

Recognizing women @



# *Nurturing and Developing Africa-focused Research future Leaders*



# Nurturing and Developing Africa-focused Research Leaders

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- What is Africa's status today
  - The usual gloomy statistics
  - How about some cautiously optimistic statistics?
- Some views about Africa's natural resources and future development opportunities
- AAS's role in nurturing and developing the future research leaders of Africa
- Conclude with a vision looking into the future

# The Gloomy Statistics About Africa

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There are only three universities that appear in the world's top 400 universities 2013-2014

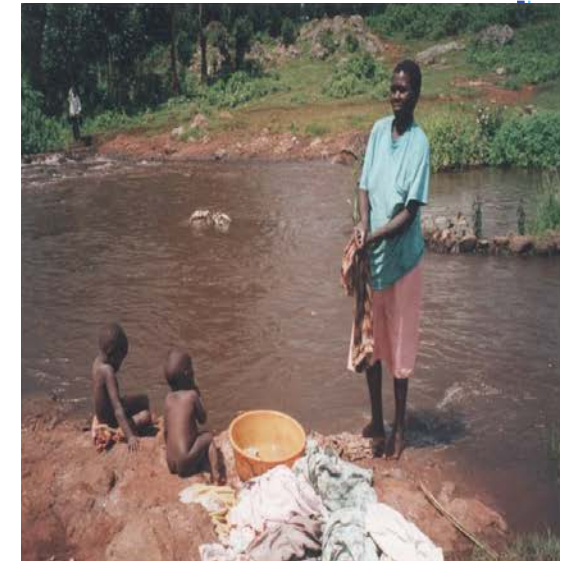
University of Cape Town 126

University of Witwatersrand 249

Stellenbosch University 338

Times Higher Education (2014)

- 15% of World's population
- 25% disease burden
- 3% health workers
- 1% economic resources
- 0.1% researchers



Africa produces only ca 2% of the total global science



# Cautiously Optimistic statistics

- Africa is changing: ~5% annual economic growth
- Scientific output growing at 21% annually compared with rest of world at 9%
- “Africa is experiencing some of the biggest falls in child mortality ever seen, anywhere” *The Economist 2012*
- New commitment of governments to research as integral to development
- Enormous opportunities to catalyse change through targeted investment



# Women in National Parliaments (1 Feb. 2015)

	Country	Seats	Women	% Women
1	Rwanda	80	51	63.8%
2	Bolivia	130	69	53.1%
3	Andorra	28	14	50.0%
4	Cuba	612	299	48.9%
5	Seychelles	32	14	43.8%
6	Sweden	249	152	43.6%
7	Senegal	150	64	42.7%
8	Finland	200	85	42.5%
9	Ecuador	137	57	41.6%
10	South Africa	400	166	41.5%

# Professional Background of African Leaders

	Field of Expertise of African Leaders	NO
1	Science/Engineering	6
2	Law	8
3	Economics/Political Science	9
4	Finance/MBA/Accounting	4
5	University Professor/Teacher	5
6	Military coup accession to power	5
7	Miscellaneous	16
		53



