### **BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FIVE PAGES.** 

NAME: Dr Ravi Ramessur

eRA COMMONS USER NAME (credential, e.g., agency login): N/A

# POSITION TITLE: Consultant Dermatologist and Visiting Lecturer

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Start Date MM/YYYY	Completion Date MM/YYYY	FIELD OF STUDY
University of Cambridge, UK	MA	Sept 2007	July 2010	Medical Sciences
University of Oxford, UK	BMBCh	Sept 2010	July 2013	Medicine
Higher Education Academy, UK	Associate Fellowship	Sept 2014	Sept 2015	Medical Education
Royal College of Physicians, UK	MRCP UK	Sept 2014	Feb 2016	Medicine
University of Cambridge, UK	PGCert	Sept 2015	Sept 2016	Medical Education

#### A. Personal Statement

From the outset of my medical career, I have been inspired by the transformative power of applied knowledge to improve patients' lives. During my undergraduate studies at the University of Cambridge, I developed a fascination with the neurobiology underpinning satiety, undertaking a summer project in Professor Lora Heisler's laboratory. This research investigated neural pathways involved in appetite regulation and highlighted how scientific innovation can enhance our understanding of disease mechanisms and inform strategies to improve health outcomes for patients and society.

Throughout my clinical training, I actively sought opportunities to contribute to research, clinical governance, and education. These experiences provided me with a robust platform of skills to make meaningful contributions to both clinical care and science as a specialist. During my time at Oxford, I collaborated with Professor Michael Sharpe, Professor of Psychiatry, and Dr Jane Walker, Senior Clinical Lecturer, on a cross-sectional study assessing the prevalence of depression in cancer patients. This research underscored the importance of addressing the holistic well-being of individuals undergoing intensive treatments such as chemotherapy and radiotherapy. As my interest in dermatology deepened, I collaborated with Dr Dipender Gill, Clinical Lecturer at Imperial College London, on a systematic review evaluating the impact of statins on psoriasis severity. These experiences solidified my commitment to investigating the complex interplay between psoriasis and its comorbidities.

My interest in innovation has complemented my research pursuits. I have collaborated with two start-up health technology companies—DemDx and AccuRx—to develop applications that enhance healthcare delivery and professional education. As the clinical lead for AccuRx from 2016 to 2019, I contributed to the development of tools to streamline communication between healthcare professionals and patients in the UK. I have also pursued formal education roles throughout my career, obtaining an Associate Fellowship with the Higher Education Academy and completing a Postgraduate Certificate in Medical Education at the University of Cambridge in 2016.

As a dermatology trainee, I undertook a Clinical Research Fellowship at King's College London, working with Professor Michael Simpson, Head of the Department of Medical and Molecular Genetics, and Professor

Catherine Smith, Consultant Dermatologist and Professor of Dermatology and Therapeutics. In this fellowship, I developed a research plan for my PhD to investigate the role of genetics and biomarkers in the early identification of disease progression in psoriasis.

My PhD research at King's College London focused on identifying biomarkers and therapeutic targets for psoriasis and its associated cardiometabolic comorbidities. This integrated clinical and research approach reinforced my commitment to addressing the systemic implications of psoriasis. During my PhD, I collaborated with BIOMAP (Biomarkers in Atopic Dermatitis and Psoriasis), a pan-European academic-industry consortium, and the International Psoriasis Council (IPC). This work culminated in three publications in the *British Journal of Dermatology*, including two large systematic reviews on biomarkers of disease progression and systemic treatment response in psoriasis. Through these projects, I developed expertise in statistical, bioinformatics, and epidemiological methods, including interaction testing, Mendelian randomisation, and regression modelling, to explore the relationship between psoriasis and cardiometabolic comorbidities.

Alongside my PhD, I completed dermatology clinical training and currently practice as a consultant dermatologist specializing in the management of severe psoriasis. I continue my research as a visiting lecturer at King's College London, while actively contributing to shaping dermatology services in the UK through committee roles. These include:

- 1. National Institute for Health and Care Excellence (NICE) Technology Appraisal Committee
- 2. British Association of Dermatologists (BAD) National Audit Committee
- 3. BAD Therapeutics and Guidelines Committee
- 4. BAD Artificial Intelligence Working Party

My work has been shared at numerous national and international conferences. In the last five years, I have delivered oral presentations at the following congresses:

