J. Riley Edwards [AGE 33]

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— by Julie Sneider, senior associate editor

As scientific researcher and senior lecturer at the University of Illinois at Urbana-Champaign's RailTEC, J. Riley Edwards believes his most important contribution to mentor the next generation of railroaders. But UIUC colleagues and rail industry representatives who know his work say Edwards also is making a difference through industry research, which has helped advance fundamental understanding of track design.
RailTEC Executive Director Christopher Barkan first observed Edwards' knack for teaching and research while Edwards was a graduate student in railway engineering at UIUC in the mid-2000s. Barkan assigned Edwards to give a lecture on railway engineering, and noted that his understanding of the subject matter and skills as a communicator made him an effective lecturer. The students responded well to him, Barkan wrote in his nomination of Edwards as a Rising Star.

The professor hoped that his former graduate student would return to teaching. But after completing a master's degree at UIUC, Edwards moved on to a job in rail construction management at Hanson Professional Services, where he worked full time on an intermodal project for BNSF Railway. Two years later, when UIUC advertised for a new railway lecturer position, Barkan was surprised and pleased to see that Edwards applied and was hired for the job.

He immediately began making a difference, teaching students and helping Barkan lead the UIUC rail research program, Barkan says. After Edwards began working with faculty members to apply their expertise to solve rail problems, the Association of American Railroads, the Federal Railroad Administration and rail suppliers started sponsoring research projects that Edwards helped develop. He also established his own research focused on concrete ties and rail-fastening systems, an important concern for railroads.

Although proud of his work in research, Edwards says he most appreciates the impact he has on filling the industry's need for future workers and leadership.

"I effectively get paid to mentor students and see them mature in their knowledge of rail engineering — and in life in general. That's exciting."

A few other notes about Edwards:
• Why rail? "I grew up in Tennessee, and there was a rail line that ran behind the family hardware store. I was always interested in trains and, as I got older, I started asking more questions about the rail industry."

• His five-year goal? "I want to continue doing what I'm doing: teach and manage the research that serves the railroad industry."

• Something about him that outsiders don't know? "I like traveling and camping. I'm also extremely passionate about my spiritual life. Being a Christian and being involved in church are important to me."

Rising Stars 2015 Award Winners: