A-rated researchers

of KwaZulu-Natal Abdool Karim -Professor Quarraisha University

HIV epidemic in South Africa, its impact on society and in advancing its prevention in women, while simultaneously fighting for the rights of people affected by HIV and Aids, have contributed to Professor Quarraisha Abdool Karim's reputation as one of the world's foremost ng contributions in the evolution of the

medical and scientific authorities in the field of HIV and Aids research.

She obtained her BSc from the University of Durban-Westville (now the University of KwaZulu-Natal), honours degree from Wits University, Diploma in Higher Education from the University of South Africa, and master's in parasitology from Columbia University in the US, before completing her PhD in medicine at the University of Natal (now the University of KwaZulu-Natal). Currently the director of the Columbia University-Southern African Fogarty Aids International Training and Research Program and associate scientific director and head of the Epidemiology and Prevention Organisation Centre for the Aids Programme of Research in South African Institute of Medical Research.

Her interest and research in the field of HIV and Aids span over two decades. Abdool Karim chairs the South African National Aids Council Prevention Technical Task Team, is a member of the Unaids Scientific Expert Panel, and scientific advisor to the executive director of Unaids. She is an advisory board member of the Higher Education and Training HIV/Aids Programme, scientific advisory board member of the US President's Emergency Plan for Aids Relief (Pepfar), chair of the Pepfar Adolescent Girls and Young Women Expert Working Group, a member of the HIV Centre Strategic Advisory Committee, and the National Institutes of Health OAR Microbicides Planning Group. She has served on the National Aids Task Team to develop SA's first Aids National Strategic Plan.

Abdool Karim has played a significant role in the fight against HIV and Aids in Africa, particularly in women.

She was principal investigator of the landmark study CAPRISA 004
Tenofovir Gel Trial, which provided proof of concept for microbicides, and was highlighted by Science as one of the top 10 scientific breakthroughs in 2010. The study was heralded by Unaids as one of the key milestones in the first 30 years of the



Professor Quarraisha Abdool Karim

underscored by her testimony to the Constitutional Court case that forced the Mbeki government to implement the drug Nevirapine to prevent mother-to-child transmission of HIV and Aids.

She has published over 170 peer-reviewed articles, as well as several Aids epidemic. Her contributions have been characterised by her passionate promotion of human rights,

reviewed articles, as well as several books and book chapters, and has served on various editorial and advisory boards. She is a foreign associate member, Institute of Medicine of the USA National Academies (considered one of the highest honours in the field of health and medicine), fellow of the Royal Society of South Africa, fellow of the Academy of Science of South Africa, fellow of the African Academy of Sciences, and fellow of The World Academy of Sciences. She is currently vice-president (Southern African Region) of the African Academy of Sciences.

Abdool Karim is the recipient of several prestigious awards, including South Africa's highest honour, the Order of Mapungubwe, from the president of South Africa for outstanding work in HIV/Aids and tuberculosis research and health policy development, the African Union's Kwame Nkrumah Prize for Science and Technology, and the TWAS-Lenovo Prize. She also received the Department of Science and Technology Distinguished Women in Science Award, the ASSAf Science-for-Society Gold Medal, and the SA Medical Research Council Gold Medal.

Professor Eric Bateman Cape Town University of

Trained as a specialist pulmonologist, he completed an MD at the University of Cape Town (UCT) in 1984. One of Bateman's proudest achievements was, without a doubt, the founding of the UCT Lung Institute. Today he is still full-time director at the institute and an Emeritus Professor and Honorary Life Fellow of UCT.

Another major achievement has been the adoption of his approach to asthma treatment not only on a local level, but also in international

Bateman delivers invited lectures in approximately 17 countries each year. He is also a regular invited speaker in symposia and plenary sessions at the two major annual congresses in pulmonology: the Annual

Meeting of the American Thoracic Society and the Annual Congress of the European Respiratory Society. Throughout his career he has served with top experts in the fields of allergy and pulmonology, on the sci-

companies on drug development.

He has authored more than 300 publications, and his work has been cited over 9 400 times in the last eight years.

