

# Local Ecologies of Knowledge, National Systems of Innovation, and Nanotech Research in the Global South: A South African Case

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Brown University**

**Workshop on Nanotechnology & Society: Networks, Risk  
and Knowledge Sharing**

Science, Technology & Society Initiative, Center for Public Policy,  
Univ. of Massachusetts Amherst, October 3, 2008

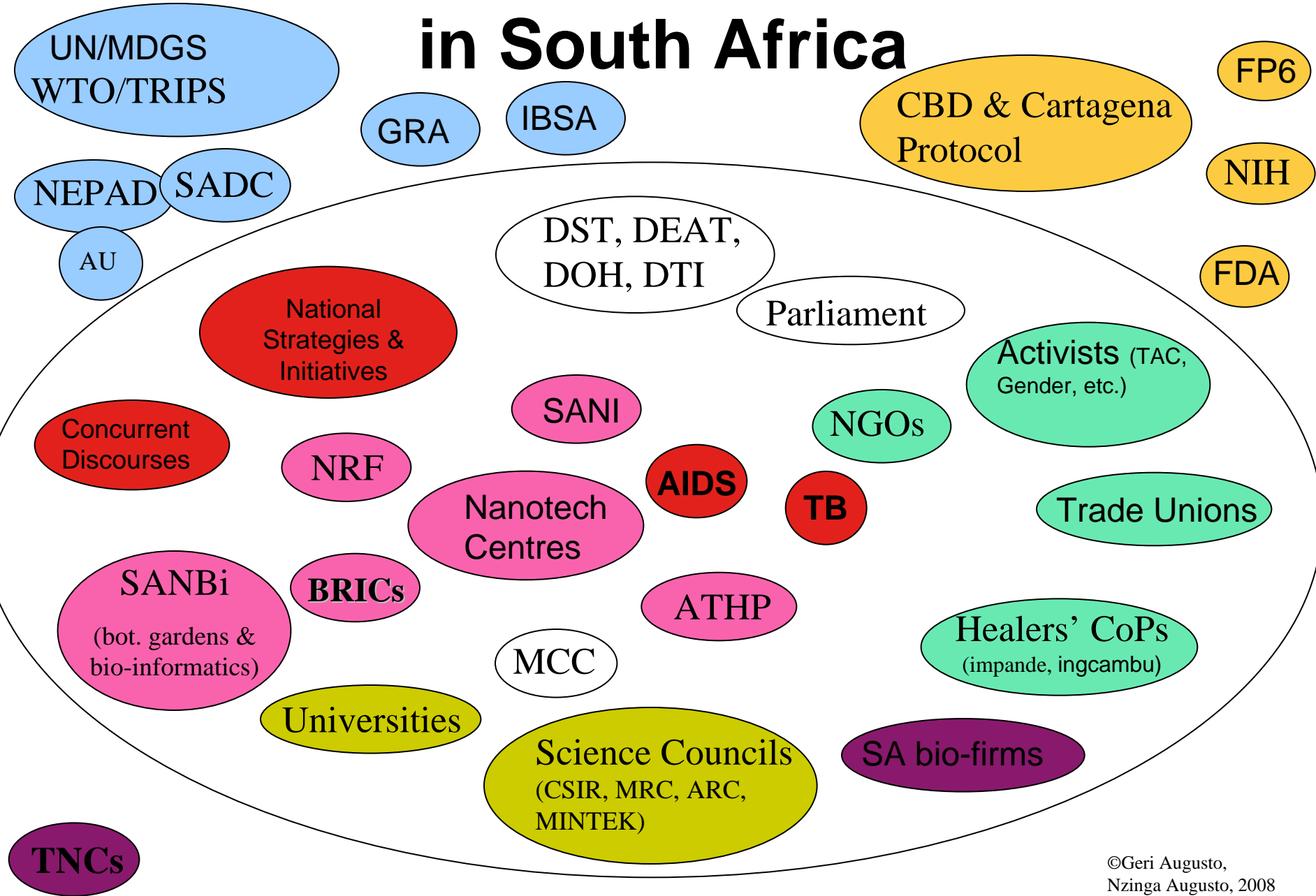
# Dr. Swai & the CSIR Nano-Drug Delivery Research Team



