Muslim-Science.Com

The Muslim World Science Initiative

1 Ducketts Mead, Lower Earley Way, RG2 9BY, United Kingdom 101 Al-Safa Heights 1, F-11 Markaz, Islamabad, Pakistan

Tel: +92 51 8443224 and +92 305 2266810 Email: <u>Editor@Muslim-Science.Com</u> Website: http://www.Muslim-Science.Com © Copyright, Muslim-Science.Com 2010-2015



Science Technology Innovation Entrepreneurship Policy

PRESS RELEASE

EMBARGOED UNTIL 8AM GMT ON 29 OCT 2015

TASK FORCE OF EMINENT INTERNATIONAL EXPERTS CALLS FOR COMPREHENSIVE REFORMS TO REINVENT THE UNIVERSITIES OF THE MUSLIM WORLD AS MERITOCRACIES SEEKING TO TRANSFORM SOCIETIES THROUGH SCIENTIFIC EXCELLENCE

Kuala Lumpur | Islamabad, 29 October 2015: A Task Force of international experts, formed by the Muslim World Science Initiative and chaired by Tan Sri Zakri Abdul Hamid, the Science Adviser to the Prime Minister of Malaysia, has released a report on the state of science at universities of the Muslim world. Earlier today, the prestigious science journal Nature also published a commentary detailing the findings and recommendations of the Task Force.

Prof. Nidhal Guessoum of the American University of Sharjah (UAE) was the Convenor of the Task Force, and Dr. Mohd Yusoff Sulaiman, CEO of MIGHT (Malaysian Industry-Government Group for High Technology) was the Co-Convenor of the Task Force. The Task Force included eminent scholars of science and education, such as Dr. Bruce Alberts of University of California at San Francisco, the former president of US National Academy of Sciences and a recent US National Medal of Science Laureate, Dr. Michael Reiss of Institute of Education at University College, London, United Kingdom, and H.E. Prof. Ameenah Gurib-Fakim, the President of Mauritius – the first woman scientist ever to hold such an office.

The Task Force was comprised of a dozen experts and scholars — including policymakers, vice-chancellors, deans and professors, and science communicators — from around the world (see the list below). The Report of the Task Force includes: a foreword by Tan Sri Zakri Abdul Hamid, the main assessment and recommendations, and individual essays written by the Task Force members on issues such as "Science, Society & the University", "Are universities of the Muslim world helping spread a culture of science through society", "Should Religion Be Kept Out of the Science Classroom?", "STEM Education and the Muslim Gender Divide", "The Need of Liberal Education for Science and Engineering", and others.

As the Task Force assessed the state of science at universities of the Muslim world, it reviewed the rankings of Muslim-world's universities globally, the scientific production (number of papers published and citations), the level of spending on research and development (R&D), female participation in the scientific workforce, and other indicators. The figures on these indicators were compared to those 'aspirational' countries that were deemed comparable in terms of gross domestic product (GDP) per capita, e.g. Brazil, Israel, Spain, South Africa, and South Korea.

The Task Force noted recent improvements in scientific publishing across a number of countries and a relatively healthy gender ratio among university students, even though the overall state of science in the Muslim World remains 'poor', as depicted by the disproportionately small number of Nobel Laureates, the small number of universities in top global rankings, the low spending on R&D, and the abysmal performance of pre-university students on Math and Science tests, etc.

Seeking to assess if universities were the 'main culprits' in this sorry state of affairs, the Task Force highlighted significant challenges at the Universities of the Muslim World. In particular, the Task Force

The Muslim World Science Initiative

1 Ducketts Mead, Lower Earley Way, RG2 9BY, United Kingdom 101 Al-Safa Heights 1, F-11 Markaz, Islamabad, Pakistan

Tel: +92 51 8443224 and +92 305 2266810
Email: <u>Editor@Muslim-Science.Com</u>

Website: http://www.Muslim-Science.Com © Copyright, Muslim-Science.Com 2010-2015



Muslim-Science.Com

Science Technology Innovation Entrepreneurship Policy

lamented the fact that science education in most OIC member countries was extremely narrow in focus and did little to enable students to think critically, especially beyond their respective domains of specialty. The Task Force calls for broad liberal education for scientists and engineers to enable them to function effectively in addressing complex multi-disciplinary challenges that the world faces today.

