

# Dr Stephen Smith BSc, MB BChir, MPhil, MRCP (UK), PhD.

## **MRC Post-doctoral Clinical Research Fellow**

*University of Cambridge and EMBL-European Bioinformatics Institute*

## **Honorary Speciality Registrar in Dermatology and Clinical Pharmacology**

*Addenbrookes Hospital, Cambridge*

I am a clinician scientist based in Cambridge. My research is focused on using cutting edge computational and mathematical tools to understand the pathogenesis and aetiology of cancer, in particular squamous cell carcinoma. As a dermatologist and clinical pharmacologist I am ultimately driven by the need to translate the findings of fundamental scientific research into clinically relevant outcomes. I am available for consultancy via the contact details below.

## **Contents**

Education  
Employment History  
Research  
Professional Service, Leadership & Management  
Publications  
Awards and Grants  
Presentations and Invited Talks  
Teaching and Supervision  
Courses and Qualifications  
Conferences  
Personal

## **Contact details**

**Email:** sps41 "at" cam.ac.uk

**Twitter:** @stevesmithcam

**Address:** Department of Pathology, University of Cambridge, Tennis Court Road, Cambridge CB21PQ, UK.

## **Education**

---

### **Post-graduate formal qualifications**

#### **MPhil (Computational Biology)**

*2013 - 2014*

University of Cambridge, UK

#### **PhD (Molecular Immunology)**

*2001 - 2004*

University of Edinburgh, UK

## Post-graduate professional qualifications

### MRCP (UK)

*2012*

Royal College of Physicians (London)

### Cert. CompMath (Certificate in Computer Science and Mathematics)

*2009 - 2010*

Open University, UK

## Undergraduate degrees

### MB BChir (Medicine and Surgery)

*2004 - 2009*

University of Cambridge, UK

### BSc (Hons) Virology (2:1)

*1997 - 2001*

University of Edinburgh, UK

## Schooling

Tonbridge School, Tonbridge, Kent

*1992-1997*

5 A levels (AABCD)

Additional level French (A)

10 GCSE (4 A\*, 5 A, 1 C)

## Employment and Work History

2018 – Present

MRC Post-doctoral Clinical Research Training Fellow

University of Cambridge Joint Fellowship with EMBL-European Bioinformatics Institute (Hinxton)

2018 – Present

Honorary SpR, Dermatology and Clinical Pharmacology,

Addenbrookes Hospital, Cambridge

2017 - Present

NICE Health Technology Appraisals Guidance Committee

National Institute for Health and Care Excellence, Committee B

2019 – Present

Founder & Director

Deepskin Dermatology (Cambridge)

2013 – 2018

Academic Clinical Fellow (ST3+) Dermatology and Clinical Pharmacology

Cambridge University Hospitals NHS Trust, Cambridge

Training number: EAN/010/00108/A

Educational Supervisors: Prof. I. Wilkinson, Dr. T. Krieg & Dr. N. Burrows

2011 – 2013

Core Medical Training

CMT2: Oncology, Infectious Diseases Educational Supervisors: Dr. E. Gkrania-Klotsas & Dr. C. Parkinson  
CMT1: Hepatology, Endocrinology Educational Supervisors: Dr. M. Allison & Dr. E. Gurnell  
Cambridge University Hospitals NHS Trust/West Suffolk Hospital

2009 – 2011

Academic Foundation Training

AFY2: ITU, Hepatology

AFY1: Hepatology, Respiratory Medicine, Urology

Educational Supervisors: Dr. P. Bradley & Dr. W. Griffiths

Cambridge University Hospitals NHS Trust/Bedford Hospital

## Research Work and Interests

### Current Research

**Computational analysis of next-generation sequencing data in squamous cell oncogenesis.**

**Sponsor:** Professor Nicholas Coleman

**Collaborators:** Professor Eugene Healy (Univ. Southampton), Prof. Chris Smith (Cambridge, Biochemistry) & Dr. Anton Enright (Univ. Cambridge/EMBL-EBI)

