

Ibrahim Duhaini, PhD, FIOMP, DIMPCB

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Education:

2014 – 2022	Beirut Arab University, PhD in Physics,	(Lebanon)
1999 – 2000	Karmanos Cancer Center, Clinical Medical Physics Internship	(USA)
1997 – 2000	Wayne State University, M.S. / Medical Physics	(USA)
1995 – 1996	American University of Beirut, Teaching Diploma in Science	(Lebanon)
1992 – 1995	American University of Beirut, B.S / Biology	(Lebanon)

Certification:

International Medical Physics Certification Board (IMPCB# 2018-003, Radiation Oncology Physicist)

Clinical Work Experience:

<u>Year</u>	<u>Organization</u>	<u>Position</u>	<u>Country</u>
2021-	Varian Medical Systems	<i>Sr. Clinical Medical Physicist</i>	USA
2004-2021	Rafik Hariri University Hospital	<i>Chief Medical Physicist & RSO</i>	Lebanon
2003-2004	Oakwood Hospital	<i>Clinical Medical Physicist</i>	USA
2000-2003	St. Mary Mercy Hospital	<i>Chief Medical Physicist</i>	USA
1998-2000	Henry Ford Hospital	<i>Research Coordinator</i>	USA
1997-1998	Wayne State University	<i>Research Assistant</i>	USA

Consulting Work Experience:

<u>Year</u>	<u>Organization</u>	<u>Position</u>	<u>Country</u>
2018-2021	Ain Wazein Medical Village	<i>Consultant Medical Physicist & RSO</i>	Lebanon
2014-1018	Nabatih Governmental Hospital	<i>Consultant Medical Physicist & RSO</i>	Lebanon
2015-2018	Turkish Hospital	<i>Consultant Medical Physicist & RSO</i>	Qatar
2013-2015	Sidra Medical & Research Center	<i>Consultant Medical Physicist & RSO</i>	Qatar
2011-2013	Hamad Medical Corporations	<i>Director Radiation Safety</i>	Qatar

Academic Work Experience:

<u>Year</u>	<u>Organization</u>	<u>Position</u>	<u>Country</u>
2021 -	Lawrence Technological University	<i>Physics Adjunct Professor</i>	USA
2015- 2021	Lebanese University, Beirut	<i>Instructor, Medical Physics for MS</i>	Lebanon
2014 - 2021	Lebanese University, Saida	<i>Instructor, Therapy Physics for BS</i>	Lebanon
2017 -2018	American University of Sci. & Tech.	<i>Instructor, Radiation Protection for MS</i>	Lebanon
1996- 1996	American Community School	<i>Science Teacher</i>	Lebanon

Professional Qualifications:

- ✓ Performs dose-rate calculations to develop radiation therapy treatment plans and/or special diagnostic procedures utilizing high-level mathematics (including calculus) computer programming techniques.
- ✓ Reviews patients' charts to ensure variables involved in planning patients' radiation therapy have been properly integrated into a workable routine by Radiation Therapy Technologists.
- ✓ Calibrates all radiation oncology equipment to comply with standards of good practice and applicable state and federal regulations.
- ✓ Maintains and supervises a Radiation Safety Program for external beam therapy and brachytherapy.
- ✓ Establishes Quality Management program including; in-service lectures and orientation on Radiation Safety topics and Dosimetry evaluations for patients undergoing examinations involving the use of radiation or radioactive materials.
- ✓ Trains Dosimetrists in utilizing computers to obtain treatment plans and to perform calculations of required treatment monitor units.
- ✓ Trains staff on the proper operation of physics equipment, on the use of quality assurance equipment to perform routine tests of therapy treatment machines and simulators and in brachytherapy source preparation, surveying, simulation, safety requirements and computer isodose generation.
- ✓ Maintains and performs minor repairs on linear accelerators, simulator, treatment planning computer system and beam calibration system.
- ✓ Develops and maintains a physics file and library for references and records.
- ✓ Provides expertise in the areas of, external beam radiation physics, brachytherapy physics, simulation, stereotactic radiosurgery, and external beam radiation dosimetry.
- ✓ Develops effective strategies and interpersonal styles to influence and guide others toward the accomplishment of identified goals and objectives in radiation treatment.
- ✓ Promotes accountability in radiation therapy practice

