

Italy-South Africa Bilateral Workshop on Transmissible Diseases: HIV/AIDS, Tuberculosis and Malaria

Celebrating the Italian Day of Research in the World on the anniversary of the birth of the noted Italian scientist and inventor, Leonardo Da Vinci

CONCEPT NOTE

Italy and South Africa have a longstanding relationship in the arts, culture, science, technology and innovation. As part of commemorating this relationship, the Italian Embassy in South Africa and the Academy of Science of South Africa (ASSAf), supported by the National Research Foundation (NRF), will be co-hosting a one-day workshop at the NRF on 5 April 2019 in Pretoria, South Africa. The aim of this workshop is to highlight and celebrate the contributions made towards research and knowledge generation as well as encourage development of future bilateral collaborations in health research.

Health research in South Africa is a major field partly due to the country's well documented high burden of diseases. This burden has been termed a 'quadruple burden of diseases': i.e. 1) Communicable diseases; 2) Non-communicable diseases; 3) Maternal and child mortality; and, 4) Violence and injuries. Communicable or transmissible diseases, specifically HIV/AIDS and tuberculosis (TB), account for a large proportion of this burden. Therefore, the country's health research landscape is characterized of scientists and researchers – both young and experienced - whose work is geared towards addressing these challenges. This research ranges from prevention, control, elimination to vaccines/new drug discoveries.

Research on communicable diseases is part of Italy's commitment to collaborate with South Africa and with the African continent to promote global health. Istituto Superiore di Sanità, Istituto Nazionale per le Malattie Infettive "Lazzaro Spallanzani" and Ospedale San Raffaele, whose researchers participate in this event, and several other Italian research institutions represent altogether a network of scientific, technological and human resources for the development of future bilateral scientific collaborations.

The focus of this one-day bilateral workshop will thus be on research in these three transmissible diseases: HIV/AIDS, TB and malaria. While the malaria burden in South Africa is not as high in comparison to HIV/AIDS and TB, the goal towards sustainable control and elimination drives the research focus in this area.

The workshop discussions will highlight issues pertinent to the following research areas:

1. **HIV/AIDS:** HIV prevention; prevention of mother-to-child transmission (PMTCT); early infant diagnosis; paediatric and adolescent HIV; acute HIV infection; anti-retrovirals (ARVs); HIV vaccine.
2. **TB:** Multi-drug resistant TB; development of host-directed therapies; new drug therapies and interventions; co-infections with HIV; biomarkers; screening tools and interventions; research outputs.

3. **Malaria:** Anti-malarial drug discoveries; new therapies/technologies; targeting malaria parasite transmission through mosquitoes; screening approaches and diagnostic interventions; genotyping to assess relatedness and drug resistance profiles of malaria parasites; sustainable malaria control research.

Several South African researchers have collaborative projects with their Italian counterparts in addressing the burden of diseases posed by these transmissible diseases, therefore, this bilateral workshop is envisaged to serve as a platform for scientists from both countries to highlight ongoing collaborations, to develop new ones and to discuss mechanisms to support future bilateral activities.

About the Academy of Science of South Africa

The Academy of Science of South Africa (ASSAf) was inaugurated in May 1996 by the former President of South Africa and patron of the Academy, Mr Nelson Mandela. ASSAf is the only national science academy that is officially recognised by the government of South Africa through the ASSAf Act, Act No. 67 of 2001, as amended, which came into operation in May 2002.

The academy was established in response to the need for an academy of science congruent with the dawn of democracy in South Africa - activist in its mission of using science for the benefit of society. The mandate of the Academy encompasses all fields of scientific enquiry and it includes the full diversity of South Africa's distinguished scientists. ASSAf's strength resides in the quality and diversity of its Membership; internationally renowned scholars elected by peers, who give of their time voluntarily in the service of society. The Members are regarded as the 'brains trust' of the nation.