

Michael D. Gibson

Assistant Professor of Architecture, Kansas State University Assoc. AIA, LEED A.P. mdgibson@ksu.edu

[i] EDUCATION

2006 Harvard Graduate School of Design, Cambridge, Massachusetts: Master in Architecture

2002 Miami University, Oxford, Ohio: Bachelor of Art in Architecture, magna cum laude with Department and University Honors

[ii] TEACHING APPOINTMENTS

2011- Assistant Professor of Architecture, Tenure-Track: Kansas State Univ.: Manhattan, KS

2010-11 Assistant Professor of Architecture: Ball State University: Muncie, IN

2007-10 Instructor of Architecture: Ball State University: Muncie, IN

[iii] AWARDS AND FUNDED RESEARCH

- Treanor Award. Received teaching award (\$5000) sponsored by Treanor Architects and "recognizing the tie between practice and academy and who, in the last year, leveraged the relationship with his or her professional organizations and/or practices to advance students' knowledge, opportunities and research."
- 2013 National Council of Architectural Registration Boards Award for the Integration of Practice and Education Awarded grant (\$25000) to study and develop new building envelope technology in collaboration with professional architects and manufacturers using advanced prototyping and computer simulation.
- 2011 Best Paper/Presentation Award, Architectural Research Centers Consortium for "Integrating Geometry and Light: Daylight Solutions through Computational, Performance-Based Algorithms."
- 2011 University Small Research Grant, Kansas State University. Awarded internal grant (\$2500 with \$1000 additional matched college support) to study material and construction strategies for buildings in hot, high-insolation climates using full-scale prototype testing. Cited as "excellent" by reviewers, in the top tier of all proposals received.
- 2010 Department of Architecture, Ball State University: In-Situ Learning Grant. With colleague Janice Shimizu (Department of Architecture) awarded funding (\$4000) through a competitive internal proposal for in-situ teaching/learning in the construction of a prefab cabin prototype for Indiana Department of Natural Resources.
- 2008 RFP Research Initiative Award, American Institute of Architects. Awarded funding (\$7000 with additional \$4800 internal matching funds) in competitive RFP process for the full-scale prototyping for a solar-powered envelope-based cooling system using photovoltaics and thermoelectric technology. Findings published in The American Institute of Architects Report on University Research, Volume 4.
- New Faculty Creative Arts Grant, Ball State University: Project Support. Seed grant (\$2000 with additional \$1000 institutional support) for construction research project involving prototype-based research of existing prefabricated building methods, BIM, and emerging prefab technologies linked to digital fabrication.
- 2008 Institute for Digital Fabrication, Ball State University: Project Support. Awarded seed funding (\$2200 in institutional support) for research projects involving two separate projects: prefab research in panelized building systems and "Microcooling" research and initial prototyping.

[iv] FELLOWSHIPS

2009-10 Institute for Digital Fabrication: Ball State University

2008-9 Center for Energy Research/Education/Service (CERES): Ball State University