Publications:

1. **Duhaini, I.** Leadership and the Medical Physicist! Health & Technology (2021). <https://doi.org/10.1007/s12553-021-00612-z>.
2. **Duhaini, I.,** Shahine, B., Zeidan, Y. et al. The effectiveness of the DIBH technique in protecting the heart of radiotherapy breast cancer patients treated at the American University of Beirut Medical Center in Lebanon. Health Technol. (2021).
3. **Duhaini, I.,** Shahine, B., Zeidan, Y. et al. Dosimetry comparison and evaluation of 3D and IMRT for left breast cancer radiotherapy techniques treated at ain wazein medical village hospital in Lebanon. Health Technol. 11, 483–490 (2021).

4. **Duhaini, I.** et al, Advanced Radiation Technology Book, Chapter 10, Radiation Dosimetry, World Nuclear University (2019).
5. **Duhaini, I.**, Hodroj, N., Farhat, F. et al. Organ at risk dose measurements following radiotherapy treatment for breast cancer patients. Health Technol. 8, 405–410 (2018).
6. **Duhaini, I.**, The medical physicist and advanced technology in the field of science and medicine, Physica Medica: European Journal of Medical Physics Vol. 32 p 214 Published in issue: September (2016).
7. **Duhaini, I.** The effects of electromagnetic fields on human health. Physica Medica: European Journal of Medical Physics Vol. 32 p213 Published in issue: (September 2016).
8. **Duhaini, I.** Medical physicist’s certification process and examination in the middle east. Physica Medica: European Journal of Medical Physics Vol. 32 p 269 Published in issue: (September 2016).
9. **Duhaini, I.**, Radiation safety training in medicine, Physica Medica: European Journal of Medical Physics Vol. 32p252 Published in issue: (September 2016).
10. **Duhaini, I.**, Radiation Protection in Medical Imaging and Radiation Oncology Book, Chapter 11” Regulatory Structure and Issues in Middle East”, CRC Press, (2015).
11. Aly, A.E., **Duhaini, I.**, M., Manaa, S.M., Tarique, S.M., Kuniyil, S.E. and Al Naemi, H.M. Patient Peak Skin Dose and Dose Area Product from Interventional Cardiology Procedures. International Journal of Medical Physics, Clinical Engineering and Radiation Oncology, 4, 7-12. (2015).
12. **Duhaini, I.**, The current status of medical physics recognition in the Middle East, Physica Medica: European Journal of Medical Physics Vol. 30e7 Published in issue: (2014).
13. Abdallah, I, Almana, S, **Duhaini, I**, Naemi, Hassan. Patient Dose Assessment for Common Digital Diagnostic Radiology Examination in Qatar. Medical Physics. 40. (2013).
14. Taha, O., Al Attar, A., **Duhaini, I.** and Al Naemi, H., Evaluation of Mean Glandular Dose From Digital Mammography Exams at Hamad Medical Corporation Qatar and Compared with International Guidance Levels. Med. Phys., 40: 123-123. (2013).
15. M. Stoeva, V. Tsapaki, K.-Y. Cheung, S. Tabakov, **I. Duhaini**, M. M. Rehani, A. Krisanachinda, A. Kyere; Advance Medical Physics Practice Worldwide., Medical Physics World. ESR (2013).
16. **Duhaini, I.** ,et al. Translating ICRP 105 Radiation Protection in Medicine into Arabic. (2012).
17. **Duhaini, I.** Status of Medical Physics in the Middle East, , Virginia- USA, ACMP (2009).
18. **Duhaini, I.**, Assafiri, Y. and El-Nachef, L., Patient Dose Measurements for Establishing Guidance Levels for Medical Exposures in Diagnostic Radiology. Med. Phys., 35: 2658-2658. (2008).
19. Mamatha Pasnoor, Panayiotis Mitsias, Suresh Patel, Rabih Hammoud, Sunitha Santhakumar, Nikolaos Papamitsakis, Hamid Soltanian-Zadeh, Michael Jacobs, Mei Lu, Donald Peck, **Ibrahim Duhaini**, Michael Chopp. Identification of acute cerebral ischemic lesion clusters in stroke patients that predict infarction using multiparametric MRI ISODATA analysis. Conference Proceeding. (2000).

