Dr. LEUNG Wan-shun Vincent, BSc, PhD

CONTACT INFORMATION

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PROFILE

Dr LEUNG Wan-shun Vincent is a Clinical Associate in the Department of Health Technology and Informatics, The Hong Kong Polytechnic University. He is also an Honorary Consultant (Therapeutic Radiographer) in the Department of Oncology, Princess Margaret Hospital of Hong Kong.

He has worked for over ten years as a Radiation Therapist (RT) at Princess Margaret Hospital, Hong Kong. His areas of clinical expertise include radiotherapy dosimetry, planning, treatment delivery, simulation and mould making. He has joined the Hong Kong Polytechnic University since 2018 and is now responsible for teaching undergraduate programme in Radiography, and master degree programmes in Medical Physics, Medical Imaging and Radiation Sciences. Dr LEUNG is actively developing new teaching pedagogies in online virtual teaching, clinical blended learning and emotional intelligence training. He has received two HTI Teaching Awards (Individual & Team) in 2021 for his teaching achievements.

Dr LEUNG completed his PhD specializing in a topic related to Radiation Therapy dosimetry and model building. His research interests include radiation therapy dosimetry, bioinformatics and clinical trials related to patient management in radiotherapy. Dr LEUNG is an awardee of the 2020 HMRF Research Fellowship Scheme.

He has been serving as an Academic Convenor in the Hong Kong Association of Radiation Therapists since 2011 and has taken part in organizing conferences and scientific meetings for radiographers and radiation therapists in the Asia-Australasia region, using online virtual and hybrid format.

QUALIFICATION:

PhD, The Hong Kong Polytechnic University, 2020
BSc Radiography (1st class honours), The Hong Kong Polytechnic University, 2008

BRIEF OUTLINE OF EXPERIENCE AND POSTS HELD:

2018 – Present	Clinical Associate, Department of Health Technology and Informatics, The Hong Kong Polytechnic University
2021 – Present	Honorary Consultant (Therapeutic Radiographer), Department of Oncology, Princess Margaret Hospital, Hong Kong

2008 – 2018	Radiation Therapist, Department of Oncology, Princess Margaret Hospital, Hong Kong

PROFESSIONAL REGISTRATION:

2010 – Present	Part I (category T) of the Register of Radiographers, Radiographers Board, Hong Kong

SERVICE TO PROFESSIONAL & SCIENTIFIC BODIES, CONSULTANCY, MEMBERSHIP OF PROFESSIONAL & LEARNED SOCIETIES:

2011 – Present	Academic Convenor, Hong Kong Association of Radiation Therapists
2020 – Present	Member, Task Force on Competency Document of Radiographers Board
2018 – 2019	Member, Scientific Committee, 4th Hong Kong Radiographers and Radiation Therapists Conference
2011 – 2018	Member, Allied Health Professions Staff Group Consultative Committee, Hospital Authority
2012 – 2013	Member, Organizing Committee, 1st Hong Kong Radiographers and Radiation Therapists Conference
2013 – 2015	Member, Organizing Committee, 2nd Hong Kong Radiographers and Radiation Therapists Conference

INTERNAL SERVICES:

2020-Present	Elected member, Departmental Management Committee
2020-Present	Clinical Coordinator
2020-Present	Student Exchange Liaison Officer
2020-Present	Deputy Enrollment Officer
2018-Present	HA-PolyU Liaison Committee member
2019-Present	Deputy Marketing and Promotion Officer
23 June, 2020	Interview Panel, Non-academic Achievements Scheme Interview for BScRAD JUPAS admission 2020 intake
14 June, 2019	Interview Panel, Non-academic Achievements Scheme Interview for BScRAD JUPAS admission 2019 intake
25 July, 2019	Interview Panel, 2019-20 JUPAS Same Admission Score Panel Interview

AWARDS:

2020/21	HTI Teaching Award (Individual)
2020/21	HTI Teaching Award (Team)
2007/08	The First Class Honours in BSc (Hons) in Radiography (Radiation Therapy)
2007/08	The Highest Cumulative GPA in BSc (Hons) in Radiography (RT)
2007/08	Dean's Honours List, Faculty of Health and Social Sciences, HKPU

REPRESENTATIVE PUBLICATIONS (JOURNAL ARTECLES, BOOK CHAPTERS, MONOGRAPHS AND CONFERENCE PAPERS):

Leung, W. S., Wu, V. W., Liu, C. Y., & Cheng, A. C. (2019). A dosimetric comparison of the use of equally spaced beam (ESB), beam angle optimization (BAO), and volumetric modulated arc therapy (VMAT) in head and neck cancers treated by intensity modulated radiotherapy. *Journal of Applied Clinical Medical Physics,* in press.

Wu, V. W., **Leung, W. S**., Wong, K. L., Chan, Y. K., Law, W. L., Leung, W. K., & Yu, Y. L. (2016). The impact of positron emission tomography on primary tumour delineation and dosimetric outcome in intensity modulated radiotherapy of early T-stage nasopharyngeal carcinoma. *Radiation Oncology*, *11*(1), 109.

Leung, W. S., Wu, V. W. C., Tang, F. H., & Cheng, A. C. K. (2016). OC-0270: Development of a model to produce reference parotid dose from anatomical parameters in IMRT of NPC. *Radiotherapy and Oncology*, *119*, S126.