The Task Force also noted that self-censorship was often practiced in the selection of topics to be taught, particularly regarding controversial subjects such as the theory of evolution. The task force called for the introduction and systematic study of philosophy of science and history of the sciences of the Muslim 'Golden Age' and beyond for students to navigate and develop a perspective on these difficult disciplinary boundaries and overlaps. The language of instruction also created significant challenges.

Faculty members were also ill-trained to teach using cutting-edge methods such as inquiry-based science education and had little autonomy to innovate. While the Task Force called for greater autonomy for the universities, it also emphasized that they must become meritocracies and aspire for true scientific excellence rather than playing for temporary gains in numbers or rankings. It also calls for zero tolerance on plagiarism and other forms of academic misconduct.

Finally, the Task Force is putting out an open call for universities across the Muslim world to join a voluntary Network of Excellence of Universities for Science (NEXUS), to be launched early next year.

This peer group will be managed by the task force and housed in Tan Sri Zakri's office. NEXUS will run summer schools for university administrators, monitor the progress of reforms at participating universities, and issue a peer report card that will assess the performance of the universities in meeting milestones, thus recognizing and inspiring further improvements. True transformation will require much broader action from ministries, regulators and funding agencies, and these may be the most resistant to change.

The Muslim Science Initiative's Task Forces are funded partly by the John Templeton Foundation. The Task Force on Science at Universities of the Muslim World was hosted and supported by MIGHT, and partnered with the Islamic World Academy of Sciences (IAS) and the Akademi Sains Malaysia (ASM).

Releasing the Report of the Task Force, Tan Sri Zakri Abdul Hamid stressed that:

"Universities must reinvent themselves to lead the scientific reforms in the Muslim World, and as they do so they must embrace key ideas of merit and transparency, engagement with society, and pedagogical and curricular innovation."

Professor Nidhal Guessoum, the Task Force's Convenor, noted that:

"The Task Force members strongly believe that the most appropriate venue for action on our recommendations is the university itself. The most essential ingredient in creating excellence in science and science teaching at a university is a realization, within a university's highest leadership and its faculty, of the need to give up the old and dated ways, renew the purpose, and re-write the genetic code of their university.

Dr. Athar Osama, the Director of the Project said that:

"The purpose of Muslim World Science Initiative is to jumpstart a dialogue within the society on critical issues at the intersection of science, society, and Islam. The Task Force has done a

Muslim-Science.Com

The Muslim World Science Initiative

1 Ducketts Mead, Lower Earley Way, RG2 9BY, United Kingdom 101 Al-Safa Heights 1, F-11 Markaz, Islamabad, Pakistan

Tel: +92 51 8443224 and +92 305 2266810 Email: <u>Editor@Muslim-Science.Com</u> Website: http://www.Muslim-Science.Com © Copyright, Muslim-Science.Com 2010-2015



tence Technology Innovation Entrepreneurship Policy

commendable job in laying the groundwork for a very important conversation about our universities."

End of Text.

Contacts:

Dr. Athar Osama

Founder Muslim World Science Initiative

Project Director, Task Forces Project: editor@muslim-science.com | athar.osama@gmail.com

t: +92 305 2266810

Prof. Nidhal Guessoum

American University of Sharjah

Convenor, Task Force on Science at the Universities of the Muslim World

e: nguessoum@aus.edu

t: +971 6 515 2512

Mansurah Raisa Ab Rahim

Media Relations, Group Communications Malaysian Industry-Government Group for High Technology Prime Minister's Department

e: raisa@might.org.my

t: +603 8315 7807

Download Report at: http://muslim-science.com/Science-at-Universities-of-Islamic-World

