

Global Education Work

Session Title: Addressing Global Needs in Medical Physics Support

July 11, 2022 - 4:30-6:00 PM

AAPM 2022

Cesar Della Bianca, PhD

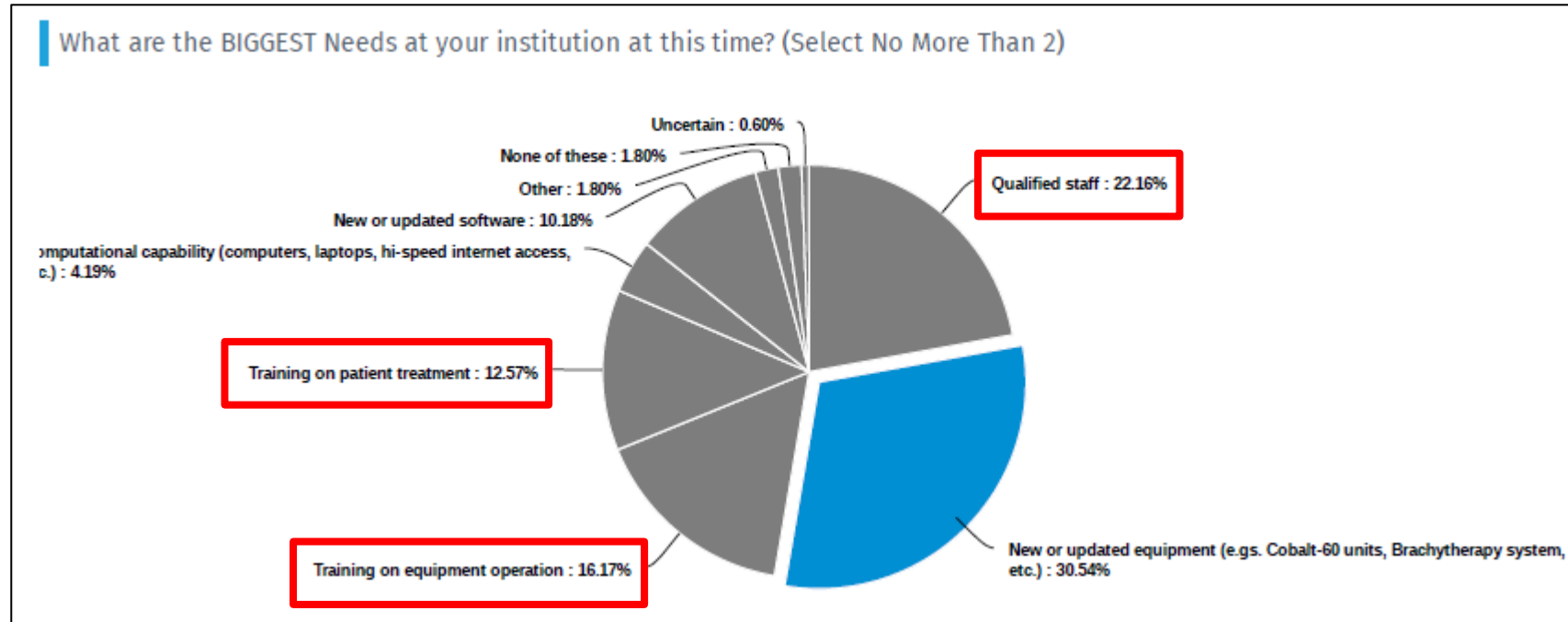
Memorial Sloan Kettering Cancer Center

Member of GNAC and GRSC (AAPM International Council)

