











Third Advanced International Colloquium on

# Building the Scientific Mind Cairo, Egypt, May 10-14, 2009

#### **SUNDAY MAY 10**

Note: This is the opening day of the colloquium during part of which invited personalities—among them Egypt's Minister of Higher Education, Dr. Hany Helal—and other invited guests will join us. All activities during the opening day take place at the facilities of the Information and Decision Support Center (IDSC) of the Egyptian Cabinet in the Sheraton district of Cairo. Its exact location can be seen on separate maps provided by IDSC, included on the colloquium Web site under "SETTING YOURSELF UP IN CAIRO AND MOVING AROUND."

10:00 AM	Registration + welcome + getting to know each other + coffee/tea.	BtSM2009 participants register at the desk for PARTICIPANT REGISTRATION. Guests invited to the opening join in at their leisure and are received at a separate table.
11:00 AM	Opening of the colloquium by the Minister of Higher Education, preceded by brief statements by representatives of the collaborating organizations in Egypt and remarks by the Chair.	Dr. Magued Osman, Chairman of the Information and Decision Support Center (IDSC) of the Egyptian Cabinet; Dr. Tarek Shawki, Director UNESCO Cairo Office; Dr. Adli Bishay, Executive Director of Friends of Environment and Development Association (FEDA); Dr. Mohsen Tawfik, Coordinator and facilitator of the BtSM dialogue in Egypt; Dr. Hany Helal, Minister of Higher Education.
		Facilitating chair: Dr. Jan Visser, President of the Learning Development Institute.
12:00 AM	Break: coffee/tea/refreshments + light snack(s).	All registered participants and guests are welcome. Opportunity for purposeful informal interaction regarding general and specific interest.
		Guests wishing to leave during this break may do so. Guests wishing to stay for the introductory presentation are welcome to remain until the end of the next session, at which moment they leave.
12:45 PM	The scientific mind: Why should we	Introductory presentation by Jan Visser followed by discussion.
	care?	Session chair: Magued Osman.
		Guests still attending this part of the proceedings will leave at or before the end of this session.
2:15 PM	Lunch break.	Registered BtSM2009 participants. Badge required!
3:30 PM	A smörgåsbord of facts, findings, ideas, concerns, visions and questions about the scientific mind.	Overview of what to expect during the days ahead, based on mini presentations by principal contributors (presenters and facilitators of activities) and statements of interest solicited from the rest of us.
5:00 PM	Looking for new ways of making sense of the universe and the place of humans in it: Foundational and non-foundational thought.	Presentation by Benjamin Olshin of paper co-authored by Paul Grobstein and Benjamin Olshin followed by discussion.
6:00 PM	Getting to know each other.	An 'artful' way of making new contacts and renewing old ones facilitated by Muriel Visser-Valfrey. This mildly directive process will spontaneously dissolve in constructive chaos as we prepare and gather for dinner.
7:00 PM	Official dinner hosted by the UNESCO Cairo Office.	Registered BtSM2009 participants and special guests. Dinner invitation required.
9:00 PM or later	End of Day 1.	Hotel based participants use provided transport to return to their respective destinations.

**Note:** Colloquium proceedings during the next four days take place at the Kharoub Wekala facilities of FEDA in El Gamaliya.

### **MONDAY MAY 11**

9:30 AM	Getting ready.	Getting to know our meeting place; free-flowing self-organizing conversations among participants; opportunity for registration for late arrivals.
9:45 AM	Building the scientific mind across the disciplinary divide - Why deconstructing and reconstructing the 'social' is important.	Presentation by John van Breda followed by discussion.
10:30 AM	Break.	Coffee/tea/refreshments.
11:00 AM	Big History: From hydrogen to humans in ten easy lessons.	Keynote presentation by David Blanks followed by discussion.
12:30 PM	Lunch break.	In addition to sharing food, participants are invited to self-organize during lunch time and continue discussions in areas of relevant interest as well as use part of the time available for Knowledge Café related exchanges.
1:30 PM	Building minds for a complex future.	Brief presentation by Rasha Awad.
1:45 PM	Bringing science to politics.	Brief presentation by Nesreen ElMolla.
2:00 PM	Brainstorming group session on 'Building minds for a complex future.'	Parallel brainstorming sessions. We break into two groups of approximately equal size and meet in two separate rooms for 30 minutes.
	Brainstorming group session on 'Bringing science to politics.'	
2:30 PM	Reporting back in plenary session on the two brainstorming activities above.	Rasha Awad and Nesreen ElMolla and/or their rapporteurs.
3:00 PM	Break.	Coffee/tea/refreshments.
3:30 PM	Special Interest Groups (SIG's) and other special group activities. See also listing on Page 5.	Two-hour timeslot for dedicated work on issues of special interest. This is left to the initiative of the participants. At the start those wishing to run a SIG or activity will be invited to briefly highlight the intentions/goals of their SIG, inviting members of the community to participate.
5:30 PM	End of Day 2.	Hotel based participants use provided transport to return to their respective destinations.
3:00 to 5:00 PM	UNAWE workshop with the children of El Gamaliya	This workshop will be conducted and facilitated by Carolina Ödman and Hala Osman with the participation of Soha Badry and Nihal Soliman. The workshop serves as an input to subsequent proceedings of the colloquium.

