

**Gordon D. Cates, Jr.** is a Professor of Physics and Radiology at the University of Virginia, where he has held the position since 2000. He received his Ph.D. in Physics from Yale in 1987, after which he went to Princeton, first as postdoctoral fellow, and subsequently as a member of the faculty, becoming a full professor in 1998. Dr. Cates' research involves experimental studies of the structure of the nucleon, particularly through the use of polarized electrons and polarized gaseous  $^3\text{He}$  targets. His work has included investigations of the neutron's spin structure, and more recently, measurements of the neutron's electric form factor at high values of momentum transfer, the latter of which provide the most detailed picture to date of the charge distribution within the neutron. Dr. Cates has also been involved in studies of parity violation in electron scattering, both to probe the role of strange quarks in nucleon structure, as well as to probe the standard model of particle physics. Building on his work with polarized  $^3\text{He}$  targets, Dr. Cates invented a new technique for producing MRIs of the gas space of the lung of unprecedented resolution, work for which he shared the Thomas Alva Edison Patent Award from the R&D Council of New Jersey in 2000. He has served as the Chair of the Jefferson Laboratory User Group Board of Directors (2005-2007), and has served on the last three NSAC Long Range Plan Working Groups. Dr. Cates is an author on over 120 peer-reviewed papers, holds 12 patents, is a Fellow of the APS, and is currently the Chair Elect of the APS Division of Nuclear Physics.