Ellen Johnson Sirlea **Catherine Samba-Panza**

Dilma Rousseff



# *NURTURING AND DEVELOPING AFRICA- FOCUSED RESEARCH LEADERS*

# Research leaders have more than just technical competence

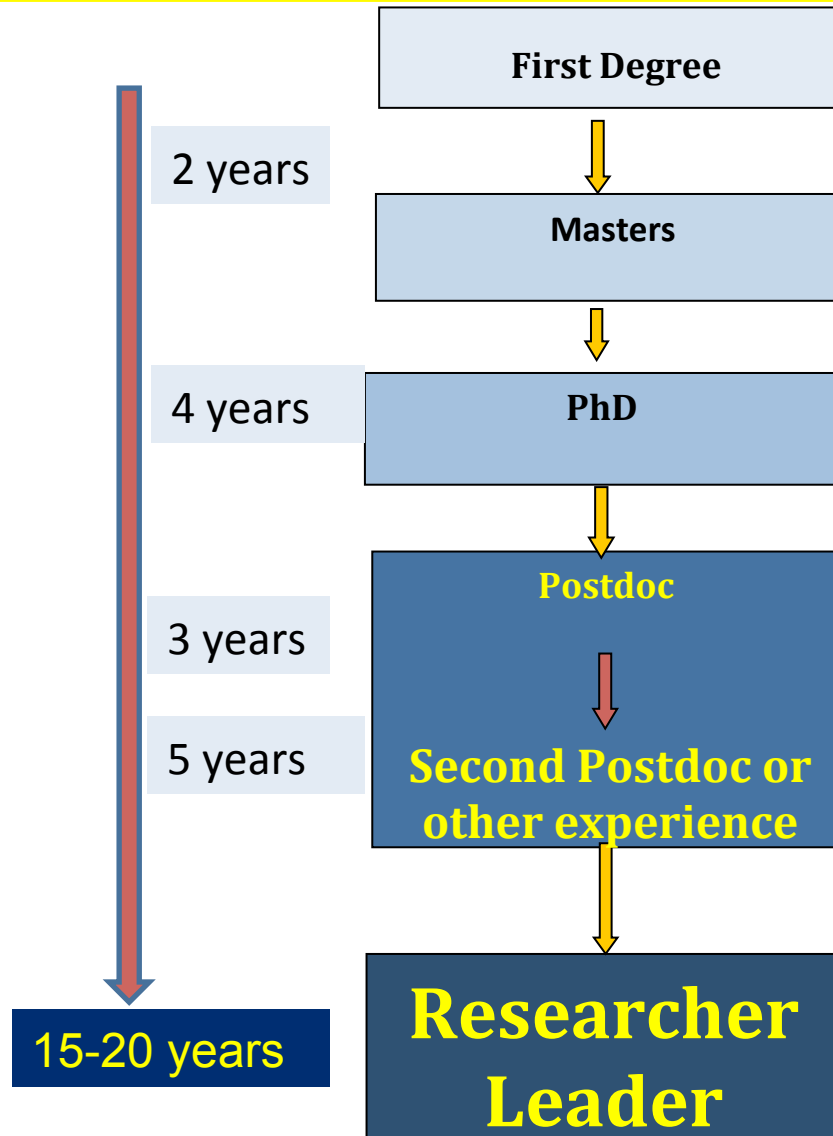
1. **Carry out** high quality relevant research
2. **Lead** a research agenda, engage in intra-African and international collaboration (as leaders or equals, not followers)
  1. **Attract** funding from local, international sources, private Sector
  2. **Advocate** for research locally and globally
  3. **Influence** the development of evidence-based policies
  4. **Engage in technology/knowledge transfer** - Innovation, new products, improved services

# The Development of Research leaders

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- is a long term process – takes 15-20 years
- The PhD training is a critical step
  - Must select the school and supervisor judiciously
  - Training should be of high quality and very relevant
- Mentorship is extremely relevant (institutions must adopt mentorship as a strategic goal for developing research leaders)

# It takes long to train and develop 'Research Leaders'



# Key elements needed in African Centers of Excellence

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- Africa-centered, Africa-specific and Africa-led
- Strong institutional leadership
- Strong research leadership
- An environment with critical mass and strong research culture
- High quality mentorship and supervision
- Career structure
- Strong collaborations (intra-African, global)
- Continuity of long-term support



# AAS's main mission are to:

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Improve Africa's capacity for management of research development and public policy

Promote sustainable development through R&D

Promote women and youth

Recognize Excellence

Regional integration, global peace and security

# Some Activities at AAS relevant to development of Research leaders

## Affiliates' program

- Identify five top young scientists from each region (25)
- Link them to mentors - the best experts in the field from anywhere (Volunteers – also from China, India, Brazil, South Africa)

### Examples Since January 2015

In Cell Biology and Regenerative Medicine: Seven mentees visited mentors (Five Females and 2 males – India, Brazil, RSA)

In Climate Change: 34 participants 19 Male and 15 Female already placed in host institutions – number to grow to 100