No conflict of interest

Global Education Needs

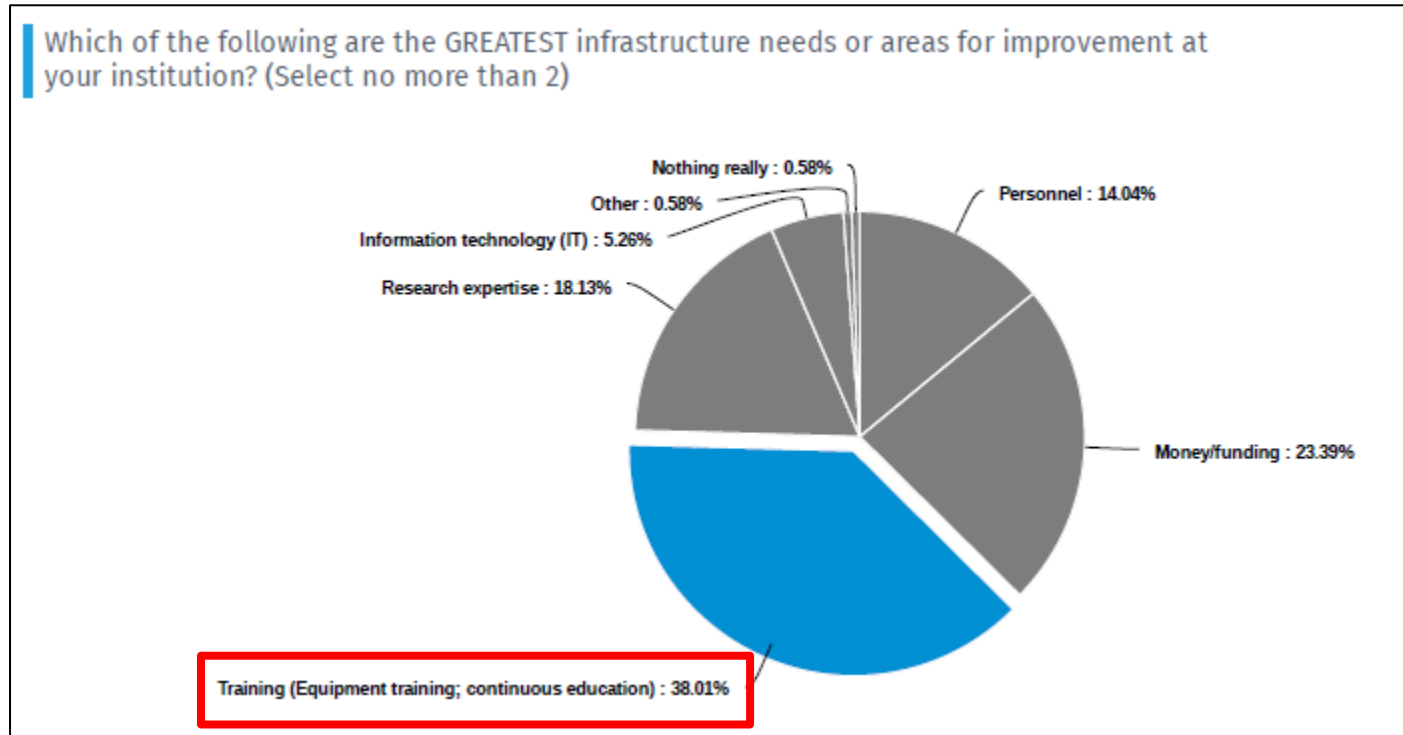
- ▶ Data from the survey to global institutional leaders



