

School of Biological Sciences Seminar Program presents:
**The Science of Teaching:
Evidence-Based approaches in Biology Education**

Achieving Institutional Change in Teaching Practices



Dr. Carl Wieman

Nobel Prize Laureate, Physics (2001)

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Friday, November 3, 2023

3201 Tata Hall, Kavli Auditorium

10:00 AM – 11:00 AM

Zoom Meeting ID: 931 7535 7612

Abstract: There are hundreds of individual experiments showing the benefits of research-based instructional practices over traditional teaching. However, the question remains of how to bring about widespread institutional change that would have all instructors using these better teaching methods. The Science Education Initiative was a large-scale experiment in institutional change which resulted in changing the teaching of about 250 faculty and courses at large research-intensive universities. This was achieved with negligible change in the ongoing instructional costs. I will discuss the design principles of the SEI and what general lessons about achieving institutional change can be learned from this experiment and its offshoots.

Speaker's bio: Carl Wieman directed the science education initiatives at the Universities of Colorado and British Columbia. He also served as Associate Director for Science in the Office of Science and Technology Policy in the White House in 2010-12. Wieman received the Nobel Prize in physics in 2001 for the first creation of a Bose-Einstein condensate. His education work has been recognized with a number of awards including the Oersted Medal for physics education, and a lifetime achievement award from the National Science Teachers Association.

Hosted by: Melinda Owens (mtowens@ucsd.edu)