consultant to solar Buffalo Heritage Carousel at Buffalo's Canalside. Since 2016.

Consultant on solar and energy issues for off-grid private home in Buffalo, NY. Jean LaMarche, Architect. 2016.

Client team member on zero-net energy light manufacturing and commercial space facility in Buffalo, NY. Project client is Erie County Industrial Development Agency. Project team includes HGA Architects and Engineers, Integral Group, and C&S Companies. Since 2015.

Energy calculations and consultation for cafe design in Buffalo, NY. Architect: Davidson Rafialidis. 2012.

As Sustainable Design Coordinator, William McDonough + Partners, Charlottesville, VA

Coordinated a detailed feasibility study and collaborated on concept design for a sustainability renovation and recladding of the Richard F. Poff Federal Building, Roanoke, VA. Client: US General Services Administration. Project team: William McDonough + Partners, TranSystems | DPK&A Architects, Greenman-Pederson, Inc., Thornton Tomasetti Group, GAI Consultants Inc, International Consultants Inc. 2009—2010.

Collaborated on a framework for spatial planning of the new island city of Pampus, including eco-effective design, systems integration, and cradle-to-cradle design philosophy. Pampus IJland, Almere, Netherlands. Client: Almere Province. Project team: William McDonough + Partners, MVRDV, West 8. 2009—2010.

Coordinated strategies document for the Mission Bay Hospital, the greenest hospital built to that date in California. San Francisco, California. Client: UCSF. Project team: William McDonough+Partners, Anshen and Allen, Rutherford + Chekene, Arup. 2008—2009.

Coordinated sustainability strategies and materials selection research for the B/S/H offices, the first building on the Park 20|20 office campus. It includes an indoor/outdoor green wall, a building integrated PV roof, and systems which are 39% beyond code compliance. Beukenhorst Zuid, Hoofddorp, Netherlands. Client: Delta Development Group. Project team: William McDonough + Partners, Nelson Byrd Woltz. 2008—2009.

Coordinated materials research and selection for NASA's Ames Research Center "Sustainability Base" at their Moffett Field campus. The design is aggressively sustainable, aiming for "beyond platinum" in performance with regard to energy and occupant health and well-being. Construction materials were rigorously scrutinized to select for healthy products. Moffet Field, CA. Client: NASA. Project team: William McDonough + Partners, AECOM, Loisos + Ubbelohde, MBDC, Todd Ecological. 2008—2009.

11.0 SERVICE

Scholarly / Professional Organizations

Peer reviewer (papers) for *Renewable Energy: An International Journal*, (Elsevier). 2018.

Peer reviewer (papers) for 7th International Building Physics Conference, "Healthy, Intelligent and Resilient Buildings and Urban Environments," Syracuse, NY. 2018.

Scientific Committee member / reviewer (abstracts, papers) for Passive and Low Energy Architecture conference, "Smart and Healthy within the 2 Degree Limit," Hong Kong. 2018.

Peer reviewer (papers) for the Association of Collegiate Schools of Architecture 105th Annual Meeting, "Brooklyn Says 'Move to Detroit,'" Detroit, MI. 2017.

Peer reviewer (design development drawings) for 2017 Solar Decathlon competition teams. 2016.

Peer reviewer (papers) for International Journal of Sustainability in Higher Education. 2016.

Peer reviewer (papers) for the Association of Collegiate Schools of Architecture's 103rd Annual Meeting, "The Expanding Periphery and the Migrating Center," Toronto, ON. 2015.

Peer reviewer (papers) for Building Technology Educators' Society 2015 Conference "Intersections & Adjacencies: Leadership in Architectural Technology Education," Salt Lake City, UT. 2015.

Scientific Committee member / reviewer (abstracts and papers) for Passive and Low Energy Architecture conference "Cities, Buildings, People: Toward Regenerative Environments," Los Angeles, CA. 2015—2016.

Peer reviewer (papers) for Michigan Journal of Sustainability. 2014.

Peer reviewer (abstracts and papers) for American Society of Heating, Refrigeration and Air Conditioning Engineers / International Building Performance Simulation Association USA SimBuild Conference, Atlanta, GA. 2013.

Peer reviewer (abstracts) for National Conference on the Beginning Design Student "Actions: The Making of Place," Temple University, Philadelphia, PA. 2013.

Peer reviewer for first and second round proposals for U.S. Green Building Council's Green Building Research Fund. 2008—2009.

Web master for Society of Building Science Educators. Since 2007.

Member, Society of Building Science Educators. Since 2006.

Member, American Solar Energy Society. Since 2006.

University Committees at UB

Meyerson Award Selection Committee. 2018.

Sustainability Engagement Coordinator search committee. 2017.

Reviewer for Research and Education in Energy, Environment, and Water (RENEW) Seed Grant Proposals. 2014, 2016.

Arthur A. Schomburg Fellowship Selection Committee. 2014.

Affiliated faculty of the RENEW Institute. Since 2014.

Socially Responsible Investment Committee. Since 2013.

Center for Undergraduate Research and Creative Activities Award Review Committee. 2012—2016.

Education / Research / Service Subcommittee of UB's Environmental Stewardship Committee. Since 2011.

Office of the Vice Provost for Undergraduate Education Adjudication Committee, School of Architecture and Planning Faculty Pool member. Since 2011.

School of Architecture and Planning Committees at UB

Associate Dean for Research Search Committee. 2012—2013.

UB School of Architecture and Planning Intersight Journal Editorial Board. 2010—2013.

Department of Architecture Committees at UB

Department Chair Search Committee. 2017—2018.

Integrated Design (Energy Focus) Search Committee. 2013—2014.

Integrated Design Search Committee. 2012—2013.

Pella Design Award Committee. 2012—2015.

Computing & Media Committee. 2010—2012.

Curriculum Committee. 2010—2011.

Department of Architecture Graduate Admissions Committee. Since 2010.

Community Organizations

Member of Economic Development Corporation for Erie County (ECIDA) client representative committee for development of Net-Zero Manufacturing facility. Since 2016.

Advisor to spin-off company developing VO₂-based window technology for architectural applications. 2013—2015.

Groundworks Buffalo Board Member. 2012—2016.