Needs

Global Education Needs

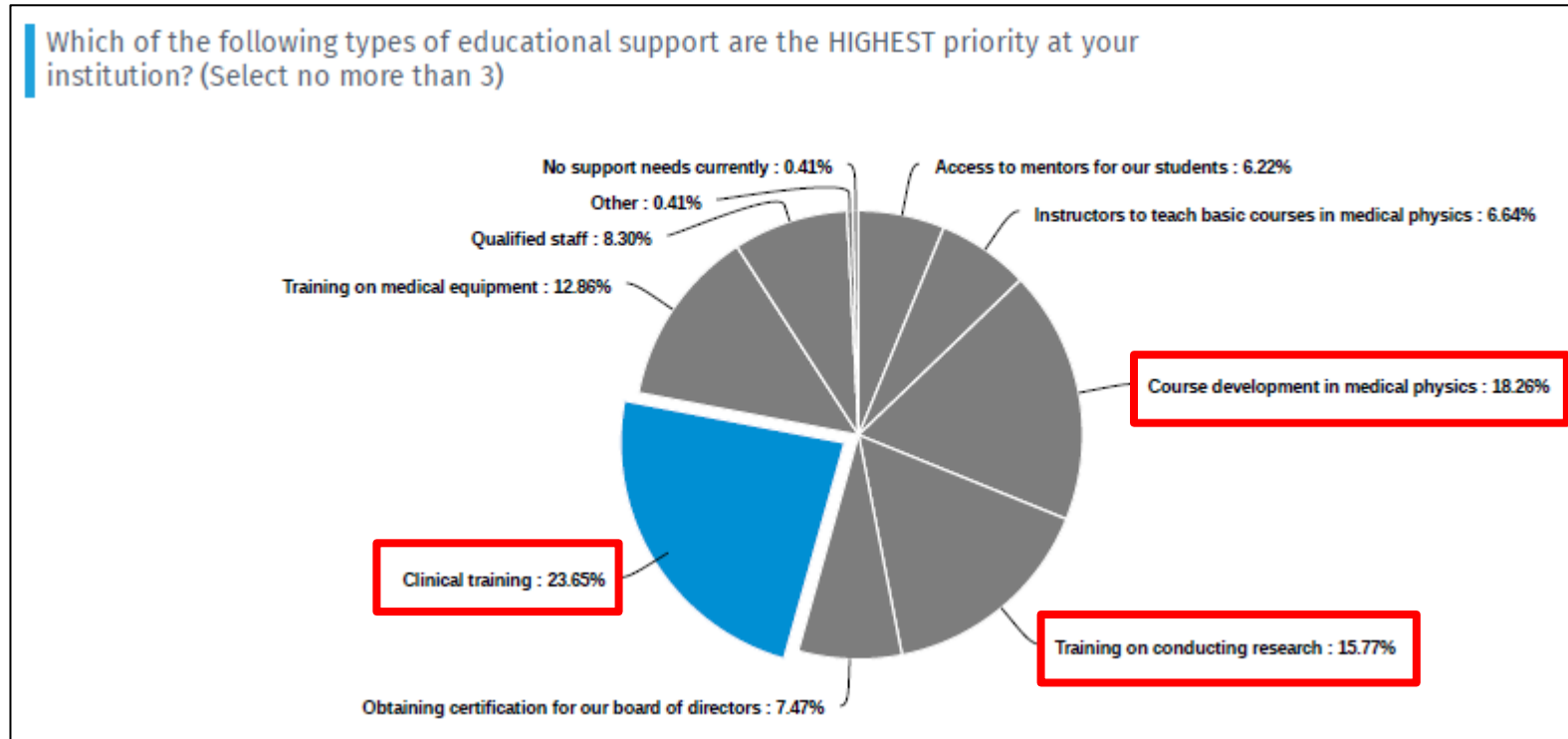
- ▶ Data from the survey to global institutional leaders



