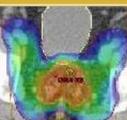
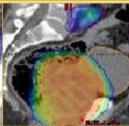
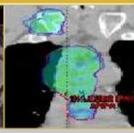


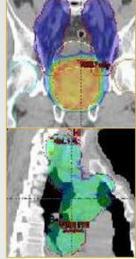


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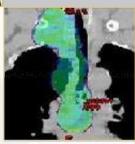


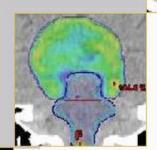


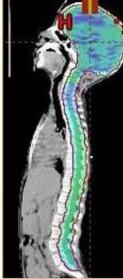


King Faisal Specialist Hospital & Research Centre BIOMEDICAL PHYSICS DEPARTMENT

# RAPIDARC WORKSHOP

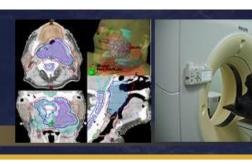




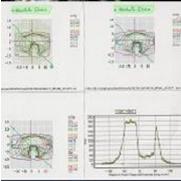


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#### **IMRT/IGRT RAPIDARC WORKSHOP**

Venue: Treatment Planning Rooms and Treatment Unit 21EX

Coordinator: Mr. Ahmad Nobah

Faculty:

Mr. Ahmad Nobah, Dr. Mohammad Beltagi, Mr. Umar Mwidu, Ms. Lorcel Ericka Ventruina, Mr. Francis Tse, Ms. Julia Brown

**Related CE Course:** RO1-CEC entitled "Advanced Radiotherapy Clinical Applications"

#### **Target Audience:**

This workshop is aimed at radiation physicists, dosimetrists, radiation oncologists, and radiation therapists interested in the RapidArc® technique on Varian® LINACS . Basic knowledge of radiation oncology and radiation physics is a prerequisite. Experience in IMRT planning and treatment will be an added advantage.

#### **Workshop Description:**

It is a Show and Tell workshop where participants will be walked-though step-by-step demonstrations for all aspects of the RapidArc® process. It will cover the following:

- 1. Introduction to Arc Therapy
- 2. Case study:
  - Brain Case
  - Nasopharyngeal case (T4N3aM0), SIB: PTV70, 66, 60, 54
- 3. Step-By-Step RapidArc Radiotherapy process:
  - CT Simulation
  - Contourina
  - Planning & Optimization
  - Dose evaluation
  - Dose delivery using the IGRT system (Varian-OBI)
  - Patient Specific QA using MapCheck2 device

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#### Coordinator



Ahmad Nobah, MSc Medical Physicist



Mohammed Nazmy, MD Consultant



Lorcel Ericka Venturina, CMD Medical Dosimetrist



Umar Maganda Mwidu, MSc Medical Physicist



Francis Tse, BSc, MRT(T)
Senior Radiation Therapist



Julia Brown, HBSc , BMRS, MRT(T)
Radiation Therapist

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Dear Participant,

This workshop intends to discuss the RapidArc technology as a state of the art technique that is capable of delivering intensity modulated radiation beams in a very short time compared to conventional fixed angle Intensity Modulated Radiation Therapy(IMRT). The workshop will explore the RapidArc process as a whole, starting from the basics and then gradually move to more challenging scenarios. All of you should learn from it; Physicist, Dosimetrists, Oncologists, and Therapists.

In this workshop, you will learn how to be efficient in each part of the RapidArc process, to make the workflow smooth and achieve the main goal of the RapidArc technology, which is , short treatment time with optimal treatment accuracy.

In this workshop you will be required to participate in part of the planning process, so it is required of you to listen to the instructor and then implement what will be asked of you.

At the end of this workshop, there will be a quiz, and the highest score will receive prizes.

You are encouraged to make the best use of this 8-hour workshop by learning as much as you can and therefore do not be deterred from asking any questions.

In case you are interested to learn more about specific aspects of the process and you feel that certain subjects may not be as relevant to you, you are advised to spend the last two hours of the workshop with our team informally asking questions about this technology.