20. Michael Jacobs, Surash Patel, Panayitis Mitsias, Hamid Soltanian-Zadeh, Donald Peck, Amir Ghanei, Rabih Hammoud, **Ibrahim Duhaini**, Mamtha Pasnour, Michael Chopp. Unsupervised Segmentation of Clinical Stroke with Multiparameter MRI. Proc. Intl. Sot. Mag. Reson. Med. 8 (2000).
21. Michael Jacobs, Robert Knight, Zhang Zheng, Hamid Soltanian-Zadeh, Anton Goussev, Donald Peck, Rabih Hammoud, **Ibrahim Duhaini**, Michael Chopp. Tissue Characterization Multiparameter MRI with Histological Validation in Experimental Cerebral Ischemia in Rat. Proc. Intl. Sot. Mag. Reson. Med. 8 (2000).

Professional Memberships:

- American Association of Physicists in Medicine (**AAPM, USA**) since 2000.
- AAPM- Great Lakes Chapter (**Secretary 2004, USA**)
- Middle East Federation of Organizations of Medical Physics **MEFOMP** President (2009- 2015)
- Member of the International Medical Physics Certification Board **IMPCB** (2014- 2020)
- International Organization of Medical Physics (**IOMP**) **Treasurer** (2018 – 2025)
- International Medical Physics Certification Board (**IMPCB**) **Treasurer** (2021 –2023)

Academic Activities:

- Physics Instructor at Lawrence Technological University in MI, USA since 2021.
- Medical Physics and Radiotherapy Physics Instructor at Lebanese University.
- Training and teaching radiotherapy Technicians, Dosimetrist, and junior physicists (Lebanon)
- Training Physicists on how to plan 3D Prostate Seed Implant In Vivo in the OR (USA)
- Participated in more than 130 conferences locally, USA, Europe and the ME region.
- Establishing Guidelines of Radiation Protection for Private Radiology Centers (Lebanon)
- Delivering a Radiation Protection course to radiologists and physicists
- Preparing course outline for a degree in Medical Physics in Lebanon.
- Delivering Radiation Safety Course to radiation workers

Certifications & Awards:

- Lebanese University Pioneer Award, **2018**.
- International Medical Physics Certification Board in Radiation Oncology Physics (DIMPCB), **2018**
- International Organization of Medical Physics Fellow Award (FIOMP) **2017**.
- International Organization of Medical Physics Presidential Award by IOMP, **2016**.
- International Day of Medical Physics Award by IOMP, **2015**.

Summary of Credentials in:

- *External Beam Therapy*
- *High Dose Rate Brachytherapy*
- *Low Dose Rate Brachytherapy (Prostate Seed Implant)*
- *Breast Treatment (Mammosite)*
- *Intravascular Brachytherapy*
- *Machine Quality Assurance Tests*
- *Establishing and Managing Radiation Therapy Department*
- *Diagnostic Radiology*
- *Physicist Consultant*
- *Radiation Safety Officer*
- *Radiation Safety*
- *PET CT Cyclotron Project*
- *Other professional, academic and administrative qualifications*

Master Thesis Advising Duties at the Lebanese University:

