



NEXT
EINSTEIN
FORUM

8-10 March 2016 | Dakar, Senegal



Africa's Global Forum for Science Connecting Science to Humanity

An  AIMS initiative in partnership with the Robert Bosch Stiftung

> Background

Last month, four Next Einstein Forum (NEF) Fellows attended the World Economic Forum Annual Meeting of the New Champions 2015 in Dalian, China, and were shocked that there was no scientific representation from Africa on panels on a wide range of topics from digital innovation to unexpected discoveries. Earlier this year at the Annual Meetings of the American Association for the Advancement of Science (AAAS) in San Jose, California, an important panel on Ebola was held without a single African researcher or medical personnel working on the ground in West Africa. NEF Fellow Noble Banadda described it this way, *“Although there is a shift in narrative in all other sectors, African scientists and the global work they are doing remains invisible; Africa is rising but not in science.”*

Through the NEF, the African Institute for Mathematical Sciences (AIMS), hopes to change this narrative. In 2013, after ten years of successfully training Africa’s brightest students in mathematical sciences and launching promising scientific careers through partner funded research chairs and grants, AIMS wanted to do more to affect large scale change. AIMS launched the NEF as a continental platform to strengthen science education and research across the continent, showcase Africa’s top young scientists and leverage science led development. African governments have already identified the urgency of placing science and technology at the center of their development agendas and the NEF will partner with the African Union, partners across the spectrum and scientists to bring about sustained progress. The NEF believes that Africa’s contributions to the global scientific community are critical for global progress. At the centre of AIMS and NEF efforts are Africa’s young people, the driving force for Africa’s scientific renaissance.

Africa is home to the world’s largest pool of untapped genius – its young people. The NEF wants to showcase and increase the pipeline of scientific talent coming from the continent.



> What is the Next Einstein Forum?

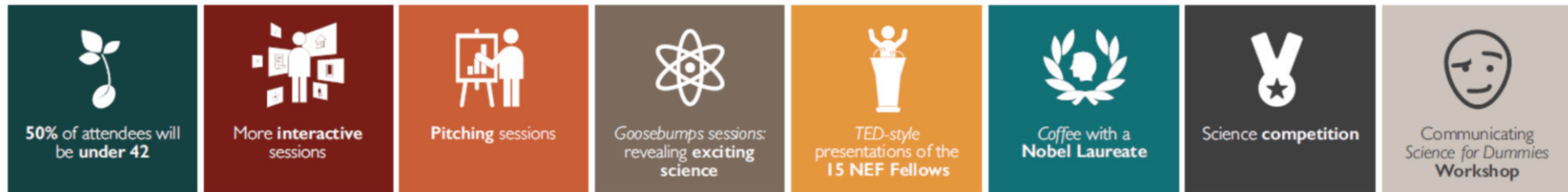
The NEF is a global platform where scientists, policy makers, industry and civil society come together to leverage science and technology for global development. The NEF's theme is 'Connecting Science to Humanity' with a particular focus on youth and women.

The NEF has two major programmes:

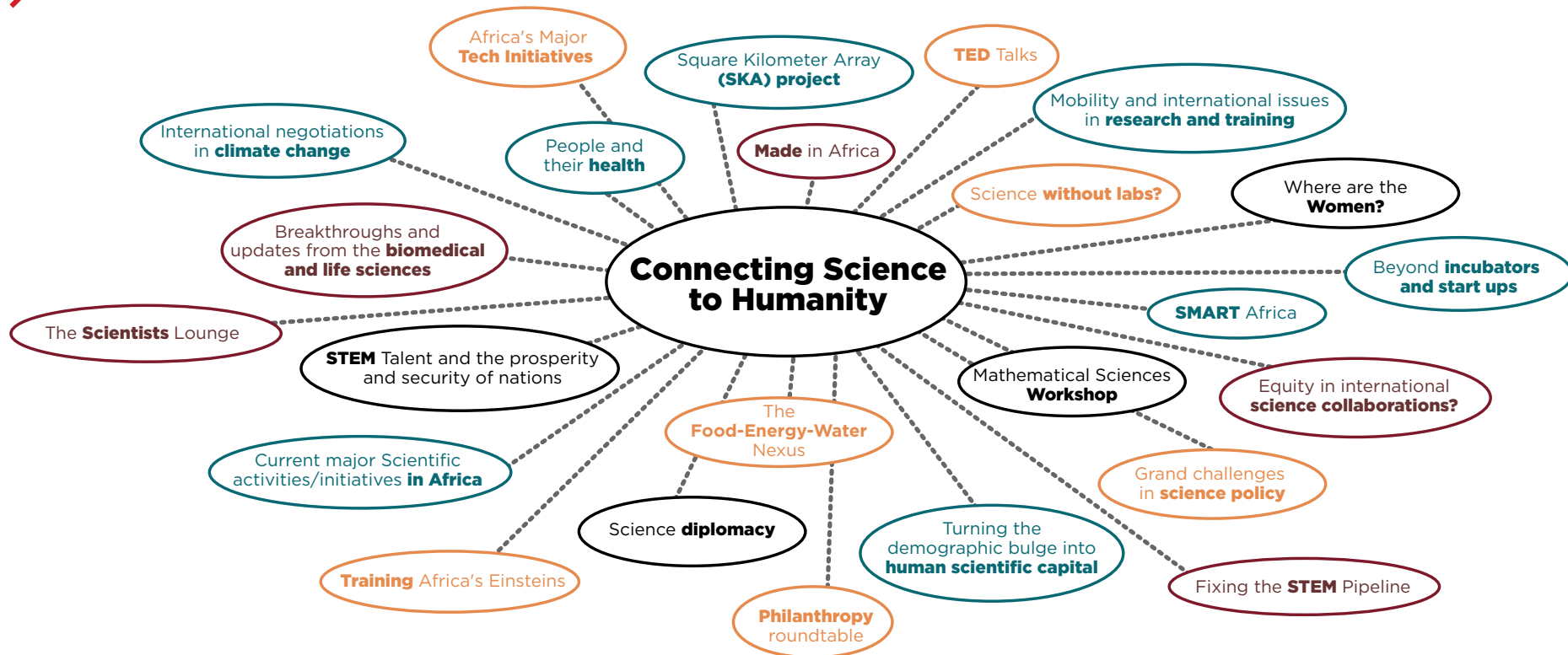
1. **The NEF Global Gathering:** This is a biennial gathering with the first NEF Global Gathering to be held 8-10 March 2016 in Dakar, Senegal. NEF Global Gatherings are more than 3-day conferences; they are global meetings of the minds to position science at the centre of global development efforts. With this strong focus on youth, and the expected presence of 10 Heads of State from across Africa, there is an exceptional opportunity for global science leaders' voices to be heard and have major impact on Africa's scientific future, through mentoring young people and through influencing continental science policy.
2. **The NEF Institution:** The NEF wishes to impact real change. To do so, the NEF is spearheading several programs including but not limited to:
 - A. The NEF Fellows programme which will showcase Africa's top 15 scientists under 42 years old.

- B. The NEF Ambassadors Programme which will select country ambassadors to help the NEF initiate science public engagement programs in their respective countries.
- C. A campaign that will highlight the stories of Africa's top young scientists as well as highlighting the exciting science happening on the continent. The video will call viewers to sign a petition showing their support for science-based development in Africa in a 1Million1 Signature Campaign. These signatures will be presented as a mural to Heads of State, science and private sector leaders at the NEF Global Gathering 2016.
- D. The NEF Global Gathering will serve to identify key issues where policy interventions and investments are required. The NEF plans to establish a 'Science and Technology Institute' which, together with the African Union, will convene leading researchers to contribute to evidence-based policy.
- E. An African Women in STEM Taskforce (AWIST) will bring together leading women scientists and technologists to highlight the contributions of women in STEM. AWIST will commission studies and data collection on the current status of women in STEM and lead continent-wide programmes to increase women's participation in STEM.

> The NEF will be unique



> What will be discussed?



> Host of NEF Global Gathering 2016



H.E. Macky Sall
President of the Republic of Senegal

> International Steering Committee



Seema Kumar
VP, Johnson and Johnson



Mthuli Ncube
Former VP of African Development Bank



Mary Teuw Niane
Minister of Higher Education and Research



Jeffrey Orridge
Canadian Football League (CFL) Commissioner



Ingrid Winning Tschol
Senior VP
Robert Bosch Stiftung

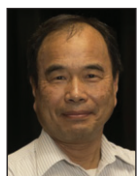


Thierry Zomahoun
(Chair), President & CEO,
AIMS-NEI

> Scientific Programme Committee



Bruce Bassett
Professor in Mathematics,
University of Cape Town



Tatsuya Nakada
Chair of Scientific Policy
Committee, CERN



Solomon Assefa
Director, IBM Africa,
MIT TR35 winner



Salif Gaye
Director, Institute of
Technology,
University of Thiès



Philip Campbell
Editor-in-Chief of Nature
Magazine



Phillip Clay
Professor of City Planning
and former Chancellor of
MIT



Peter Tindemans
Secretary General of
EuroScience, Director,
Global Knowledge
Strategies & Partnerships