Squamous cell carcinogenesis is a complex, highly integrated systems-based process. In order to more fully understand the nature of genomic processes underlying the transformation from epithelium to SCC I am interrogating large scale NGS datasets (both RNA-seq and DNA-seq). This MRC funded post-doctoral fellowship is focused on the analysis and integration of expression profiling and genomic sequencing data, including network analysis and comparative analysis of publically available data (such as from TCGA) with our experimental work. The project is particularly targeted at understanding the role of alternative RNA splicing in the pathogenesis of squamous cell carcinoma. We will use patient-derived samples from skin and cervix and aim to translate the findings across squamous-type carcinomas in other organ systems.

**Understanding transcriptional events in melanoma carcinogenesis for early diagnosis, prognosis and novel therapeutic approaches.**

Leveraging extensive and detailed publically available data collections of next-generation sequencing and microarray analyses of melanoma samples I have applied machine learning and network biology analyses to understand the early events that transition primary melanoma to metastatic disease. In order to further understand how molecular events drive melanoma initiation and progression I am leading a project targeting co-dependent pathways in order to identify genes showing genetic dosage lethality in melanoma. The project aims to translate these findings into potential avenues for therapy using repositioned existing drug treatments.

### Drug design and repositioning

The development of new therapies is costly and time-consuming. There exists an enormous library of therapeutic compounds whose activity can be predicted to extend across multiple diseases, but which are not used in such a way. By analysing transcriptomic and genetic data from diseases of interest (atopic dermatitis, skin cancer, cervical cancer etc) we aim to identify promising compounds with established pharmacological profiles to test in novel therapeutic areas, shortening the time from discovery to prescription.

### Non-invasive Diagnostics in Skin Disease

The gold standard non-invasive diagnostic tool for skin cancer by dermatologists is the dermatoscope. Presently dermatoscopes are expensive and affordable models lack digital capabilities. These factors make their use outside specialist centres in wealthy countries infeasible. I am directing a project aiming to produce and refine a low-cost, simple digital dermatoscope for widespread use in clinical contexts where cost sensitivity currently limits their deployment. Additional imaging capabilities will also be integrated to the device to enable it to perform as a cutting-edge research tool in the optical investigation of skin biology. Future work will be focused on leveraging this tool as a platform for computationally aided diagnostics with important potential

applications in resource-limited settings. This work has been supported by a grant from the University of Cambridge Biomaker Challenge and has won 2nd prize at the Cambridge Judge Business School's medical technologies competition (2019). I am the founder and co-director of Deepskin Dermatology, a company founded to commercialise and exploit this technology

## Collaborations

**Dr. Amaya Viros** (*CRUK Manchester Institute*). Understanding the role of aging in melanoma (Smith et al, Under review 2019)

**Prof. Jacqueline Boulton** (*University of Oxford*). RNA-seq and splicing analysis in myelodysplastic syndrome (Pellagetti et al, Blood 2018)

**Narita/Hoare lab** (*University of Cambridge Cancer Institute*). Molecular basis of senescence and its role in carcinogenesis (Parry et al, Nature Communications 2018).

**Coleman Lab** (*University of Cambridge*). Ongoing collaboration with Coleman group members on bioinformatics aspects of work in squamous cell carcinoma, HPV biology and paediatric tumours. (Kucia-Tran et al, British Journal of Cancer 2016, Journal of Pathology 2018)

**Raffan/O'Rahilly group** (*University of Cambridge, IMS*). Collaboration on data analysis of genetic effects on obesity in dogs. (Raffan et al, Cell Metabolism 2016, PeerJ 2015).

## Previous Research

### Masters Thesis

#### **Functional genomics analysis of papillomavirus oncogenesis in W12 cell lines**

**Supervisor:** Professor Nicholas Coleman

This research explored the functional genomic aspects of HPV carcinogenesis applying network models to high-quality gene expression data in a cell model of HPV16 mediated oncogenesis (Smith et al, Scientific Reports 2016).

