In 2018, AISC administered over $200,000 in financial aid to 58 deserving undergraduate and masters-level students for the 2018-19 academic year.

The AISC David B. Ratterman Fast Start Scholarship program, which began in 2012, awarded a total of $46,000 in scholarships to 15 students this year. The program awards children of AISC full member company employees who will be freshmen and sophomores during the upcoming academic year. The students may attend two- or four-year programs and may choose any area of study.

In addition, the AISC Education Foundation, in partnership with several other structural steel industry associations, awarded $156,000 to 43 students. AISC recognizes that without our industry partners, many of these scholarships would not be possible, and we offer our sincerest thanks for their generous, continued support.

Congratulations to the following students for earning their well-deserved scholarships for the 2018-19 academic year:

**David B. Ratterman Fast Start Scholarships:**

- $2,000 Award Recipients
  - Ashley Allen, Jones County Junior College
  - Kasside Cain, Kirkwood Community College
  - Kayelen Joiner, Holmes Community College
  - Kolby Lawrence, Kennebec Valley Community College
  - Jonathan Martin, Kansas State Polytechnic
  - Kyle Rhinerson, Ohio Technical College
  - Joseph Richter, Bismarck State College
  - YeChan Bang, Clemson University
  - Max Fricks, Drury University
  - Garrett James, Middle Tennessee State University
  - Paul Kelly, Rochester Institute of Technology
  - Renae Loera, University of La Verne
  - Kaylee Pagel, Towson University
  - Ashton Robertson, University of Southern Indiana
  - Natalia Valentin, Universidad de Puerto Rico-Rio Piedras

- $4,000 Award Recipients
  - Madeline Augustine, Northeastern University
  - Karly Bast, Massachusetts Institute of Technology
  - Nathaniel Bergner, University of Texas at Austin
  - Christopher Bird, University of Louisville
  - Lara Creter, Manhattan College
  - Anthony Feeney, Lehigh University
  - Sarah Freiheit, Cornell University
  - Hannah Hillegas, Kansas State University
  - Justin Holt, University of Kentucky
  - Lauren Hudak, Colorado State University
  - Joseph Jesse, University of Washington
  - Ramzi Labbane, University of Minnesota Twin Cities
  - Kai Ling Liang, Stanford University
  - Matthew Moorhead, University of Houston
  - Brian Seemann, Kansas State University
  - Chase Suehiro, University of California, Berkeley
news

• Marc Toro,
  University of California, Berkeley
• Christopher Waite,
  Oklahoma State University
• Gabrielle Willis,
  The University of Alabama

AISC/Associated Steel Erectors of Chicago
• Yazan Alshawabkeh,
  University of Illinois at Chicago
• Linnea Carr, Western Illinois University Quad Cities
• Matthew Carsello, University of Illinois at Urbana-Champaign
• Samun Khalilian, University of Illinois at Urbana-Champaign
• Herbert Nuwagaba, University of Illinois at Chicago
• Nicholas Sabatini, University of Illinois at Urbana-Champaign
• Michael Walz, Purdue University

AISC/Great Lakes Fabricators and Erectors Association
• Chris Kuenzer,
  University of Michigan

AISC/Rocky Mountain Steel Construction Association
• Nathan Deanda,
  University of Colorado Boulder
• Lauren Hudak,
  Colorado State University

AISC/Southern Association of Steel Fabricators
• Christopher Bird,
  University of Louisville
• Seth Caudle, University of Tennessee at Chattanooga

AISC/Indiana Fabricators Association
• Nigel Hensley, Rose-Hulman Institute of Technology
• Bowen Plogmann, University of Notre Dame
• Alexandra Bridwell,
  Purdue University Fort Wayne
• Alex Baker, Valparaiso University

AISC/W&W Steel/Oklahoma State University (program includes sophomores, juniors and seniors)

Seniors
• Jose Reyna,
  Construction Management
• Kennedy Stephens,
  Architectural Engineering
• Lauren Breedlove,
  Civil Engineering

Juniors
• Evan George, Civil Engineering
• Jesse Mathews,
  Construction Management
• Gage Strom,
  Architectural Engineering

