

## Scientists vs. pseudo-science: short memoirs of Rationalis' 07

**Sumario.** Resumen de las memorias y recomendaciones surgidas del Taller “Pensamiento Racional y Pseudociencia” celebrado en la Universidad de La Habana en los días 17-19 de Diciembre de 2007.

**Abstract.** A summary of the memories and recommendations of the Workshop “Rational Thinking and Pseudoscience”, taking place in December 17-19, 2007 at the Havana University.

The Workshop “Rational Thinking and Pseudoscience”, took place in December 17-19, 2007, at the Havana University. Attended the workshop engineers, physicians, dentists, biologists, mathematicians, veterinarians, pharmacists, journalists and physicists, among others.

The programme (see next page) included conferences about general features of the scientific method, the exchange of knowledge through scientific journals, ethics in medicine, the internationally accepted standards for clinical trials and also some more specific ones about energy, magnetism, coherence in optics, homeopathy and the so-called “pyramidal energy”. Evidences were shown that contradict some statements about practices already applied in our country, or going to be, such as the “pyramidal therapy”, biophoton therapy -a modern version of the old chromotherapy-, magnetotherapy, etc.

Examples were presented showing that the press, including papers, radio, TV and web sites, has regularly published pseudoscientific news without criticism, including frontal violations of elementary physics laws and other basic sciences.

The opinion of the Organizing Committee on the subject is that this behavior wears away the national praiseworthy efforts of the massive diffusion media to contribute to the citizen’s culture, as well as the prestige of the health system. A simple way to avoid the diffusion of false information (especially anecdotic) about a supposedly scientific advance or therapy would be not

to publish it unless previously reported in a refereed scientific journal.



In addition, evidences came out suggesting generalized practices in health centers not endorsed by the corresponding Cuban agencies, some of them based on pseudoscientific arguments. As some participants related, some “healing” procedures, not approved by the public health system, have been chosen by some patients discarding conventional therapies of tested efficiency (like, for instance, hem dialysis or gall bladder surgery), with negative consequences for their health, or even for their life. It was suggested that the concerning agencies should take care about this delicate situation.

The Organizing Committee made a point in stating that the former does not mean a reject to Natural and Traditional medicine as a concept or valid practice. Natural products - historical source of modern drugs- are more accessible and, in general, less toxic than occidental drugs, even though they require the same controls that synthetic drugs. The same opinion is sustained about empirical practices such as acupuncture and others of the Asiatic medicine.

To preserve nationally and internationally the standing and prestige attained by Cuban medicine and public health, the Committee suggests that natural and traditional medicine must take distance of practices without scientific fundamentals, already considered as pseudoscience by the international scientific community.

A full copy of the workshop memories is kept at <http://www.fisica.uh.cu/rationalis/index.htm>.

### Workshop programme

*1 Taller “Pensamiento Racional y Pseudociencia” Universidad de La Habana, diciembre 17, 18 & 19, 2007*

#### Programa

Todas las sesiones serán en el “Salón 250 Aniversario” del edificio “Varona”, excepto la tarde del lunes 17 y la mañana del día martes 18, que sesionarán en el “Salón Frío” de la Facultad de Filosofía de la Universidad de La Habana

## Lunes 17 de diciembre

9:00 AM – 9:30 AM Acreditación

9:30 AM – 9:40 AM Palabras de bienvenida, *Dr. Rolando García, Vicerrector, UH*

9:40 AM – 10:00 AM Introducción, *Dr. Ernesto Altshuler, Decano, FFUH*

10:00 AM – 10:30 AM "Claves para una discusión científica racional", *Dr. Luis Carlos Silva, Infomed*

10:30 AM – 11:00 AM "Coffee break"

11:00 AM – 11:30 AM "Energías", *Dr. Osvaldo de Melo, Presidente Sociedad Cubana de Física*

11:30 AM – 12:30 PM Primera sesión de debate (*Moderador: Dr. Nelson Suárez, FFUH*)

12:30 PM – 2:00 PM Receso

2:00 PM – 2:30 PM "Desde la verdad científica hasta las especulaciones", *Dr. M. Iturralde, Museo de Historia Natural*

2:30 PM – 3:00 PM "Experimentando con pirámides" *Dr. Julio Álvarez, Instituto de Cardiología*

3:00 PM – 4:30 PM Segunda sesión de debate (*Moderador: Dr. Oscar Sotolongo-Costa*)

## Martes 18 de diciembre

9:30 AM – 10:00 AM "El *ethos* clásico de la Ciencia", *Dr. Pedro M. Pruna-Goodall, SCHCT*

10:00 AM – 10:30 AM "El ensayo clínico controlado como Regla de Oro para la evaluación de medicamentos",

*Dra. Grisela Soto, CENCEC*

10:30 AM – 11:00 AM "Coffee Break"

11:00 AM – 11:30 AM "Consideraciones éticas acerca de la validación de tratamientos médicos", *Dr. José Ramón Acosta Sariago, ICBP "Victoria de Girón"*

11:30 PM – 1:00 PM Tercera sesión de debate (*Moderador: Dr. Núñez-Jover, Dirección de Postgrado, UH*)

1:00 PM – 2:00 PM Receso

2:00 PM – 2:30 PM "Biofoterapia", *MSc. Esperanza Purón, IMRE, UH*

2:30 PM – 3:00 PM "El espejismo de la magnetoterapia", *Dr. Arnaldo González, FFUH*

3:00 PM – 3:30 PM "Homeopatía", *Dr. Julio Álvarez, Instituto de Cardiología*

3:30 PM – 4:30 PM Cuarta sesión de debate (*Moderadora: Dra. Lilliam Álvarez, CITMA*)

## Miércoles 19 de diciembre

9:30 AM – 10:00 AM Cultura científica vs. Pseudociencia, *Dr. Edwin Pedrero, Presidente, Cátedra de Cultura Científica "Félix Varela"*

10:00 AM – 10:30 AM "Pseudociencia y medios de comunicación: ¿un matrimonio feliz?", *Lic. Manuel Vázquez, Prensa Latina*

10:30 AM – 12:00 M Proyección de documentales sobre supuestos fenómenos para-normales ó pseudo-científicos (*Presentador: Dr. Osvaldo de Melo, FFUH*).

12:00 M – 1:00 PM Receso

1:00 PM – 3:00 PM Coloquio "Ciencia y Pseudociencia en la TV –cómo el científico debe afrontar el debate" (*Moderador: Dr. Oscar Álvarez, CITMA; Invitados: Dr Fabio Hernández, Director, Centro de Investigaciones Sociales del ICRT y Lic. Reinaldo Taladril, periodista, ICRT*).

