

# Clinical Brachytherapy Workshop

August 17-20 2023 (AEDT)



<b>Thursday August 17th</b>	
8:30 – 8:50 am	<b>Registration</b>
8:50 – 9:00 am	<b>Welcome &amp; Introduction: Prof Annette Haworth &amp; Dr Joel Poder</b>
Session Chairs: <i>Annette Haworth &amp; Joel Poder</i>	
9:00 – 9:30 am	<b>THURS_1_Jackson</b> How did we get here, from Manchester and Paris? Dr Michael Jackson (30 min)
9:30-10:05am	<b>THURS_2_Sullivan</b> <b>Brachytherapy is best:</b> Comparison of Techniques (BT, EBRT & charged particles) Emma Sullivan (35 min)
10:05-10:40 am	<b>THURS_3_Flower</b> <b>Basic principles of HDR operation and quality assurance</b> Emily Flower (35 min)
Morning Tea: 10:40 -11:00 am	
Session Chairs: <i>Emma Sullivan &amp; Eireann Cosgriff</i>	
11:00 am – 11:40pm	<b>THURS_4_Howie</b> <b>Introduction to radiation safety and protection;</b> Protection principles and procedures, emergency procedures, source storage and security, biological effects of radiation and current dose limits. Andrew Howie (40 minutes)
11:40 – 12:20	<b>THURS_5_Smith</b> <b>Principles of treatment planning, optimisation methods and plan checking</b> Dr Ryan Smith (40 min)
Lunch: 12:20 – 1:10 pm	
Session Chairs: <i>Annette Haworth &amp; Niluja Thiru</i>	
1:10 – 2:20 pm	<b>THURS_6A_Bucci &amp; Poder</b> <b>Prostate Cancer (LDR)</b> 1:10 – 1:45 pm LDR Clinical Component (Dr Joseph Bucci) (35 min) 1:45 – 2:20 pm LDR Technical Component (Dr Joel Poder) (35 min)
Stretch Break: 2:20 – 2:30 pm	
Session Chairs: <i>Annette Haworth &amp; Niluja Thiru</i>	
2:30 – 3:20 pm	<b>THURS_6B_Bucci &amp; Smith</b> <b>Prostate Cancer (HDR)</b> 3:25 – 3:50 pm HDR Clinical Component (Dr Joseph Bucci) (25 min) 3:50 – 4:15 pm HDR Technical Component (Dr Ryan Smith) (25 min)
Afternoon tea: 3:20 – 3:45 pm	
Session Chairs: <i>Emma Sullivan &amp; Eireann Cosgriff</i>	
3:45 – 4:25 pm	<b>THURS_7_Graham, Poder &amp; Tzovaras</b> <b>Skin brachytherapy</b> Dr Peter Graham, Dr Joel Poder, Angelo Tzovaras (40 min)
4:25 – 5:00 pm	<b>THURS_8_Downes</b> <b>Eye plaque brachytherapy:</b> Clinical indications, equipment, imaging, QA, and planning technique. Simon Downes (35 min)
5:30 – 7:00 pm	<b>Social event: Thai Recipe &amp; Tako Japanese Restaurant</b> Both at 13 Belgrave St, 13 Belgrave St, Kogarah

## Friday August 18th

8:50 – 9:00 am	<b>Welcome to Day 2</b>
Session Chairs: <i>Eireann Cosgriff &amp; Annette Haworth</i>	
9:00 – 10:00 am	<b>FRI_1_Poder</b> <b>Dose calculation and source specification</b> Dr Joel Poder (60 min)
10:00 – 10:45 am	<b>FRI_2_Panettieri</b> <b>Radiobiology for brachytherapy</b> Dr Vanessa Panettieri (45 min)
Break: 10:45-11:05	
Session Chairs: <i>Simon Downes &amp; Joel Poder</i>	
11:05 – 11:45 am	<b>FRI_3_Sullivan</b> <b>Imaging for brachytherapy</b> , including principles of image reconstruction, catheter/applicator delineation, patient anatomy, image distortion/artefacts Emma Sullivan (40 min)
11:45 am-12:45 pm	<b>FRI_4_Chin</b> <b>Clinical applications: Breast.</b> – Lecture and Practical demonstration Dr Yaw Chin (60 min)
Lunch: 12:45 – 1:25	
Session Chairs: <i>Emma Sullivan &amp; Eireann Cosgriff</i>	
1:30 - 2:30 pm	<b>FRI_5_Graham</b> <b>Clinical applications: Head and neck, intraluminal</b> – Lecture and Practical demonstration Dr Peter Graham (60 min)
2:30 – 3:10 pm	<b>FRI_6_Chard &amp; Busuttil</b> <b>Paediatric Brachytherapy</b> Dr Jennifer Chard J, Gemma Busuttil (40 mins)
Break 3:10 - 3:30 pm	
Session Chairs: <i>Jennifer Chard &amp; Gemma Busuttil</i>	
3:30 - 4:10pm	<b>FRI_7A_Do</b> <b>Gynaecological Cancers: Clinical component</b> Clinical indications, Patterns of care, Principles of treatment, Target definition and image interpretation, prescription, protocol and technique, Clinical results GEC-ESTRO recommendations (clinical) Dr Viet Do (40 min)
4:10 -5:00 pm	<b>FRI_7B_vanDyk</b> <b>Technical Component:</b> GEC-ESTRO recommendations (technical) including imaging Dr Sylvia Van Dyk (50 min)