Sophomores
• Jacqueline Fuller, Civil Engineering
• Nathaniel Northcutt,
  Construction Management
• Payton Hill,
  Architectural Engineering

AISC/UIUC Architecture Scholarship
• Conor Schafer, University of Illinois at Urbana-Champaign

The David B. Ratterman Scholarship Jury consisted of the following individuals:
• Jack Klimp, Vice Chair,
  AISC Board of Directors
• Lawrence Cox,
  AISC Board Member
• Babette Freund,
  AISC Board Member
• Patrick Leonard,
  AISC Board Member
• Hugh McCaffery,
  AISC Board Member
• David B. Ratterman,
  AISC General Counsel

The AISC Scholarship jury consisted of the following individuals:
• Benjamin Baer,
  Baer Associates Engineers, Ltd.
• David Bibbs, Cannon Design
• Christopher Brown,
  Skidmore, Owings & Merrill, LLP
• Luke Johnson, AISC
• Colleen Malone,
  formerly of H.W. Lochner, Inc
• Steven Offringa, EXP

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The world premiere of the documentary film *Leaning Out*, the story of acclaimed structural engineer Leslie E. Robertson, took place during the 2018 Architecture and Design Film Festival in New York in October. AISC was a co-producer of the film and was represented at the event. An exclusive pre-screening of the film was also held as part of AISC’s 2018 SteelDay.

Told by the guru of high-rise structural design himself and those closest to him, with voices of visionary architects and engineering experts, the film recounts Robertson’s storied career pioneering tall landmark structures, including New York’s World Trade Center, and highlights his unique perspective on innovative uses of steel and wind engineering.

The film was directed and produced by Basia and Leonard Mysznski and written by Basia Mysznski. Other contributors include: ArcelorMittal (an AISC member); the International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers (IW); the Ironworker Management Progressive Action Cooperative Trust (IMPACT); the Council of Tall Buildings and Urban Habitat; Nucor Yamato Steel (an AISC member); Zekelman Industries, the parent company of Atlas Tube (an AISC member); and the Steel Institute of New York. Louis F. Geschwindner, former AISC vice president of engineering and research, is interviewed in the film.

To learn more and watch the movie trailer, see the film’s Facebook page at [www.facebook.com/leaningout](http://www.facebook.com/leaningout).

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**EDUCATION**

**Annual AISC Scholarship Winners Announced (continued)**

AISC also wishes to congratulate the winners of the Puma Steel 2017 SteelDay Welding Contest. Area high school juniors and seniors took part in the competition, and winners were awarded scholarships to attend Laramie County Community College (LCCC) during the 2018-19 academic year as part of the David B. Ratterman Fast Start Scholarship. The winners are as follows:

- Esteban Archuleta, Rawlins High School (1st place)
- Coby May, Rawlins High School
- Chance Rankin, Rawlins High School
- Keedin Denny, Cheyenne Central High School
- Dominik Swank, Cheyenne South High School
- Edgar Vega, Cheyenne South High School
- Dakota Blew, Cheyenne South High School
- Agustin Loya, Cheyenne South High School
- Conner Wilson, Cheyenne East High School
- Chayce Willet, Cheyenne East High School

Puma held the competition again this year on SteelDay, September 28, and top finishers were awarded approximately $13,000 in scholarships to LCCC. This year’s participants are shown below.

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**EDUCATION**

**2019 Steel Design Student Competition Program Now Accepting Entries**

AISC and the Association of Collegiate Schools of Architecture (ACSA) are pleased to announce the 19th annual Steel Design Student Competition for the 2018-19 academic year. The competition encourages architecture students from across North America to explore the many functional and aesthetic uses for steel in design and construction. A total of $14,000 in cash prizes will be awarded to the winning students and their faculty sponsors.

The competition offers students the opportunity to compete in two separate categories. The intermodal transportation center category challenges students to design a facility that proposes a cohesive transit system including components such as international, regional and local train stations, bus terminals, ports, airports and spaceports in a major urban location. In the open category, students are given the flexibility to select a site and building program.