### PhD Thesis

#### **Evidence for a remote lung response in endotoxin-mediated direct lung injury: a strategic application of microarray technology.**

**Supervisors:** Dr David Collie & Dr Varrie Ogilvie

Construction and assay of a suppression-subtraction-hybridisation ovine lung sequence library followed by molecular genomic probing of sheep lung tissue from in vivo models of acute lung injury via novel microarray and qRT-PCR to characterise inflammatory responses in lung segments.

### BSc Honours Thesis

#### **Design and evaluation of mouse housekeeping genes for oligonucleotide microarrays.**

**Supervisor:** Dr D Roy

Analysis of housekeeping genes in mice for the purposes of validating and assuring quality of internally normalised microarray data for mouse models.

## Research skills

**Computational Biology:** RNA-seq, DNA-seq and microarray analysis, R programming, Python scripting, Bioinformatics skills, Machine learning, Image analysis

**Molecular Biology:** PCR (including qPCR and RT-PCR), molecular cloning, Western blotting, library

construction, microarray design, construction and hybridization

**Cell Biology:** Cell and tissue culture (primary, mammalian and tumour), FACS, siRNA Clinical Research  
Trial design and statistical analysis training

## Professional Service, Leadership & Management

### Committee Positions (Present)

2017-present: NICE Health Technology appraisals committee B (Member)

2017-present: British Assn Dermatologists Research Sub-Committee Trainee Representative

2017-present: British Assn Dermatologists Health Informatics Sub-Committee Member

2017-present: UK TREND Steering Committee member

2014-present: Local Negotiating Committee, Cambridge University Hospitals NHS Trust Junior Doctors' Representative

### Committee Positions (Previous)

2017-2018: Cambridge University Hospitals Trust Junior Doctors' Forum Co-Chair

2014-2017: Joint Drugs and Therapeutics Committee, Cambridge University Hospitals NHS Trust Clinical Pharmacology Trainee Observer

2012-2013: Junior Doctors' Mess President, Cambridge University Hospitals NHS Trust

### Memberships

British Association of Dermatologists (BAD)

European Society for Dermatological Research (ESDR)

British Society for Investigative Dermatology (BSID)

British Pharmacological Society (BPS)

British Association for Cancer Research (BACR)

### Leadership & Management

2019-present: European Society for Dermatological Research Leadership Training Program Member

2018: European Society for Dermatological Research Future Leaders Academy (Budapest, Hungary)

2018: International Investigative Dermatology Residents Retreat (Orlando, Florida)

## Publications

ORCID #0000-0001-7744-3238

Google Scholar

### Journal Articles (Peer-reviewed)

A Shapanis, C. Lai, **S. Smith**, G Coltart, M. Sommerlad, J. Schofield, E Parkinson, P. Skipp, E. Healy

*Identification of proteins associated with development of metastasis from cutaneous squamous cell carcinomas (cSCCs) via proteomic analysis of primary cSCCs.*

**British Journal of Dermatology** 13 August 2020 <https://doi.org/10.1111/bjd.19485>

**Smith SP**, Mohd Mustapa MF, de Berker D.

*The landscape of psoriasis provision in the UK.*

**Clinical and Experimental Dermatology** 2020;10.1111/ced.14286. <https://doi.org/10.1111/ced.14286>

Pellagatti A, Steeples V, Armstrong RN, Sharma E, Repapi E, Singh S, Sanchi A, Radujkovic A, Horn P, Dolatshad H, Roy S, Lockstone H, Taylor S, Giagounidis A, Vyas P, Schuh A, Hamblin A, Papaemmanuil E, Killick S, Malcovati L, Gavin A-C, Ho AD, Luft T, Hellström-Lindberg E, Cazzola M, Smith CWJ, **Smith SP**, and Boultonwood J

*Impact of spliceosome mutations on RNA splicing in myelodysplasia: dysregulated genes/pathways and clinical associations.*

**Blood** 2018 Jun 21. pii: blood-2018-04-843771. <https://doi.org/10.1182/blood-2018-04-843771>

Parry AJ, Hoare M, Bihary D, Hänsel-Hertsch R, **Smith SP**, Tomimatsu K, Mannion E, Smith A, D'Santos P, Russell IA, Balasubramanian S, Kimura H, Samarajiwa SA & Narita M

