

International Conference on
Nuclear Knowledge Management
Strategies, Information Management and
Human Resource Development

Remarks on Human Resource Development
based on the experience at **ICTP**

- What is **ICTP** and what does it do?
- And what is the connection between **ICTP** and **IAEA**?
- **ICTP**'s experience with Human Resource Management
- Challenges for the immediate future

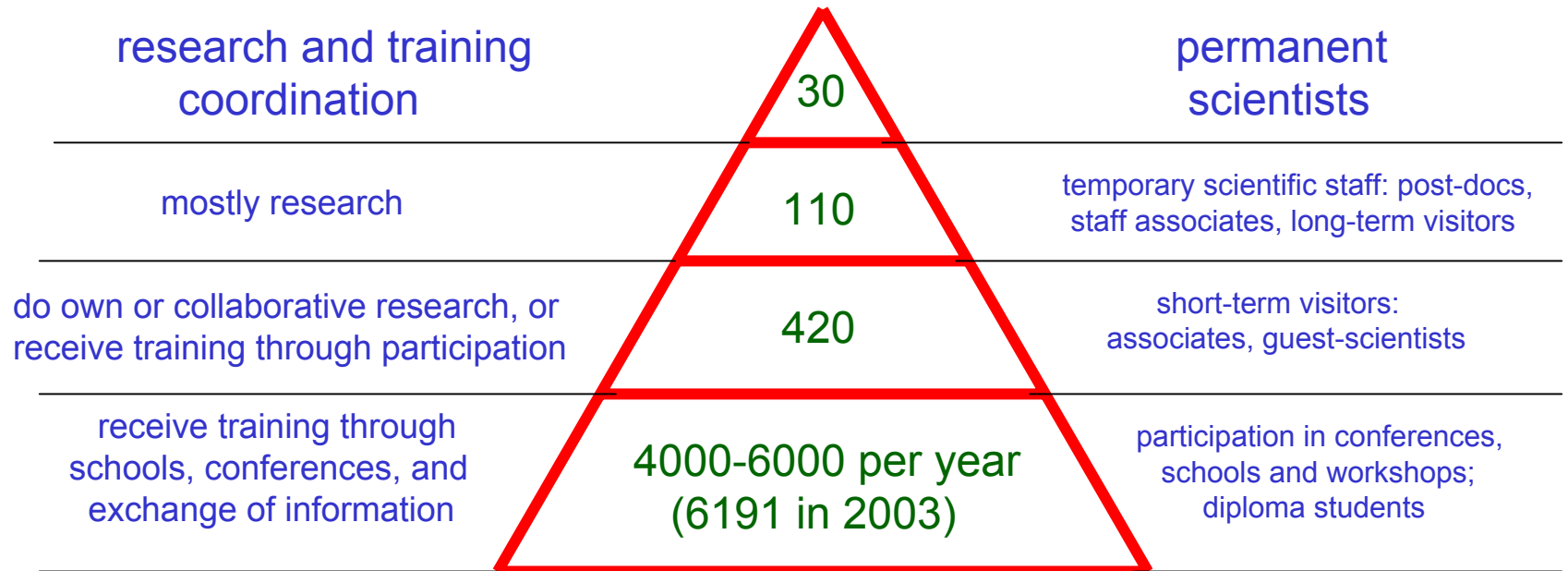
What is ICTP?

(International Centre for Theoretical Physics)

- Founded* in 1964, ICTP is a centre for scientific research and training.
- ICTP operates under a tripartite agreement between two United Nations agencies (UNESCO and IAEA) and the Government of Italy.
- ICTP was created and managed for the first twenty five years or so under the umbrella of IAEA. Now UNESCO has assumed that role.
- IAEA and UNESCO provide seed funding for the Centre, and Italy provides a major share.
- ICTP's mission is **to foster the growth of advanced studies and research in developing countries.**
- ICTP's activities extend to a wide range of fundamental and applied sciences. Many IAEA training activities are held at ICTP.

*by Abdus Salam, 1979 Nobel Laureate in Physics

ICTP is run by a few scientists for the benefit of many.



ICTP Scientists, Visitors and their Functions

ICTP Scientists, Visitors and their Functions

+ about 125 general staff

Over the past 40 years:

About 100,000 scientists from 170 nations have visited the Centre. About 2000 of them are ICTP Associates.

They have come for varying lengths of time to do research and to attend some 2000 activities in physics, mathematics, interpreted broadly, including topics of interest to this conference.

ICTP sponsors a one-year Diploma Program for promising students from the least developed countries.

Scientists affiliated with ICTP participate in off-campus activities both in Italy through a Program on Training and Research in Italian Laboratories and in all regions of the South through the External Activities programme.

BIT MAP

A World Divided By A Common Internet

We hear a lot about the digital divide—the gulf between rich and poor—but it's a hard thing to quantify, especially when it comes to the Internet. In a breakthrough study of all 178 nations in the world, released last November, the International Telecommunication Union came up with a set of metrics that finally shows who's bit-rich and who's bit-poor, and why.

The ITU calculated a ranking for each country, which it called the Digital Access Index (DAI), determined by such factors as education, the affordability of Internet access, and the proportion of Internet users with high-speed connections, in addition to the raw availability of bandwidth. On the map, the DAI is represented by height: the taller the bar, the better the nation's Internet access.

Four of the five top-ranked countries are in Scandinavia, with Sweden coming out on top. The first non-Scandinavian country is South Korea (4). The United States ranked 11, one notch below Canada. Japan was 15. Surprisingly, Slovenia tied with France, Italy, and New Zealand at 21.

In fact, smaller nations often ranked higher than their larger counterparts: Hong Kong (7), Singapore (14), Luxembourg (15, tie), and even the Seychelles (52) doing better than Russia (63), China (84), and India (119).

The United States may have been penalized by one of the factors used to determine rankings—a quality measurement that considered the total bandwidth connecting a country to other countries, divided by the number of inhabitants.

Because so much of the Internet still physically resides in the United States, there's far less need for international connections than in, say, Denmark (2). However, as time goes by and more and more of the Internet exists outside the United States, Americans may find themselves truly slipping behind if they do not invest in more global connectivity.

Perhaps the most interesting factor was affordability, defined by what it costs to access the Internet as a percentage of a country's gross national income per capita. The measure considered the basic monthly cost of Internet access for an individual line plus any additional cost for 20 hours online (10 peak hours

