

PROJECT COORDINATORS

ABUBAKER FARMESK	CHARMO UNIVERSITY, IRAQ
SCOPELLITI FABRIZIO	CANNIZZARO HOSPITAL, ITALY

COORDINATORS

KHARMAN FARAJ	RADIOBIOLOGIST PHD, PROFESSOR, COLLEGE OF SCIENCE, SULAIMANI UNIVERSITY
ABUBAKER FARMESK	PHYSICIST PHD, LECTURER, COLLEGE OF SCIENCE, CHARMO UNIVERSITY

SPEAKERS

IN PERSON

SCOPELLITI FABRIZIO	RADIOPHARMACIST PHD, HEAD OF RADIOPHARMACY, CANNIZZARO EMERGENCY HOSPITAL, CATANIA, ITALY
ABUBAKER FARMESK	PHYSICIST PHD, LECTURER, COLLEGE OF SCIENCE, CHARMO UNIVERSITY, IRAQ
KHANNA RUHANI	MEDICAL PHYSICIST, PHD STUDENTS, NOTTINGHAM TRENT UNIVERSITY, UK
LA TORRE FLAVIA	NUCLEAR MEDICINE PHYSICIAN, POLYCLINIC HOSPITAL, MESSINA, ITALY
SAEED SOMA	MEDICAL PHYSICIST, PHD, LECTURER, SULAIMANI POLYTECHNICS UNIVERSITY, IRAQ
MURAD KARZAN	BOARD CERTIFIED RADIATION ONCOLOGIST, PHD, ZHANAWA CANCER CENTER, IRAQ
WSHIAR LANA	BOARD CERTIFIED RADIATION ONCOLOGIST, PHD, ZHANAWA CANCER CENTER, IRAQ
MOHAMMED SHWAN	BOARD CERTIFIED RADIATION ONCOLOGIST, PHD, ZHANAWA CANCER CENTER, IRAQ
GHAFOUR HAWBIR	MEDICAL PHYSICIST, ZHANAWA CANCER CENTER, IRAQ

VIRTUAL

FAVETTA MARCO	PHYSICIST PHD-MEDICAL PHYSICS, BIOPHYSICS POSTDOC, POLYCLINIC HOSPITAL, BARI, ITALY
MASPERO MARCO	RADIOPHARMACIST, NATIONAL COUNCIL OF RESEARCH-SAN RAFFAELE HOSPITAL, MILANO, ITALY
PANASITI FRANCESCO	NUCLEAR MEDICINE PHYSICIAN, CANNIZZARO EMERGENCY HOSPITAL, CATANIA, ITALY
CARAMMA SEBASTIANO	NUCLEAR MEDICINE TECHNICIAN, GARIBALDI HOSPITAL, CATANIA, ITALY
PISCIOTTA PIETRO	MEDICAL PHYSICIST, PHD, UNIVERSITY MEDICAL CENTER GROWINGER (UMCG), THE NETHERLANDS



SCAN TO JOIN

ICTP Physics Without Frontiers: Kurdistan - Iraq

MEDICAL PHYSICS

USE OF RADIATION IN CANCER MANAGEMENT



1ST - 4TH OCTOBER 2023



The Abdus Salam
International Centre
for Theoretical Physics
Physics Without Frontiers



Physics Department
College of Science
University of Sulaimani

THE PROGRAM OF THESE DAYS

DAY 1 - GENERALITY

9:00	9:30	Registration	---
9:30	10:05	Greetings + Introduction to PWF project	PAYAM ABUBAKER
10:05	10:40	Cancer in Kurdistan: An Overview of Current Status and Progress in Diagnosis, Treatment and Prevention	KARZAN MURAD
10:40	11:00	COFFEE BREAK	---
11:00	11:30	Radiation: Illuminating Diagnosis and Empowering Therapy in Modern Medicine	FARMESK ABUBAKER
11:30	12:00	Inside the Radiopharmacy: An Overview of a Nuclear Medicine Department	FABRIZIO SCOPELLITI
12:00	14:00	LUNCH	---
14:00	14:35	Overview of a Modern Radiotherapy Department and its Vital Role in Cancer Care	RUHANI KHANNA
14:35	15:10	Status and perspectives of cancer management	FLAVIA LA TORRE
15:10	15:30	DISCUSSION	---

