Lauren Jellison (M.S. 2014) has had a clear vision of her career path since she first toured a steel mill as an undergrad at Virginia Tech. “I was a Chemistry major, but I knew I didn’t want to work in a research lab. Visiting a steel mill changed my perspective on the industry,” she says. “There was something about the large scale of the manufacturing processes, and the associated reactions, that just fascinated me.”

Three internships with Nucor Steel only solidified Jellison’s vision. She determined that she wanted to focus on the “hot” side of the business, working in molten metal processing.

When she decided to pursue her master’s degree, Carnegie Mellon MSE was an easy choice. The Center for Iron and Steelmaking Research (CISR), a National Science Foundation initiated research center within MSE, factored heavily in her decision.

“The CISR is a prominent research program for the steel industry in North America, and it’s an incredible resource for anyone interested in a career in metals,” explains Jellison. “The opportunity to focus so sharply on steelmaking, and to work with world-renowned faculty like Professor Chris Pistorius, offered the best possible training.”

After completing her master’s research project, entitled “Effect of Increased Carbon Levels in Direct Reduced Iron on Electric Steelmaking,” Jellison was recruited by Nucor in April 2014 to work as a process engineer. Today, Jellison works on projects involving process improvements and yield optimization at Nucor’s direct reduced iron (DRI) facility in St. James Parish, Louisiana.

“I love my work because Nucor’s team environment focuses on continual improvement. As a teammate, I’m solving real problems, in a hands-on manner, every day — and the problems are always different,” Jellison notes. “I’m applying the practical principles I learned in classes like ‘Kinetics of Steelmaking’ to make a true impact. That’s really gratifying.”

Dr. Kevin J. Handerhan (B.S. 1980, M.S. 1986, Ph.D. 1988) will bring positive recognition to MSE when he receives Carnegie Mellon’s Alumni Achievement Award at the university’s commencement ceremony next May. This prestigious award was created to recognize both accomplishment and leadership in the field which brings honor to Carnegie Mellon University.

Dr. Handerhan manages his own consulting company, 525 Flynn Consulting, which helps manufacturers improve their financial performance, with an emphasis on companies involved in specialty metals processing. Prior to becoming an entrepreneur, Dr. Handerhan spent 33 years with Ellwood Group, a specialty metals producer headquartered in Ellwood City, Pennsylvania. He was hired as a superintendent of quality assurance and retired as chief operating officer.

A native of Carnegie, near Pittsburgh, Dr. Handerhan was always a hard worker and high achiever. Though he was the youngest of 11 children in a working-class family, he was able to earn three degrees at MSE — two while working full-time at Ellwood Group.

Dr. Handerhan looks back fondly on his many years in the department. “I enjoyed the academic challenges of materials science and metallurgy, as well as the friendships I formed with both fellow students and faculty.”

Dr. Handerhan’s personal life was also impacted by his years at Carnegie Mellon. He met his wife Katheen Knestrick (B.S. 1979, Civil Engineering) in an undergraduate computer science class. Today, the couple lives in Cranberry Township, Pennsylvania, and they are the proud parents of three sons: Ryan (M.S. 2008, Information Systems Management), Jason, and Tyler.