

# Matthew Robinson

Microbiotica, Chesterford Research Park,  
Cambridge, CB10 1XL. UK

[mrobinson@microbiotica.com](mailto:mrobinson@microbiotica.com)

01223 869309

## Profile

Extensive experience in biological and biomedical research (12 years in academia and 14 years in industry) including fundamental basic mechanistic studies, human disease biology, microbiome science, all stages of pre-clinical drug discovery and clinical development. Strategic and executive roles in pharma and biotech.

## Research Experience

### **2019-present:**

Microbiotica, Cambridge, UK

#### *Position:*

SVP Research (2022- ); VP of Translational Biology (2109-2022)

#### *Roles and Responsibilities:*

Member of company executive team

Lead microbiome platform, discovery science and discovery teams  
(Translational Biology, Discovery Microbiology and Bioinformatics)

Established Translational Biology Group (in vitro and in vivo teams)

### **2017-2019:**

MedImmune/AstraZeneca, Cambridge, UK

#### *Position:*

Associated Director

#### *Department:*

Oncology- Research

#### *Roles and Responsibilities:*

Led a team of 9 preclinical research scientists.

Led preclinical immuno-oncology projects.

Research representative for Oleclumab clinical development team

Chair of strategic team focused on novel T cell targeted therapies in oncology.

Laboratory design and transition planning for move to new site

### **2008-2017:**

MedImmune, Cambridge, UK

#### *Position:*

Senior Scientist (2012-2017); Scientist II (2008-2012)

#### *Department:*

Respiratory, Inflammation and Autoimmunity- Research

#### *Roles and Responsibilities:*

Team Leader in Preclinical Research

Led preclinical projects in IBD, COPD, asthma and autoimmunity.

Co-chair of cross-functional IBD strategy team

Member of Clinical Development Teams for Brazikumab in Ph2a to Ph2b for Crohn's disease and Abrilumab Ph2b for Crohn's disease and ulcerative colitis.

**2005-2008:** **Cancer Research UK LRI** (now part of Francis Crick Institute), London, UK.  
*Position:* Postdoctoral Research Fellow  
*Area of Interest:* Innate immune receptors that recognise fungi.  
*Achievements:* Identification of the pattern recognition receptors expressed by dendritic cells that engage fungi, one of which is novel. Elucidation of the signalling pathways triggered by these fungal receptors. Analysis of the resultant cell activation, cytokine release and adaptive immune response by assessment of T lymphocyte differentiation.

**2001-2005:** **National Institute for Medical Research**, London, UK.  
*Position:* Postdoctoral Research Fellow  
*Area of Interest:* Macrophage cell signalling in response to inflammatory stimuli.  
*Achievements:* Elucidation of two mechanisms by which LPS activates the MAP3-kinase TPL-2, namely degradation of an inhibitor and identification of a regulatory phosphorylation site. Determination of how this regulation contributes to macrophage activation and induction of TNF.

**1996-2001:** **Imperial Cancer Research Fund** (now part of Francis Crick Institute), London, UK.  
*Position:* Post Graduate Student and Research Fellow  
*Area of Interest:* Neutrophil S100 proteins associated with inflammation.  
*Achievements:* Cloning and characterising a novel family member. Dissection of the mechanisms by which these molecules modulate cell adhesion *in vitro*.

## Education

**1996-2000:** PhD in Immunology at Imperial Cancer Research Fund (Awarded by University College London)

**1992-1996:** BSc hon from the University of Bath, UK. Upper Second-class honours

## Publications

### Publications

Villemin C, Six A, Neville BA, Lawley TD, **Robinson MJ**, Bakdash G. 2023  
 The heightened importance of the microbiome in cancer immunotherapy.  
 Trends Immunol. 44:44-59

Thompson NA, Stewart GD, Welsh SJ, Doherty GJ, **Robinson MJ**, .....Corrie PG. 2022  
 The MITRE trial protocol: a study to evaluate the microbiome as a biomarker of efficacy and toxicity in cancer patients receiving immune checkpoint inhibitor therapy.  
 BMC Cancer. 22:99

Hair J, **Robinson MJ**, Wilkinson RW, Dovedi SJ. 2022

Deep phenotyping of surface stimulatory and inhibitory co-receptors on cancer-resident T and NK cells reveals cell subsets within the tumor-reactive CTL population that are uniquely defined by NKG2A expression.

SLAS Discov. 27:95-106.

Corkill DJ, Hunt AN, Hinrichs MJ, White N, Rebelatto M, Roskos L, Nys J, Scott A, **Robinson MJ**, Ryan P, Postle AD, Sleeman MA. 2021

Chronic pharmacological antagonism of the GM-CSF receptor in mice does not replicate the pulmonary alveolar proteinosis phenotype but does alter lung surfactant turnover.

