

Biography

Dr. Gustavsson joined the faculty at Rice University in the summer of 2020 as a CPRIT Scholar in Cancer Research and the Norman Hackerman-Welch Young Investigator Chair. Her research group strives to gain detailed information about cellular nanoscale structures, dynamics, and molecular mechanisms by designing and applying innovative and versatile optical imaging tools. Dr. Gustavsson received her Ph.D. in Physics from the University of Gothenburg, Sweden. Her graduate work focused on studying dynamic responses in single cells by combining and optimizing techniques such as fluorescence microscopy, optical tweezers, and microfluidics. Upon completion of her graduate work, Dr. Gustavsson joined the group of Nobel Laureate W. E. Moerner at Stanford University as a Postdoctoral Fellow in 2015. Her research focused on the development and application of 3D single-molecule super-resolution microscopy for cellular imaging and included the implementation of light sheet illumination for optical sectioning of mammalian cells. Her work has been recognized with multiple honors, awards, and fellowships, most notably the FEBS Journal Prize for Young Scientists, the 3-year Swedish Research Council International Postdoc Fellowship, the PicoQuant Young Investigator Award, the NIH K99/R00 Pathway to Independence Award, the CPRIT Recruitment of First-Time Tenure-Track Faculty Members Award, the Scialog: Advancing Bioimaging Fellowship, and the Edward S. and Fofu Lewis Chemistry Research Award.