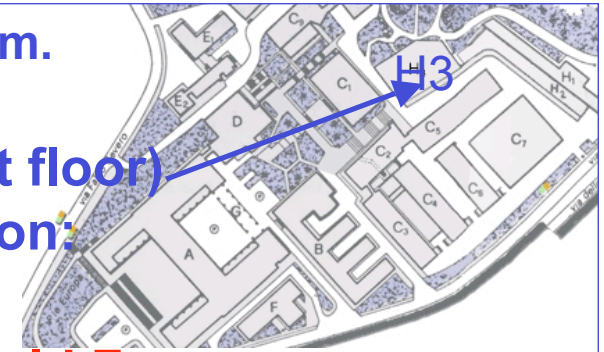




Monday 28 May 2007, 4.00- 6.00 p.m.  
University of Trieste  
Building H3, Lecture Room 1A (first floor)  
Special International Presentation:



**HIGHLIGHTS** of the **G8-UNESCO World Forum**  
on 'Education, Research and Innovation: New Partnership for  
Sustainable Development', held in Trieste, May 2007  
(In English) All students, researchers, lecturers are cordially invited

Program

- 16,00 Introduction: Education-Research-Innovation - **Gianrossano GIANNINI (TS/Italy)** (10')
- 16,10 Why UNESCO? Why Africa? Why Trieste?- **Paolo ALESSI (TS/Italy+UNESCO)** (10')
- 16,20 Education in the Knowledge-Based Society - **Gabriele GARBIN (TS/Italy+UNESCO)**(10')
- 16,30 Environment: Global Challenges - **Gianrossano GIANNINI (TS/Italy)** (10')
- 16,40 Innovation and Society - **Rachel OBED (Nigeria+ICTP)** (10')
- 16,50 Sustainable Development and Health - **Omer A. Ali (Sudan+ICTP)** (10')
- 17,00 Sustainable Development and Energy - **Gabriele GARBIN (TS/Italy+UNESCO)** (10')  
& **Anna Maria Novello (TS/Italy)** (5')
- 17,15 Research and Innovation: Role of Governments-**Patrizia TIBERI VIPRAIO (UD/Italy)** )(5')  
& **Rachel OBED (Nigeria+ICTP)** )(5')
- 17,25 Knowledge and Sustainable Development **Gianrossano GIANNINI (TS/Italy)** (10')
- 17,35 Science/Technology/Innovation: Perspectives for Africa-**Elie SIMO (Cameroon+ICTP)** (15')
- 17,50 Knowledge for Sustainable Development:The future **Patrizia TIBERI VIPRAIO(UD/Italy)**(10')
- 18,00 End

# Session on Sustainable Development and Health

Summarize by:  
Omer A. ALI  
Radiation and Isotopes Center  
Dep. of Medical Physics  
SUDAN

PITT-MILLER  
(CHAIR)

- “A healthy population is essential prerequisite for economic growth and stability for the Caribbean”

- The diseases in Caribbean are typical ones of developing countries.
- They have exhibited also the developed countries disease.

# The aim of these session

- How to developed integrated health care approach that can meet the challenges of 21 century arising from ageing population, environmental degradation and possible pandemic.
- Identify intellectuals properties including impact on developing countries.

## Prof. Pratap C. Reddy

- Noble goal to be “to bring healthcare of international standards within the reach of every individual. We are committed to the achievement and maintenance of excellence in education, research and healthcare for the benefit of humanity”.

- They have **done 59,000 heart surgeries** with outstanding success rate, “last year our success rate was **99.6 %**, which consider the **second in the world.**”
- Prevention.
- Tel-medicine.

**Prof. Francisco E. BARALLE**  
**ICGEB**

- Structural and functional genomics and related **biotechnologies** are **keys** for the development of healthcare and agricultural innovations over the coming decades.



# Biopharmaceuticals

- A **biopharmaceutical** is a naturally occurring or modified polypeptide, DNA or RNA molecule, produced by recombinant DNA technology.
- The biological systems for **production** can be bacteria, eukaryotic cell lines, transgenic animals or plants.
- They can be used for therapy, prophylaxis or diagnostics.

# Biogenerics

- The first recombinant biopharmaceuticals patents are **now over 20 years old** and a **13.5 billion** generics market is now being opened. The biopharmaceutical industries in countries such as **Argentina, Brazil, China, Cuba, India, Korea, etc.** are in a position to take a considerable share of this market.

- The essential raw material needed are the **scientist with adequate knowledge of the scientific method,** skilled in biotechnological techniques and with as wide as possible **scientific culture.**

- There is a need to **simplify technology and adapt it to developing world needs and possibilities.** The **meaning** of this statement is not to lower the quality of the scientific questions but to **avoid unnecessary sophistication.**

- There is the need to **avoid prestige** only projects, based on automated repetitive procedures. These type of projects have very little added value in terms of capacity building and skills gained.

- “From the point of view of the wide political guidelines on project selection, there is no need to restrict this action to the so-called third world diseases. More people die in the developing world from Cardiovascular Diseases than from Parasitosis. **Basic research should be actively encouraged because its social value goes beyond the hypothetical economic return of a given project.** The fundamental value of basic research is the creation of a collective scientific competence that promotes the acquisition and diffusion of innovation in the social fabric”.

## Health status at global level: highlights Prof Tamburlini

- The health status of the majority of the population in many developing countries is daunting and represents an increasingly unsustainable burden for development and a threat to global security
- There is a **sense of progress**, but in many countries (almost all of them belonging to sub-Saharan Africa) there is stagnation or worsening of the main health indicators (WHO Health Report, 2006)

# child health

- 10.7 million children die every year
- Main causes of death:
  - prematurity and neonatal infections
  - diarrhoea
  - pneumonia
  - malaria
- **malnutrition** is an underlying cause of over **50% of deaths**



# Maternal health

- **529 000** annual maternal deaths, including 68 000 deaths attributable to unsafe abortion
- over **300 million** women suffer from long-term or short-term illness brought about by pregnancy or childbirth
- There is **lack of reliable information** on the fate of mothers in many countries – and on that of their newborns

- we need new health programmes and more more health workers.
- Integrated approaches to health care are necessary.
- We should have strategies for sustainable development and health.

**Friday, 11 May**

## **Sustainable Development and Energy**

***What possible energy scenario exists for the world of the 21st century?  
How to develop an integrated approach involving education, research and  
innovation to solve the energy challenges of the 21st century?***

### **Chair**



**Dr David LINDLEY, OBE,  
FEng, FRSA**  
Director  
Ocean Power Delivery Ltd.  
U.K.

### **Welcome Remarks**



**Hon. Mr. Giovanni MANFREDI**  
Minister Plenipotentiary and  
Co-ordinator for Energy Issues  
Directorate General for  
Multilateral Economic and  
Financial Co-operation Ministry of Foreign Af-  
fairs Italy

### **Keynote Speakers**



**Dr. Lawrence L. KAZMERSKI**  
Director National Centre  
for Photovoltaics  
U.S.A.

### **Rapporteur**



**Dr. Isao YUKAWA**  
President  
Kyocera Solar Corporation  
JAPAN



**Dr. Evgeny P. VELIKHOV**  
President of Russian Research  
Centre Kurchatov Institute  
RUSSIAN FEDERATION



**Professor Ali SAYIGH**  
Chairman of World Renewable  
Energy Congress  
Director General of World  
Renewable Energy Network  
Editor-in-chief of Renewable Energy Journal  
Brighton U.K.