### **TUESDAY MAY 12**

9:30 AM	Enriching the academic mind through deepening the scholarship of integration.	Presentation by Gary Hampson followed by discussion.
10:00 AM	The evolving scientific mind through a transdisciplinary lens.	Presentation by Jennifer Gidley followed by discussion.
10:30 AM	Break.	Coffee/tea/refreshments.
11:00 AM	Issues of integration, transdisciplinarity, and design of the learning context in relation to the building of the scientific mind.	Plenary panel discussion. Composition to be determined as we meet.
11:30 AM	Arts, language, purposeful action, development of consciousness, and development of the scientific mind: Implications for education and for sustainable human life.	Presentation by Martin Gardiner followed by discussion.
12:30 PM	Lunch break.	In addition to sharing food, participants are invited to self-organize during lunch time and continue discussions in areas of relevant interest as well as use part of the time available for Knowledge Café related exchanges.
1:30 PM	Indigenous games: A natural way of awakening the senses and knowing the world.	Presentation by Jinan Kopadully followed by discussion.
2:15 PM	Gaming and the scientific mind: The impact of digital gaming on the development of the scientific mind.	Presentation + demo by Carlo Fabricatore and Ximena Lopez followed by discussion.
3:00 PM	Break.	Coffee/tea/refreshments.
3:30 PM	On teaching 'scientific thinking': A collaborative approach to a student centered active learning and technology enhanced course design.	Panel discussion with Aziza Ragai Ellozy, Tiffany Vora, Kathryn Lawrence, & Brandon Canfield on the panel.
4:15 PM	Special Interest Groups (SIG's) and other special group activities. See also listing on Page 5.	105-minute timeslot for dedicated work on issues of special interest. This is left to the initiative of the participants. At the start those wishing to run a SIG or activity will be invited to briefly highlight the intentions/goals of their SIG, inviting members of the community to participate.
6:00 PM	Special session on the history, culture and architecture of the broader environment in	Session organized and moderated by Mohsen Tawfik with guest participation.
	which we meet, El Gamaliya.	Around 7:30 this is followed by sharing a traditional Egyptian meal, offered by IDSC.
		For those interested, we end the evening with a stroll through the illuminated area, appreciating its beauty at night.
??????? time tbd (around 9 PM)	End of Day 3.	Hotel based participants use provided transport to return to their respective destinations.

### **WEDNESDAY MAY 13**

9:30 AM	The role of media, mind and identity in a 'liquid' social universe.	Presentation by Jaap Swart of work in collaboration with Marten de Vries.
9:45 AM	Which home we want to replicate in the universe and is there any room for 'the Third World people'?	Presentation by Faiza Hussein AbdAllah.
10:00 AM	The socio-demographic and some personal characteristics of those who value imagination as a quality that children can be encouraged to learn, at home, in Egypt. A descriptive study.	Presentation by Shahinaz Mekheimar of a paper co-authored by Shahinaz Ibrahim Mekheimar and Maha Ismail Mahmoud.
10:15 AM	Science and Religion Perspectives: Conflict, Interdependence, Dialogue or Integration	Presentation by Mohsen Tawfik
10:30 AM	Break.	Coffee/tea/refreshments.
11:00 AM	Developing young scientific minds: The role of the arts.	Presentation by Marion Porath of paper co-authored by Marion Porath and Krista Fogel.
11:15 AM	Basic Books in Science: Problems of science publishing for those with limited access, particularly in Africa: Issues of printing and distribution.	Presentation by Roy McWeeny on challenges met in his work 'For the Love of Science.'
11:30 AM	Inspiring young children in underprivileged environments using the beauty and scale of the universe as a source of inspiration: Results of a workshop with the children of El Gamaliya.	Presentation by Carolina Ödman on UNAWE's international experience and in particular the work done with the children of El Gamaliya.
11:45 AM	Diverse opportunities for the development of the human mind, starting with the very young, with particular attention to those growing up in underprivileged environments.	Group discussions inspired by the seven previous presentations and earlier contributions to clarifying this area of concern during the colloquium. Results to be presented after the lunch break.
12:30 PM	Lunch break.	In addition to sharing food, participants are invited to self-organize during lunch time and continue discussions in areas of relevant interest as well as use part of the time available for Knowledge Café related exchanges.
1:30 PM	Diverse opportunities for the development of the human mind, starting with the very young, with particular attention to those growing up in underprivileged environments (continued).	Reporting back by working groups who discussed these matters before lunch. Plenary debate inspired by the group reports.
2:30 PM	Special Interest Groups (SIG's) and other special group activities. See also listing on Page 5.	Three-hour timeslot (before and after the break) for dedicated work on issues of special interest. This is left to the initiative of the participants. At the start those wishing to run a SIG or activity will be invited to briefly highlight the intentions/goals of their SIG, inviting members of the community to participate.
3:00 PM	Break.	Coffee/tea/refreshments.
3:30 PM	Special Interest Groups (SIG's) and other special group activities (continued). See also listing on Page 5.	Three-hour timeslot (before and after the break) for dedicated work on issues of special interest. This is left to the initiative of the participants. At the start those wishing to run a SIG or activity will be invited to briefly highlight the intentions/goals of their SIG, inviting members of the community to participate.
5:30 PM	End of Day 4.	Hotel based participants use provided transport to return to their respective