DFID

- AAS-ELSEVIER Training courses

2011

# Young Affiliates

2012



Kakai, Benin

Lochner, RSA

Igbinosa, Nigeria

Mwangangi Kenya

S. F. Kouam, Cameroon

Asfawossen Ethiopia

Mahomoodally Mauritius



Choonara South Africa

Gahungu Burundi

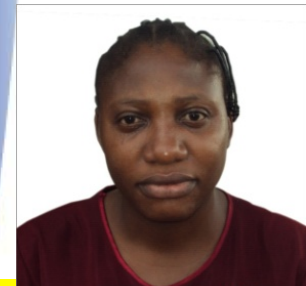
Danda Zimba

A.E. Schutte RSA

Assogbadjo

A. Mudhoo Mauritius

H. H. Kinfe Eritrea



B. A. Ojokoh Nigeria

Sophie von der Heyden South Africa

Atunga Nyachieo Kenya

Adewale Adewuyi Nigeria

Chabi A. M. S. Djagoun

Adejuwon A. Adeneve



Academy of Business



# AAS FELLOWS 2012



M. Abdel Aty  
Egypt



O. Adeyemo  
Nigeria



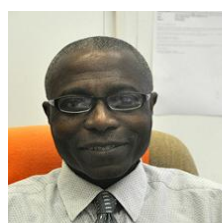
P. Babalola  
Nigeria



M. Bousmina  
Morocco



Robin Crewe  
South Africa



James Darkwa  
Ghana



M. Diop  
Senegal



G. Ekhaguere  
Nigeria



A. Gurib-Fakim  
Mauritius



C. Hoopers  
Uganda



B. Kgarebe  
Botswana



Z. Khan  
India



M. Leaky  
Kenya



O. Makinde  
Nigeria



T. Marwalla  
South Africa



C. Masirembwa  
Zimbabwe



R. Munavu  
Kenya



B. Ngadjui  
Cameroon



T. Nyokong  
Lesotho



J. Omumbo  
Kenya



F. Otieno  
Kenya



Papa Seck  
Senegal



V. Pillay  
South Africa



T. Woldai  
Eritrea

# AAS Fellows - 2013



**Ejeta, G.**  
Ethiopia



**Obi, T.**  
Nigeria



**Kelemu, S.**  
Ethiopia



**Neuenschwander, P.**  
Switzerland



**Abdulrazak, S.**  
Kenya



**Ambali, A.**  
Malawi



**Awuah, R.T..**  
Ghana



**Bringmann, G.**  
Germany



**Steyn, P.**  
South Africa



**Dagne E.**  
Ethiopia



**Nyasse, B.**  
Cameroon



**N. Torto**  
Botswana