Year	Title	Student	Comments
2007	<i>Radiation Protection: The Radiation Dose that parents get while holding their children during X-Ray Procedure</i>	<i>Talib Koubaissy</i>	<i>Co- Advisor</i>
2012	<i>Comparison Between Two Methods of Treatment of Breast Cancer Using Wedges and Reducing Beams Rafic Hariri University Hospital Radiotherapy Department</i>	<i>Zainab Al Sayyed</i>	<i>Co- Advisor</i>
2016	<i>Optimal Radiotherapy Plans for Brain, Breast, Lung and Prostate</i>	<i>Zeinab Hassan</i>	<i>Reviewer</i>
2016	<i>Demarche Physique De Traitment Et Countourage De Tumeur</i>	<i>Amal Taleb</i>	<i>Reviewer</i>
2017	<i>Risk Evaluation Of Secondary Primary Cancer Induced By Breast Cancer Radiotherapy</i>	<i>Eva Sabbagh & Fatima Hijazi</i>	<i>Advisor</i>
2017	<i>Calibration of scan for patient's absorbed dose calculated by the software system</i>	<i>Hazar Soulh</i>	<i>Reviewer</i>
2017	<i>Dose measurement in breast treatment using treatment planning system measurement</i>	<i>Nour Hodrouj</i>	<i>Reviewer</i>
2017	<i>Dose measurement in breast treatment using designed rondo phantom or in vivo dosimetry on patient</i>	<i>Mariam Harab</i>	<i>Advisor</i>
2018	<i>CT and Mammography: Quality Control</i>	<i>Batoul Deibah</i>	<i>Advisor</i>
2018	<i>Laser and Ionizing Radiation: Safety and Protection</i>	<i>Zainab Ghoson</i>	<i>Advisor</i>
2018	<i>Facility management and safety: preparation for accreditation at Saint Georges Hospital</i>	<i>Hiba Maki</i>	<i>Advisor</i>
2018	<i>Physical evaluation of compass phantom parameter before IMRT treatment</i>	<i>Maria Hakimeh</i>	<i>Reviewer</i>
2018	<i>5 years and 10 years follow up for breast cancer reoccurrence in radiotherapy patients</i>	<i>Sukaina Abdallah</i>	<i>Reviewer</i>

	<i>with partial and total mastectomy in Lebanon</i>		
2018	<i>Effects of respiratory movements on the estimation of the dose during breast external radiotherapy</i>	<i>Pauline Harab</i>	<i>Reviewer</i>
2018	<i>Establishing Risk Management Plan And Assessment In Radiation Oncology Department</i>	<i>Hiba Meslimani & Dina Maged</i>	<i>Advisor</i>
2019	<i>Labib Medical Center compliance with the new accreditation standard</i>	<i>Maria Hammam</i>	<i>Advisor</i>
2019	<i>Rapid Arc planning versus well-established field-to-field tangential technique for chest wall deliveries</i>	<i>Nancy Jaber</i>	<i>Advisor</i>
2019	<i>Optimization of the treatment plan for prostate cancer by IMRT using the « Dynamic MLC » technique</i>	<i>Mostafa Kobtan</i>	<i>Reviewer</i>
2020	<i>Rendre La Radiothérapie Plus Précise : Une Comparaison Dosimétrique Entre Les Techniques 3D-CRT, IMRT, VMAT, IGRT et SRS</i>	<i>Sara Joujou</i>	<i>Advisor</i>
2020	<i>Optimal radiotherapy treatment techniques for breast cancer patients with internal mammary lymph node metastasis</i>	<i>Mariam Hemadeh</i>	<i>Advisor</i>
2020	<i>or Breast cancer patientsf Real time dosimetry measurement undergoing external beam radiation therapy</i>	<i>Kawther Akil</i>	<i>Reviewer</i>
2020	<i>The effect of using the wide angle technique on loco-regional left breast radiotherapy with the inclusion of internal mammary chain lymph nodes on the heart and Ipsilateral lung</i>	<i>Diana Bakkar</i>	<i>Reviewer</i>
2020	<i>Study of the accuracy of Monitor Units hand calculation for electron treatments</i>	<i>Zainab Shahrour</i>	<i>Reviewer</i>
2021	<i>Radiation Therapy Centers in Lebanon; Detailed Technical and Clinical Data Analysis</i>	<i>Zahraa Aafarani</i>	<i>Advisor</i>
2021	<i>Radiation Dose Measurements for In vivo Dosimetry in Breast, Lung, and Pelvis Treatment sites</i>	<i>Ali Abdelkader</i>	<i>Advisor</i>
2021	<i>Essais d'acceptation et mise en service du Linac IMRT. Mise à niveau d'une étude de cas à RHUH.</i>	<i>Mariam Mouzawak</i>	<i>Advisor</i>
2021	<i>PET-CT: Innovative and Advanced Diagnostic Imaging Technology to Reveal Tumors for Enhanced Cancer Treatment of Patients.</i>	<i>Rawan Naim</i>	<i>Advisor</i>
2021	<i>Dose calculation for IMRT treatment plans Quality Assurance as a substitute of measurement</i>	<i>Zeinab Ammar</i>	<i>Reviewer</i>

