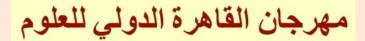


## Cairo Science Festival

Cultivating a Knowledge-Based Culture Bridging the Divide Between Science & Arts



CairoScienceFestival.org ScienceAndSociety.org



Festival

Coming in April 26, 2010

## **Prospectus and Highlight of Activities**

Dr. Alaa Ibrahim ai@aucegypt.edu, +20-14-14-76000

### **Overview**

The Cairo Science Festival is a public celebration of science and technology directed toward the society at large through activities that bring science (in its broad sense including engineering, medical, and social sciences) from the classrooms and research laboratories to the general public via interactive shows, exhibitions, plays, and public lectures and dialogues. The festival will also deliver science in an artistic and entertaining flavor to bridges the divide between Science and Arts.

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The Cairo Science Festival is organized in collaboration with and concurrent to the Cambridge Science Festival (the first annual science festival in the USA), organized by Massachusetts Institute of Technology and Harvard University. It is the first citywide science festival to be held in Egypt and the flagship activity of the *Science and Society* initiative that aims at cultivating a knowledge-based culture and fostering innovation and creativity.

The festival will feature Nobel laureates and internationally renowned luminaries, distinguished Egyptian expatriates, and leading Egyptian scholars and research groups. The festival will also engage students and members of the general public through solicitations to organize and host their own events as part of the festival program.



### Why the Cairo Science Festival?

The world of the 21<sup>st</sup> century will be shaped and led by knowledge-based societies and nations. Globalization has already set the stage for this era through making the world interconnected more than ever and the tools of empowerment increasingly accessible to all. This revolution has been driven by breakthroughs in science and technology whose impacts touch every aspects of our life today. Bridging the gap between science and the society and embracing a science literate and appreciative culture -- that is rooted in our heritage -- are a proven catalyst to a) stimulating a knowledge-based society, so we can lead and compete in the new landscape of the 21<sup>st</sup> century; b) fostering innovation and creativity among the young generations; and c) promoting good governance and democratic values.

Universities and research institutions have an untapped potential to play a more vital and pivotal role in fostering public engagement with science while bridging the divide between science on one hand and arts and humanities on the other hand, and stimulating cross-disciplinary collaboration among their faculty and students. As more and more scientific and technological issues – ranging from climate change to

renewable energy, from new epidemics to natural disasters, from pioneering biomedical research to the social controversies stirred into debate by new medical practices – appear in the daily news and influence so much of our public discourse across the globe, the need for scientists to convey highly complicated technical information and their implications to mass audiences



grows ever apace. Furthermore, as scientists attempt to address these issues with the general public, the need to enliven their communications/presentations so that they truly resonate with non-specialist audiences becomes ever more urgent. We need nothing less than the broadest possible public engagement in science to make the kinds of informed decisions we face. It is against this background that the Cairo Science Festival emerged.

#### **Venues and Dates**

The festival will commence on April 26, 2010 and it will last through May. Its activities will be held at the following venues:

- American University in Cairo,
- Cairo University,
- Cairo Opera House

### Website and Contact information

CairoScienceFestival.org info@CairoScienceFestival.org ScienceAndSociety.org info@ ScienceAndSociety.org

Dr. Alaa Ibrahim, +2-014-14-76000 ai@aucegypt.edu, alaa@milkyway.gsfc.nasa.gov

## **Organizing Committee**

Dr. Alaa Ibrahim, (Chair), American University in Cairo & Cairo University.
Dr. Amr Shaarawi, Associate Dean, School of Sciences & Engineering, American
University in Cairo.
Dr. Aziza Ellozy, Director, Center for Learning & Teaching, American University in Cairo
Dr. Heba Nassar, Vice President for Community Service, Cairo University

## **Advisory Committee**

Dr. John Durant, Director Cambridge Science Festival & MIT Museum, USA.
Dr. Nina Fedoroff, Science Adviser to U.S. Secretary of State, USA.
Dr. Manuela Arata, Director, Genoa Science Festival, Italy.
Dr. Ismail Serageldin, Director, Bibliotheca Alexandrina, Egypt.
Dr. Tarek Hussein, President, Academy of Scientific Research & Technology, Egypt.