Clin Sci (Lond). 135:2559-2573

Sitnikova SI, Munnings-Tomes S, Galvani E, Kentner S, Mulgrew K, Rands C, España Agustí J, Zhang T, Ilieva KM, Rosignoli G, Ghadially H, **Robinson MJ**, Slidel T, Wilkinson RW, Dovedi SJ. 2021

Novel non-terminal tumor sampling procedure using fine needle aspiration supports immuno-oncology biomarker discovery in preclinical mouse models.

J Immunother Cancer 9:e002894

Foster WS, Grime CJ, Tan HL, Williams GS, **Robinson MJ**, Carlesso G, Saglani S, Lloyd CM and Harker JA. 2020

Enhanced frequency and function of follicular T cells in the tonsils of house dust mite-sensitized children.

Allergy 75:1240

Belchamber KB, Singh R, Whyte MK, Dockrell DH, Kilty I, **Robinson MJ**, Wedzicha JA, Barnes PJ, Donnelly LE, COPDMap consortium. 2019

Defective bacterial phagocytosis is associated with dysfunctional mitochondria in COPD macrophages.

Eur. Respir. J. 10:54

Martinez-Lopez M, Iborra S, Conde-Garrosa R, Mastrangelo A, Danne C, Mann ER, Reid DM, Gaboriau-Routhiau V, Chaparro M, Lorenzon MP, Minnerup L, Saz-Leal P, Slack E, Kemp B, Gisbert JP, Dzionek A, **Robinson MJ**, Ruperez FJ, Cerf-Bensussan N, Brown GD, Bernardo D, LeibundGut-Landmann S and Sancho D. 2019

Microbiota sensing by Mincle-Syk axis in dendritic cells regulates IL-17 and IL-22 and promotes intestinal immune barrier.

Immunity 50:446

Spooner W, McLaren W, Slidel T, Finch DK, Butler R, Campbell J, Eghobamien L, Rider D, Kiefer CM, **Robinson MJ**, Hardman C, Cunningham F, Vaughan T, Flicek P, Huntington CC. 2018

HaploSaurus computes protein haplotypes for use in precision drug design

Nat. Commun. 9:4128

Cook AD, **Robinson MJ**, Sleeman MA and Hamilton JA. 2016

GM-CSF drives monocyte differentiation into inflammatory dendritic cells indirectly

Arthritis Res Ther 18:287

Iborra S, Martinez-Lopez M, Izquierdo HM, Abram CL, Conde-Garrosa R, Campos-Martin Y, Reguera R, Kemp B, **Robinson MJ**, Soto M, Lowell CA and Sancho D. 2016

Leishmania targets a novel Mincle/SHP-1 axis on dendritic cells to subvert adaptive immunity to infection.

Immunity 45:788-801

Campbell JI, Nys J, Eghobamien L, **Robinson MJ\*** and Sleeman MA\*. 2016

Pulmonary Pharmacodynamics of an anti-GM-CSFR $\alpha$  antibody enables systemic dosing that spares the lung compartment.

MAbs Journal 8:1398-1406

Percival-Alwyn JL, England E, Kemp B, Rapley L, Davis NH, McCarthy GR, Majithiya JB, Corkill DJ, Welsted S, Minton K, Cohen ES, **Robinson MJ**, Dobson C, Wilkinson TC, Vaughan TJ, Groves MA, Tigue NJ 2015  
Generation of potent mouse monoclonal antibodies to self-proteins using T-cell epitope "tags".  
*MAbs Journal* 7:129-37

Clarke DL, Davis NHE, Campion CL, Foster ML, Heasman SC, Lewis AR, Anderson IK, Corkill DJ, Sleeman MA, May RD, **Robinson MJ**. 2014  
Dectin-2 sensing of house Dust Mite is critical for the initiation of airway inflammation.  
*Mucosal Immunol.* 7:558-67.

Mouraor-Sa D, **Robinson MJ**, Zelenay S, Sancho D, Chakravarty P, Larsen R, Plantinga M, Van Rooijen N, Soares MP, Lambrecht B, Reis e Sousa. 2011  
CLEC-2 signalling via Syk in myeloid cells can regulate inflammatory responses  
*Eur. J. Immunol.* 41:3040-53.

Rosas M, Osorio F, **Robinson MJ**, Davies LC, Dierkes N, Jones SA, Reis e Sousa C, Taylor PR  
Hoxb8 conditionally-immortalised macrophage lines model inflammatory monocyte cells with important similarity to dendritic cells. 2010  
*Eur. J. Immunol.* 41:356-65.