Needs

Global Education Needs

- Data from the survey to global institutional leaders

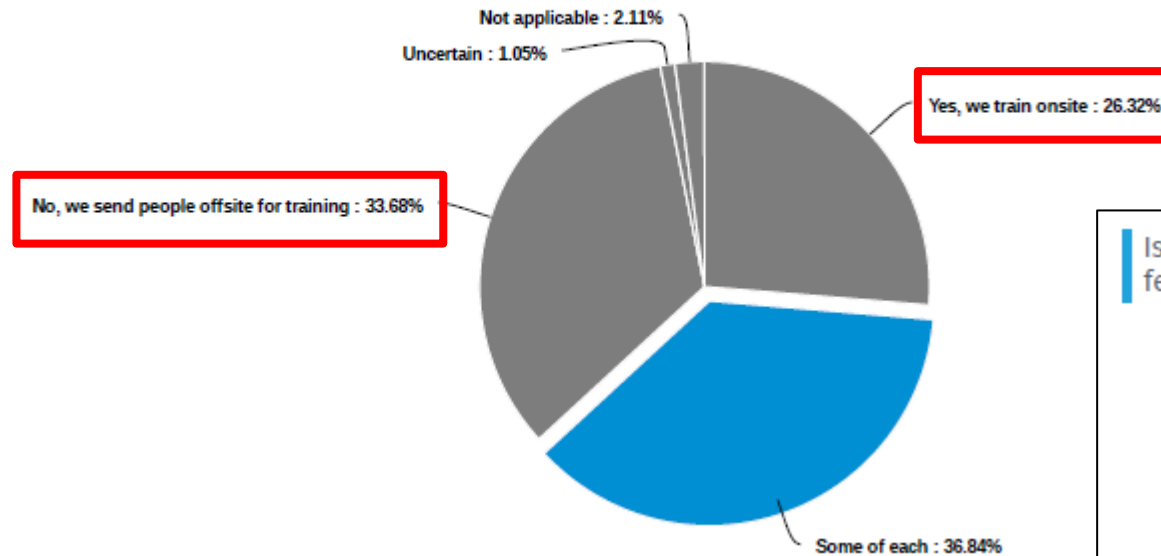


Priorities

Global Education Needs

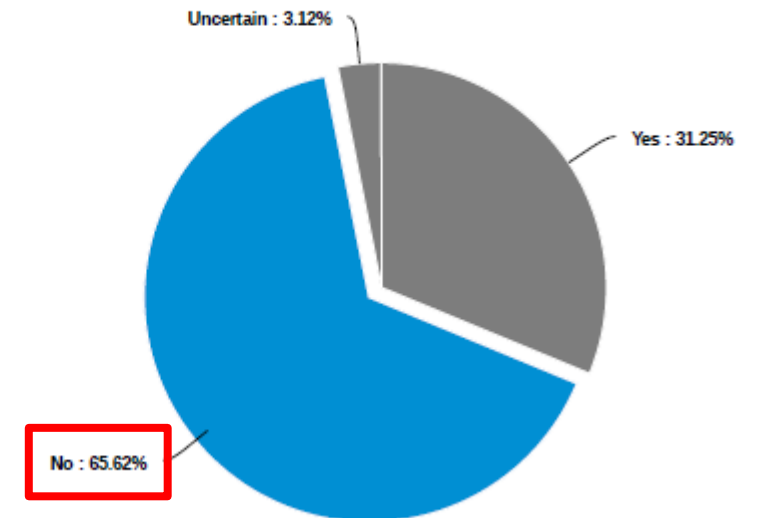
► Data from the survey to global institutional leaders

Does your institution have the capability to train your work force in medical physics on site or do you have to send employees away for training?



Reality

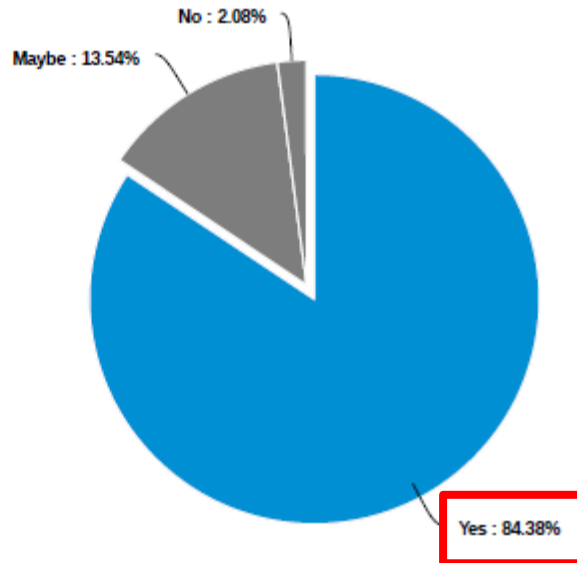
Is your institution affiliated with a graduate program or structured training (e.g. residency, fellowship, specialty certificate, etc.) in Medical Physics?



Global Education Needs

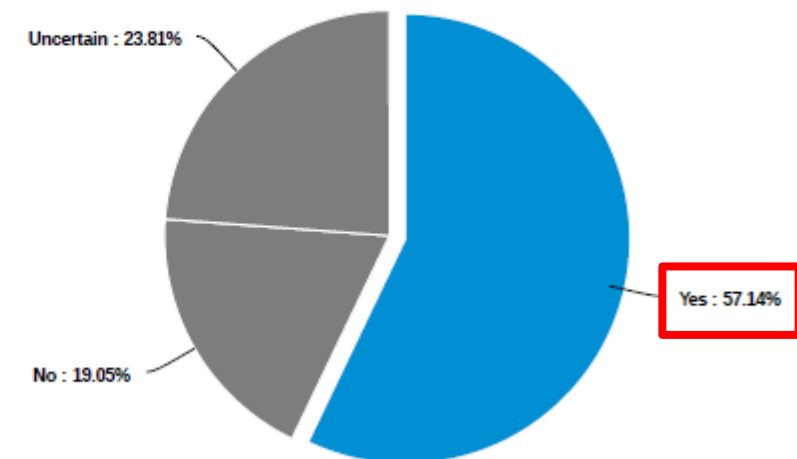
► Data from the survey to global institutional leaders

Do you have staff that would be interested in receiving remote training and peer support on treatment planning and quality assurance?



