



55th Annual Meeting & Exhibition • August 4 - 8, 2013 • Indianapolis, Indiana

Education Council Symposium

-

AAPM and International Education: What, Why and How?

Is this the place ?

Yakov Pipman, D.Sc.
Medical Physicist Emeritus
Chair - International Education Activities Committee



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Brought to you by the IEAC

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Why do we get involved?

Lila Downs, a Mexican-American singer-songwriter.



- *Native Spanish speaker, speaks fluent English and Mixtec.*
- *She performs her own compositions, Mexican traditional and popular music, and songs in indigenous languages: Mixtec, Zapotec, Mayan, Nahuatl and P'urhépecha.*

Lila Downs



Fela Kuti - Nigerian musician



- *Beginning in the 1960s, Fela pioneered his own unique style of music called "Afrobeat."*
- *Singed in English, Yoruba and Pidgin English*

Fela Kuti



Manu Chao, a Spanish/French singer.

- Sings in French, Spanish, English, Italian, Galician, Arabic, and Portuguese and occasionally in other languages.*



Music

instruments

Train, Rehearse, practice

Style and form

Group / band

Guitar , drums, sax

Jam Session feedback

New techniques

Constant improvement

Medical Physics

Instruments

Education and Training

Continuous improvement

Continuing education

Practice

Methodologies

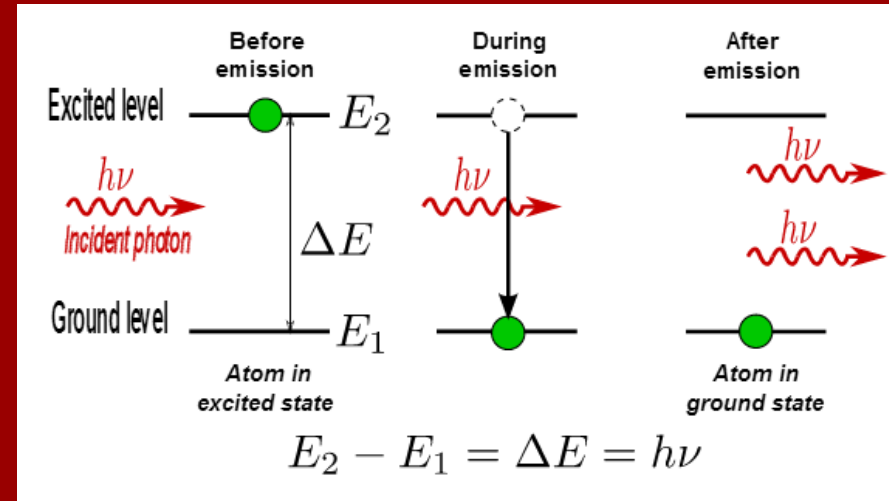
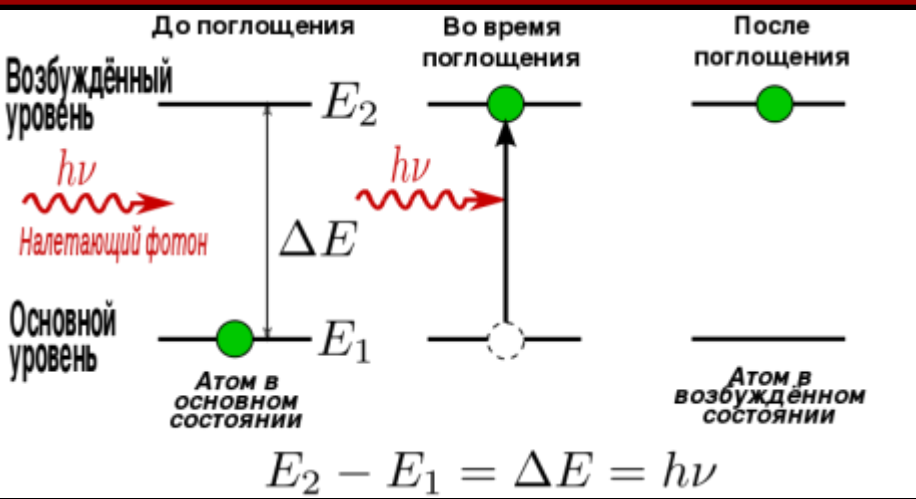
New techniques

Team of MD + physicist
+ Dosimetrist + Technologist

...all over the map...



Medical Physics - is it the same?



Is Medical Physics without Borders ?

A gamut of cases.

- **Bend, Oregon, 1980's: incorrect T/P correction. 13% overdose**
- **Spain, 1990: Linac `repair' led to 36MeV e- beam no matter what was programmed. No dosimetry check. 27 patients, 15 deaths**
- **Costa Rica, 1996: Incorrect Co-60 source calibration. Confusion between 0.30 min and 30 seconds. About 115 patients received 60% higher doses, 17 deaths among them.**
- **Panama, 2000-01: Unverified change of a procedural detail in Treatment planning . 28 patients received “double their doses” . Eight deaths and many major complications.**
- **France, 2004: Incorrect MU for dynamic wedge. 23 patients overdosed 20%, 4 deaths**
- **Glasgow,2006: Incorrect calculation of MU's. Planner thought TPS calculated MU/Gy and not MU/fraction. It didn't! 67% overdose results in death**
- **UK, 1982-90: incorrect SSD correction (did not know how TPS worked). 1045 patients, 30% underdose, >492 RT failures**
- **France, 2006-7: large ion chamber used for SRS. 145 overdoses.**

We need to talk...