*NOTCH-mediated non-cell autonomous regulation of chromatin structure during senescence.*

**Nature Communications** May 2018 volume 9, Article number: 1840 (2018) <https://doi.org/10.1038/s41467-018-04283-9>

Kucia-Tran, J. A., Tulkki, V. , Scarpini, C. G., **Smith, S.P.** , Wallberg, M. , Paez-Ribes, M. , Araujo, A. M., Botthoff, J. , Feeney, M. , Hughes, K. , Caffarel, M. M. and Coleman, N.

*Anti-oncostatin M antibody inhibits the pro-malignant effects of oncostatin M receptor overexpression in squamous cell carcinoma.*

**Journal of Pathology**, Jan. 2018 244: 283-295. <https://doi.org/10.1002/path.5010>

**Smith SP**, Baxendale HE, Sterling JC.

*Therapeutic use of the quadrivalent Human Papillomavirus vaccine for recalcitrant warts in idiopathic immune deficiency.*

**Clinical and Experimental Dermatology** Jan 2017 42: 306-308. <https://doi.org/10.1111/ced.13038>

**Smith SP**, Scarpini CG, Groves IJ, Odle RI, Coleman N

*Identification of host transcriptional networks showing concentration-dependent regulation by HPV16 E6 and E7 proteins in basal cervical squamous epithelial cells.*

**Scientific Reports** Jul 2016; 6:29832. <https://doi.org/10.1038/srep29832>

Kucia J, Tulkki V, **Smith SP**, Scarpini C, Hughes K, Araujo AM, Yan KYM, Botthof J, Prez-Gmez E, Sanchez C, Quintanilla M, Cuschieri K, Caffarel MM, Coleman N

*Overexpression of the oncostatin M receptor in cervical squamous cell carcinoma is associated with epithelial-mesenchymal transition and increased metastasis.*

**British Journal of Cancer** Jul 2016; 115(2):212–22. <https://doi.org/10.1038/bjc.2016.199>

Raffan E, Dennis R, O'Donovan C, Becker J, Scott R, **Smith SP**, Withers D, Wood C, Conci E, Clements D, Summers K, German A, Mellerch C, Arendt M, Iyemere V, Withers E, Soder J, Wernersson S, Andersson G, Lindlad-Toh K, Yeo G, O'Rahilly SO

*A deletion in the canine POMC gene and its relationship to the obesity-proneness of Labrador retriever dogs.*

**Cell Metabolism** 2016 May; 23(5): 893–900. <https://dx.doi.org/10.1016/j.cmet.2016.04.012>

Raffan E, **Smith SP**, O'Rahilly SO, Wardle J.

*Development, factor structure and application of the Dog Obesity Risk and Appetite (DORA) questionnaire.*

**PeerJ** 2015; 3:e1278; <https://doi.org/10.7717/peerj.1278>

**Smith SP**, Crawley C, See TC, Sreaton N and Preller J.

*A case of BK virus causing bilateral ureteric obstruction in an allogeneic stem cell transplant recipient.*

**Journal of Clinical Virology** 2013 Jan; 56(1): 1-4. <https://doi.org/10.1016/j.jcv.2012.07.003>

## Published Abstracts

Bailey S, Ferraresso M, **Smith SP**, Nicholson JC, Scarpini CG, Enright AJ, Murray MJ, Coleman N.

*Targeting oncogenic microRNAs in malignant germ cell tumours with locked nucleic acid-based inhibitors.*

**European Urology Supplements** 2019; 18 (4) 22

Ferraresso M, Bailey S, Panayi C, **Smith SP**, Nicholson JC, Scarpini CG, Enright AJ, Coleman N, Murray MJ.