Recent awards include the Lifetime Achievement Award (platinum medal) from the South African Medical Research Council; Alan Pifer Award from UCT for outstanding welfare-related research; Fellowship in the Art and Science of Medicine Award (gold medal) from the South African Medical Association; President's Award from the European Thoracic Society for his global contribution to respiratory medicine; and Honorary Life Fellowship of the South African Thoracic Society.



Environmental Observation Network Professor William Bond -South African



Professor William Bond

Professor William Bond is an ecologist with broad interests in the processes most strongly influencing vegetation change in the past and present, including fire, vertebrate herbivory, atmospheric CO₂ and cli-

Bond obtained a PhD degree in ecology at the University of California, Los Angeles in the US in 1987. He started out as a scientist at the forestry department, Saasveld Forestry Research, and later moved on to the University of Cape Town where he is now an emeritus professor in biological sciences. He is currently chief scientist at the South African Environmental Observation Network.

Bond has served on the boards of the South African National Botanical Institute and of Cape Nature, and on the editorial boards of several journals. In 2013, he was elected a foreign associate of the US National Academy of Sciences. He is frequently invited to give talks at international conferences and symposia, and has reviewed for many journals. He has authored and co-authored nearly 200 papers and three books. He has been invited to co-author and contribute to several pieces, including a completely new introductory book on world fire, an article on fire ecology for an *Encyclopaedia of*

Biodiversity and a "topical insight" on global fire for the new edition of Strasburger's Plant Sciences.

As of February 2014, Bond's work had received about 16 980 citations. Since 2009, 47 of these citations indicated sustained scientific impact. His most cited first author paper (2008; Ann Rev Ecol Evol Syst) with 246 citations, won a Science Faculty prize at UCT. He was recently ranked by Thomson Reuters as one of the top 3 200 most influential researchers

around the globe.

Bond's research has had significant impact on different areas of ecology at different phases of his career.

His earlier research has culminated in a focus on identifying open (non-forested) ecosystems as a global consolit to the widespread accump anomaly to the widespread assumption that climate controls global biome distribution.

The mere existence of open ecosystems raised a number of important questions in the scientific community — Bond was among the first to identify these questions and to help initiate research to address most of them.

Thanks to him and his colleagues, there has been a huge proliferation of studies on fires over the last decade, and traditional assumptions on what determines global vegetation are in the process of radical revision.

Professor Jean Cleymans University of Cape Town

Professor Jean Cleymans has made considerable contributions to the area of plasma and particle physics with a particular focus on relativistic

He obtained his doctorate in physics at the Université Catholique de Louvain in Belgium and completed his post-doctoral thesis on Habilitation in Theoretical and Condensed Matter Physics at the Universität Bielefeld in Germany. He joined the University of Cape Town as a senior lecturer in 1986, and later became professor and head of the physics department. He is currently emeritus professor and senior scholar at UCT.

His research work currently focuses on the phase diagram separating nuclear matter from quark matter and exploring areas of high baryon density. He has carried out much of his research at the European Organization for Nuclear Research (CERN) Large Hadron Collider in Geneva, Switzerland as well as at the Nuclotron-based Ion Collider Facility in Russia and the Facility for Antiproton and Ion Research at Darmstadt, Germany. Cleymans has been instrumental in establishing the SA-CERN programme, the successor to the UCT-CERN Research Centre, which he set up with Professor Zeblon Vilakazi. He also

for Nuclear Research with Russia and was Leader of the UCT-ALICE Collaboration at CERN. As a consequence, South Africa has become a major player in the field of nuclear and particle research.

Cleymans has authored or coauthored more than 300 refereed articles on theoretical physics in journals such as the European Physical Journal; Physical Review; and Physics Letters, which have garnered over 16 000 citations. He also edited two books and contributed one book chapter. He has acted as referee for Physical Review and Physics Letters and Service and Physics Letters and Review and Physics Letters and Service as Chair-

man of the SA-CERN Programme.
To date, he has supervised 21 MSc and 13 PhD students, one of which recently won the prize for Academic Leadership from the University of Minnesota in the USA.

Cleymans has been an NRF A-rated

Cleymans has been an NRF A-rated researcher since 1985, and was the recipient of a number of awards throughout his career, including the Alexander von Humboldt Research Prize in 1999, the Prize of the Polish Ministry of National Education for Research Excellence in 2000 and for Outstanding Team Research in 2003.