destinations.

#### **THURSDAY MAY 14**

9:30 AM	Health promotion and raising critical awareness with special emphasis on qualitative research.	Presentation by Shahinaz Mekheimar followed by discussion.
10:00 AM	Approaches to the explanation and learning of scientific studies for nonscience stakeholders.	Paper by John Johnson. Presentation followed by discussion. (The paper may be presented by a colleague.)
10:30 AM	Break.	Coffee/tea/refreshments.
11:00 AM	What we have learned and how we intend to make further progress: Reporting back by groups and individuals—brainstorming ideas and visions for the future.	Closing plenary dialogue.
12:30 PM	Lunch break.	We close while sharing a last meal together, leaving time for plenty of informal discussion, reconfirming friendships and sustained professional contacts beyond the colloquium.
13:30 PM	End of Day 5.	Hotel based participants use provided transport to return to their respective destinations.

#### Special Interest Groups as identified previously:

- Learning for Sustainable Futures.
- Problem Oriented Learning.
- Personal Health and the Scientific Mind (with specific attention to the challenge of endemic diseases).
- Transdisciplinarity.
- Development of the Scientific Mind in the Age of the Internet (exploring opportunities and distractions).
- UNAWE.
- Big History.
- Diverse Cultural, Philosophical and Religious Perspectives on the Scientific Mind.
- Science and Pseudoscience.
- Early Child Development and the Scientific Mind.
- Developing the Scientific Mind in and for a Developing World.

### Special activities as proposed by participants to be accommodated in 'SIG and special group activities' program slots:

- Elizabeth Jordan & Marion Porath: Problem-oriented approaches to teaching and learning across disciplines (workshop).
- Carlo Fabricatore & Ximena Lopez: Gaming and the scientific mind: Designing games to develop the scientific mind (2-hour workshop).
- Shahinaz Mekheimar: Health promotion and raising critical awareness with special emphasis on qualitative research (roundtable).
- Roy McWeeny: Science publishing in Africa: Problems of printing and distribution (roundtable).
- Marion Porath: Developing young scientific minds: The role of the arts (roundtable).
- Mohsen Tawfik: Science and religion (roundtable).

#### **LEGEND**

- General/Relating to overall organization of the colloquium.

  Knowledge Café and informal purposeful interaction.

  Plenary sessions providing food for thought.
- The scientific mind in action: Group work on special interest—SIG's and premeditated or spontaneously conceived activities.
- Building vision and commitment regarding what to do next.

## Notes about the program

- 1. Only the opening part of the colloquium, the session from 11 to 12 a.m. on Sunday, is formal and fixed. Everything else is in principle informal and flexible. A suggested structure is outlined in the pages above. That suggested structure is provided to help you conceive of the program as an integrated whole. However, it should by no means be considered limiting. The outcome of the meeting is what matters. For that reason the program provides **ample opportunity for non-programmed interaction** among participants in accordance with premeditated or spontaneously evolving specific interests. Timeslots available for these purposes are color coded 'yellow' and 'light orange' (see the legend on Page 5). Some of these timeslots coincide with the breaks for refreshments and meals. In addition, participants may use what is left of the evenings and their breakfast periods in the hotel(s) to continue their conversations. These non-programmed items may turn out to be the most important ones on the agenda. **How important will depend on you!**
- 2. To facilitate purposeful interaction among the participants we created during the afternoon of the opening day a session named 'A *smörgåsbord* of facts, findings, ideas, concerns, visions and questions about the scientific mind.' During that session all participants who submitted formal proposals will be invited to briefly (a couple of minutes in most cases; occasionally more) highlight their proposed item. In addition, those who did not submit formal proposals but who yet wish to bring their interests to the attention of the BtSM2009 community will be equally encouraged to do so. Please come prepared for the opportunity!
- 3. To make it even better, we also plan on running a so-called 'knowledge café'—a space in terms of time, location and opportunities—for all members of the community who so feel inclined to display, for the duration of the colloquium, their interests in the form of posters and poster like material that one can stick onto the pillars surrounding the patio at FEDA where we share our food and refreshments. Do take advantage of the occasion and, if still possible, prepare something in advance.