Marlene Belfort for the DSc (honoris causa)

Professor Marlene Belfort graduated from UCT with a BSc in 1965, followed by doctoral and postdoctoral work at UC Irvine in the United States, and the Hebrew University in Jerusalem. She is currently a distinguished professor in the Departments of Biological Sciences and Biomedical Sciences at SUNY at Albany, and is a world-renowned scientist in the field of molecular genetics and biochemistry.

Her leading achievements include the self-splicing of introns in bacteriophage T4 and a detailed analysis of the splicing mechanism. Her demonstration that the introns are mobile and later comparison of the endonuclease encoded by and involved in intron movement has stimulated debate over evolutionary origins. More recently, her work has led to the development of a model for the mechanism of intron evolution that is not only applicable to prokaryotes, but may shed light on vertebrate genes as well.

The importance of Professor M Belfort's work has been recognised with numerous awards and honours. She has also chaired committees for a number of leading scientific organisations, and has published over 190 scientific papers and co-edited two books. For the past 25 years she has enjoyed continuous grant funding from the National Institutes of Health.

In addition to her research undertakings, Professor M Belfort has proven exceptionally committed to teaching, training and professional service. Her dedication to mentorship – of younger scientists, technicians, undergraduate and postgraduate students, and even high school pupils – has resulted in her working with dozens of PhD students who have gone on to fill top placements at leading scientific organisations around the world. Within the global scientific community, she is particularly well known for her support of women in science, winning the ASM Alice Evans Award, which recognises contributions toward the participation and advancement of women in microbiology.

Beyond her hugely influential discoveries relating to introns, Professor M Belfort's prolific publication record, impeccable grant history and longstanding reputation for mentorship, make her a worthy candidate for an honorary doctorate from UCT.