- 1. European Society of Dermatological Research (ESDR) annual congress, online (September 2021)
- 2. Psoriasis Gene to Clinic Congress, London, UK (December 2021)
- 3. ESDR annual congress, Amsterdam, Netherlands (September 2022)
- 4. American Academy of Dermatology (AAD), New Orleans, USA (March 2023)
- 5. International Society of Investigative Dermatology (ISID), Tokyo, Japan (May 2023)
- 6. BAD annual congress, Liverpool, UK (July 2023)
- 7. Clinical Dermatology Update, Liverpool, UK (October 2023)
- 8. British Society of Investigative Dermatology (BSID) Annual Meeting, Southampton, UK (March 2024)
- 9. IPC Virtual Masterclass, online (May 2024)
- 10. IPC Symposium at the European Academy of Dermatology and Venereology (EADV), Amsterdam, Netherlands (September 2024)
- 11. BSID-BAD Research Techniques Course, London, UK (November 2024)
- 12. Psoriasis Gene to Clinic Congress, London, UK (December 2024)
- 13. FOFO FORSKNINGSSEMINAR Congress, Oslo, Norway (January 2025)
- 14. Norwegian University of Science and Technology Genetic epidemiology group meeting, Trondehim, Norway (January 2025)

These experiences have solidified my aspiration to advance psoriasis care and research globally, ensuring equitable access to effective treatments and improved outcomes for individuals affected by this complex disease.

# B. Positions, Scientific Appointments, and Honors

### Positions:

- Consultant Dermatologist, Watford General Hospital, Watford (Feb 2024 present)
- Specialist training (ST) ST6: Dermatology clinical training Watford General Hospital, Watford (Feb 2021

  Jan 2024)
- ST5: Dermatology clinical training Luton and Dunstable University Hospital (Apr 2020 Jan 2021)
- ST4: Dermatology clinical training Addenbrooke's Hospital, Cambridge (Dec 2018 Oct 2019)
- ST3: Dermatology clinical training Watford General Hospital, Watford (Aug 2017 Nov 2018)
- Core training (CT) CT2: Dermatology-Rheumatology, Neurology UCLH, London (Aug 2016 Aug 2017)

- CT1: Acute medicine, Oncology, Intensive Care Medicine UCLH, London (Aug 2015 Aug 2016)
- Foundation training (FY) FY2: General practice, Trauma and Orthopaedics, Haematology and Oncology, West Suffolk Hospital, Bury St Edmunds, Suffolk (Aug 2014 Aug 2015)
- FY1: Renal, Hepatology, Psychiatry Addenbrooke's Hospital, Cambridge (Aug 2013 Jul 2014)

#### Committee roles:

- National Institute for Clinical Excellence (NICE) Technology Appraisal Committee (2023 present)
- BAD National Research Committee (2019 2023)
- BAD National Audit Committee (2021 present)
- BAD Therapeutics and Guidelines Committee (2023 present)
- BAD Artificial Intelligence Working Party (2023 present)

## Scientific Appointments:

- Visiting Lecturer St John's Institute of Dermatology, King's College London (Mar 2024 present)
- Clinical Research Fellowship (PhD) St John's Institute of Dermatology, King's College London (Feb 2021 – Feb 2024
- Research Fellowship St John's Institute of Dermatology, King's College London (Oct 2019 Apr 2020)

### Awards:

- International Psoriasis Council Research Fellowship Award (2025)
- Emirates Dermatology Society Conference Fellowship Award (2022), Emirates Dermatology Society
- International Society of Investigative Dermatology (ISID) Travel Grant (2023), International Society of Investigative Dermatology
- European Society for Dermatology Research (ESDR) Travel Grant (2021), European Society for Dermatology Research
- American Academy of Dermatology Registration Scholarship (2021), American Academy of Dermatology
- British Skin Foundation Fellowship St John's Institute of Dermatology, King's College London (2020)
- BAD/NIHR research visit bursary St John's Institute of Dermatology, King's College London (2019)
- Presentation prize for a case of leprosy presenting in the UK (2018), St John's Dermatological Society
- Presentation prize for a case of keratin 6a pachyonychia congenita (2018), Royal College of Medicine,
   Dermatology section
- Indian journal of Dermatology, Venerology and Leprology International award for best review article (2017)
- Prize presentation award, National Undergraduate Cancer Research, Conference Southampton General Hospital (2015)
- Dennis Gath prize in Psychiatry University of Oxford (2013)

