

Course Programme

Pre-course		Introduction to genomics - genetics variation
<i>Aim of session: Understand the fundamental concepts of genetic variation, gene expression, and regulation.</i>		
Video	20 mins	Introduction to the human genome <i>Andrew Read, University of Manchester, UK</i>
Video	15 mins	Gene expression and regulation - Analysis of the transcriptome <i>Hans Hennies, University of Huddersfield, UK</i>
Video	13 mins	Variation in the human genome - extent and source of variation <i>Sara Brown, University of Edinburgh, UK</i>
Video	17 mins	Variation in the human genome, part II - How can we make sense of this? <i>Sara Brown, University of Edinburgh, UK</i>
Start (GMT)	Finish (GMT)	Presenter details
Monday 11 November 2024		
12:00	13:00	Registration, lunch and networking
13:00	13:10	Welcome <i>Wellcome Connecting Science:</i> <i>Nagehan Ramazanoglu Bahadir - Wellcome Connecting Science, UK</i> Scientific Programme Committee: Ajoy Bardhan, University of Birmingham, UK Joanna Jackow-Malinowska, Kings College London, UK David Kelsell, Queen Mary University of London, UK Edel O'Toole, Queen Mary University of London, UK
13:10	14:00	Introductions (ice-breaker activity)
14:00	14:30	Quiz on pre-course material <i>Chair: Joanna Jackow-Malinowska, Kings College London, UK</i> <i>Ajoy Bardhan, University of Birmingham, UK</i>
Comfort break		
14:40	16:20	Session 1: Repair mechanisms and cancer <i>Aim of session: Explore the mechanisms of DNA repair in skin cells and their implications for cancer</i> <i>Chair: David Kelsell, Queen Mary University of London, UK</i>
14:40	15:25	Dermatlas: The Genomic Atlas of Dermatopathology David Adams, Wellcome Sanger Institute, UK
15:25	16:10	Title TBC Sophie Momen, St John's Institute of Dermatology, UK
16:10	16:20	Session discussion
16:20	16:50	Refreshment break and networking

16:50	18:30	Session 2: Epigenetics
		<i>Aim of session: Identify epigenetic mechanisms and non-coding genomic elements and their functions in skin biology.</i> <i>Chair: Edel O'Toole, Queen Mary University of London, UK</i>
16:50	17:10	Role of histone modifications in genome regulation Pradeep Madapura, Queen Mary University of London, UK
17:10	17:30	RNA-based mechanisms orchestrating the cell cycle and genome stability in cancer Lovorka Stojic, Barts Cancer Institute, UK
17:30	18:30	Workshop
18:30	19:30	Poster session
		<i>Aim of session: Showcase and discuss your recent research findings and advancements in skin biology</i> Bar open (card payments only)
19:30		Dinner
19:30		Bar open (card payments only)

Tuesday 12 November 2024

09:30	11:00	Session 3: Genomic literacy (workshop)
		<i>Aim of session: Learn to perform basic variant interpretation using clinical case histories and genetic reports</i>
		<i>Chair: David Kelsell, Queen Mary University of London, UK</i>
09:30	11:00	Genetic variation in clinical care - tools, tips and pitfalls? Elizabeth Jones, Saint Mary's Hospital Manchester and University of Manchester, UK Thomas Cullup, Great Ormond St Hospital, UK
11:00	11:45	Refreshment break and networking
11:45	13:25	Session 4: Genomic technologies in skin disease
		<i>Aim of session: Explore advanced techniques and applications of long read sequencing and transcriptomic studies in skin research</i>
		<i>Chair: Joanna Jackow-Malinowska, Kings College London, UK</i>
11:45	12:30	Long read sequencing for skin research John Common, A *STAR Skin Research Labs, Singapore
12:30	13:15	Transcriptomic studies of mouse paw skin in health and disease Diana Blaydon, Queen Mary University of London, UK
13:15	13:25	Session discussion
13:25	14:25	Lunch and networking
14:25	15:45	Session 5: Rare disease patient voice
		<i>Aim of session: Understand and integrate patients' expectations for new treatments</i>
		<i>Chair: Edel O'Toole, Queen Mary University of London, UK</i>
14:25	14:50	Ichthyosis, the scale of the problem Mandy Aldwin-Easton, Ichthyosis Support Group (ISG), UK
14:50	15:15	Pain, isolation, and the life-changing work of PC Project Janice Schwartz, Pachyonychia Congenita Project, USA- VIRTUAL
15:15	15:45	Panel discussion
15:45	16:15	Refreshment break and networking
16:15	17:05	Session 6: AI and genomics
		<i>Aim of session: Explore the potential of AI in skin research</i>
		<i>Chair: Ajoy Bardhan, University of Birmingham, UK</i>
16:15	17:00	Generative machine learning to model cellular perturbations Mo Lotfollahi, Wellcome Sanger Institute, UK
17:00	17:05	Comfort Break
17:05	18:05	Session 7: Keynote speaker
		<i>Chair: Joanna Jackow-Malinowska, Kings College London, UK</i>
17:05	18:05	The human skin: development and disease Muzlifah Haniffa, Wellcome Sanger Institute, UK
18:05	19:05	Poster session with drinks reception
		<i>Aim of session: Showcase and discuss your recent research findings and advancements in skin biology</i>
19:05		Dinner
19:05		Bar open (card payments only)

Wednesday 13 November 2024

09:30 10:30 Session 8: Therapies (keynote speaker)

Aim of session: Understand the significance of genetic diagnosis in skin disease and its role in developing effective therapies

Chair: Joanna Jackow-Malinowska, Kings College London, UK

09:30 10:30 Title TBC

[Peter Marinkovich, Stanford University, USA](#)

10:30 11:00 Refreshment break and networking

11:00 12:00 Session 9: Therapies (continued)

Aim of session: Understand the significance of genetic diagnosis in skin disease and its role in developing effective therapies

Chair: Edel O'Toole, Queen Mary University of London, UK

11:00 11:40 Title TBC

[Maanasa Polubothu, University College London, UK](#)

11:40 12:20 Title TBC

[Joanna Jackow-Malinowska, Kings College London, UK](#)

12:20 12:30 Session discussion

12:30 12:50 Consolidation and Closing remarks

Scientific Programme Committee:

[Ajoy Bardhan, University of Birmingham, UK](#)

[Joanna Jackow-Malinowska, Kings College London, UK](#)

[David Kelsell, Queen Mary University of London, UK](#)

[Edel O'Toole, Queen Mary University of London, UK](#)

12:50 13:00 Grab bag lunch

13:10 Coach departures for Cambridge train station and city centre