Wishes

Do you plan to initiate structured training in Medical Physics within the next (3) years?



Global Education - AAPM

- ▶ AAPM provides a variety of programs, membership opportunities, and resources for medical physicists, students and related medical and scientific professionals anywhere in the world
 - ▶ International Scientific Exchange Program
 - ▶ AAPM Virtual Library → continuing education courses
 - ▶ AAPM/IOMP Library program
 - ▶ IAEA sponsored Training Programs
- ▶ International Council (IC)
 - ▶ Created: 10/1/2020
 - ▶ Council Chair: Dr. Jatinder Palta
 - ▶ Interconnections between all committees (6)



Global Education
and Training



Global Data and
Information
Exchange



Global Medical
Physics Education
and Training



Global Needs
Assessment



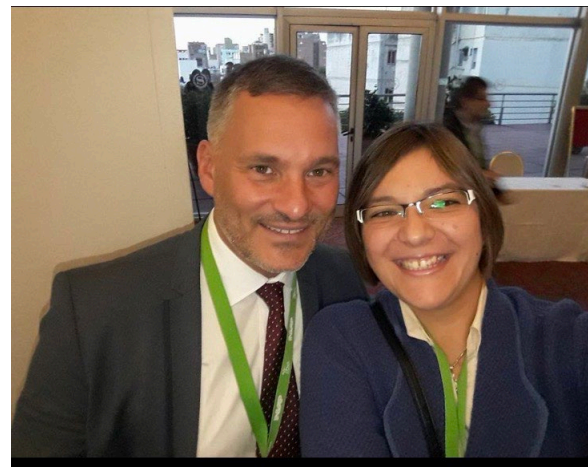
Global
Liaisons



Global Research
and Scientific
Innovation

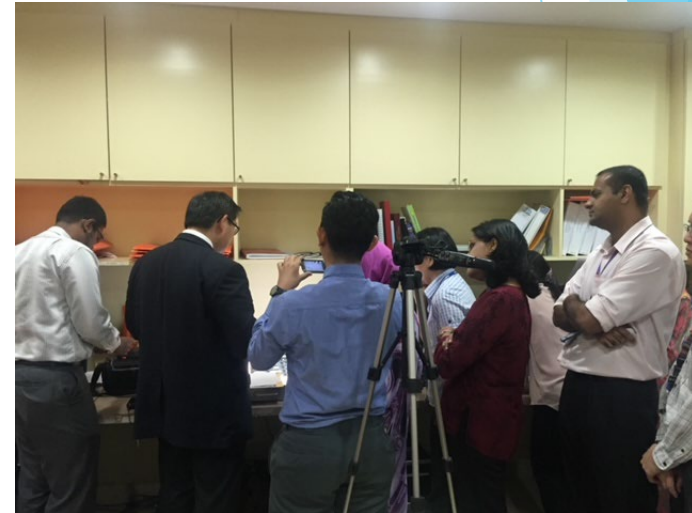
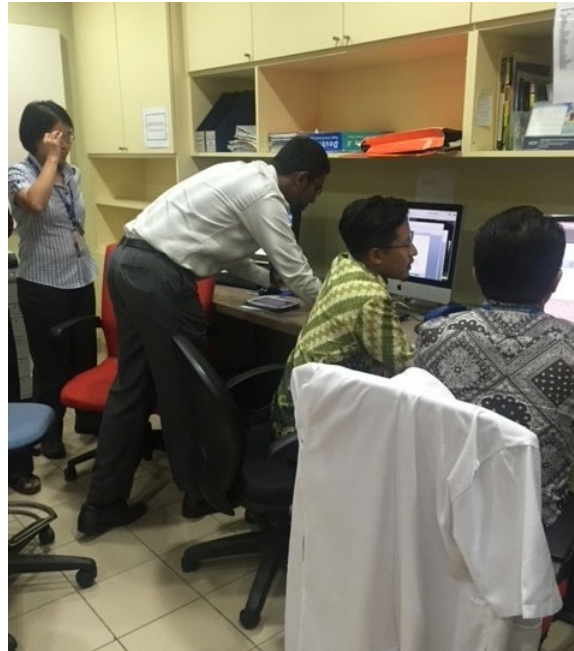
Global Education - My experience

