

Genomics for Dermatology 2020

25 - 27 November 2020

Virtual Course Agenda

Pre Course Material		
On demand		Introduction to the Human Genome <i>Andrew Read, University of Manchester, UK</i>
On demand		Gene expression and regulation - Analysis of the transcriptome Hans Hennies, University of Huddersfield, UK

Wednesday, 25 November 2020

11:00	12:15	Welcome and Introductions
11:00	11:15	<i>Scientific Programme Committee:</i> Sara Brown, University of Dundee, UK David Kelsell, Queen Mary University of London, UK Edel O'Toole, Queen Mary University of London, UK Neil Rajan, Newcastle University, UK
11:15	12:15	All Students - 1.5 minute introduction
12:15	12:45	Break

12:45	14:55	Session 1: Genetic Variation
		Introduction to the session <i>Chair: David Kelsell, Queen Mary University of London, UK</i>
12:45	13:05	Variation in the Human Genome - extent and source of variation Sara Brown, University of Dundee, UK
13:05	13:25	Variation in the Human Genome - how can we begin to make sense of this? Sara Brown, University of Dundee, UK
13:25	13:35	Q&A <i>Chair: David Kelsell, Queen Mary University of London, UK</i> <i>Moderator: Edel O'Toole, Queen Mary University of London, UK</i>
13:35	13:45	Break
13:45	14:05	Understanding psoriasis genetics and implications for patient management Catherine Smith, King's College London, UK
14:05	14:25	Understanding psoriasis genetics and implications for patient management workshop Catherine Smith, King's College London, UK
14:25	14:55	Q&A - Catherine Smith, Sara Brown, Andrew Read, Hans Hennies <i>Chair: David Kelsell, Queen Mary University of London, UK</i> <i>Moderator: Edel O'Toole, Queen Mary University of London, UK</i>
14:55	15:25	Break

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15:25	18:00	Session 2: Epigenetics
		Introduction to the session <i>Chair: Neil Rajan, Newcastle University, UK</i>
15:25	15:45	The expanding world of RNAs: microRNAs and beyond Enikő Sonkoly, Karolinska Institute, Sweden
15:45	16:05	Regulation of gene networks by microRNAs Enikő Sonkoly, Karolinska Institute, Sweden
16:05	16:15	Q&A <i>Chair: Neil Rajan, Newcastle University, UK</i> <i>Moderator: Sara Brown, University of Dundee, UK</i>
16:15	16:35	Break
16:35	16:55	MicroRNAs in skin homeostasis and development Enikő Sonkoly, Karolinska Institute, Sweden
16:55	17:05	Q&A <i>Chair: Neil Rajan, Newcastle University, UK</i> <i>Moderator: Sara Brown, University of Dundee, UK</i>
17:05	17:25	MicroRNAs in chronic inflammatory skin diseases Enikő Sonkoly, Karolinska Institute, Sweden
17:25	17:35	Q&A <i>Chair: Neil Rajan, Newcastle University, UK</i> <i>Moderator: Sara Brown, University of Dundee, UK</i>
17:35	18:00	Additional Q&A Enikő Sonkoly / Wrap up day 1 <i>Chair: Neil Rajan, Newcastle University, UK</i> <i>Moderator: Sara Brown, University of Dundee, UK</i>

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Thursday, 26 November 2020

10:00		12:00		Session 3: Developmental Biology
				Introduction to the session <i>Chair: Neil Rajan, Newcastle University, UK</i>
10:00	10:20	Mosaicism in Dermatology Veronica Kinsler, Great Ormond Street Hospital for Children, UK		
10:20	10:35	Q&A <i>Chair: Neil Rajan, Newcastle University, UK</i> <i>Moderator: David Kelsell, Queen Mary University of London, UK</i>		
10:35	10:50	Break		
10:50	11:30	Zebrafish models of mosaic syndromes and melanoma Liz Patton, University of Edinburgh, UK		
11:30	11:40	Q&A <i>Chair: Neil Rajan, Newcastle University, UK</i> <i>Moderator: David Kelsell, Queen Mary University of London, UK</i>		
11:40	12:00	Additional Q&A Veronica Kinsler, Liz Patton <i>Chair: Neil Rajan, Newcastle University, UK</i> <i>Moderator: David Kelsell, Queen Mary University of London, UK</i>		
12:00	12:50	Break		

12:50		16:20		Session4: Molecular Mechanism of Disease
				Introduction to the session <i>Chair: Sara Brown, University of Dundee, UK</i>
12:50	13:10	Beyond gene discovery in monogenic skin disorders David Kelsell, Queen Mary University of London, UK		
13:10	13:30	Deciphering the role of iRhom2 in the skin David Kelsell, Queen Mary University of London, UK		
13:30	13:40	Q&A <i>Chair: Sara Brown, University of Dundee, UK</i> <i>Moderator: Edel O'Toole, Queen Mary University of London, UK</i>		
13:40	14:00	Break		
14:00	14:20	Mutated tumour suppressor genes and inherited skin tumours Neil Rajan, Newcastle University, UK		
14:20	14:40	Using genetics to gain mechanistic insights into inherited skin tumours Neil Rajan, Newcastle University, UK		
14:40	14:50	Q&A <i>Chair: Sara Brown, University of Dundee, UK</i> <i>Moderator: Edel O'Toole, Queen Mary University of London, UK</i>		
14:50	15:10	Break		