Conferences and Workshops:

1. World Congress Annual Meeting, July 2000, **USA**.
2. 43rd AAPM Annual Meeting, July 2001, **USA**.
3. ASTRO Annual Meeting, October 2002, **USA**.
4. IEEE-EMB, International Conference on Biological & Medical Physics, March 2005, **UAE**
5. IAEA, LAEC, and BGUH, Radiation Protection in Diagnostic & Interventional Radiology, (Course Director) July 2005, **Lebanon**
6. AAPM 47th Annual Meeting, July 2005, **USA**.
7. IAEA, Regional Training Course on Radiation Protection in Diagnostic & Interventional Radiology, September 2005, **Kuwait**.
8. IAEA, International Conference on Quality Assurance and New Techniques in Radiation Medicine, (Invited Speaker) November 2006, **Austria**.
9. The 4th Annual Forum of the Arab Hospital Federation, (Invited Speaker) June 2006, **Lebanon**.
10. AAPM 48th Annual Meeting, July 2006, **USA**.
11. WHO Workshop on QA in Radiographic Technique and Radioprotection, April 2007, **Bahrain**.
12. Elekta New Technologies in Radiotherapy treatment, June 2007, **Spain**.
13. ISEP- IOMP Workshop on Therapeutic and Diagnostic Physics, (Invited Speaker) November 2007, **Bahrain**.
14. IOMP-ICMP Current and Future Sciences in Radiation Medicine, April 2008, **UAE**.
15. RSSA 5th Conference of the Radiological Society of Saudi Arabia, (Invited Speaker) April 2009, **KSA**.
16. ACMP 2009 American College of Medical Physics Annual Conference, (Invited Speaker) May 2009, **USA**.
17. WC 2009 Annual Meeting, (Invited Speaker) September 2009, **Germany**.
18. Medical Professionals' Radiation Safety Course, (Trainer) October 2009, **UAE**.
19. The 16 International Conference of the Lebanese Association for the Advancement of Science, (Invited Speaker) November 2009, **Lebanon**.
20. The 3rd IEEE Lebanon Communication Workshop, (Invited Speaker) November 2009, **Lebanon**.
21. IRPA Radiation Protection Workshop, (Invited Speaker) January 2010, **Egypt**.
22. ICRM International Conference on Radiation Medicine, (Invited Speaker) March 2010, **KSA**.
23. Medical Professionals' Radiation Safety Course, (Trainer) March 2010, **Lebanon**.
24. American College of Medical Physics Annual Conference, (Invited Speaker) May 2010, **USA**.
25. Medical Professionals' Radiation Safety Course, (Trainer) October 2010, **Lebanon**.
26. ISEP-AAPM, The 22nd King Hussein Cancer Center Conference, (Invited Speaker) October 2010, **Jordan**.