Best wishes and good luck-

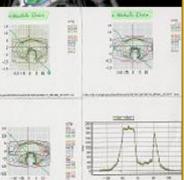
RapidArc Team at KFSHRC

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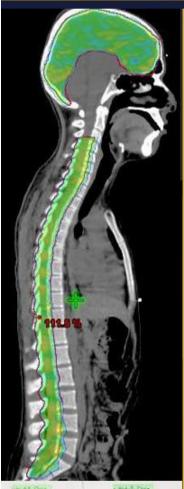
Date Wednesday, 29 Feb 2012	Wednesday, 29 Feb 2012		
Time Activity	Activity		
08:00 - 09:30 Continuing Education Courses	Continuing Education Courses		
09:30 - 10:00 Coffee Break	Coffee Break		
12:00 - 13:30 Prayer and Lunch Break (Al-Maather Cave Park)	Prayer and Lunch Break (Al-Maather Cave Park)		
Beginning of RapidArc Workshop			
Time Topic Group By	Room		
13:30 - 13:40 What is this workshop about? ALL A.N.	Onc. Conf.		
13:40 - 14:00 RapidArc Clinical ALL M.N.			
14:00- 15:00 Introduction: RapidArc (TPS) ALL E.V.	Onc. Conf.		
15:00 - 15:30 CT Simulation ALL F.T. & J.B.	CT Sim		
15:30 - 16:00 Break + Discussion	Break + Discussion		
16:00 - 17:00 RapidArc Planning (Brain) ALL E.V.	Onc. Conf.		
17:00 - 17:20 Discussion ALL ALL	Onc. Conf.		
17:00 - 17:20 Discussion ALL ALL	Onc. Conf.		
Thursday, 1 March 2012			
	Onc. Conf.  Room		
Thursday, 1 March 2012			
Thursday, 1 March 2012 Time Topic Group By	Room		
Thursday, 1 March 2012	Room		
Thursday, 1 March 2012  Time Topic Group By  08:00 - 09:00 RapidArc Plannning (Naso) ALL A.N.  09:30 - 10:00 Break + Discussion	Room Onc. Conf.		
Thursday, 1 March 2012	Room Onc. Conf. 21EX (T2)		
Thursday, 1 March 2012  Time Topic Group By  08:00 - 09:00 RapidArc Plannning (Naso) ALL A.N.  09:30 - 10:00  Break + Discussion  Case Delivery G1 F.T. / J.B.  RA QA Process G2 U.M.	Room Onc. Conf.  21EX (T2) Onc. Conf.		
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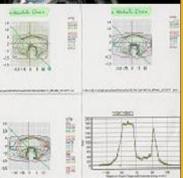
M.N.: Mohammad Nazmy, F.T.: Francis Tse, J.B.: Julia Brown E.V.: Erica Venturina, U.M.: Umar Mwido, A.N.: Ahmad Nobah

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13:30 – 13:40 PM	Introduction - Workshop Time table - Get the best out of this workshop
13:40 – 14:00 PM	RapidArc Clinical Perspective  - KFSHRC RapidArc experience  - Why I prefer RapidArc as an oncologist?
14:00 - 15:00 PM	Introduction: RapidArc (TPS)  - ABC of RapidArc  - Importing Patient CT  - Contouring  - Start a plan
15:00 – 15:30 PM	CT Simulation -Patient Positioning -Exporting CT to Eclipse
15:30 – 16:00 PM	<u>Break</u>
16:00 – 17:00 PM	RapidArc Planning (Brain case) - RapidArc contours - Arc geometry - Optimization parameters - Plan evaluation
08:00 - 09:30 AM	Advanced RapidArc Planning (Naso Case)  - RapidArc contours  - Arc geometry  - Optimization parameters  - Plan evaluation  - Results of different arc geometries  - Plan approvals  - Second independent check software
09:30 - 10:00 AM	<u>Break</u>
10:00 – 11:00 AM	Case Delivery (H&N Case) Parallel session  - Calc Room check  - Machine check  - IGRT: OBI Registration  - Treatment Delivery

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