Wu, W. V., **Leung, W. S.**, San Kay, S., Cheung, H. C., & Wah, Y. K. (2011). A comparison between electronic portal imaging device and cone beam CT in radiotherapy verification of nasopharyngeal carcinoma. *Medical Dosimetry*, *36*(1), 109-112.

ORAL PRESENTATIONS:

Invited guest speaker for the 中華醫學會放射腫瘤治療學分會 2019 年放療技術學組學術年會

(6 – 8 September, 2019, NanChang, Hunan Province)

"肝癌 SBRT 實施"

Invited guest speaker for the 市級繼續醫學教育項目-肺癌精准診療沙龍

(13 July, 2019, Panzihua, Sichuan Province)

"SBRT 的協議指引和個案分享"

The 4th Hong Kong Radiographers & Radiation Therapists Conference, 2019

(15 June, 2019, Hong Kong)

"A Dosimetric Comparison of the Use of Equally Spaced Beam (ESB), Beam Angle Optimization (BAO) and Volumetric Modulated Arc Therapy (VMAT) in the Intensity Modulated Radiotherapy (IMRT) of Head and Neck Cancers"

ESTRO 35, 2016

(29 April – 3 May 2016, Turin Italy)

"Development of a model to produce reference parotid dose from anatomical parameters in IMRT of NPC"

The 20th AACRT, 2015

(14 July, 2015, Singapore)

"Dosimetric comparison of different beam arrangement in intensity modulated radiotherapy (IMRT) of maxillary sinus carcinoma"

The 18th AACRT, 2011
(25-27 March, 2011, Kaosiung, Taiwan)
"Beam angle optimization in intensity modulated radiation therapy planning - A systematic review"

The 2nd annual scientific meeting of the HKCRRT, 2010
(9 October, 2010, Hong Kong)
"A comparison between electronic portal imaging device and cone beam CT in radiotherapy verification of nasopharyngeal carcinoma"

RESEARCH GRANTS:

Health and Medical Research Fund – Research Fellowship Scheme (06200137). HK$1,130,940 awarded
"Evaluation of the treatment outcome of definitive radiotherapy in non-small cell lung cancer using radiomics and dosiomics"
Ref No. 06200137
Role: Principal investigator

Health and Medical Research Fund (07183176). HK$1,425,760 awarded
"*Management of oral mucositis using low-level laser therapy in nasopharyngeal cancer patients receiving chemo-radiotherapy: A randomized-controlled trial (MAGNETO)*"
Ref No. 07183176, 3/2020
Role: Co-investigator

Science and Technology Department of SiChuan Province 四川省科學技術廳 2020 年第一批省級科技計畫項目. RMB¥200,000 awarded
"Establishment of the relationship between pituitary gland radiation dose and hypopituitarism using Acruros XB calculation algorithm 鼻咽癌病人放療後腦垂腺機能衰退症和劑量的關係- 應用 AcurosXB 演算法來計算較準確的劑量分佈"
Ref No. 2020YFH0194, 6/2020
Role: Co-Principal Investigator

TEACHING GRANTS:

Large Equipment Fund for Teaching, PolyU. HK$1,000,000 awarded
"RayStation – Deep learning computer system for radiotherapy treatment planning and medical images processing" 6/2021, Role: Co-applicant

Online Teaching Development and Educational Research Grant, Quality Incentive Scheme on Online Teaching, PolyU. HK$999,950 awarded
"Development of structured simulation-based online training and assessment platform for radiography students" 4/2021, Role: Co-applicant

Special Grant for Virtual Teaching and Learning, PolyU. HK$1,800,000 awarded

"Video-based learning in specialized training: Enhancing inter-professional communication skills in healthcare settings through mini-case videos" 3/2021, Role: Co-applicant

RESEARCH PROJECTS

Title	Management of dysphagia, neck lymphedema and trismus using photobiomodulation therapy in head and neck cancer survivors after radiotherapy: A pilot study
Year	2021 – Present *(On-going)*
Role	Principal Investigator

Title	Investigation on the psychological needs of post-radiotherapy rectal cancer survivors and their direct caregivers in Hong Kong
Year	2020-Present *(On-going)*
Role	Co-investigator

Title	Dosimetric study on packing tissue-equivalent bolus in cases of significant tissue loss during radical radiotherapy using IMRT for head and neck cancers
Year	2016 – 2020 *(Direct impact on the implementation of adaptive RT protocol at PMH, Hong Kong)*
Role	Co-investigator

Title	Evaluation of the Effect of Beam Arrangements and Establishment of Treatment Planning Models in Intensity Modulated Radiation Therapy of Head and Neck Cancers
Year	2013 – 2020 *(Completed for PhD study)*
Role	Principal Investigator

UNDERGRADUATES FINAL YEAR PROJECT SUPERVISION

Name of project	A planning CT-based radiomics model to predict the clinical outcome of whole pelvic radiotherapy in localized prostate cancer patients indicated for prophylactic pelvic lymph node irradiation
Year	2020-2021
Role	Supervisor

Name of project	Dosimetric Effects of Collimator Angles in Volumetric Modulated Arc Therapy Planning in Cancers of the Left Breast
Year	2019-2020
Role	Co-supervisor