27. Medical Professionals' Radiation Safety Course, (Trainer) October 2010, **UAE**.
28. ICRP 105 Translation Project Meeting,(Chairman) October 2010, **Tunisia**.
29. IMRT & IGRT ADAC Planning Workshop, December 2010, **Lebanon**.
30. Medical Professionals' Radiation Safety Course, (Trainer) December 2010, **KSA**.
31. AUB- KHCC, Women's Cancer, January 2011, **Lebanon**.
32. BMPS International Conference on Medical Physics in Radiation Oncology and Imaging, (Invited Speaker) March 2011, **Bangladesh**.
33. Medical Professionals' Radiation Safety Course, (Trainer) March 2011, **UAE**.
34. Medical Professionals' Radiation Safety Course, (Trainer) April 2011, **UAE**.
35. Medical Professionals' Radiation Safety Course, (Trainer) April 2011, **Lebanon**.
36. AAEA, Authorization and Inspection in RADIOTHERAPY, (Course Director) May 2011, **Tunisia**.
37. LAEC/ CNRS, Promoting Nuclear Safety Culture in the Arab Countries, June 2011, **Lebanon**.
38. IMC, Iraqi Medical Scientific Society Support Program and Conference, (Invited Speaker) June 2011, **Erbil-Iraq**.
39. IMC, Iraqi Medical Physics Society Training Course, (Trainer) June, **Erbil-Iraq**.
40. Medical Professionals' Radiation Safety Course, (Trainer) September 2011, **KSA**.
41. First MEFOMP International Conference on Medical Physics, (Chairman) November 2011, **Iran**.
42. IAEA, Regional Training Course on Radiation Protection in Diagnostic & Interventional Radiology, (Coordinator & Speaker) December 2011, **Qatar**.
43. HMC, Basic Life Support Course, April 2012, **Qatar**.
44. WC 2012 Annual Meeting, (Invited Speaker, Theme Co-Chair) May 2012, **China**.
45. HMC, Joint Commission International Workshop (JCI) , June 2012, **Qatar**.
46. HMC, Facility Management and Safety Workshop, October 2012, **Qatar**.
47. IAEA, Group Training on Radiation Protection in Diagnostic & Interventional Radiology, November 2012, **Italy**.
48. IAEA, TRS-398 Regional Workshop on the implementation of the International Code of Practice for External Radiotherapy, (Coordinator & Speaker) December 2012, **Qatar**.
49. First Qatar PET and Molecular Nuclear Medicine Symposium, December 2012, **Qatar**.
50. The Dubai Arab Health Conference, January 2013, **UAE**
51. The First Conference on Radiation Safety in Interventional Cardiology, (Coordinator)February 2013, **Qatar**
52. Annual Research Day Symposium, February 2013, **Qatar**
53. 2nd Symposium on Prostate Cancer, March 2013, **Qatar**
54. Essential Disaster Administration and Management Support (EDAMS), April 2013, **Qatar**
55. The First Middle East Forum on Quality Improvement in Healthcare, 17 -19 May 2013, **Qatar**

