



HANA KAMAL MEKDASH

Date of Birth: 6 September 1991

Nationality: Lebanese

E-mail: hanamekdash@gmail.com

Address: Beirut, Lebanon

Phone: +961 3 026 964,

EDUCATION

Sep 2013 – Aug 2014	Heidelberg University – Medical Faculty Mannheim Masters of Science, Medical Physics Grade: Very Good (1.3)	Mannheim, Germany
Sep 2009 – Jun 2012	American University of Beirut (AUB) Bachelor of Science, Physics Grade: GPA of 3.3/4	Beirut, Lebanon
Sep 2001 – Jun 2009	Lycée Abd el Kader French Baccalaureate	Beirut, Lebanon

EMPLOYMENT

Jan 2015 – present	American University of Beirut Medical Center Department of Radiation Oncology Medical Physicist	Beirut, Lebanon
--------------------	---	-----------------

- **Radiation Therapies**
 - Photon and Electron External Beam Radiation Therapies
 - Total Body Irradiation (TBI) and Total Skin Electron Irradiation (TSEI)
 - High Dose Rate (HDR) Brachytherapy
 - Deep Inspiration Breath Hold Techniques (DIBH)
- **Treatment Planning Experience**
 - Three Dimensional Conformal Radiation Therapy (3D-CRT)
 - Intensity Modulated Radiation Therapy (IMRT)
 - Stereotactic Body Radiation Therapy (SBRT)
 - Stereotactic Radiosurgery and Radiotherapy (SRS and SRT)
 - Intracavitary and interstitial 3D Brachytherapy
- **Quality Assurance (QA)**
 - Routine QA of two linear accelerators, one HDR Brachytherapy unit, and one CT simulation machine.
 - Treatment Planning Software (TPS) QA
 - Patient-specific IMRT QA
- **TPS Experience**
 - Eclipse, Velocity and BrachyVision (Varian), iPlan (BrainLab) Panther (Prowess) and Monaco (Elekta)

Jan 2012 – Feb 2012

American University of Beirut Medical Center
Department of Radiation Oncology
Intern

Beirut, Lebanon

CERTIFICATES & AWARDS

Sep 2022

Radiation Oncology Best Employee Award
American University of Beirut Medical Center

Sep 2021

International Medical Physics Certification Board (IMPCB)
Specialty of Radiation Oncology Medical Physics

CONFERENCES & ADVANCED TRAINING

Oct 2019

Workshop on Topics and Trends in Medical Physics Doha, Qatar

Apr 2019

ESTRO 38 Milan, Italy

Dec 2018

**The first International Medical Physics Workshop
in Lebanon on Diagnostic Imaging and Radiotherapy** Beirut, Lebanon

Apr 2017

ESTRO Teaching Course Warsaw, Poland
Dose Modeling and Verification for external beam radiation therapy

Jun 2016

ESTRO Teaching Course Brussels, Belgium
Brachytherapy for Prostate Cancer

May 2015

BRAINLAB Training Course Chicago, USA
Treatment Planning and Physics (iPlan)

PUBLICATIONS

Hilal L, Mkanna A, Shahine B, Ramia P, **Mekdash H**, Geara F, Youssef B. Electrons Only Internal Mammary Chain (IMC) Irradiation Technique Reduces Cardiac Toxicity Compared to Mixed Electron-Photons Technique in Left-Sided Breast Cancer. *International Journal of Radiation OncologyBiologyPhysics* 105(1):E704. 2019.

Hilal L, **Mekdash H**, Ramia P, Jammal M, Youssef B. A Novel Three-Dimensional Conformal Radiation Therapy Technique to Decrease the Mean Parotid Gland Dose in Whole Brain Radiation Therapy. *Journal of Nuclear Medicine & Radiation Therapy* 2019, 10:2.

Mekdash H, Shahine B, Youssef B. A simple technique for an accurate shielding of the lungs during total body irradiation. *Technical Innovations & Patient Support in Radiation Oncology* 3-4 (2017) 13-18.

Nwankwo O, **Mekdash H**, Sihono D, Wenz F, Glatting G. Knowledge-based radiation therapy (KBRT) treatment planning versus planning by experts: validation of a KBRT algorithm for prostate cancer treatment planning. *Radiation Oncology*, 10:111 (10 May 2015)

ORAL AND POSTER PRESENTATIONS

Hilal L, Shahine B, Ramia P, **Mekdash H**, Geara F, Youssef B. Electrons Only Internal Mammary Chain (IMC) Irradiation Technique Reduces Cardiac Toxicity Compared to Mixed Electron-Photons Technique in Left Sided Breast Cancer. *Poster presentation at the ASTRO Annual Meeting, September 15-18, 2019, Chicago, IL, USA.*

Mekdash H. A simple technique for an accurate shielding of the lungs during total body irradiation. *Oral Presentation at The first international Medical Physics Workshop in Lebanon on Diagnostic Imaging and Radiotherapy, Dec 1-5, 2018, Beirut, Lebanon.*

Mekdash H, Shahine B, Jalbout W, Youssef B. A simple technique for an accurate shielding of the lungs during total body irradiation. *Poster Presentation at the ESTRO 36, May 5-9, 2017, Vienna, Austria.*

Abu Gheida I, **Mekdash H**, Youssef B, Shahine B, Geara F. Is intensity-modulated radiation therapy always superior to three-dimensional radiation therapy to treat prostate cancer? A study based on normal tissue constraints and individual patient anatomy. *Oral Presentation at the MDACC/AUBMC/KHCC Connecting Through Research Conference, March 2017, Amman Jordan.*

Mekdash H, Nabha R, Taddei P. Radiation dose measurements: Validation of an analytical model for out-of-field dose estimates. *Poster Presentation at the Sixth Annual AUB Biomedical Research Day 2016, Beirut, Lebanon.*

LANGUAGES AND SKILLS

Languages	Fluent in Arabic, English and French Intermediate level of German (B2)
Programming Languages	MATLAB and Java
Healthcare Software	MOSAIQ (Elekta) and EPIC