- ▶ Since 1998 → involved in Seminars, Conferences, Workshops and Round tables in different cities in Argentina, especially Córdoba



Global Education - *My experience*

- ▶ 2015 → IMRT/VMAT and SBRT training (Prostate, Lung, Brain and Spine) - General Hospital of Kuala Lumpur, Malaysia



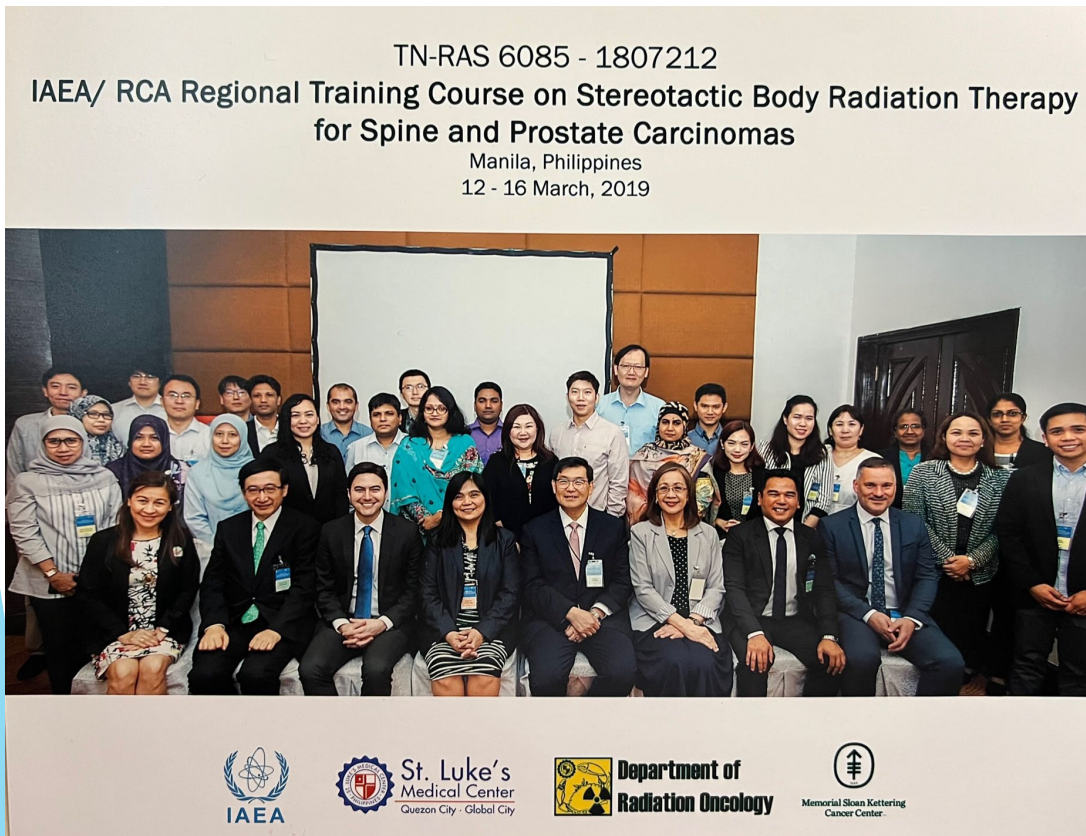
Global Education - My experience

- ▶ 2016 → ISEP/AAPM/IOMP Radiation Therapy Physics Course: Foundation on Theories, Developments, And Practices (Brachytherapy, Advances in IGR, QA Imaging Device/IGRT) - Jakarta, Indonesia



Global Education - My experience

- ▶ 2019 → IAEA SBRT Regional Training Course (Prostate, Spine, SBRT QA and QC, Treatment Planning workshop) - Manila, The Philippines



