

# DR. CARLA PUGH

Phonetic Spelling: [Car-luh] [Pew]



Carla Pugh, MD, PhD is the Thomas Krummel [Professor of Surgery](#) at Stanford University School of Medicine and Director of the [Technology Enabled Clinical Improvement \(T.E.C.I.\) Center](#). Her clinical area of expertise is Acute Care Surgery and her research involves the use of simulation, advanced engineering technologies, and artificial intelligence to develop new approaches for assessing and defining mastery in clinical procedural skills. Dr. Pugh is considered to be a leading, international expert on the use of sensors and motion tracking technologies for performance measurement.

Dr. Pugh obtained her undergraduate degree at U.C. Berkeley in Neurobiology and her medical degree at Howard University School of Medicine. Upon completion of her surgical training at Howard University Hospital, she attended Stanford University to obtain her PhD in Education. Her goal is to use technology to change the face of medical and surgical education.

Dr. Pugh holds multiple patents on the use of sensor and data acquisition technology to measure and characterize hands-on clinical skills. Currently, over two hundred medical and nursing schools are using one of her sensor-enabled training tools for their students and trainees. Her work has received numerous awards from medical and engineering organizations, including the [Presidential Early Career Award for Scientists and Engineers](#) from President Barack Obama at the White House in 2011. In 2014, she was invited to give a [TEDMED talk](#) on the potential uses of technology to transform how we measure clinical skills in medicine. Recently, Dr. Pugh was inducted into the [American Institute for Medical and Biological Engineering](#) (April 2018), the [American College of Surgeons Academy of Master Surgeon Educators](#) (April 2019), as well as the [American Board of Surgery Council](#) (February 2020). She is also the President-elect for the Society of Black Academic Surgeons (SBAS) and an elected member of the Defense Health Board.

More information about Dr. Pugh and her research can be found [here](#).

**Media Links:**

**TED Talk: Getting a sense for the surgical touch**

<https://www.youtube.com/watch?v=k9D-vxGkHTc>

**TED Talk: Want to be a better doctor? Look for models**

<https://www.youtube.com/watch?v=zJGsknEhjNc>

**2022 MD Commencement Recognition Ceremony – Washington University School of Medicine**

<https://www.youtube.com/watch?v=d1YfzVz4tbw&t=3066s>

**Stanford Surgery Grand Rounds: The Quantified Surgeon**

<https://www.youtube.com/watch?v=irm8MqtqK34>

**The Metrics of Surgery – Surgical Metrics Project at the American College of Surgeons**

<https://www.youtube.com/watch?v=GUQzBW7WfTc>