### Partners

Cambridge Science Festival, USA	$www. {\it CambridgeScienceFestival.org}$
MIT Science Museum, USA	www.mit.edu/museum
Central Square Theatre, USA	www.CentralSquareTheater.org
Genoa Science Festival, Italy	www.FestivalScienza.it
Academy of Scientific Research & Technology, Egypt.	
Ministry of Higher Education and Scientific Research, Egypt.	

## **Highlights of Festival Activities**

### 1. Chat with Nobel Laureates

Imagine chatting with a Nobel Laureates and asking him questions. This opportunity will become a reality at the Cairo Science Festival and not with one but with five Nobel Laureates.

In collaboration with the Cambridge Science Festival, we will be broadcasting live a week-long activity of daily open conversation with a Nobel Laureate from Harvard University and Massachusetts Institute of Technology to audience in Cairo.

**Mon. April 26:** *Robert C. Merton*, winner of the 1997 Nobel Prize in Economics for his work on the valuation of stock options. Merton is a University Professor at the Harvard Business School.

**Tue. April 27:** *Robert Horvitz*, winner of the 2002 Nobel Prize in Medicine for his studies of genes that control development and cell death. Horvitz is a Professor of Biology at Massachusetts Institute of Technology, a Member of the McGovern Institute for Brain Research, and an Investigator at the Howard Hughes Medical Institute.

**Wed. April 28:** *Jack Szostak*, winner of the 2009 Nobel Prize in Medicine for showing how chromosomes are safely copied and protected against degradation. Szostak is currently trying to synthesize the origins of life. Szostak is a Professor of Genetics at Harvard Medical School and an Investigator at both Massachusetts General Hospital and the Howard Hughes Medical Institute.

**Thurs. April 29:** *Eric Chivian*, co-founder of the International Physicians for the Prevention of Nuclear War, which received the 1985 Nobel Peace Prize. Chivian is the Founder and Director of the Center for Health and the Global Environment and an Assistant Clinical Professor of Psychiatry at Harvard Medical School.

**Friday April 30:** *Richard Schrock*, winner of the 2005 Nobel Prize in Chemistry for developing the metathesis method in organic synthesis, now used regularly by the chemical industry in developing pharmaceuticals and advanced plastic materials. Schrock is a Professor of Chemistry at MIT.









## 2. Public Lectures & Dialogues with:

#### a) International Luminaries

#### Dr. Alan Lightman

Professor of Humanities at Massachusetts Institute of Technology (MIT) and author of international and New York Times bestseller novels that bridge science, arts, and humanities, including "Einstein's Dreams" which was translated to 30 languages.

http://writing.mit.edu/people/faculty/homepage/lightman

#### **Dr. Eric Lander**

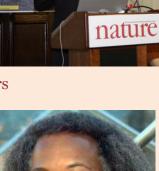
Professor of Biology and director of the MIT-Harvard Whitehead Institute: Co-chair of President Obama Council of Advisers on Science & Technology (PCAST)

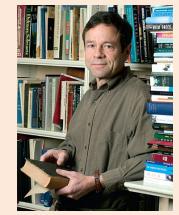
http://www.whitehouse.gov/administration/eop/ostp/pcast/about/members

#### **Dr. James Gates**

Professor at University of Maryland at College Park; Member of President Obama Council of Advisers on Science & Technology (PCAST), Member of the State of Maryland Board of Education.

http://www.whitehouse.gov/administration/eop/ostp/pcast/about/members







#### b) Distinguished Egyptian Expatriate Scholars and Entrepreneurs

#### Dr. Farouk El Baz

Professor and Director of the Center for Remote Sensing at Boston University; Adviser to NASA and member of the Apollo team.