*Mechanism and functional significance of downregulated microRNA expression in malignant germ cell tumours.*

**European Urology Supplements** 2019; 18 (4) 22

**Smith SP**, Amin K, Fang S, Morrison T, Coleman N, Murray MJ, Enright AJ.

*Analysing large scale TGCT data from The Cancer Genome Atlas (TCGA): Challenges and considerations.*

**European Urology Supplements** 2019; 18 (4) 38

Hasan H, **Smith SP**, Scarpini CG and Coleman N.

Human papillomavirus subversion of host RNA splicing machinery in early progression.

**British Journal of Dermatology** 2019; 181 (S1) 48

**Smith S.P.**, Gaudy-Marqueste C, Kumar R, Marais R, Nagore E, Viros A.

*Genomic characterization of melanoma in the elderly reveals molecular drivers of progression and prognosis associated with immunotherapy response*

**Cancer Research** 2019; 79 (13 Supplement) 3994-3994; <https://DOI.org/10.1158/1538-7445.AM2019-3994>

Nagore E, Roeck K, Budden T, **Smith SP**, Craig S, Krutmann J, Lotz M, Furney S, Viros A.

*Chronic UV damage of the stroma improves melanoma survival*

**Cancer Research** 2019; 79 (13 Supplement) 2022-2022; <https://DOI.org/10.1158/1538-7445.AM2019-2022>

**S.P. Smith**

*1067 Fascin and Cdk2 are synthetic lethal partners with exceptional potential as joint therapeutic targets in malignant melanoma*

**Journal of Investigative Dermatology** 2018; 138 (5), S181 <https://doi.org/10.1016/j.jid.2018.03.1080>

**Smith SP**, Mehta SG, Burrows N.

*A Rare Form of Classical Ehlers-Danlos Syndrome with Arterial Rupture.*

**British Journal of Dermatology** 2016; Online Supplement (Accepted)

Raffan E, **Smith SP**, Wardle J, O’Rahilly S,

*Variation in appetitive behaviour between pet dogs; association with obesity and relationship to owner management factors.*

**Journal of Veterinary Behavior: Clinical Applications and Research** 2015; 10 (5), 447, <https://doi.org/10.1016/j.jveb.2015.07.032>.

Raffan E, Diss S, **Smith SP**, Wardle J

*Development and validation of the Dog Obesity Risk and Appetite (DORA) questionnaire*

**Acta Veterinaria Scandinavica** 2015, 57(Suppl 1):O18

**Smith SP.**

*Network analysis identifies master regulators of metastasis in cutaneous melanoma.*

**British Journal of Dermatology** 2015 July; 173 (S1): 2176. <https://doi.org/10.1111/bjd.13761>

**Smith SP**

*Bioinformatics Identification of Personalised Medicine Repositioning Candidates in Atopic Dermatitis.*

**Clinical and Experimental Dermatology** 2015; Online Supplement

**Smith SP**, Tate S, Collie DD.

*Interleukin 10 is upregulated in Contralateral Lung Segments Following Local LPS Challenge.*

**Proceedings of the 42nd IDSA Congress** 2004

## Books

**Co-editor:** BMA New Guide to Medicines and Drugs. (2015)

## Awards, Prizes & Grants

### Awards

2019: British Association of Dermatologists Travel Award  
2018: European Society for Dermatological Research Future Leader  
2018: European Society for Dermatological Research Travel Award  
2018: British Association of Dermatologists Travel Award  
2018: Selected for International Investigative Dermatology Trainee Retreat  
2017: Emirates Dermatology Society Fellowship  
2016: Cambridge Biomedical Research Centre Bursary  
2016: British Society for Investigative Dermatology Specialist Registrar Bursary  
2015: THESIS BSID Fellowship

### Prizes

2019: Cambridge Judge Business School Medical Technologies Competition, 2nd Prize  
2017: Emirates Dermatology Society Conference 2017, Best Abstract Prize