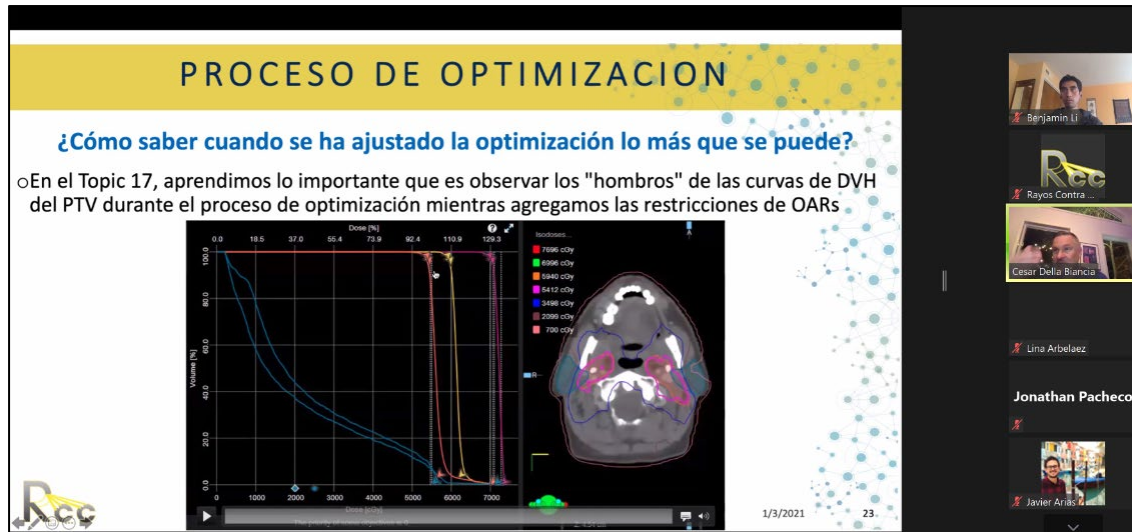
Global Education - My experience

- ▶ 2020/2021 → Rayos Contra el Cancer
 - ▶ Transition to IMRT 2.0 (for Africa and Middle East - English - Virtual)
 - ▶ Transition to IMRT 2.0 (for Latin America - Spanish - Virtual)

PROCESO DE OPTIMIZACION

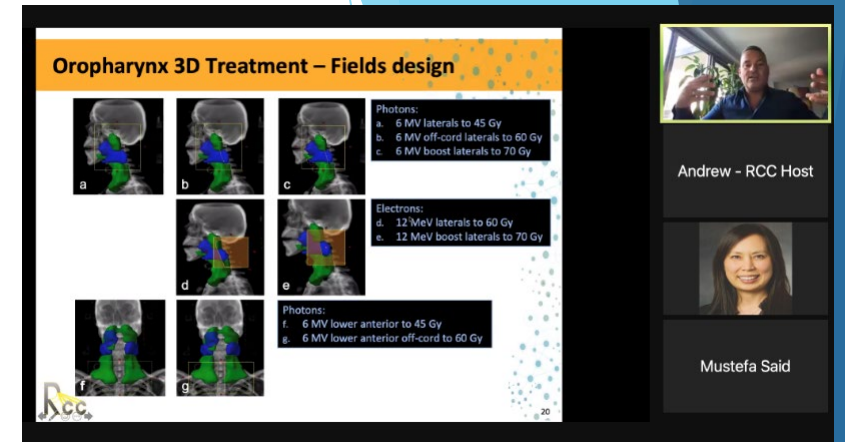
¿Cómo saber cuando se ha ajustado la optimización lo más que se puede?

o En el Topic 17, aprendimos lo importante que es observar los "hombros" de las curvas de DVH del PTV durante el proceso de optimización mientras agregamos las restricciones de OARs



- ▶ 2022 → Rayos Contra el Cancer
 - ▶ Mastering IMRT/VMAT (for Latin America 0 Spanish - Virtual)