## C. Contributions to Science

### 1. Graduate career

## **Key Publications:**

- Ramessur R, Saklatvala J, Budu-Aggrey A, et al. Exploring the Link Between Genetic Predictors of Cardiovascular Disease and Psoriasis. *JAMA Cardiol.* 2024. doi:10.1001/jamacardio.2024. 2859
- Ramessur R, Dand N, Langan SM, et al. Defining disease severity in atopic dermatitis and psoriasis for the application to biomarker research- an inter-disciplinary perspective. *Br J Dermatol.* 2024. doi:10.1093/bjd/ljae080 PMID:38419411
- Dand N, Ramessur R. New analyses exploring multimorbidity in psoriasis. Br J Dermatol. 2024;190(3):299-300. doi:10.1093/bjd/ljad475 PMID:38011326
- Ramessur R, Fadhli T, Tripathi B, Sandhu D, Batta K. Glomovenous malformation secondary to a heterozygous nonsense variant in GLMN: a clinical mimicker of blue rubber bleb naevus syndrome. Clin Exp Dermatol. 2023;49(1):108-110. doi:10.1093/ced/llad302 PMID:37655781
- Ramessur R, Corbett M, Marshall D, et al. Biomarkers of disease progression in people with psoriasis: a scoping review. *Br J Dermatol.* 2022;187(4):481-493. doi:10.1111/bjd.21627 PMID:35482474

- Corbett M, Ramessur R, Marshall D, et al. Biomarkers of systemic treatment response in people with psoriasis: a scoping review. *Br J Dermatol.* 2022;187(4):494-506. doi:10.1111/bjd.21677 PMID:35606928
- Ramessur R, Saffar N, Czako B, Agarwal A, Batta K. Cutaneous thrombosis associated with skin necrosis following Oxford-AstraZeneca Covid-19 vaccination. *Clin Exp Dermatol*. 2021 Jun. doi: 10.1111/ced.14819. PMID:34189756
- Douroudis K, Ramessur R, Barbosa IA, et al. Differences in Clinical Features and Comorbid Burden between HLA-C\*06:02 Carrier Groups in >9,000 People with Psoriasis. *J Invest Dermatol.* 2021;S0022-202X(21)02473-8. doi:10.1016/j.jid.2021.08.446 PMID:34767815

## 2. Doctoral career (PhD)

**Key Publications:** 

- Ramessur R, Meligonis G, Burrows NP. Eruptive papules in a 4-year-old girl. *Pediatr Dermatol*. 2020;37(1):e5-e6. doi:10.1111/pde.14023 PMID:31997438
- Ramessur R, Gill D. The effect of statins on severity of psoriasis: A systematic review. *Indian Journal of Dermatology* 2017 Aug. doi: 10.4103/0378-6323.188655 PMID:27549870
- Ho DK, Ramessur R, Webber S. Bilateral corneal injury after face-paint application to upper eyelids. BMJ Case Rep. 2017;2017:bcr2017219315. Published 2017 May 10. doi:10.1136/bcr-2017-219315 PMID:28490477
- Walker J, Hansen CH, Ramessur R, Sharpe M. Prevalence, associations and adequacy of treatment of major depression in patients with cancer: a cross-sectional analysis of routinely collected clinical data. *Lancet Psychiatry* 2014 Oct;1 (5):343-350. Doi: 10.1016/S2215-0366(14)70313-X PMID:26360998

#### D. Scholastic Performance

YEAR	COURSE TITLE	GRADE	
	UNIVERSITY OF CAMBRIDGE		
2008	Anatomy	Pass	
2008	Physiology	Pass	
2008	Biochemistry and Molecular Biology		
2009	Pharmacology Pas		
2009	Neuroscience	Pass	
2009	Pathology	Pass	
2009	Human Reproduction	Pass	
2010	Pharmacology	2.1	
2016	Post-graduate Certificate in Medical Education	Pass	
	UNIVERSITY OF OXFORD		
2010-2013	Medicine	Pass	
2010-2013	Surgery	Pass	
2012	Primary Care, Dermatology	Pass	
2012	Psychiatry	Merit	
2012	Palliative Care	Pass	
2012	Obstetrics and Gynecology	Pass	
2012	Pediatrics	Merit	
2012	Neurology and Neurosurgery, Ophthalmology and ENT	Pass	
2013	Clinical Skills Training	Pass	
	ROYAL COLLEGE OF PHYSICIANS		
2016	Membership for the Royal College of Physicians	Pass	
2020	Dermatology Specialty Certificate	Pass	