### Grants

2020-2025: NIHR HTA Researcher-led call Primary Research: "Best systemic treatments for adults with atopic eczema over the long term (BEACON): A randomised, assessor-blind trial comparing ciclosporin, methotrexate and dupilumab." (co-Investigator; £2.6M)  
2018-2019: British Association of Dermatologists Intercalated Degree Grant: "HPV driven alternative splicing." (Supervisor/PI; £3000)  
2018-2019: Evelyn Trust Medical Research Grant: "Making the most of what he have: computational approaches to drug repositioning." (Principal Investigator; £12,000)  
2018-2021: Medical Research Council Post-Doctoral Clinical Research Training Fellowship: "Computational Analysis of Transcription and Alternative Splicing Events in Squamous Cell Cancer." (Principal Investigator; £351,712)  
2017: Cambridge Biomaker Challenge Grant: "Building DeepSkin a low-cost state-of-the-art digital dermatoscope" (Principal Investigator; £1,000)  
2002: Normal Salvesen Trust: "Development of an Ovine Lung Specific gene array through Interspecies hybridisation." (Co-Investigator; £27,270)  
2001-2003: MRC doctoral training Award

## Presentations, Lectures & Invited Talks

### Oral Presentations International/National Meetings

2019: Plenary lecture: What's new in Dermatology. Doctors' updates 2019 (Val d'Isere, France)  
2018: Mini-symposium research presentation: Fascin and Cdk2 are synthetic lethal partners with exceptional potential as joint therapeutic targets in malignant melanoma. International Investigative Dermatology Conference 2018. (Orlando, USA).  
2017: Invited Lecture: Epigenetics for Dummies. British Association of Dermatologists Annual Congress (Liverpool, UK)  
2016: Plenary Lecture: The Next Revolution: Computational Biology and the Skin. British Association of Dermatologists Annual Congress (Birmingham, UK)  
2016: Invited Workshop: Bioinformatics in HPV Research. HPV UK 2016 (Lake District, UK)



2014: Invited Research Talk: Functional genomics analysis of HPV oncogenesis in W12 cell lines. HPV UK 2014 (Lake District, UK)  
2003: A novel Ovine immune/inflammatory microarray. Faculty of Medicine Research Emphasis Day (Edinburgh, UK)

### **Invited oral presentations**

2019: Invited Lecture: Big Data in Dermatology. British Association of Dermatologists THESIS course (London, UK)  
2018: Host Transcriptional Control by Human Papillomavirus. University of Cambridge Pathology Department Annual Symposium (Cambridge, UK)  
2017: Big Data, Machine Learning and Dermatology: Rise of the Machines. Newcastle Medical School Research in Progress Lecture (Newcastle, UK)  
2017: Invited Lecture: Computational Biology in Dermatology. British Association of Dermatologists THESIS course (London, UK)  
2015: It's melanoma, is it serious? Addenbrookes Staff Grand Rounds (Cambridge, UK)  
2010: A complicated transplant. Addenbrookes Staff Grand Rounds (Cambridge, UK)  
2005: Medicine and the Media. Inter-faculty off-topic seminars (Cambridge, UK)

