

## **Biography**

Dr. Byrne is manager of the Power Electronics and Energy Conversion Systems department at Sandia National Laboratories, where he has been employed since 1989. He holds a B.S. in electrical engineering from the University of Virginia, an M.S. in electrical engineering from the University of Colorado, and a Ph.D. in electrical engineering from the University of New Mexico. He also completed an M.S. in financial mathematics (financial engineering) at the University of Chicago. Previously, he was a Distinguished Member of the Technical staff, which is limited to a maximum of 10 percent of the engineering staff at Sandia. Awards include 2001 Time Magazine invention of the year in robotics, the Prize Paper award at the 2016 IEEE Power and Energy Society General Meeting, and the IEEE Millennium medal. Dr. Byrne was elevated to IEEE Fellow in 2017 for contributions to miniature robotics and grid integration of energy storage.

Dr. Byrne has been a member of Sigma Xi since 1993 and currently serves as President of the University of New Mexico (UNM) Chapter. He is also a past chair of the Albuquerque IEEE Section.

The UNM Chapter has an active fall and spring Sigma Xi seminar series that is co-sponsored by the Albuquerque IEEE Section and the UNM Physics and Astronomy Department. The meetings are well attended by UNM researchers, IEEE members, and the community at large. Each meeting concludes with complimentary pizza dinner with the speaker (pre-COVID). In addition, the UNM Sigma Xi Chapter and the Albuquerque IEEE Section hold a joint award banquet each May. The banquet recognizes outstanding undergraduate and graduate researchers, exceptional math and science teachers in the community, and new initiates to Sigma Xi. The banquet concludes with an invited talk. This year's speaker was David R. Scrase, M.D., New Mexico Cabinet Secretary for the Health and Human Services Department. In this role he led the state's COVID-19 response.