Mamadou Sy
Professor of Applied
Mathematics, University
Gaston Berger, Senegal



Klaus Toepfer
Former Executive Director
UNEP



Jean-Pierre Bourignon
President, European
Research Council



Bernard Slippers
Professor in Genetics,
University of Pretoria



Barry Green
Director, AIMS-South Africa,
Chief Academic Officer,
AIMS-NEI



Adam Sneyd
Professor in Political
Science and International
Development Studies,
University of Guelph



Aminata Diallo Sall
Professor in Physiology
UCAD-Senegal



Leymah Gbowee
Noble Peace Prize 2011
Peace Activist



Arnold Van Zyl
Rector of Chemnitz
University of Technology,
Germany



Julie Makani
Wellcome Trust Research
Fellow and Senior Lecturer,
Muhimbili University of
Health and Allied Sciences



Souleymane Mboup
Professor of Microbiology,
University of Cheikh Anta
Diop and Co-discoverer
HIV-2 virus



Helga Nowotny
Chair of the ERA Council
Forum Austria, Professor
Emerita of Social Studies of
Science, ETH Zurich



Aissa Wade
Associate Professor in
Mathematics, Penn State
University

> Other Confirmed Attendees as of October 2015



H.E. Paul Kagame
President of the Republic
of Rwanda



Johanna Wanka
Minister of Education and
Research, Germany



Martial De Paul Ikounga
Commissioner for Human
Resources, Science and
Technology, African Union
Commission



France Cordova
Director, US National
Science Foundation



Peter Strohschneider
President, German
Research Foundation



Aicha Bah Diallo
FAWE Vice Chairperson and
Advisor to the Director
General UNESCO on
Education



Sylvester Gates
White House Council of
Advisers of Science and
Technology



Paul Stoffels
Chief Scientist at Johnson &
Johnson



Aaron Ciechanover
Nobel Laureate, Chemistry,
2004



Cedric Villani
Fields Medalist, 2010



Rose Gana Fomban Leke
Professor of Immunology
and Parasitology,
University of Yaoundé I

> Expected Outcomes 2015-2020



50 young scientists across Africa selected as NEF Fellows. +

The NEF will support the Fellows by providing them with resources and networks to do impactful scientific work.



1000 young STEM ambassadors. +

from across Africa to develop a community of NEF ambassadors.



200 leading scientists in the diaspora. +

are facilitated to return and play a meaningful role in Africa's scientific renaissance.



100 Nobel Laureates. =

brought to Africa to inspire and mentor Africa's young and upcoming scientists through NEF projects.



100 million young people engaged through NEF media campaigns and online talks.

This engagement will culminate into a continent wide movement for science and technology with global impact

AND \$150 million estimated social value of all NEF projects.

➤ Meet the 2015/2016 NEF Fellows

The NEF Fellows Programme will showcase 15 of Africa's best young scientists on the global stage. Currently, 12 of the 15 Fellows have been selected. The NEF is currently recruiting the last three female Fellows. All Fellows are under 42 years old, have citizenship from an African country – although they may live and work anywhere in the world- hold a PhD in STEM or social science fields with

outstanding academic and research qualifications and maturity measured by publication records or patents, prizes, leadership in independent research groups, and raising funds from various sources etc. Fellows have demonstrated that their research has impact in both their field of research and for wider society. They are passionate about raising Africa's scientific profile and are strong communicators.



Noble Banadda

- Uganda
- Bioprocessing Engineering
- Makerere University



Joseph Bengeloun

- Senegal
- Putative Quantum Properties (Quantum Gravity)
- Max Plank Institute



Mouhamed Fall

- Senegal
- Partial Differential Equations & Differential Geometry
- AIMS Senegal



Evelyn Gitau

- Kenya
- Cellular Immunology
- African Academy of Science



Assane Gueye

- Senegal
- Security and performance of cyber physical systems
- University of Maryland



Mohlopheni Jackson Marakalala

- South Africa
- TB Research
- Harvard School of Public Health



Wilfrid Ndifon

- Cameroon
- Adaptive Immunity (Biological Dynamics)
- AIMS South Africa and AIMS Ghana



Axel Ngonga

- Cameroon
- Semantic Web Technologies/Big Data
- AKSW, University of Leipzig



Hallowed Olaoluwa

- Nigeria
- Mathematics – Functional Analysis
- Harvard University



Tolullah Oni

- Nigeria
- Public Health Medicine and Policy
- University of Cape Town



Alta Schutte

- South Africa
- Hypertension & Heart Disease in African populations
- South African Medical Research Council's Extramural Unit for Hypertension and Cardiovascular Disease



Komminist Weldamariam

- Ethiopia
- Software innovations for education
- IBM Research Africa – Kenya

Our dream is that the Next Einstein will be African

> Contact

For more information, contact:

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Robert Bosch Stiftung

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DFG Deutsche
Forschungsgemeinschaft



IBM



AAS



IMAGINARY
open mathematics