### **Conference Presentations**

2019: Bailey S, Ferraresso M, Smith SP, Nicholson JC, Scarpini CG, Enright AJ, Murray MJ, Coleman N. Targeting oncogenic microRNAs in malignant germ cell tumours with locked nucleic acid-based inhibitors. International Extracranial Germ Cell Tumour Conference 2019 (Cambridge, UK)  
2019: M. Ferraresso<sup>1</sup>, Bailey S, Panayi C, Smith SP, Nicholson JC, Scarpini CG, Enright AJ, Coleman N, Murray MJ. Mechanism and functional significance of downregulated microRNA expression in malignant germ cell tumours. International Extracranial Germ Cell Tumour Conference 2019 (Cambridge, UK)  
2019: Smith SP, Amin K, Fang S, Morrison T, Coleman N, Murray MJ, Enright AJ. Analysing large scale TGCT data from The Cancer Genome Atlas (TCGA): Challenges and considerations. International Extracranial Germ Cell Tumour Conference 2019 (Cambridge, UK)  
2019: Hasan H, Smith SP, Scarpini CG and Coleman N. Human papillomavirus subversion of host RNA splicing machinery in early progression. British Association of Dermatologists Annual Congress 2019 (Liverpool, UK)  
2019: Smith SP, Gaudy-Marqueste C, Kumar R, Marais R, Nagore E, Viros A. Genomic signature of poor outcome in elderly melanoma predicts immunotherapy response. American Association for Cancer Research 2019 (Atlanta, Georgia, USA) Poster  
2019: Nagore E, Roeck K, Budden T, Smith SP, Craig S, Krutmann J, Lotz M, Furney S, Viros A. Chronic UV damage of the stroma improves melanoma survival American Association for Cancer Research 2019 (Atlanta, Georgia, USA)  
2018: Smith SP, Fascin and Cdk2 are synthetic lethal partners with exceptional potential as joint therapeutic targets in malignant melanoma. International Investigative Dermatology Conference 2018. (Orlando, USA). Poster  
2017: Smith SP GATAD2A, a chromatin remodelling gene, is a powerful prognostic marker in malignant melanoma. British Society for Investigative Dermatology (Manchester, UK)  
2016: Smith SP, Mehta SG, Burrows N. A Rare Form of Classical Ehlers-Danlos Syndrome with Arterial Rupture. British Society for Medical Dermatology (London, UK)  
2015: Smith SP Network Analysis of Melanoma Metastasis. British Association of Dermatologists Annual Congress (Manchester, UK)  
2015: Smith SP Bioinformatics Identification of Personalised Medicine Repositioning Candidates in Atopic Dermatitis. British Society of Investigative Dermatology (Southampton, UK)  
2004: Smith SP, Tate S, Collie DD. IL-10 is upregulated in contralateral lung segments following local LPS challenge. Infectious Diseases Society of America Congress (Boston, USA)

## Teaching, Training & Supervision

### Research supervision

2019: Hira Hasan, Undergraduate BSc research placement (HPV induced RNA splicing).  
2018: Augustus Rottenberg, Summer research placement (*In vitro* analysis of drug repositioning candidates for melanoma).  
2018: Andrew Farr, research placement (Bioinformatics of drug repositioning).

### Clinical supervision

2009–2016: Clinical Supervisor, University of Cambridge Clinical School Undergraduate clinical skills and mentoring, 4 to 10 students

### Undergraduate Lecturing

2014–present: Clinical Lecturing, University of Cambridge Clinical School Undergraduate Dermatology Lectures, 50 to 100 students  
2011: Course Organiser, University of Cambridge Clinical School Medical Statistics, Ethics and Law - 2 day lecture course, final year undergraduates (30 students)

## Courses & Qualifications

### Current Certificates

2013– Good Clinical Practice Current, valid Certification  
2011– Advanced Life Support Current, valid Certification

### Courses Attended

2020: European Cancer Research Centres Early Trials (JING) Training Course  
2019: BPS Clinical Pharmacology Training Day  
2019: NICE Technology appraisals Away Day  
2019: BAD Dermatology Registrars' Training Day  
2019: Cambridge Judge Business School Entrepreneurship Centre Accelerate Plus Program  
2018: NICE Technology appraisals Away Day  
2018: BAD Dermatology Registrars' Training Day  
2018: British Cosmetic Dermatology Society Training Day  
2018: East Region Dermatology Education update Day  
2018: European Society for Dermatological Research Future Leaders Academy  
2018: BPS Experimental Medicine Training Day (Early phase trial design)  
2018: NIHR Statistics Group Early Phase Trials workshop  
2017: NICE Technology appraisals Away Day  
2017: East Region Dermatology Education update Day  
2017: BPS Clinical Pharmacology Training Day  
2017: BAD Dermatology Registrars' Training Day  
2016: BPS Clinical Pharmacology Training Day  
2016: BAD Dermatology Registrars' Training Day  
2016: East Region Dermatology Education update Day

2016: Wellcome Advanced Course in Genomics for Dermatology  
2015: BAD Dermatology Registrars' Training Day  
2013: Introduction to Biology of the Skin  
2013: An Introduction to Solving Biological Problems with R  
2013: An Introduction to Solving Biological Problems with Python  
2013: Bioinformatics: Microarray Analysis with Bioconductor  
2012: THESIS/BAD/BSID Research Course (London, UK)  
2010: BSMD DermDoc Course (London, UK)  
2009: Immediate Life Support  
2009: ALERT course