56. National Primary Health Care Strategy for 2013- 2018, June 2, 2013. **Qatar**
57. National Health Strategy for 2011- 2016 (*Caring for the Future*) June 10, 2013. **Qatar**
58. International Conference On Medical Physics (ICMP 2013), Participant & Coordinator, September 1- 4, 2013, **UK**
59. International Day of Medical Physicist Seminar, November 8, 2013, **Qatar**
60. LAEC- IAEA, " Neutron Sources: Dosimetry and Application", Participant, November 19, 2013, **Lebanon**
61. ICTP Training Course on Medical Physics for Radiation Therapy, Trainer, 25/11- 6/12, 2013, **Italy**
62. The Dubai Arab Health Conference, January 2014, **UAE**
63. 3rd Radiation Technologies School (WNU), Invited Speaker and Group Mentor, 7-20 March 2014, **Qatar**
64. PET- CT Quality Control and Radiation Safety Workshop, Program Director and Speaker, March 20, 2014, **Kuwait**
65. The 7th Arab Radiology Congress (ARC7), Delegate, 17-21 April 2014, **Qatar**
66. 2nd International Conference on Medical Physics, Invited Plenary Speaker, 19 – 22 August 2014, **Bangladesh.**
67. 8th European Conference on Medical Physics, (Co-Chairman and Invited Speaker) 11- 13 September 2014, **Greece.**
68. SPE Middle East Health, Safety and Environment, Delegate, 22-24 September 2014, **Qatar.**
69. International Day of Medical Physics Symposium, Program Organizer, November 7, 2014, RHUH, **Lebanon**
70. International Day of Medical Physics Symposium, November 8, 2014, Hamad Medical Corporation, **Qatar**
71. International Day of Radiology, Invited Speaker, November 9, 2014, Aspetar Hospital, **Qatar**
72. International Conference on Occupational Radiation Protection, Delegate, 1 – 5 December, 2014, **Austria**
73. The Dubai Arab Health Conference, 26 – 29 January 2015, **UAE.**
74. 2nd Interventional Cardiology Conference, Invited Speaker, 21 – 23 January 2015, HMC, **Qatar**
75. Summit on Radiation in Life, Invited Speaker, 5 – 6 April 2015, HMC, **Qatar**
76. The Health Industry Summit, 15 – 18 May 2015, National Exhibition & Conventional Center, Shanghai, **China.**
77. Spring Medical Oncology Forum, Participant, 23 May 2015, NBGUH, **Lebanon**
78. Qatar International Medical Congress, Participant, Qatar National Convention Center, 26 – 28 May 2015, **Qatar**
79. World Congress on Medical Physics ,WC 2015, Invited Speaker, 7 – 12 June 2015 Toronto, **Canada.**
80. IDMP Symposium, Invited Speaker ,7 – 8 November 2015, Hamad Medical Corporation, **Qatar**
81. International Day of Medical Physics Symposium, Program Organizer, November 10, 2015, RHUH, **Lebanon**
82. HDR Symposium, February 27, 2016, Middle East Institute of Health, Bsalim, **Lebanon**
83. Anti Drug Symposium, 4-5 March 2016, Lebanese Ministry of Social Affairs, Mais Al Jabal, **Lebanon.**
84. Radiation Safety Solution by Instadose Lecture, 22 March 2016, King Saud Medical City Hospital, Riyadh, **KSA**
85. Medical Advancements in Nabatieh, Invited Speaker, August 13, 2016, Nabatieh, **Lebanon.**
86. HMC Radiation Protection Officer Course, Invited Speaker, 27-29 August 2016, Doha, **Qatar**

