Engineering education research is emerging as an identifiable discipline, with engineering education departments, programs, and centers of excellence and a growing community of engineering education researchers around the globe. It is bringing together decades, and even centuries, of experience in teaching engineering with more recent learning from education and social-behavioral sciences research to delve into critical questions such as:

- Who studies engineering and why?
- What are engineering ways of thinking, knowing, and doing?
- How do students of all ages learn engineering?
- How do we assess engineering education practice and learning?
- How do engineering education systems evolve?
- How do we connect engineering education research with engineering education practice?

This talk will take stock of the current state of engineering education practice and explore the engineering education research agenda. The talk will also look at the university and the professional infrastructure that go into the creation, growth, and recognition of a new field, and will summarize the opportunities and challenges for engineering education from a survey of engineering faculty committees, department chairs, and deans in the United States.

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Jamieson served as 2007 IEEE President and CEO, was a member of the steering committee for the NAE report “Changing the Conversation: Developing Effective Messages for Improving Public Understanding of Engineering,” and co-chair of the 2012 ASEE report Innovation with Impact: Creating a Culture for Scholarly and Systematic Innovation in Engineering Education. She received her S.B. from MIT and her Ph.D. from Princeton.