## Conferences

### Invited Speaker

Doctors' Updates 2019, 2020 (France)  
Cambridge DermSoc Conference 2020  
British Association of Dermatologists Annual Meeting (UK) 2019 (Liverpool, UK)  
British Association of Dermatologists Annual Meeting (UK) 2018 (Edinburgh, UK)  
British Association of Dermatologists Annual Meeting (UK) 2017 (Liverpool, UK)  
British Association of Dermatologists Annual Meeting (UK) 2016 (Birmingham, UK)

### Presenter

International Papillomavirus Conference 2020 (Barcelona, Spain)\*  
Pharmacology 2019\*  
American Academy of Cancer Research Annual Meeting 2019 (Atlanta, GA, USA)  
European Society for Dermatological Research Future Leaders Academy 2018 (Budapest, Hungary)\*  
International Investigative Dermatology Conference 2018 (Orlando, FL, USA)\*  
Cambridge Pathology symposium 2018 (Cambridge, UK)\*  
Emirates Dermatology Conference 2017 (Abu Dhabi, UAE)  
British Society for Investigative Dermatology 2017 (Manchester, UK)  
British Society for Medical Dermatology Meeting 2017 (RCP, London, UK)  
HPV UK (Lake District, UK) 2016\*  
British Society for Investigative Dermatology 2015 (Southampton, UK)  
HPV UK (Lake District, UK) 2014\*  
Infectious Diseases Society of America Annual Meeting (Boston, USA) 2004

\*Oral presentations

### Delegate

Innovation, Collaboration and Entrepreneurship in Drug Discovery 2018 (Cambridge, UK)  
BAYES 2018: Bayesian Biostatistics Workshop (Cambridge, UK)  
Cambridge Pathology symposium 2018, 2019 (Cambridge, UK)  
International Investigative Dermatology Conference 2018 (Orlando, FL, USA)  
NICE Technology appraisals Away day 2017, 2018, 2019  
Emirates Dermatology Conference 2017 (Abu Dhabi, UAE)  
Annual Symposium of the Cambridge Computational Biology Institute (Cambridge, UK) 2011, 2012, 2013  
British Association of Dermatologists Annual Meeting (UK) 2015, 2016, 2017, 2018, 2019  
British Society for Investigative Dermatology (UK) 2015, 2017

British Pharmacology Society annual Meeting 2015, 2016, 2017, 2019  
British Society for Medical Dermatology Meeting (RCP, London, UK) 2011, 2016  
HPV UK (Lake District, UK) 2012, 2014, 2016  
University of Cambridge Department of Medicine Research Day (Cambridge, UK) 2013  
Academy of Medical Sciences: Developing a career in academic medicine. (Cambridge, UK) 2013  
Building Bridges in Medical Sciences (Cambridge, UK) 2011, 2012  
European Students' Conference (Berlin, Germany) 2006  
Infectious Diseases Society of America Annual Meeting (Boston, USA) 2004

## Personal Activities

I have been a keen waterpolo player, having competed at all levels up to national. I have also been a referee at National standard and am a level 3 waterpolo coach. I have previously held positions on the national governing board for UK national waterpolo. I still play, though less than I would like, and love the experience of being part of a competitive team. My current club is the City of Cambridge Waterpolo Club, and I have previously played for the Universities of Cambridge and Edinburgh, Scottish Universities, Warrender Waterpolo Club, royal Tunbridge Wells Monsoon and Beckenham Swimming club.

I am an ex-competitive national-standard swimmer, having competed at middle and long distance front crawl. I have more recently taken up open-water swimming and hope to compete again at longer distances. My naturally geeky side enjoys seeing data and dissecting my swims on Strava.

I play squash, though not as well as I'd like and am a keen if not elegant skier.

With my family I enjoy cooking, particularly what we can grow ourselves, skiing and supporting my wife on the hockey pitch.