**B. Torto**  
Ghana



**P. Rasoanaivo**  
Madagascar



**T. Mutabingwa**  
Tanzania



**O. Jegede**  
Nigeria



**Kevin Urama**  
Nigeria



**A. Samatar**  
Somalia



**J. Mugabe**  
Kenya



**Mamo Muchie**  
Ethiopia



**B. Bouhaouala-Zahar**  
Tunisia



**J. Van Wyk**  
South Africa



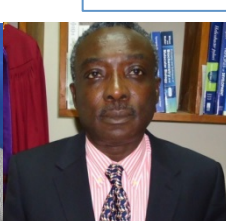
**D. Abutajdine.**  
Morocco



**H. Merzouk**  
Algeria



**M. Mgaya,**  
Tanzania



**A. Sanni, Benin**



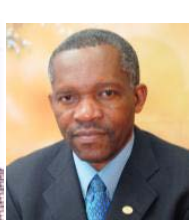
**F. Toteu**  
Cameroon



**F. Okeke**  
Nigeria



**M. Tchunte**  
Cameroon



**B. Mwamila**  
Tanzania



**G. Mophou**  
France -  
Cameroon



**D. Makawiti**  
Kenya



**H. Talaat,** Egypt



# AAS FELLOWS 2014



E. Bukusi  
Kenya



S. Nadifi  
Morocco



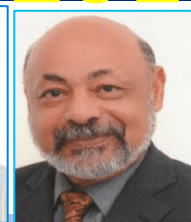
F. Djefal



A. Zobia  
Egypt



S. Messoui



S. Khalid  
Sudan



A. Faha



M. Cherry  
RSA



R. Diab  
RSA



G. Stevens  
RSA



D. Bakibinga  
Uganda



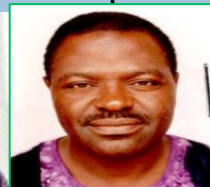
A. Noor  
Kenya



R. Sang  
Kenya



F. Dako  
Ghana



F. Nyamnjoh  
Cameoun



E. Cloete  
RSA



A. Van der Walt  
RSA



B. Lal  
India



A. Viljoen  
RSA



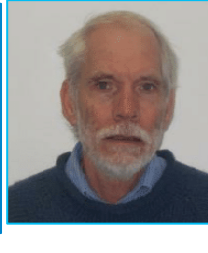
A. Stegeman  
RSA



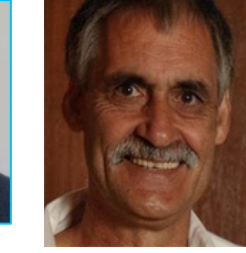
Von Brown  
Germany



H. Geyer  
RSA



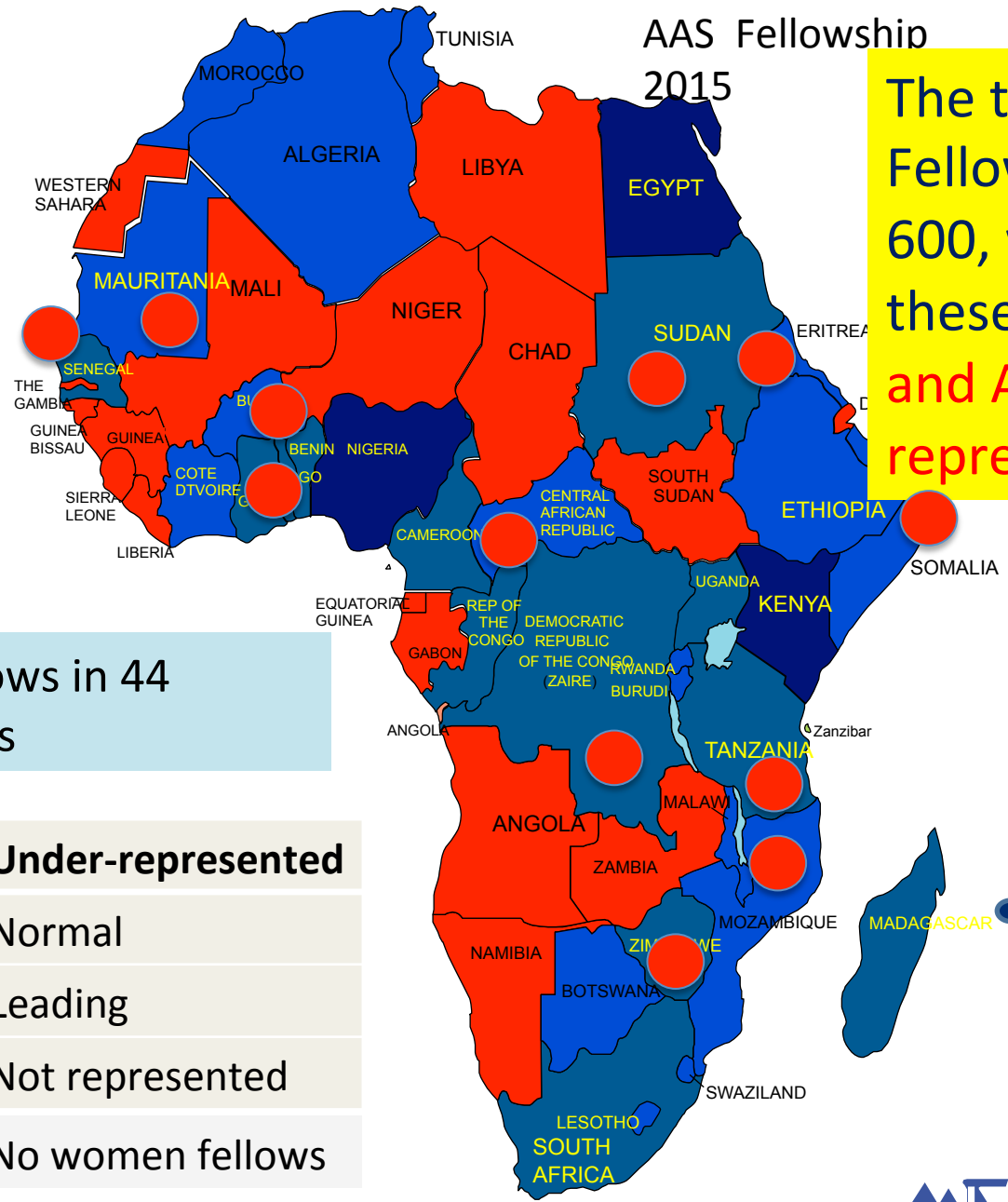
N. Coville  
RSA



W. Gelderblom  
RSA

# AAS Fellowship 2015

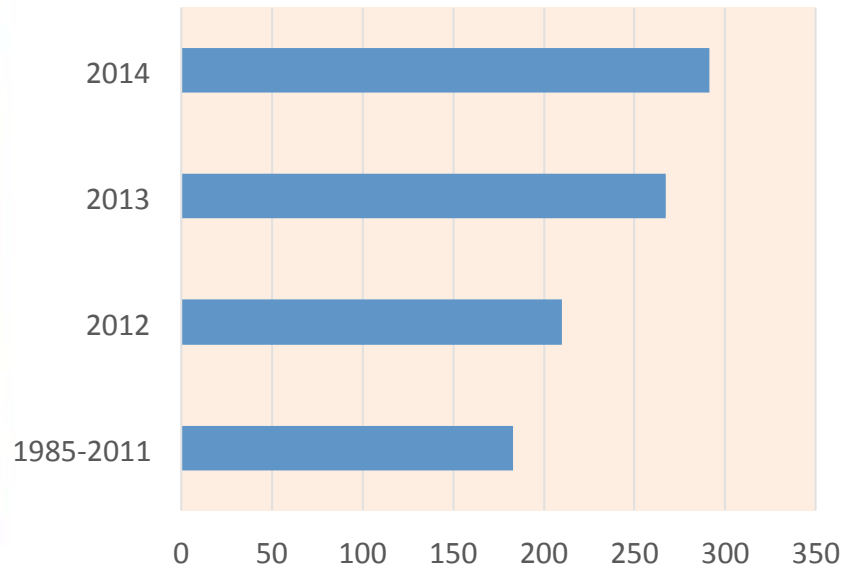
The target number of Fellows by 2018 is 600, with 15% of these being Women; and Africa-wide representation



