# Patrick Tripeny Professor of Architecture Director of the Center for Teaching and Learning Excellence Associate Dean of Undergraduate Studies (801) 581-8351 tripeny@arch.utah.edu

## <u>Education</u>

University of Michigan, MS. Arch (terminal academic degree), 1996.

California Polytechnic State University, MS. Arch with Distinction, 1991.

University of Notre Dame, B.Arch, 1985.

## **Teaching and Administration**

Office of Undergraduate Studies, University of Utah.

Director of the Center for Teaching and Learning Excellence, 2011 – Present.

Associate Dean of Undergraduate Studies, 2011 – Present.

College of Architecture and Planning (Graduate School of Architecture), University of Utah.

Professor, 2015 - Present

Director of the School of Architecture, 2007 - 2009

Associate Dean for Architecture 2007

Associate Professor with Tenure, 2003 - 2015

Assistant Professor, 1996-2003.

## <u>Honors</u>

Association of Collegiate Schools of Architecture (ACSA) Service Award, 2006.

Early Career Teaching Award, University of Utah, 2001.

New Faculty Teaching Award, Association of Collegiate Schools of Architecture and the American Institute of Architecture Students, 2000.

Rackham Dissertation Fellowship, University of Michigan, 1991.

James B. and Christine Newman Fellowship, University of Michigan, 1991.

Outstanding Graduate Student Research Award, California Polytechnic State University, 1991.

George Agron Research Fellowship, California Polytechnic State University, 1990.

## **Professional Registration and Experience**

California Licensed Architecture, 1992 to Present.

Skidmore Owings and Merrill, Los Angeles, 1987 to 1989.

American Honda Headquarters, Torrance, CA.

Mission College, Symar, CA.

Home Savings Data Center, Charlotte, NC.

Kendrick Ritter Spross, San Francisco, 1985 to 1987.

First Interstate Bank Main Branch, San Francisco, CA.

Mac World and PC World Magazines Headquarters, San Francisco, CA.

Pixar Corporation Headquarters, Navato, CA.

## **Publications (Selective)**

Ambrose J. and P. Tripeny, **Simplified Engineering for Architects and Builders**, 12th ed., New York: John Wiley and Sons, 2016.

Ambrose J. and P. Tripeny, **Building Structures**, 3rd ed., New York: John Wiley and Sons, 2011.

Ambrose J. and P. Tripeny, **Simplified Engineering for Architects and Builders**, 11th ed., New York: John Wiley and Sons, 2010.

Ambrose J. and P. Tripeny, **Simplified Design of Wood Structures**, 6th ed., New York: John Wiley and Sons, 2009.

Ambrose J. and P. Tripeny, **Simplified Design of Steel Structures**, 8th ed., New York: John Wiley and Sons, 2007.

Ambrose J. and P. Tripeny, **Simplified Design of Concrete Structures**, 7th ed., New York: John Wiley and Sons, 2007.

Ambrose J. and P. Tripeny, **Simplified Engineering for Architects and Builders**, 10th ed., New York: John Wiley and Sons, 2006.

Cheng R. and P. Tripeny (Editors), **Getting Real: Design Ethos Now**, Washington: Association of Collegiate Schools of Architecture, 2006.

Tripeny, P., *Flipping Structures*, **Teaching Techtonic**, Bristol, RI: Building Technolgy Educators' Society, 2011.

Tripeny, P. and R. Smith, *The Development and Implementation of a Rapid Visual Screening Method for Non-structural Damage due to Seismic Forces*, **Seeking the City: Visionaries on the Margins**, Washington: Association of Collegiate Schools of Architecture, 2008.

Smith, R. and P. Tripeny, *Planning a Disaster Resistant University Study*, **Seeking the City: Visionaries on the Margins**, Washington: Association of Collegiate Schools of Architecture, 2008.

Tripeny, P. *Cable Net Structures in Mid-Twentieth Century Architecture*, **Metropolis & Beyond**, Reston: American Society of Civil Engineers, 2005.

