

## PROFESSOR NAM-HWA KANG

Korea National University of Education (KNUE), South Korea



Nam-Hwa Kang is a Professor of Physics Education at Korea National University of Education (KNUE), South Korea. Before she joined KNUE in 2012, she was an Associate Professor at Oregon State University and an Assistant Professor at University of Nevada, Las Vegas, United States. She was the Chair of the 2015 revision of the physics national curriculum in South Korea. Nam-Hwa is affiliated with the Korean Physical Society (KPS), the Korean Association for Science Education (KASE), and the National Association for Research in Science Teaching (NARST) – a global organisation for improving science education through research. She was an Executive Chair of the Physics Education Committee of the KPS and a board member of NARST.

Nam-Hwa received her BS and MS degrees from Seoul National University, South Korea, in Physics Education and her Ph.D. degree in Science Education from University of Georgia, United States. Her research centres on bringing science/physics inquiry practices to school classrooms through science/physics teacher education. Her recent publications include, “Emerging online science teaching practices: Insights from high school physics teaching cases in South Korea during COVID-19 pandemic.”

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## DR. DEREK MULLER

Veritasium



Derek Muller is the creator of Veritasium, a YouTube channel about science that has over 11.5 million subscribers and 1.5 billion views, and a winner of the Streamy award for Science and Education in 2017 and 2021. He has hosted award-winning documentaries: Uranium: Twisting the Dragon's Tail, Digits, and Vitamania for international broadcast networks (SBS, ABC, PBS, ARTE). He was also a correspondent on Netflix's Bill Nye Saves the World and a presenter on ABC's Catalyst.

Derek has appeared live on stage with Neil deGrasse Tyson, Michio Kaku, Space station commander Chris Hadfield, and co-hosted the 2017 March for Science on the Washington Mall. He kickstarted a magnetic molecule making kit called Snatoms, which exceeded its funding goal in the first hour, sold 10,000 units, and is now available globally.

Derek completed a degree in Engineering Physics from Queen's University, Canada, and a Ph.D. in Physics Education Research at the University of Sydney, Australia. The topic of his thesis was 'Designing Effective Multimedia for Physics Education'. He will be live-streaming directly from Sydney to talk about the future of engaging and educating a wide and diverse audience.

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## PROFESSOR CHANDRALEKHA SINGH

**Department of Physics and Astronomy, Discipline-based Science Education Research Center, University of Pittsburgh, United States**



Chandralekha Singh is a Distinguished Professor in the Department of Physics and Astronomy and the Founding Director of the Discipline-based Science Education Research Center (dB-SERC) at the University of Pittsburgh, United States. She recently served as the President of the American Association of Physics Teachers. She is a Fellow of the American Physical Society, American Association for the Advancement of Science, and American Association of Physics Teachers.

Chandralekha has been conducting cutting-edge research to improve the learning of physics at all levels. She has pioneered efforts to improve the learning of advanced physics and has conducted seminal research on improving student understanding of quantum mechanics. She has also been a leading researcher focusing on research on assessment of learning in the context of physics and on improving student learning in physics courses at all levels. Chandralekha has played a key role in research on the role of intuition and expertise in physics problem solving, which can be translated to improving students' problem solving, reasoning, and meta-cognitive skills.

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