Abstract:

South Africa is one of the most biologically diverse countries in the world after Indonesia and Brazil. The country is encompassed by 2 oceans and occupies only about 2% of the world’s land area; but is home to nearly 10% of the plants in the world (making it the richest in temperate flora), 7% of the reptiles, birds and mammals; and 15% of known coastal marine species. About 12.6% of taxa are threatened with regional to global extinction. One of the great pressures on this rich biodiversity is the impact of invasive species. The South African National Biodiversity Institute (SANBI) was formed with the promulgation of the National Environmental Management and Biodiversity Act, 2004. Among the functions of SANBI listed in the Act are that it must monitor and report to the Minister on the status of invasive aliens, and it may co-ordinate and implement programs for the prevention, control or eradication of listed invasive alien species. It is in this act that the Invasive Species Program was established in 2008 with the mission to protect ecosystems, from the negative impact of invasive plants, through surveillance that enables early detection of invasions and allows appropriate action. In light of the above, this presentation will highlight general perspectives of DNA barcoding in South Africa.