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15:10	16:20	Session4: Molecular Mechanism of Disease continued
15:10	15:30	Investigating immune responses in human skin Marta Polak, University of Southampton, UK
15:30	15:50	Investigating immune responses in human skin workshop Marta Polak, University of Southampton, UK
15:50	16:00	Q&A <i>Chair: Sara Brown, University of Dundee, UK</i> <i>Moderator: Edel O'Toole, Queen Mary University of London, UK</i>
16:00	16:20	Additional Q&A Marta Polak, David Kelsell, Neil Rajan / Wrap up day 2 <i>Chair: Sara Brown, University of Dundee, UK</i> <i>Moderator: Edel O'Toole, Queen Mary University of London, UK</i>
16:20	16:30	Break
16:30	17:00	Quiz
		Sara Brown, University of Dundee, UK Neil Rajan, Newcastle University, UK

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10:00		12:10		Session5: GWAS/Immunology
				Introduction to the session <i>Chair: Sara Brown, University of Dundee, UK</i>
10:00	10:20	Linking immune-disease GWAS variants to function with chromatin marks Gosia Trynka, Wellcome Sanger Institute, UK		
10:20	10:40	Linking immune-disease GWAS variants to function with single cell transcriptomics Gosia Trynka, Wellcome Sanger Institute, UK		
10:40	10:50	Q&A <i>Chair: Sara Brown, University of Dundee, UK</i> <i>Moderator: Neil Rajan, Newcastle University, UK</i>		
10:50	11:10	Break		
11:10	11:50	Gaining biological insight from GWAS studies (in AD) Lavinia Paternoster, University of Bristol, UK		
11:50	12:10	Q&A <i>Chair: Sara Brown, University of Dundee, UK</i> <i>Moderator: Neil Rajan, Newcastle University, UK</i>		
12:10	12:30	Break		
12:30		13:15		Keynote
				Introduction to the session <i>Chair: Edel O'Toole, Queen Mary University of London, UK</i>
12:30	12:55	Exploring skin cell heterogeneity Fiona Watt, Kings College London, UK		
12:55	13:15	Q&A <i>Chair: Edel O'Toole, Queen Mary University of London, UK</i> <i>Moderator: Neil Rajan, Newcastle University, UK</i>		
13:15	14:05	Break		
14:05		17:55		Session 6: Monogenic Skin Disease
				Introduction to the session <i>Chair: David Kelsell, Queen Mary University of London, UK</i>
14:05	14:25	Elucidation of monogenic hair disorders Regina Betz, University of Bonn, Germany		
14:25	14:45	Genetics of uncombable hair syndrome - more than an eye-catching feature? Regina Betz, University of Bonn, Germany		
15:05	15:15	Q&A <i>Chair: David Kelsell, Queen Mary University of London, UK</i> <i>Moderator: Sara Brown, University of Dundee, UK</i>		
15:15	15:30	Break		

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15:30	17:55	Session 6: Monogenic Skin Disease continued
15:30	15:50	Interesting cases from 100K Genomes Edel O'Toole, Queen Mary University of London, UK
15:50	16:00	Q&A <i>Chair: David Kelsell, Queen Mary University of London, UK</i> <i>Moderator: Sara Brown, University of Dundee, UK</i>
16:00	16:20	Using 3D skin models to model rare disease epidermal pathology and treatment Edel O'Toole, Queen Mary University of London, UK
16:20	16:30	Q&A <i>Chair: David Kelsell, Queen Mary University of London, UK</i> <i>Moderator: Sara Brown, University of Dundee, UK</i>

16:30	16:45	Break
16:45	17:05	The 100,000 Genomes Project and its legacy Ellen Thomas, Genomics England, UK
17:05	17:25	Genomics in the NHS: the Genomic Medicine Service Ellen Thomas, Genomics England, UK
17:25	17:35	Q&A <i>Chair: David Kelsell, Queen Mary University of London, UK</i> <i>Moderator: Sara Brown, University of Dundee, UK</i>
17:35	17:55	Additional Q&A Regina Betz, Edel O'Toole, Ellen Thomas / Wrap up day 3 <i>Chair: David Kelsell, Queen Mary University of London, UK</i> <i>Moderator: Sara Brown, University of Dundee, UK</i>

17:55	18:05	Closing remarks
		<i>Scientific Programme Committee:</i> Sara Brown, University of Dundee, UK David Kelsell, Queen Mary University of London, UK Edel O'Toole, Queen Mary University of London, UK Neil Rajan, Newcastle University, UK