Igbo, Yoruba

Yakurr

Hausa,
Fulfulde
Arabic

Spanish,
Hebrew

Hausa,
Fulfulde

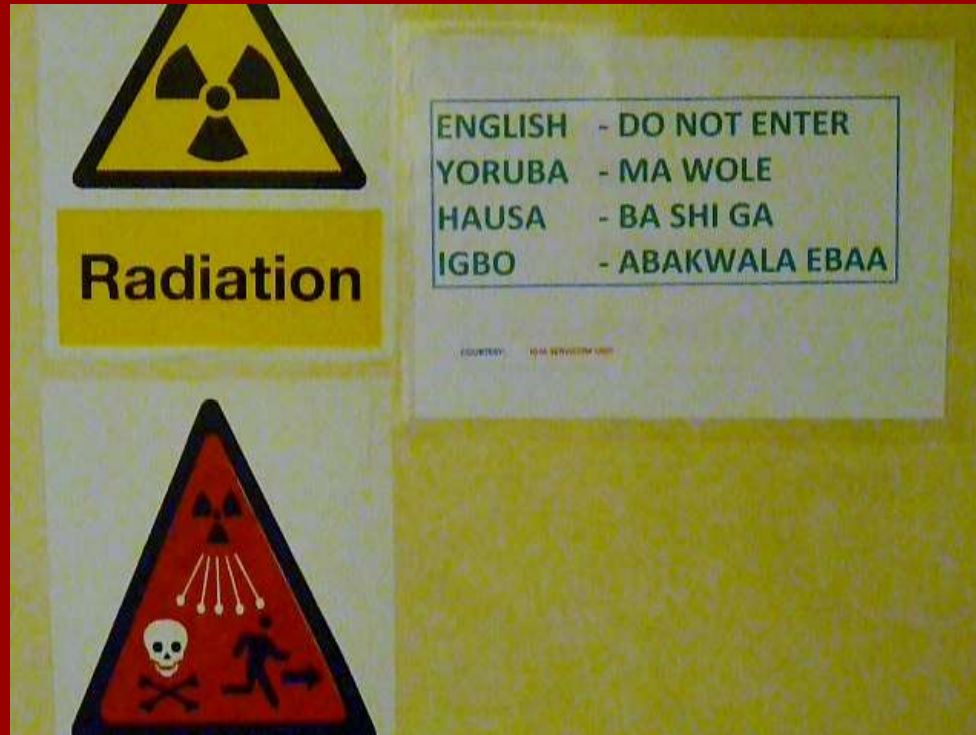
Igbo,
Yoruba



Yoruba

Urhobo,
Yoruba

Communication is key!



We also did things together...



We ate together...

LUNCH - MENU 30/4/13

WHITE BEANS	CHICKEN
JOLLOF RICE	GOAT MEAT
WHITE RICE	BEEF
	FISH
AMALA	CAT FISH
SEMOWITA	SOUP
ERA	EGUSI
CHICKEN-KIEV	OKRO
MEXICO STEAK RICE	



Where are our members?



Argentina	11
Bangladesh	6
Brazil	30
Canada	449
China	48
Cuba	1
Germany	64
Ghana	2
India	34
Iran	0
Iraq	3
Morocco	1
Nigeria	5
Poland	9
Rusia	0
Spain	36
UK	59
USA	6000+

Just a sample !

There are about 420 AAPM fellows ...among them...

Suresh K. Agarwal - India

Muthana Al-Ghazi - Iraq

Caridad Borrás - Spain

Chen-Shou Chui -Taiwan

Joanna Cygler - Poland

Carlos E. de Almeida - Brazil

Doracy Fontenla - Brazil

Michael Goitein - UK

John Laurence Humm - UK

M. Saiful Huq - Bangladesh

Willi A. Kalender - Germany

and...

Renate Muller-Runkel - Germany

Adel A. Mustafa - Palestine

Orhan Nalcioglu - Turkey

Ravinder Nath - India

Azam Niroomand-Rad - Iran

Colin G. Orton - UK

Nikos Papanikolaou - Greece

E. Ishmael Parsai - Iran

Yakov M. Pipman - Argentina

Ervin B. Podgorsak - Slovenia

Ulf F. Rosenow - Germany

What do we get out of it?

geography

Teach and learn

colleagues

Work in a
very
different
environment

Helping

Surprises
and
challenges

culture

Food

friends



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So, here we go !

Medical Physics Education and Training in the
Global Village
Issues, Strategies, and Experiences



Hearts in International Education: Rewards
and Benefits

International educational programs for the
future: challenges and opportunities



Transforming Teachers into Learners and
Learners into Teachers; the Sui Generis
Opportunities in Cross-Border Collaboration