Johnson, S., P. von Buelow and P. Tripeny, *Linking Structural Analysis and Architectural Data: Why it's Harder Than We Thought*, Fabrication: Examining the Digital Practice of Architecture, Waterloo: University of Waterloo, 2004.

Bradshaw, R., D. Campbell, M. Gargari, A. Mirmiran and P. Tripeny, *Special Structures: Past, Present and Future,* **Journal of Structural Engineering**, New York: American Association of Civil Engineers, July 2002.

Tripeny, P. and R. Shaeffer, *Survey of Special Structures Education in North American Schools of Architecture*, **Theory, Design and Realizations of Shell and Spatial Structures**, Madrid: CEDEX, 2001.

Shaeffer, R. and P. Tripeny. *Special Structures Taught in Schools of Architecture*, in **Connector: A Forum for Teachers of Technology in Schools of Architecture**, Volume X, Number 2, Eugene: University of Oregon, Fall 2001.

Tripeny, P. and R. Shaeffer. *Survey of Special Structures Education in North American Schools of Architecture*, in **Theory, Design and Realizations of Shell and Spatial Structures**, Madrid: CEDEX, 2001.

Tripeny, P. Space Frame Configurations Generated by a Computer Driven Program Utilizing a Grammar Algorithm, in Theory, Design and Realizations of Shell and Spatial Structures, Madrid: CEDEX, 2001.

Tripeny, P. Computerized Form Generation for Space Frame Structures through the use of a Grammar Methodology, in Shells and Spatial Structures: from Recent Past to the Next Millennium, Volume 1, Madrid: CEDEX, 1999.

Shaw, G., I. Barandiaran, and P. Tripeny. *Form Finding of Tensile Membrane Structures and the 2002 Olympic Speed Skating Oval*, in **Shells and Spatial Structures: from Recent Past to the Next Millennium**, Volume 1, Madrid: CEDEX, 1999.

Tripeny, P. *The Development of a Computerized Form Generator for Space Frame Structures*, in the **Proceedings of the Association of Collegiate Schools of Architecture's Technology Conference** - Montreal, Washington: Association of Collegiate Schools of Architecture, 1999.

Tripeny, P. *The Integration of Design into the Structures Curriculum*, in **Connector: A Forum for Teachers of Technology in Schools of Architecture**, Volume VIII, Number 2, South Natick: Edward Allen, Fall 1999.

Tripeny, P. *The Integration of Design into the Structures Curriculum*, in **Architecture and Engineering: The Teaching of Architecture for multidisciplinary Practice**, Thessaloniki: European Association for Architectural Education, 1999.

Tripeny, P. The Use of a Grammar Methodology in the Development of a Computerized Form Generator for Space Frame Structures, in La Citta Nuova: Proceedings of the 1999 ACSA International Conference - Rome. Washington: Association of Collegiate Schools of Architecture, 1999.

Tripeny, P. and G. Shaw. *Configuring Tension-Based Space Frame Systems to be utilized in a Tension Glass Wall System*, in **Structural Engineering World Wide 1998: The proceedings of the Structural Engineers World Congress**. Oxford: Elsevier, 1998.

Tripeny, P. *The Tensile Polyhedral Structural System*, in **Built to Last: Proceedings of Structures Congress XV**. New York; American Society of Civil Engineers, 1997.

Cuoco, D. Guidelines for the Design of Double-Layer Grids. New York: American Society of Civil Engineers, 1997.

Tripeny, P. The Architectural Development of the Tensile Tetrahedron Structure, Masters Thesis, San Luis Obispo: California Polytechnic State University, 1991.

## Funded Research (from Non-University Sources)

*Greenplex – A Sustainable Urban Form for the 21<sup>st</sup> Century*, with R. Balling of Brigham Young University, P3 Awards: A National Student Design Competition for Sustainability Focusing on People, Prosperity and the Planet, US Department of the Environmental Protection Agency, 2013-2014.

*Teaching Flipped*, with C. Furse (Electrical Engineering), D. Ziegenfuss (Marriot Library) and S. Bamberg (School of Computing, Bioengineering, and Mechanical Engineering), NSF, 2013-2016.

