AAPM educational endeavors and resources
- tools for mutual collaboration and growth

Yakov Pipman, DSc
Chair, International Education Activities Committee
AAPM

International Educational Activities
An outreach and collaboration tool for the profession beyond North America.

International Scientific Exchange Programs
- Two each year: Imaging (1) + Therapy (1)
- 4-5 full days
- Local Director and institutional commitments
- Program matched to the local needs
- 2 Program directors: Local (1) + AAPM-ISEP (1)
- Numerous lectures by 4-5 AAPM faculty
- Some practical demonstrations and exercises
- Language
- Regional - Geographic balance
ISEP Characteristics

- Tool to enhance status and visibility of MP at various levels
  - Clinical Institution
  - Academic
  - Regulatory
  - National Education and Health authorities
- Boost to the formation, and/or to advance, the organization of the local MP organization
- Focused discrete event
- Seed to longer term collaboration and relations

36 ISEP courses since 1992

- 1992 Islamabad, Pakistan
- 1993 Warsaw, Poland
- 1994 Tehran, Iran
- 1995 Istanbul, Turkey
- 1996 Rabat, Morocco
- 1997 Moscow, Russia
- 1998 Cairo, Egypt
- 1999 Sao Paulo, Brazil
- 1999 Cluj Napoca, Romania
- 2000 Bangkok, Thailand
- 2001 Dhaka, Bangladesh
- 2002 Riyadh, Saudi Arabia
- 2002 Sao Paulo, Brazil
- 2003 Cairo, Egypt
- 2004 Chengdu, China
- 2004 Abu Dhabi, UAE
- 2005 Manila, Philippines
- 2005 Yaoundé, Cameroon

International Educational Activities Committee - IEAC

WG on Cooperative Agreements between the AAPM and other National and International Medical Physics Organizations - WGNIMP

- SEFM and AMPR
- Individual student and faculty visits
  - International Learning - A two way street
- Joint Scientific or Education Symposia
  - International learning

- Chair: Carl Borras (cariborras@starpower.net)
Example: In Latin America

- ALFIM - founded at the AAPM annual meeting in Chicago, 1984
- Steady support of ALFIM workshops and congresses and courses:
  1988-Austin
  1994-Rio de Janeiro
  2000-Chicago
  2001-Caracas
  2004-Rio de Janeiro
  2007-Cartagena
  2010-Cuzco
  2013-Costa Rica
- Numerous national meetings and workshops

Example: South East Asia

- Asian Oceanic Affairs Subcommittee (AOA-SC) works with North American Chinese Medical Physicists Association (NACMPA), participate in a variety of Regional courses and meetings in China.
  - Advise to Chinese Health Department on guidelines and polices. Dialogue with China Medical Devices officials on setting up QC standards.
  - Not enough!

Example: In Africa

Dakar, Senegal: ‘Radiating Hope’ Physicists helped with training for an HDR and External beam program at Institut Curie to improve treatment techniques and to assist with department-wide issues.

Dakar, Senegal: ISEP course

Nigeria: Several hands-on training visits to support a National MP training program. (2010, 2012, 2013)

Far from enough!
Examples: in the Middle east

Example: Matthew (Liaison to Iraq)
External advisor to the Iraqi Cancer Board (ICB).
Assist with equipment specifications for RT facilities undergoing upgrade.
Hosted an Iraqi radiation oncologist (SBRT).

Resources

International Affiliates 173
DCEA 2222

Virtual Library
Presentations posted in the Virtual Library include:
- streaming video and/or audio of the speakers
- transcriptions of the audio for numerous presentations
- audio of this presentation

Medical Physics Continuing Education Credits (Members Only)
The AAPM ELearning Learning Service is an active posting continuing education question/answer site for several of the Virtual Library presentations.
If you desire to be familiar with the online learning Center program, please review the information posted here.