Information on Task Forces: http://muslim-science.com/task-force/
Facebook Page: https://www.facebook.com/MuslimScienceCom/

Twitter:@MuslimScience

ABOUT THE MUSLIM WORLD SCIENCE INITIATIVE

The Muslim World Science Initiative is a non-governmental apolitical platform (and portal) dedicated to a revival of science and a scientific culture within the Islamic World. The Muslim World Science Initiative seeks to go beyond historical facts and comparisons to spotlight, debate, and address contemporary issues of policy and practice of science and innovation within the Islamic World that may not receive adequate attention in the international (western) scientific media. It also seeks to address specific challenges emanating from religious, cultural, or historical factors.

The Muslim World Science Initiative also aims to create a culture of dialogue, discourse, and critical inquiry that is crucial to the development of a scientific culture in the Islamic World. In doing so, it also seeks to reclaim the narrative of science within the Islamic Community - a narrative that in the recent years has been imposed from outside rather than created from inside - and hence begin an inside-out process of scientific revival within the Islamic World.

Muslim-Science.Com

The Muslim World Science Initiative

1 Ducketts Mead, Lower Earley Way, RG2 9BY, United Kingdom 101 Al-Safa Heights 1, F-11 Markaz, Islamabad, Pakistan

Tel: +92 51 8443224 and +92 305 2266810 Email: <u>Editor@Muslim-Science.Com</u> Website: http://www.Muslim-Science.Com © Copyright, Muslim-Science.Com 2010-2015



Science Technology Innovation Entrepreneurship Policy

LIST OF TASK FORCE MEMBERS

- 1. Tan Sri Zakri Abdul Hamid, Science Advisor to Prime Minister of Malaysia, Chair of the Task Force on Science at the Universities of the Muslim World
- 2. Prof. Nidhal Guessoum, American University of Sharjah, UAE, Convenor of the Task Force on Science at Universities of the Muslim World
- 3. Dr. Mohammad Yusoff Sulaiman, President and CEO, MiGHT, Malaysia, Co-Convenor of the Task Force on Science at Universities of the Muslim World.
- 4. Dr. Moneef Zou'bi, Executive Director, Islamic World Academy of Science (IAS)
- 5. Prof. Adil Najam, Dean Frederick S. Pardee School of Global Studies, Boston University and former Vice Chancellor, Lahore University of Management Sciences (LUMS)
- 6. Prof. Ameenah Gurib-Fakim, Fellow of IAS, President of the Republic of Mauritius, and Professor at University of Mauritius
- 7. Prof. Mustafa El-Tayeb, President, Future University, Khartoum, Sudan
- 8. Prof. Abdur Razak Dzulkifli, President of International Association of Universities (IAU), and former Vice Chancellor USM, Malaysia
- 9. Dr. Nadia Alhasani, Dean of Student Life (formerly Dean of Women in Science and Engineering (WiSE), The Petroleum Institute, Abu Dhabi, UAE
- 10. Prof. Jamal Mimouni, Professor, University of Constantine-1, Algeria
- 11. Dr. Dato Lee Yee Cheong, Chair ISTIC Governing Board / Chair IAP SEP Global Council
- 12. Prof. Michael Reiss, Professor of Science Education, UCL Institute of Education, University College, London and Expert Advisor to the Muslim-Science.Com Task Force on Science at Universities of the Muslim World
- 13. Prof. Bruce Alberts, Professor of Biochemistry at University of California, San Francisco, President Emeritus, *National Academy of Sciences*, and Recipient of 2014 US Presidential Medal of Science, Expert Advisor to the Muslim-Science.Com Task Force on Science at Universities of the Muslim World
- 14. Professor Shoaib S. H. Zaidi, Professor and Dean of School of Sciences and Engineering, Habib University, Karachi
- 15. Dr. Athar Osama, Founder Muslim World Science Initiative, and Project Director of the Task Forces Project.