87. 1st European Congress of Medical Physics, Invited Speaker, 1-4 September, 2016, Athens, **Greece.**
88. 4th Cancer Care Conference, Participant, 14-15 October 2016, CMC Beirut, **Lebanon.**
89. Stereotactic Surgery Symposium, Brain-Lab 18 October 2016, Beirut, **Lebanon.**
90. National Training Course on Radiation Protection, Invited Speaker, 19-21 October 2016, Riyadh, **KSA**
91. REG Radiation Safety Course, (Trainer) 23 October 2016, Al Machrik Medical Center, Tyre, **Lebanon.**
92. International Day of Medical Physics Symposium, Program Organizer, November 9, 2016, CMC, **Lebanon**
93. 2nd Symposium on Radiology, Radiopathology & Radioprotection, November 19, 2016, LU Saida, **Lebanon.**
94. International Conference on Medical Physics, ICMP 2016, Invited Speaker, Dec 9-12, 2016 Bangkok, **Thailand**
95. 4th Regional IRPA-IOMP-WHO Workshop on Radiation Safety Culture in Healthcare, Invited Speaker, Feb 6-7, 2017 Doha, **Qatar**
96. Medical Professionals' Radiation Safety Course, (Trainer) February 12, 2017, Dubai, **UAE**
97. Medical Professionals' Radiation Safety Course, (Trainer) March 4, 2017, Beirut, **Lebanon**
98. REG Radiation Safety Course, (Trainer) March 16, 2017, Nabih Berry Hospital, Nabateh, **Lebanon.**
99. IAEA International Conference on Advances in Radiation Oncology, ICARO2, 20-23 June 2017, Vienna, **Austria**
100. 19th International Congress on Cardiovascular Updates, Invited Speaker, September 12-14, 2017, Tehran, **Iran.**
101. 4th International Conference on Advances in Biomedical Engineering, October 19-20, 2017, LU, Beirut, **Lebanon.**
102. 4rd Radiation Technologies School (WNU), Invited Speaker and Mentor, 23-28 October 2017, Sao Paulo **Brazil**
103. 17th Asia Oceania Congress of Medical Physics (AOCMP), Invited Speaker, 4-7 November 2017, Jaipur **India**
104. Joint IMPCB/IAEA/ICTP Workshop on International Certification of Medical Physicist, December 6, Trieste **Italy**
105. International Conference on Radiation Protection in Medicine, invited participant, 11-15 Dec 2017, Vienna **Austria**
106. Orthopedic Nuclear Medicine Update, Invited Speaker, 11-13 March, 2018, Al Jumairah, **Kuwait.**
107. 1st Student Innovation and Research Conference for Arab Universities and Schools (SIRCAUS – BAU), Invited Speaker, 27-28 March, 2018, Debbeh, **Lebanon.**
108. Radiation Safety Training for Radiologists, April 14, 2018, Doha, **Qatar**
109. World Congress on Medical Physics, WC2018, Invited Speaker, 3 – 8 June 2018 Prague, **Czech Republic.**
110. Nuclear Medicine Symposium and Updates for Cancer, Invited Speaker, 2 September 2018 Beirut, **Lebanon.**
111. 12th Radiation Physics and Protection Conference, Invited Speaker, 27-29 October 2018 – Cairo, **Egypt**
112. Radiation Safety Training for Staff at Labib Medical Center, November 3, 2018, Saida, **Lebanon.**
113. International Day of Medical Physics Symposium, November 7, 2018, Beirut, **Lebanon**
114. Ali Ben Ali Bio-Medical Symposium Invited Speaker, November 10, 2018, Doha, **Qatar**
115. 18th AOCMP & 16th SEACOMP, Invited Speaker, 11-14 November 2018, Kuala Lumpur, **Malaysia**

- 116.** Biomedical Engineering: Management, Protection & Hi-tech, Invited Speaker, 17 November 2018, **Lebanon.**
- 117.** Medical Physics Workshop, Invited Speaker, 18-20 November, 2018, Kuwait, **Kuwait**
- 118.** The First Medical Physics Workshop in Diagnostic Imaging and Radiotherapy, Director and Organizer, 1-4 Dec 2018, Beirut, **Lebanon**
- 119.** Best of Saudi Oncology Conference, Invited Speaker, 13-14 Dec 2018 – Dammam, **KSA**
- 120.** Sustainable Management Group (SMG), Safety at Work in Hospitals, Trainee, 9 days, Dec 2018, Beirut, **Lebanon**
- 121.** IAEA Regional train the trainers course for Radiation Protection Officers (RPOs) of medical and industrial facilities 26- 29 March 2019, Beirut, **Lebanon.**
- 122.** International Conference on Medical Physics, **ICMP 2019**, Speaker, Sep 8-11, 2019 Santiago, **Chile.**
- 123.** 5rd Radiation Technologies School (WNU), Invited Speaker and Mentor, 20-27 October 2019, Obninsk, **Russia**
- 124.** REG's Radiation Safety Officer Course, (Trainer) 28-30 November 2019, Beirut, **Lebanon.**
- 125.** SMG, Facility Management in Hospitals, Trainee, 9 days, Dec 2019, Beirut, **Lebanon**
- 126.** ICRM International Conference on Radiation Medicine, (Invited Speaker) February 2020, **KSA**
- 127.** Attending some Online conferences and symposiums due to Covid-19 Out-break.
- 128.** World Congress on Medical Physics, WC2022, Co-Organizer, 11 – 17 June 2022, **Singapore.**
- 129.** AAPM 64th Annual Meeting, July 10-14, 2022, Washington DC, **USA.**