The competition is open to upper-level students (third year or above, including graduate students). All student entrants are required to work under the direction of a faculty sponsor. Registration is free and open to eligible entrants until April 3, 2019. For more information and to view this year’s winners, visit [www.aisc.org/education](http://www.aisc.org/education). The winners were also featured in our November issue, available at [www.modernsteel.com](http://www.modernsteel.com).
The second edition of AISC Design Guide 21: Welded Connections—A Primer for Engineers (DG 21) is now available. This new edition of the guide, authored by structural welding guru Duane K. Miller, PE, ScD, The Lincoln Electric Co., provides an updated overview of all kinds of topics related to structural welding, including selection of weld types, weld design, metallurgy, weld repair, weld procedure specifications, quality, inspection, economy and safety.

“When the AISC Steel Solutions Center needs information about welding, we always turn to AISC Design Guide 21 first,” said Larry Muir, PE, AISC’s director of technical assistance, and co-author of AISC Design Guide 29: Vertical Bracing Connections—Analysis and Design. “We know the answers are there, and we’re excited that the guide has been updated and expanded. Anyone who saw Duane Miller’s incredible presentation, ‘Important Lessons I’ve Learned During the Past 40 Years,’ at the 2018 NASCC: The Steel Conference (www.aisc.org/miller2018) will be especially interested to read through the ‘Fourteen Principles of Connection Design’ (Section 4.1.2) in the guide, where many of the lessons from his presentation are further illustrated and explained. I encourage engineers to return to this section often until the principles become second nature to them.”

AWARDS
Ronald D. Ziemian Wins 2019 Higgins Award

The 2019 winner of the $15,000 AISC T.R. Higgins Award is Ronald D. Ziemian, a professor at Bucknell University, Lewisburg, Pa. Ziemian is recognized worldwide for his expertise in structural stability and his uncanny ability to take an incredibly complex topic and make it understandable to everyone from undergraduates to experienced structural engineers. Get an inside look at his life and career in the May 2016 Steel Profiles podcast episode at www.aisc.org/podcasts, in which he discusses the most important concept for engineers to understand about stability.

The Higgins Award, presented annually by AISC, recognizes an individual for their outstanding lectures and papers that have advanced the state-of-art of steel in construction. Ziemian will present his lecture “Structural Stability—Letting the Fundamentals Guide Your Judgement” at the upcoming NASCC: The Steel Conference on April 5 in St. Louis (registration for the conference opens January 2; visit www.aisc.org/nascc for more information). You can view his past conference sessions, including “More Opportunities with the Direct Analysis Method” and “Modules for Learning Structural Stability,” in our Education Archives at www.aisc.org/educationarchives.

“Ron was primarily nominated for his stability paper, ‘Formulation and Validation of Minimum Brace Stiffness for Systems of Compression Members,’ which was published in the Journal of Constructional Steel Research, as well as his stability work, which was particularly notable in the discussions of the jury,” said Larry Kruth, PE, AISC’s vice president of engineering and research. “Ron’s work has done much to advance the understanding of stability in the structural engineering profession, and it is our pleasure to present him with this year’s award.”

In addition to authoring papers on the design and analysis of steel and aluminum structures, Ziemian is co-author of the textbook Matrix Structural Analysis, the developer of the educational analysis software MASTAN2 and the editor for the 6th edition of the Guide to Stability Design Criteria for Metal Structures. He is also the co-editor-in-chief of Elsevier’s Journal of Constructional Steel Research. He is a member of AISC’s Committee on Specifications, currently chairs AISC’s TC3 - Loads, Analysis and Stability and previously chaired AISC’s Task Group on Inelastic Analysis and Design. He also serves on the AISI and Aluminum Association Specification Committees, is active with the Steel Joist Institute and is a former chair of the Structural Stability Research Council. Ziemian was awarded an AISC Special Achievement Award in 2006, the ASCE Shortridge Hardesty Award in 2013 and the ASCE Norman Medal in 1994 for his contributions to the profession related to the stability analysis and design of metal structures. He received his BSCE, MENG and PhD degrees from Cornell University.

For more about the T.R. Higgins Award and its past winners, please visit www.aisc.org/higgins.

correction

In the sidebar at the end of the October article “Design with a Twist,” Trilogy Machinry, Inc., was inadvertently left off the list of AISC Bender-Roller Committee members.