<b>Saturday August 19<sup>th</sup></b>			
	<b>Group 1</b>	<b>Group 2</b>	<b>Group 3</b>
Annette and St George staff to assist across all groups			
8:15 am all delegates and staff assemble St George Cancer Centre for briefing			
8:30-9:40 am	Contouring –Prostate and Gynae  Dr Joseph Bucci & Dr Viet Do Sarah Graves	<b>1.</b> HDR unit operation (40 min): User and emergency procedure training <b>2.</b> General BT equipment overview (30 min) Victor Edwards/Annette Haworth & Dr Sylvia van Dyk / Gemma Busuttil	Planning –Prostate HDR  Dr Niluja Thiru Dr Joel Poder Andrew Howie Simon Downes
Morning tea 9:40-10:00am			
10:00-11.10am	Planning –Prostate HDR	Contouring –Prostate and Gynae	<b>1.</b> HDR unit operation (40 min): User and emergency procedure training <b>2.</b> General BT equipment overview (30 min)
11:10am - 12:20pm	<b>1.</b> HDR unit operation (40 min): User and emergency procedure training <b>2.</b> General BT equipment overview (30 min)	Planning –Prostate HDR	Contouring –Prostate and Gynae
Lunch 12:20-1:10 pm			
	<b>Group 1</b>	<b>Group 2</b>	<b>Group 3</b>
1:15-2:25 pm	Stepper Stabiliser set-up Mock volume study Practise needle insertion Dr Niluja Thiru Dr Joel Poder Sarah Graves St George RT TBC	Planning: Gynaecological planning Vault and Cervix Dr Viet Do Dr Sylvia van Dyk Victoria Beenstock Gemma Busuttil	Planning –Prostate LDR Dr Joseph Bucci Andrew Howie Ese Enari Simon Downes
2:25-3:35pm	Planning –Prostate LDR	Stepper Stabiliser set-up Mock volume study Practise needle insertion	Planning: Gynaecological planning Vault and Cervix
Afternoon tea 3:35-4:00 pm			
4:00-5:10pm	Planning: Gynaecological planning Vault and Cervix	Planning –Prostate LDR	Stepper Stabiliser set-up Mock volume study Practise needle insertion

## Sunday August 20th: Exam Preparation and Advanced Planning Clinic

9:00 am – 10:30 am	Session 1 (RO): Exam preparation & rectal spacer insertion practical  Jennifer Chard Niluja Thiru Gemma Busuttil	Group 2 (Physics): ◦ Dosimetry formalism for physics ◦ Dose calibration (theory) Joel Poder	Group 3 (RTs) Transabdominal ultrasound and image registration Emily Flower Victoria Beenstock Sarah Graves
10:30-10:50: Break			
10:50 am- 12:30 pm	Session 2. (RO): Exam preparation  Jennifer Chard Niluja Thiru Gemma Busuttil	Group 2 (Physics): TEAP exam preparation Simon Downes	Group 3 (RTs) Advanced gyn treatment planning Emily Flower Victoria Beenstock Sarah Graves
12.30pm	Finish for ROs and RTs		
12:30- 1:00pm	Lunch for Physics		
1:00- 5:00pm	Physics Stream A HDR source calibration, QA and in-vivo verification Joel Poder Annette Haworth	Physics Stream B Applicator commissioning and eye plaque treatment planning Simon Downes Andrew Howie	Physics Stream C TPS commissioning and ultrasound calibration Emma Sullivan Vanessa Panettieri



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