Gwen Grinyer obtained her B.Sc. in physics from McMaster University in ON, Canada and completed her M.Sc. and Ph.D. degrees in experimental nuclear physics at the University of Guelph in ON, Canada. She then held the inaugural Gregers Hansen Post-Doctoral Fellowship at the National Superconducting Cyclotron Laboratory at Michigan State University (2008 to 2010). From 2010 to 2017, Dr. Grinyer worked as a research scientist with the French Atomic Energy Commission and was stationed at France's heavy-ion accelerator facility, the Grand Accélérateur National d'Ions Lourds (GANIL) in Caen, Normandie. In 2017, Dr. Grinyer joined the faculty at the University of Regina in SK, Canada where she currently holds the title of Associate Professor.

Dr. Grinyer's research uses beams of rare isotopes to study the properties of short-lived radioactive nuclei that are located furthest from stability. The structure of these "exotic" nuclei are essential for understanding how the nuclear force evolves towards the extremes of matter and for describing the observed abundances of stable nuclei throughout the universe that are produced in explosive astrophysical scenarios. This research is carried out TRIUMF in Canada and at other rare-isotope production and accelerator facilities around the world.

In addition to experimental physics research, Dr. Grinyer is passionate about equity, diversity and inclusion in STEM fields, physics education and outreach, and science communication.