2007-8 Institute for Digital Fabrication : Ball State University

[v] PROFESSIONAL BACKGROUND

2009 LEED Accredited Professional Certification, New Construction

2006-7 Project Manager: Paul Lukez Architecture / Transform X: Somerville, MA

2002-3 Intern Architect: ArchPlan, Inc.: Baltimore, MD

[vi] PEER REVIEWED PUBLICATIONS

- 2016 Gibson, Michael. "Heat Transfer and the Building Enclosure: Comparing In-Situ Measurement Methods." <u>Journal of the National Institute of Building Science</u>. August 2016.
- 2016 Gibson, Michael. "Measuring Envelope Heat Transfer: A Critical Comparison of In-Situ Methods." Proceedings of the Façade Tectonics 2016 World Forum, Los Angeles, CA, October 2016. Manuscript accepted, publication pending.
- 2015 Gibson, Michael. "Designed for performance: research methods in a collaborative studio rethinking modern curtain walls." Perkins + Will Research Journal. V07.02, 2015. ISBN: 978-0-9847582-2-7.
- 2015 Gibson, Michael. "Designed for Performance: A Collaborative Research Studio Rethinks the Environmental Integration, Materiality, and Manufacturing of Curtain Wall Systems." The Future of Architectural Research: Proceedings of the 2015 ARCC Conference, Chicago, IL. ISBN: 978-0-9847582-0-3
- Bomberg, Mark, Michael Gibson, and Jian Zhang. "An Integrated Environmental Approach to Building Upgrade and New Construction. "A concept of integrated environmental approach for building upgrades and new construction: Part 1—setting the stage." <u>Journal for Building Physics</u>. January 2015 vol. 38 no. 4 360-385
- 2015 Gibson, Michael. "Cool Skins: Materials and Assemblies for Light-Weight Building Envelopes in Warm Climates" Proceedings of BEST Conference Building Enclosure Science & Technology, Kansas City, MO.
- 2014 Gibson, Michael. "Designed for Performance: Informed Models and Experimental Methods in Architectural Education." Working Out Thinking While Building: Proceedings of the 2014 ACSA Fall Conference, Halifax, NS, October 2014. ISBN 978-0-615-78533-2
- 2013 Gibson, Michael. "Cool Skins: Exploring the Cooling Potential of Light-Weight, Layered Wall Systems." Visibility of Research: Proceedings of the 2013 ARCC Conference, Charlotte NC, March 2013. ISBN: 978-0-61578-533-2
- 2012 Gibson, Michael. "Construction Critical: A Case Study in the Critical Application of Prefabrication Technology." Offsite: Proceedings of the 2012 ACSA Fall Conference, Philadelphia, Oct 2012. ISBN: 978-0-935502-85-5
- 2011 Gibson, Michael. "Integrating Geometry and Light: Daylight Solutions through Computational, Performance-Based Algorithms." Considering Research: Proceedings of the ARCC 2011 Conference, Detroit, April 2011. ISBN: 978-1-257-32189-6.
- 2011 Gibson, Michael. "Construction Critical: Technology and Innovation in a New Era of Practice." <u>Design Principles and Practices: An International Journal, Volume 4.</u> Champaign, IL, USA: Common Ground Publishing, 2011. ISSN: 1833-1874. pp155-173.
- Gibson, Michael. "The Active Thermal Manifold Skin: Feasibility, Prototyping, and Performance Studies of a Wall System Integrating Distributed Solid State, Solar Powered Cooling and Heating Technology." The American Institute of Architects Report on University Research, Volume 4. Washington, DC: The American Institute of Architects, 2011. pp 208-229. ISBN 978-1-57165-029-0.
- Gibson, Michael, Kevin R. Klinger and Joshua Vermillion. "Constructing Information: Towards a Feedback Ecology in Digital Design and Fabrication," Proceedings of the 28th Annual Conference of the Association for Computer Aided Design in Architecture (ACADIA), Minneapolis, MN, Oct. 16-19, 2008. pp 182-191. ISBN: 978-0-9789463-2-6
- 2008 Gibson, Michael. "Construction Critical: Technology and Experiment in Designer-Manufacturer Collaboration." Without a Hitch: Proceedings of the 2008 ACSA Northeast Fall Conference/2008 UMass Wood Structures Symposium, Amherst, MA, Sept. 25-27, 2008. pp 54-64. ISBN 978-0-557-08075-5.

[vii] EXHIBITIONS

- 2015 Gibson, Michael. "Designed for Performance: Cool Skins and Curtain Wall Studio Research Exhibit." BEST Conference Building Enclosure Science & Technology, Kansas City, MO.
- 2010 Gibson, Michael. "Active Thermal Manifold: Experiments in Building-Integrated, Solid State Cooling" Input_Output Conference and Exhibit, Temple University.
- 2006 Winning Entry, Boston Society of Architects Edge of Center Competition (awarded to Paul Lukez Architecture)
- 2005 Competition Entry, Selected for Exhibit, Cradle to Cradle Competition