Oropharynx 3D Treatment – Fields design

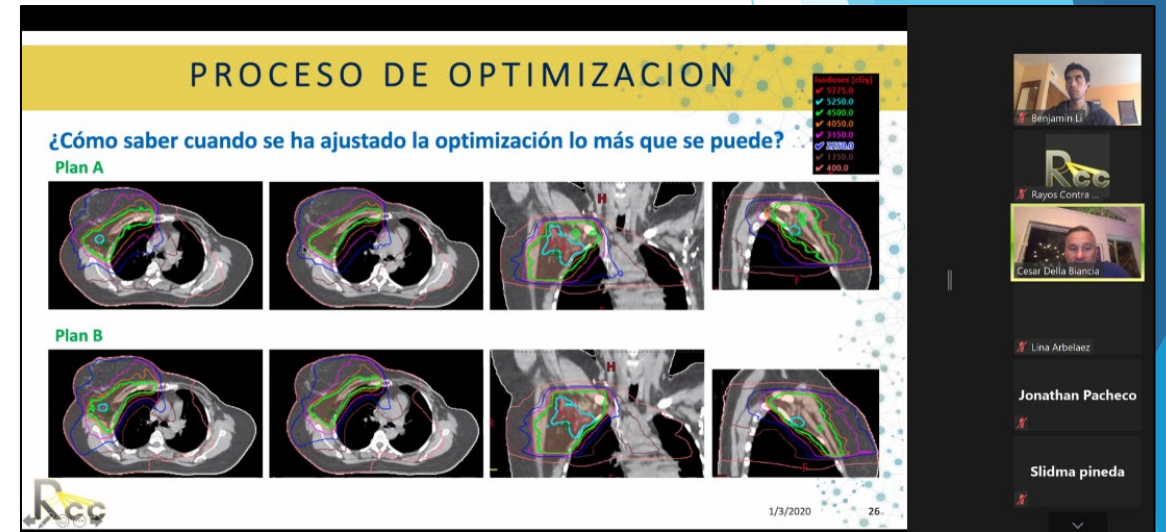


PROCESO DE OPTIMIZACION

¿Cómo saber cuando se ha ajustado la optimización lo más que se puede?

Plan A

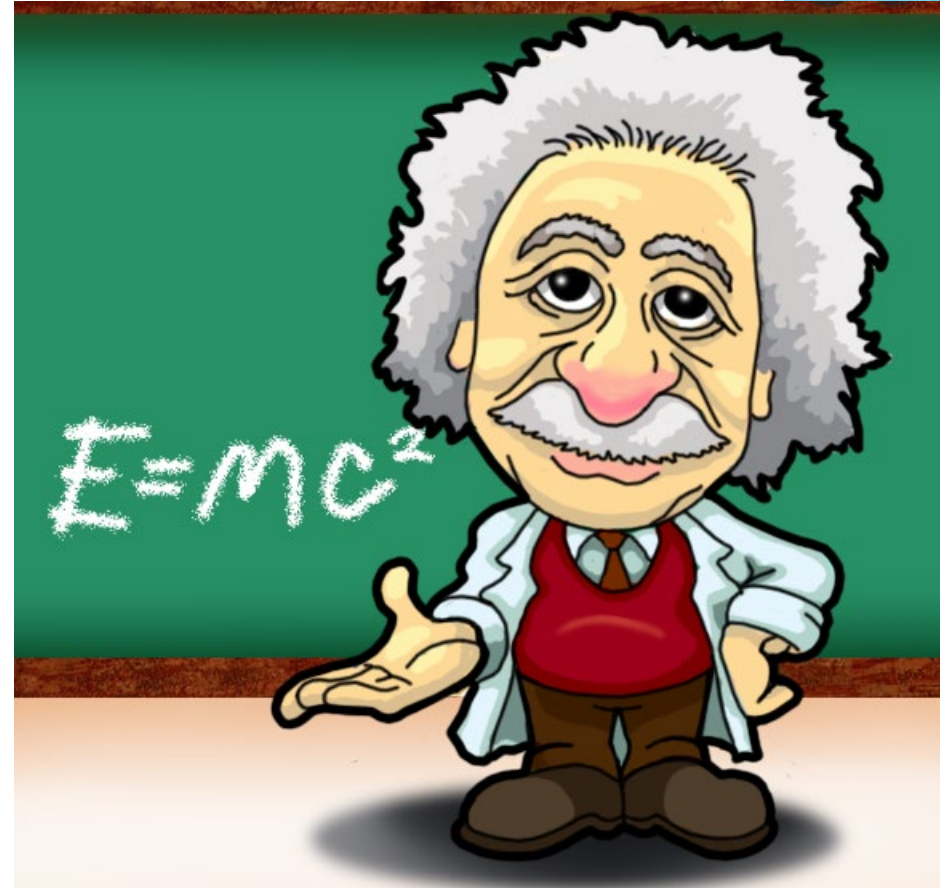
Plan B



Global Education

Your help is very much appreciated

- ▶ Voluntary work
- ▶ A couple of hours of your time and expertise means much more than that for LMICs
- ▶ Stay connected with AAPM for training and educational opportunities





**Help disseminate
the survey to global
institutional leaders**

<https://bit.ly/GNAC1>



Thank you so much for your attention
dellabc@mskcc.org