Mars for Earthlings, with M. Chan (Geology and Geophysics), NASA, 2010-2011.

*Pre-Disaster Mitigation at the University of Utah*, with R. Smith (Architecture), L Reaveley and S. Bartlett (Civil Engineering) and M. Shaub (Environmental Health), FEMA: Department of Homeland Security, 2006-2008.

AISC Case Study, with R. Smith, American Institute for Steel Construction, 2006-2008.

*Integrated Structures Instruction Package*, with S. Vassigh of the University of Buffalo, FIPSE Grant, US Department of Education, 2001-2008.

#### Teaching (since 2005)

ARCH 3310, 4310 and 6310, Architectural Structures I, Once a year.

ARCH 4011, Architectural Design 4, Spring 2011.

ARCH 4311 and 6311, Architectural Structures II, Once a year.

ARCH 4351 and 6351, Environmental Controls II, Spring 2007.

ARCH 6005, Graduate Session Studios

Cottonwood Country Club, Fall 2009.

Accessible Residential, Fall 2008.

MCA Design Competition, Fall 2006, Students placed first and second in national competition.

ARCH 6301, Advanced Structures based on Material.

Steel, Fall 2005, Summer 2012, 2013, 2014

ARCH 6302, Advanced Structures based on Typology.

Residential, Fall 2009 and Fall 2005.

Highrise, Summer 2011, Summer 2013 and 2014, Summer and Fall 2010, Fall 2008 and Fall 2006.

Longspan, Summer 2012, Fall 2010, Spring 2008 and Spring 2006.

ARCH 6965, Lamella Structures with R. Smith, Fall 2007.

CTLE 6000, Teaching in Higher Education, Fall 2011.

#### <u>Service</u>

### National

ACSA Education Committee. Member. Association of Collegiate Schools of Architecture, Washington DC, 2016 - Present.

National Architecture Accrediting Board (NAAB), Member of Accreditation Teams for Association of Collegiate Schools of Architecture (ACSA), 2011-Present.

Conference Co-Chair of the Association of Collegiate Schools of Architecture's National Meeting, Salt Lake City, 2006.

Organizing Committee for the Building Technology Educator's Society Meeting, Salt Lake City, 2015.

Session Chair and Moderator for *Building Skins: Theory and Practice*, Association of Collegiate Schools of Architecture's National Meeting, Houston, 2008.

Faculty Councilor representing the School of Architecture, Association of Collegiate Schools of Architecture, 2005-2007 and 2011 - Present.

Partners in Education, American Institute of Steel Construction, 2008 to Present.

Special Structures Committee, American Society of Civil Engineers, Member 1994-2003 and 2005-2008, Secretary 1996-1999, Chair 1999-2002.

Committee on Metals, American Society of Civil Engineers, Member 1999-2002

#### University of Utah

Director Search Committee for the Teaching and Learning Technology Center, University of Utah, Member, 2014 – 2015.

Online Program Proposal Executive Committee, University of Utah, Member, 2014 – Present.

Comprehension and Retention Task Force, University of Utah, Member, 2013 – Present.

Academy of Medical Educators, University of Utah, Executive Committee Member, 2012 – Present.

Beacons of Excellence Organizing Committee, University of Utah, Cochair, 2011 – Present.

Undergraduate Council, University of Utah, Member, 2011 - Present.

University Promotions and Tenure Committee, University of Utah, 2010 to Present.

Bookstore Advisory and Review Committee, University of Utah, Member 2009-2013.

Athletics Advisory Committee, University of Utah, Member 2007-2012, Chair, 2010-2012, Vice Chair 2008-2010, Chair Finance Sub-committee 2007-2010.

University Teaching Committee, University of Utah, Member 2002-2007.

Library Policy Advisory Committee, University of Utah, Member 1998-2002, Chair 2001-2002.

Quantitative Intensive Designation Review Committee, University of Utah, 2004-2008.

University Senate, University of Utah, 1997-2000.

Served on and chaired various school and college committees including curriculum, faculty search, dean search, and admissions.