**Problem:** XDR TB+HIV/AIDS+Poverty+Gender inequalities = Ineffective directly-observed treatment

**One possible solution:** “polymeric nanoparticles loaded with anti-TB drugs for sustained release”

# An ANT View: Biotech/Nanotech in South Africa

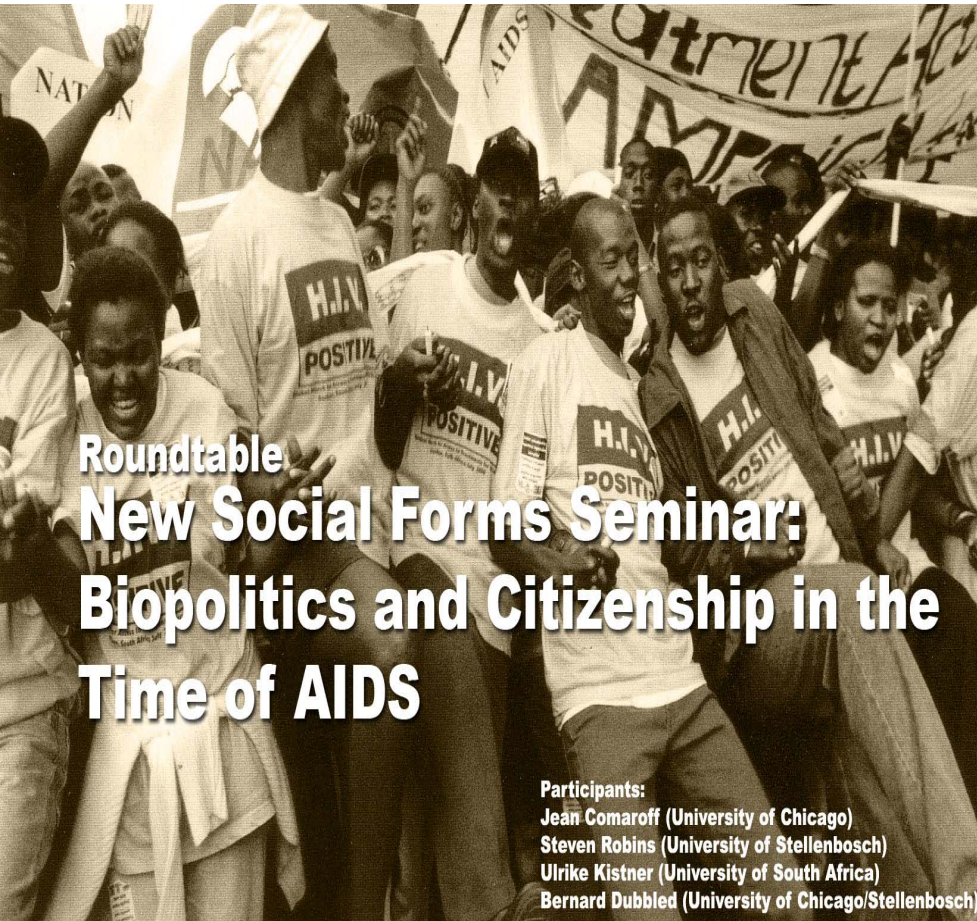




# Tensions in “inward stretch, outward reach”

- Developmental politics & poverty reduction/“getting into the global game”.
- Overcoming Bantu education/importing high-level skills/”brain circulation”
- Precaution/Innovation
- Biosciences/Indigenous Medico-botanical Knowledge...Life, humans, plants, knowledge, nature *differently*
- Emerging research areas/”Emergent concerned groups”
- “Constellation of states”>Boundary state & The Good “South-South’er”
- Swirl of contesting discourses: biodiversity, nanotech...human rights, “closing the gap,” “spanning the [R&I] chasm”, indigeneity and IKS, African Renaissance, IPR, fair trade, biopiracy, social justice, *cognitive justice*

# Bio-pasts > Nano-futures?



- ❖ Cape Colony, colonial sciences, imperial botany.
- ❖ Gen. Jan Smuts' Gondwana: Cape flora and "fossilized peoples".
- ❖ Plants As Ideas: *Shoeshoe & Kanniedood*
- ❖ "Patriotism of Place" & Settler Identity
- ❖ Bantustans, Dispossession & Environmental Degradation
- ❖ Apartheid's Science for Security: Policing, Destabilization & the Bomb
- ❖ Race, Human-ness & Intelligence
- ❖ "Dr. Doom" vs. Liberation Movements and UDF
- ❖ "Neglected Diseases"
- ❖ "Healing State"
- ❖ Biopolitics & Citizenship

**Date: Thur, 28th February 2008 (13.00-15.00)**

**Venue: Department of Sociology and Social Anthropology  
University of Stellenbosch (room 403)**

# South Africa, 21<sup>st</sup> century “Boundary State”



- “Trans-ing” multiple boundaries
- Still the “Gateway to Africa”?
- Managing collaboratories>FP6, IBSA, GRA
- Platforms and Systems/Processes, Clinical Trials and Data Points...or both?
- Enrolling, translating, mobilizing>AU/NEPAD/SADC
- “African” FDA & NIH standards
- Poly-knowledges, cultures, languages
- Different genealogies for a “noumenal technology”?