Webcast of the Month
You have the choice of selecting a webinar's value and then return to watch over the year for each month during the year to benefit from new offerings in these.
Resources

The AAPM supports its mission by disseminating scientific and technical information in the discipline of medical physics.

**Medical Physics** (The International Journal of Medical Physics Research and Practice) is our flagship publication with diverse and high-quality contributions through individual and library subscriptions. Subscription provides online access and sophisticated search capability through the journal archive at no additional charge, and a significant number of featured articles are also available without charge. HTML and PDF versions of the latest issues are available to all AAPM members.

**AAPM Reports** are technical reports on specific topics that are prepared by experts drawn from the AAPM membership who work together in Task Groups under the guidance of the Task Group Chair. AAPM Monographs and Conference Proceedings are reviews of medical physics topics and are primarily the output of annual AAPM Summer School. These are available for purchase from Medical Physics Publishing Corporation.

The AAPM Newsletter is published for the benefit of members of the Association and other organizations related to the activities of the Association.

Collaboration with ICTP-IAEA programs

**International Centre for Theoretical Physics**

**Joint ICTP-IAPM International Training Workshop on Accuracy Requirements and Uncertainties in Radiation Therapy**

9 - 13 December 2013

Mugan, Trieste, Italy

**Co-Sponsors**

- AAPM
- IAEA

**DIRECTIONS**

- President (AAPM)
- General Director (IAEA)

**LOCAL ORGANISER**

- Lecturer Remo (ICTP)
### Endorsed and Co-Sponsored meetings

<table>
<thead>
<tr>
<th>Year</th>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>2014</td>
<td>August 24–30, 2014</td>
<td>International Workshop on Modern Clinical Radiography</td>
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<tr>
<td>2014</td>
<td>18-May-14</td>
<td>XVI Argentine Meeting of Medical Physics / Meeting of Medical Physics of the Americas / AANRNM Meeting of Nuclear Medicine and Diagnostic Imaging</td>
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<tr>
<td>2014</td>
<td>6/16/2014</td>
<td>APP/KCEP - ISEP Radiotherapy course on: &quot;QA and Dosimetry of Emerging Radiotherapy Techniques&quot;</td>
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<tr>
<td>2014</td>
<td>17-Jun-14</td>
<td>International Workshop on Monte Carlo Techniques in Medical Physics</td>
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<tr>
<td>2014</td>
<td>4/4-8, 2014</td>
<td>ESTRO 33 Vienna, Austria</td>
</tr>
<tr>
<td>2013</td>
<td>8/24-27, 2013</td>
<td>VI Congress of the Latin American Medical Physics Association (ALFIM) Guanacaste, Costa Rica</td>
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<tr>
<td>2012</td>
<td>3/16/2012</td>
<td>16th International Leksell Gamma Knife Society Meeting</td>
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### Some of the Challenges encountered

- Unreliable or limited communication channels limit access to external resources needed for advise and technical support.
- Underutilization of resources available.
- Advanced equipment purchased without the proper human resources preparation instead of gradual but steady addition of equipment to assure its proper utilization.
- Poor equipment maintenance hinders operations and training projects.
- Strong need for mentoring and training in problem solving.
- Disconnect between responsibility and authority.
- Hierarchical structure at the workplace that is not conducive to taking initiative.
- Need for very practical training in addition to didactic lectures.

### Characteristics of ‘longer stay’ activities:

- Better chance for establishing a long term relationship between the parties.
- Opportunity to learn the issues and solutions specific to the locality.
- More of the learning can be combined with practical doing.
- The "learning while solving", even if the problems are incidental to the declared purpose of the training, is a very effective teaching and learning method.
- Requires a broad approach to problem solving.
- Experience is valuable. But, 'open mind' and flexibility is as important.
- Bring home the lessons learned from the experience.
There is a need to expand these longer term and more hands-on collaborations. They are far from enough!

So what is in it for us?

• As individuals
• As an organization

IEAC Contact: ypipman@yahoo.com