[viii] ACTIVITIES AND SERVICE		
2017	President, AIA Topeka, a Section of the American Institute of Architects\	
2016	President-Elect, AIA Topeka, a Section of the American Institute of Architects	
2012-	Board Member, AIA Topeka, a Section of the American Institute of Architects	
2012-	Associate Member, American Institute of Architects	
2013-	Editorial Board Member, Enquiry: The Architectural Research Centers Consortium Journal of Architectural Research	
2012-	Faculty Mentor, Kansas State University Developing Scholars Program	
2014	Member, exhibit task force, Kansas Children's Discovery Center	
2012-3	Faculty Councilor representing KSU Dept of Architecture, Association of Collegiate Schools of Architecture	
2010-11	Conference Co-Chair and Proceedings Co-Editor, Architecture in the Fourth Dimension Conference:	
	Methods and Practices for a Sustainable Building Stock, Boston, MA – Nov 15-17, 2011	
2008-11	Editor of the e-Newsletter, Department of Architecture, Ball State University	
2009-11	Curriculum Committee, College of Architecture and Planning, Ball State University	
2009-11	Undergraduate Curriculum Committee, Department of Architecture, Ball State University	
2008-11	Information Technology Committee, College of Architecture and Planning , Ball State University	
2008-11	Information Technology Committee, Department of Architecture, Ball State University	
2007-08	Conference Co-Chair, Education for an Open Architecture Conference, Muncie, IN, October 20-22, 2008.	
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[ix] TEACHING ASSIGNMENTS		
	Iniversity Department of Architecture	
Spring 2016	ARCH404 - Architectural Design Studio 4	
	ARCH716 - Building Skin Science and Design Seminar	
Fall 2015	ARCH413 - Environmental Systems in Architecture I	
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Spring 2016	ARCH404 - Architectural Design Studio 4
, ,	ARCH716 - Building Skin Science and Design Seminar
Fall 2015	ARCH413 - Environmental Systems in Architecture I
Spring 2015	ARCH807 - Architectural Design Studio 8 ARCH808 - Architectural Design Communication ARCH514 - Environmental Systems in Architecture II
Fall 2014	ARCH806 - Architectural Design Studio 7 ARCH805 - Project Programming
Sum 2014	ARC 499/599 - Fallingwater Design-Build Workshop (Miami University)
Spring 2014	ARCH807 - Architectural Design Studio 8 ARCH808 - Architectural Design Communication ARCH514 - Environmental Systems in Architecture II ARCH274 - Digital Architecture I
Fall 2013	ARCH806 - Architectural Design Studio 7 ARCH805 - Project Programming
Spring 2013	ARCH304 - Architectural Design Studio 2 ARCH514 - Environmental Systems in Architecture II
	ARCH274 - Digital Architecture I

ARCH605 - Architectural Design Studio 5 ARCH274 - Digital Architecture I

Fall 2012

Sum 2012 ARC 499/599 - Fallingwater Design-Build Workshop (Miami University)

ARCH765 - KS Discovery Center Design-Build Seminar

Spring 2012 ARCH304 - Architectural Design Studio 2

ARCH514 - Environmental Systems in Architecture II

Fall 2011 ARCH605 - Architectural Design Studio 5

Ball State University Department of Architecture

Spring 2011 ARCH314 - Building Technology (2 sections)

ARCH498 - DNR Prefab Cabin Design/Build Special Project (co-instructed with Janice Shimizu)

Fall 2010: ARCH201 - Second-Year Design Studio

ARCH263 - Digital Design

ARCH490 - Virtual Studio Design (Independent Study)

Sum 2010: CAP162 - First Year Design Communication Media

ARCH163 - First Professional Degree M.Arch Design Communication Media

Spring 2010: ARCH601/602 - M.Arch Thesis Studio

ARCH261 - Design Communication Media III: Presentation Methods and Portfolio Design ARCH498 - Interdisciplinary Design/Build (Independent Study): Green Pavilion for Motivate Our

Minds Community Center Children's Garden

Fall 2009: ARCH601/602 - M.Arch Thesis Studio

ARCH263 - Digital Design (2 sections)

ARCH490 - Virtual Studio Design (Independent Study)

Spring 2008: ARCH202 - Second-Year Design Studio

ARCH261 - Design Communication Media III: Presentation Methods and Portfolio Design ARCH498 - Digital Fabrication Seminar, Design/Build Puppet Theater for Minnetrista Cultural

Center

Fall 2008: ARCH201 - Second-Year Design Studio

ARCH263 - Digital Design

Sum 2008: ARCH612 - First Professional Degree M.Arch Studio 2 of 6

ARCH666 - First Professional Degree M.Arch Design Communication Media II

Spring 2008: ARCH202 - Second-Year Design Studio

ARCH498 - Digital Fabrication Seminar: Environmental Installation, College of Architecture and

Planning (co taught w/ Prof. Kevin Klinger)

Fall 2007: ARCH201 - Second-Year Design Studio

ARCH263 - Digital Design