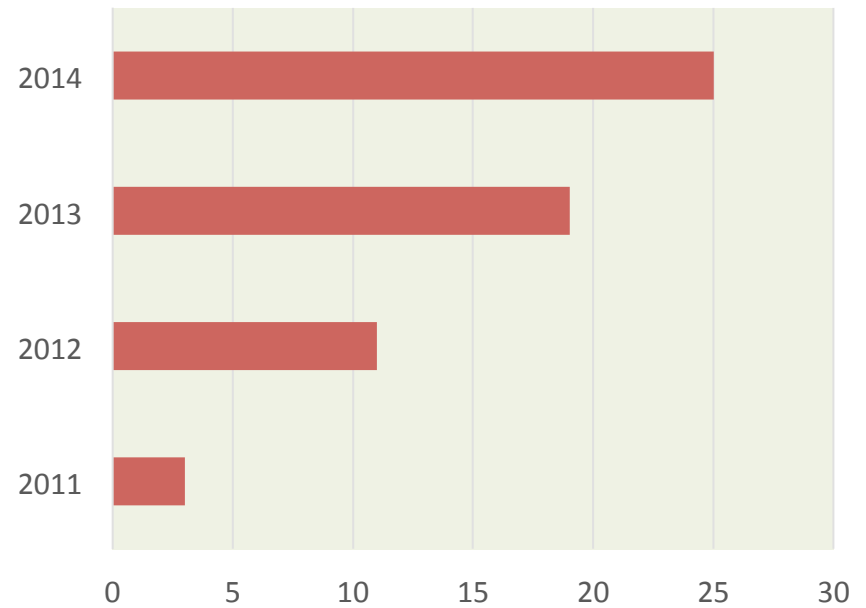
291 Fellows in 44 Countries

	Under-represented
	Normal
	Leading
	Not represented
	No women fellows

# Growth of AAS Fellowship



■ No of Fellows



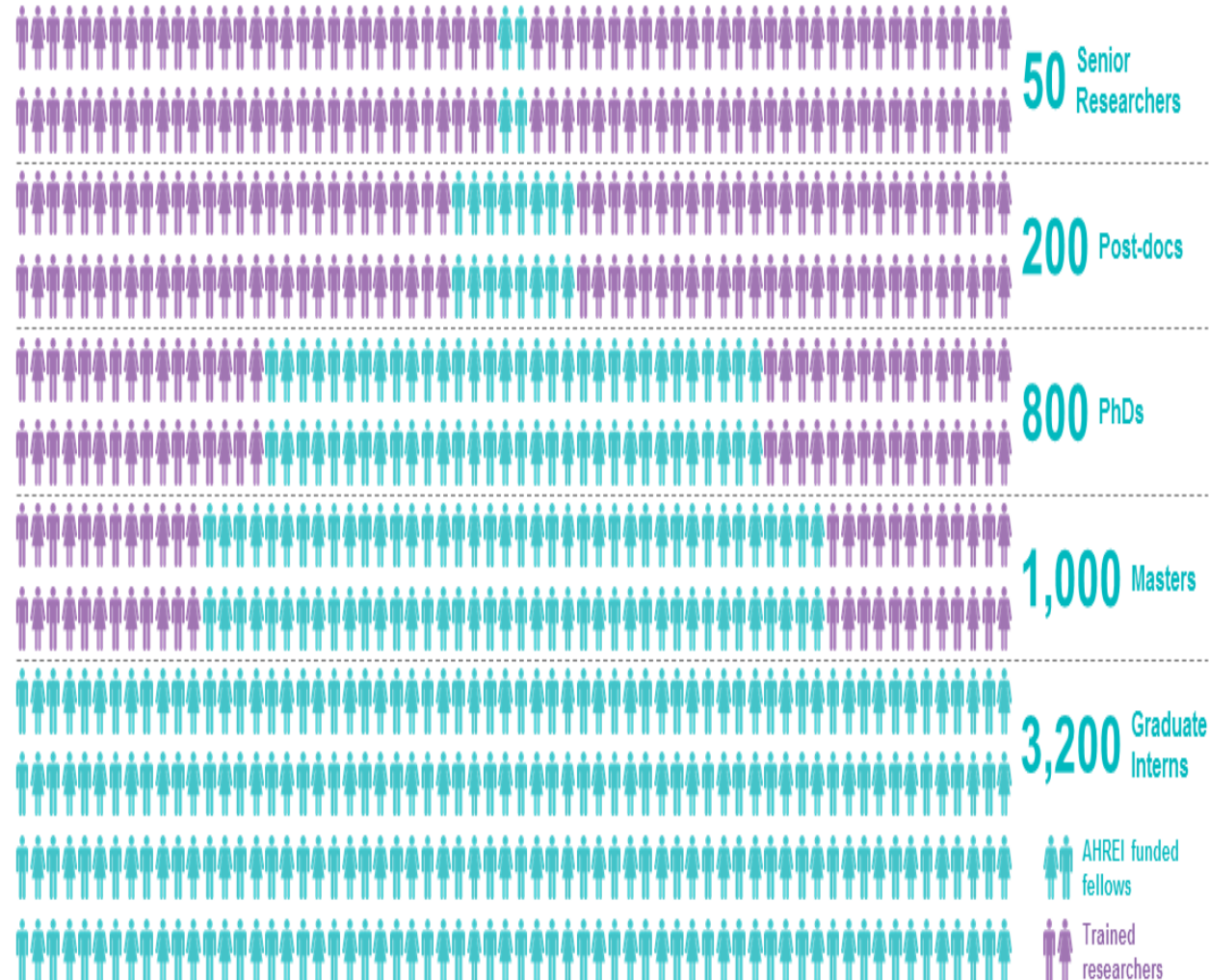
■ No of Women Fellows

# Recommendations

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- Institutions must assume full responsibility to identify, train, attract bright young people, engage them, stimulate them, and foster their growth into research leaders
- Active and aggressive program to address gender issues; Top end of University and Research Institutions may aim at attaining 35-40% women by 2025
- There is a need to reduce that age at which candidates obtain their PhD (25-30)

# One objective long term measure of success- 50 senior fellows leading world class groups





# Strategic Approach

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A single initiative with clear aims, a large base, a long time horizon, an emphasis on quality and relevant research and mentorship, rigorous review and sustainable (and expanded) funding

## Vision

A large cohort of internationally competitive researchers, appropriately gender-balanced, spread across Africa, addressing problems relevant to Africa, clustered in programmes and headed by world-class leaders.

This new generation of researchers will play a major role in shaping and driving the research agenda in Africa over the next 50 years

# Acknowledgements

- Organizers of the Gender Summit 5
- AAS-AESA colleagues – Dr. Benjamin Gyampoh, Dr. Tom Kariuki and Prof. Kevin Marsh
- AAS