http://www.bu.edu/remotesensing/faculty/el-baz





### 3. Shows & Exhibitions

#### a) Students and Community Events

Students and members of the general public are invited to conduct their own events that can be shows, exhibits, documentaries, plays, songs, posters, and other forms of creative work. Suggested themes are (but not limited to):

- i) Science and Technology Demonstrations.
- ii) Communicating Science (e.g. short live oral presentation, podcasts, documentaries, essays, etc.).
- iii) The Role of Science and Technology in our Everyday Life.
- Bridging the divide between Science and Arts (e.g. Science and Theatre;
   Science and Visual Arts: drawing, painting, film and documentary production, etc.).
- v) What every person must know about science and technology.
- vi) The contributions of the various civilizations to Science and Technology and the impact they have in the modern world.
- vii) The Legacy of Al-Hassan Ibn Al-Haytham (see below).

- viii) Science as a common heritage among people and civilizations. The international character of science.
- ix) Scientific Thinking and the Scientific Method.
- x) Students Research Activities.
- xi) The Fun Side of Science.

#### b) Connecting the Egyptian Research Community with the Society

Leading Egyptian research groups will be organizing outreach booths and shows at the festival exhibition.

Language: Arabic & English

#### c) Science Come Alive

Science and Technology Companies will be invited to organize outreach booths at the festival exhibition to highlight and showcase the role of science and technology in our everyday life. *Language: Arabic & English* 

## 4. Science Journalism

A Panel on *Science Journalism in a Globalized World* featuring leading Egyptian and international science journalists, communicators, and media producers. *Language: Arabic* 

### 5. The Poetry of Nature

A workshop on Science Poetry and novels, including science fiction. *Language: Arabic & English* 

## 6. Raising Creative Minds

A workshop on nurturing kids' creativity and innovation at home and school. *Language: Arabic & English* 









### 7. Commemorating the Legacy of Ibn El-Haytham

The year 2012 will mark the 1000<sup>th</sup> anniversary of Al-Hassan Ibn Al-Haytham's book Kitab Al-Manazeer (Book of Optics) in which he laid the foundation to the science of Optics as well as the scientific method and the experimental approach of scientific investigation.. Ibn Al-Haytham (known in the western literature as Al-Hazen) made seminal contributions to astronomy, physics, and engineering that influenced modern science and the European Renaissance.

The American University in Cairo is leading an international initiative to commemorate this occasion with a host of activities the first of which will be a workshop and an exhibit that will take place during the Cairo Science Festival.

Language: Arabic & English

#### 8. Science Art Gallery

A science art gallery that illustrates the beauty of the nano world, the universe, and the marine life.

#### 9. Science Theatre

The Central Square Theatre - MIT Catalyst Collaborative will be performing the *Einstein's Dreams* play during the festival. They will also conduct a workshop on Science and Theatre. The *Einstein's Dreams* play blends science and arts through contemplating on the human dimension of the life of Albert Einstein.

Language: English with Arabic Translation





## **Call for Sponsors**

The Cairo Science Festival is a community service activity dedicated to empowering the minds of the youth and enlightening the society. This objective can only be achieved through integrating the efforts of all stakeholders that share this vision. We invite civil societies, businesses, governmental, and non-governmental organizations to sponsors the festival. Sponsors will enjoy the following benefits:

- Logo on festival's website with link to the sponsor's website.
- Logo on posters, and other printed materials.
- Recognition in e-mail announcements and at festival activities.
- Receive VIP seats at all festival activities.
- Receive invitations to exclusive social events, receptions, and dinners with the festival speakers and distinguished guests.
- Preferred booth space at the festival exhibition.

Media Sponsors will receive the following additional benefits:

- Exclusive interviews with festival speakers.
- Right to record and broadcast festival activities.

School sponsors will receive the following additional benefits:

• Visits by the festival distinguished guests.

Additional tailored benefits can be mutually agreed upon, as requested.



