Title: Engineering Human Tissues Like a Physicist

Abstract:

Of the 40 trillion cells in the human body, almost every single one can be programmed from a stem cell. Yet, persuading stem cells to produce functionally mature tissues for therapeutic use has been challenging. Cellino has built the first platform that enables precise control over tissue engineering. The Cellino technology combines optics, stem cell biology, and machine learning to manufacture human-like tissues with high functionality and structure for the tissue replacement industry. I will be sharing insights on my company, and highlights of my journey as a physicist turned entrepreneur.

Bio:

Nabiha Saklayen is a bio-inspired physicist and entrepreneur focused on commercializing technologies to redefine how we engineer human cells. She made significant scientific contributions to the field of pulsed-laser delivery to cells, with several peer-reviewed papers published, patents pending, and grants awarded. Nabiha launched Cellino with the vision of converging physics, biology, and computation to enable paradigm shifts in regenerative medicine with a world-class team. Cellino is building the next generation of cell-based tissues and therapies with a proprietary platform technology.

Nabiha was recognized as a Pioneer in MIT Tech Review's 35 Innovators under 35 list for her inventions in laser-based delivery methods and is on the 2019 Forbes under 30 List for Healthcare. She received her BS summa cum laude in Physics from Emory University as a Robert Woodruff Scholar, and her PhD in Physics from Harvard University as an HHMI International Fellow. Nabiha grew up in Saudi Arabia, Bangladesh, Germany, and Sri Lanka.