

Biologically Guided Radiation Therapy Symposium 2026

Day 1 Educational Session

9:00 – 9:30	Registration
9:30 – 9:40	Opening Acknowledgement of Country <i>Prof. Annette Haworth & Rachel Stensmyr</i>
9:40 – 9:50	Introduction What is BgRT? <i>Prof Annette Haworth (The University of Sydney)</i>
9:50 – 10:15	Radiobiology part 1 Basic principles of radiobiology – Mechanisms of radiation response <i>Prof Martin Ebert (University of Western Australia)</i>
10:15 – 10:45	Radiobiology part 2 Dose Response Modelling <i>Prof Ane Appelt (Rigshospitalet & Technical University of Denmark)</i>
10:45 – 11:10	Radiobiology part 3 Mechanisms of cell death <i>A/Prof Harriet Gee (WSLHD)</i>
11:10 – 11:35	Morning tea
11:35 – 12:10	Radiobiology part 4 Understanding hypoxia and its Impact on the micro-environment <i>Dr Kristina Cook (The University of Sydney)</i>
12:10 – 12:40	Imaging part 1 Introduction to quantitative MRI <i>Dr Sirisha Tadimalla (The University of Sydney)</i>
12:40 – 1:10	Imaging part 2 Uncertainties in quantitative MRI <i>Prof Yves De Deene (SWSLHD)</i>
1:10 – 1:20	Imaging – panel discussion
1:20 – 2:10	Lunch
2:10 – 2:45	Imaging part 3 From Qualitative Reading to Quantitative Biomarkers: Radiomics 1.0, 2.0, and 3.0 <i>Prof Dr Philippe Lambin (University of Maastricht)</i>
2:45 – 3:10	Imaging part 4 (25 minutes) Imaging biomarker discovery <i>Dr Yu Sun (The University of Sydney)</i>
3:10 – 3:35	Afternoon tea
3:35 – 4:05	Dose painting by numbers – translating radiation biology into treatment planning <i>Prof Annette Haworth (The University of Sydney)</i>
4:05 – 4:40	MedAustron Guest Speaker Clinical and radiobiological aspects of carbon ions and protons with a focus on overcoming the effects of hypoxia <i>Univ Prof Dr Piero Fossati (MedAustron)</i>
4:40 – 4:50	Closing Comments
4:50 – 6:30	Networking event

Day 2 Symposium

8:30-9:00	Registration
9:00 – 9:10	Opening (Prof. Annette Haworth & Rachel Stensmyr) <i>Acknowledgement of Country</i>
9:10-9:55	Keynote speaker 1 Translating Radiomics and Medomics into clinical trials and Personalised Medicine <i>Prof Dr Philippe Lambin (Maastrich University)</i>
9:55-10:35	Keynote speaker 2 RT, the immune response and synergies with immunotherapy <i>Prof Martin Ebert (University of Western Australia)</i>
10:35 – 11:00	Keynote speaker 3 PET imaging using PSMA in brain cancer <i>Prof Michael Fay (University of Newcastle)</i>
11:00 - 11:25	Coffee Break
11:25 – 11:50	Mark Hughes Foundation Guest Speaker Making radiotherapy more effective by blocking DNA repair <i>A/Prof Paul Tooney (University of Newcastle)</i>
11:50 – 13:05	Biologically guided RT clinical trials Pt 1 Chairs: <ul style="list-style-type: none"> - VITaL – Functional lung imaging, <i>Prof Shalini Vinod (SWSLHD)</i> - PRISM, <i>Dr Sirisha Tadimalla (WSLHD/University of Sydney)</i> - Head and neck response imaging, <i>Dr Alan Mui (WSLHD)</i>
13:05 – 13:55	Lunch
13:55 – 14:45	Biologically guided RT clinical trials Pt 2) Chairs: <ul style="list-style-type: none"> - MR-L head and neck/CNS, <i>Dr Sweet Ping Ng (Austin Health Melbourne)</i> - MR-L upper GI/urogenital/lung, <i>Dr Jeremy de Leon (Genesis Care, Sydney)</i>
14:45 – 15:35	Innovative imaging methods Chairs: <ul style="list-style-type: none"> - FIG: PET-based RT guidance and prognosis for advanced glioma, <i>Prof Martin Ebert (University of Western Australia)</i> - BED modelling for combined SBRT with Lu-177 boost, <i>Dr Price Jackson (Peter MacCallum Cancer Centre)</i>
15:35 – 15:55	Afternoon tea
15:55-17:10	Invited Speaker Session (Biologically guided adaptive and post-treatment response) Chairs: <ul style="list-style-type: none"> - Real-time MRI, <i>Dr David Waddington (University of Sydney)</i> - SI-BiRT studies, <i>Dr Hayley Reynolds/Dr Yu-Feng Wang (University of Auckland/University of Sydney)</i> - Reirradiation/salvage RT, <i>Prof Ane Appelt (Rigshospitalet & Technical University of Denmark)</i>
17:10-17:20	Symposium Close (Prof. Annette Haworth & Rachel Stensmyr)