DAY 2 - NUCLEAR MEDICINE

9:00	9:35	From Atom to Aid: The Crucial Role of Radioisotope Production in Advancing Medical Diagnostics and Therapy	FARMESK ABUBAKER
9:35	10:10	From the isotope to the drug: the synthesis of radiopharmaceuticals	FABRIZIO SCOPELLITI
10:10	10:30	COFFEE BREAK	---
10:30	11:05	Assessing the injectability of radiopharmaceuticals: the quality controls	MARCO MASPERO
11:05	11:40	Nuclear Medicine Imaging Equipment and its Vital Role in Diagnosis and Treatment	FARMESK ABUBAKER
11:40	12:00	DISCUSSION	---
12:00	14:00	LUNCH	---
14:00	14:35	Hi-tech equipment and patient management: the technician point of view	SEBASTIANO CARAMMA
14:35	15:10	Clinical use of radiopharmaceuticals	FLAVIA LA TORRE
15:10	15:30	DISCUSSION	---

DAY 3 - RADIOTHERAPY

9:00	9:25	Comprehensive Cancer Management: A Multidisciplinary Approach to Fighting and Living with Cancer	SOMA SAEED
9:25	9:45	Exploring the Potential of Photon Radiotherapy in Cancer Treatment	MARCO FAVETTA
9:45	10:10	Mastering the Basics: An Introduction to LINAC Technology and its Role in Modern Radiation Therapy	HAWBIR GHAFOUR
10:10	10:30	COFFEE BREAK	---
10:30	11:05	Introduction to Particle Therapy in Modern Cancer Treatment	RUHANI KHANNA
11:05	11:40	Proton Therapy Unveiled: A Comprehensive Introduction to the Cutting-Edge Cancer Treatment	PIETRO PISCIOTTA
11:40	12:00	DISCUSSION	---
12:00	14:00	LUNCH	---
14:00	14:35	Particle Therapy: Unveiling the Power of Heavy Particles in the Present and Shaping the Future of Cancer Treatment	RUHANI KHANNA
14:35	15:10	Clinical Applications and Breakthroughs in Radiotherapy for Enhanced Cancer Treatment	KARZAN MURAD
15:10	15:30	DISCUSSION	---

DAY 4 - FUTURE TRENDS

9:00	9:35	How Nuclear Medicine can help in Radiotherapy treatment	FRANCESCO PANASITI
9:35	10:10	Proton-Boron Fusion Radiotherapy: Unleashing the Power of Precision Cancer Treatment	RUHANI KHANNA
10:10	10:30	COFFEE BREAK	---
10:30	11:00	Revolutionizing Cancer Treatment: The Power of MRI-LINAC Technology	MARCO FAVETTA
11:00	11:30	Theranostics: Pioneering Precision Medicine for Targeted Therapy and Diagnosis	FABRIZIO SCOPELLITI
11:30	12:00	Radiation Protection	LANA WSHIAR
12:00	12:30	Round table	FARMESK ABUBAKER
12:30	14:30	LUNCH	---

PROJECT OVERVIEW

University of Charmo in collaboration with Sulaimani university and ICTP scheduled the School of Medical Physics: Use of Radiation in Cancer Management, in Kurdistan Region, Iraq. It will take place from October 1st to 4th, October 2023 at Sulaimani university. This School aims to bring together national and international experts, researchers, and professionals in the field of medical physics, Radiopharmaceutical and oncology to discuss and exchange knowledge about the latest advancements, techniques, and practices related to using radiation in cancer diagnosis and treatment within the Kurdistan Region of Iraq. By gathering experts and professionals in this conference, the goal is to foster a deeper understanding of the role of medical physics in cancer management, particularly within the Kurdistan Region of Iraq. This event has the potential to facilitate knowledge sharing, promote best practices, and contribute to advancements in cancer treatment and patient care.

The aim of the School is to obtain a general understanding of Nuclear Medicine in Cancer Diagnosis and Treatment such as Highlight the significance of nuclear medicine techniques in detecting, characterizing, and monitoring cancer. Emphasize the need for research and advancements in nuclear medicine for improved cancer outcomes. Explain the principles of nuclear medicine, which involve the use of radioactive substances (radiopharmaceuticals) for imaging and therapy, all those topics will be discussed at the 1st and 2nd days of the school.

In the day 3, and 4 we are going to focus on Radiotherapy.

Provide a brief introduction to medical physics and its role in cancer management. Highlight the significance of radiation therapy in cancer treatment. Discuss the fundamentals of radiation therapy, including ionizing radiation and its interaction with cancer cells. Explain the different types of radiation used in cancer treatment, such as external beam radiation therapy, brachytherapy and Particle therapy. Describe the goal of radiation therapy, which is to deliver a precise dose of radiation to the tumor while minimizing damage to surrounding healthy tissues. Explain the process of treatment planning, which involves various steps such as imaging, contouring, and dose calculation. Discuss the role of medical physicists in treatment planning, including quality assurance to ensure accurate and safe treatment delivery.

The specific agenda, speakers, and details about the School are likely to be available on the Universities and ICTP-PWF official website or promotional materials.