**Robinson MJ\***, Osorio F\*, Rosas M, Schweighoffer E, Gros O, Verbeek JS, Ruland J, Tybulewicz V, Brown GD, Moita LF, Taylor PR, Reis e Sousa C. 2009  
Dectin-2 is a Syk-coupled pattern recognition receptor crucial for Th17 responses to fungal infection.  
*J. Ex. Med.* 206:2037-51

**Robinson MJ\***, Beinke S\*, Kouroumalis A, Tschlis PN, Ley SC. 2007  
Phosphorylation of TPL-2 on serine 400 is essential for lipopolysaccharide activation of ERK in macrophages.  
*Mo-. Cell. Biol.* 27:7355-64

Slack EC, **Robinson MJ**, Hernanz-Falcón P, Brown GD, Schweighoffer E, Tybulewicz VL, Reis e Sousa C. 2007  
Syk-dependent ERK activation regulates IL-2 and IL-10 production by DC stimulated with zymosan.  
*Eur. J. Immunol.* 37:1600-12.

LeibundGut-Landmann S, Gross O, **Robinson MJ**, Osorio F, Slack EC, Tsoni SV, Schweighoffer E, Tybulewicz V, Brown GD, Ruland J, Reis e Sousa C. 2007  
Syk- and CARD9-dependent coupling of innate immunity to the induction of T helper cells that produce IL 17.  
*Nat. Immunol.* 8:630-8.

**Robinson MJ**, Sancho D, Slack E, LeibundGut-Landmann S, Reis e Sousa C. 2007  
Myeloid C-type lectins in innate immunity. (Review)  
*Nat. Immunol.* 7:1258-65.

Beinke S\*, **Robinson MJ\***, Hugunin M, Ley SC. 2004  
Lipopolysaccharide activation of the TPL-2/MEK/extracellular signal-regulated kinase mitogen-activated protein kinase cascade is regulated by I $\kappa$ B kinase-induced proteolysis of NF- $\kappa$ B1 p105.  
*Mol. Cell. Biol.* 24:9658-67

**Robinson MJ**, Tessier P, Poulson R, Hogg N. 2002  
The S100 family heterodimer, MRP-8/14, binds with high affinity to heparin and heparan sulfate glycosaminoglycans on endothelial cells.  
*J. Biol. Chem.* 277:3658-65

Hobbs JA, May R, Tanousis K, McNeill E, Mathies M, Gebhardt C, Henderson R, **Robinson MJ**, Hogg N. 2003  
Myeloid cell function in MRP-14 (S100A9) null mice.  
*Mol. Cell. Biol.* 23:2564-76

**Robinson MJ**, Hogg N

A comparison of human S100A12 with MRP-14 (S100A9). 2000

*Biochem. Biophys. Res. Commun.* 275:865-70

Gubareva LV, **Robinson MJ**, Bethell RC, Webster RG. 1997

Catalytic and framework mutations in the neuraminidase active site of influenza viruses that are resistant to 4-guanidino-Neu5Ac2en.

*J. Virol.* 71:3385-90

Cusdin FS, **Robinson MJ**, Holman GD, Hough DW, Danson MJ. 1996

Characterisation of glucose transport in the hyperthermophilic Archaeon *Sulfolobus solfataricus*.

*FEBS Lett.* 387:193-5

\* These authors contributed equally

Patents and patent applications as named inventor

| Country Name      | Filing / National Phase Entry No. | Filing/National Phase Entry Date | Publication Number | Publication Date | Patent Number | Grant Date  | Status       |
|-------------------|-----------------------------------|----------------------------------|--------------------|------------------|---------------|-------------|--------------|
| WIPO              | PCT/GB2021/052558                 | 04 Oct 2021                      | WO2022/069907      | 07 Apr 2022      |               |             | Nationalised |
| Canada            | 3178513                           | 19 May 2021                      |                    | 25 Nov 2021      |               |             | Pending      |
| Canada            | 3178982                           | 19 May 2021                      |                    | 25 Nov 2021      |               |             | Pending      |
| China             | 202180036768.2                    | 21 Nov 2022                      | 115667555          | 31 Jan 2023      |               |             | Pending      |
| EPO               | 21731263.6                        | 15 Dec 2022                      | 4153786            | 29 Mar 2023      |               |             | Pending      |
| EPO               | 21731264.4                        | 15 Dec 2022                      | 4153787            | 29 Mar 2023      |               |             | Pending      |
| Israel            | IL298231A                         | 15 Nov 2022                      |                    | 1 Jan 2023       |               |             |              |
| India             | 202247071099                      | 09 Dec 2022                      | 202247071099       | 06 Jan 2023      |               |             | Pending      |
| Republic of Korea | 1020227043932                     | 19 May 2021                      |                    | 26 Jan 2023      |               |             | Pending      |
| USA               | 17/324,898                        | 19 May 2021                      | US-2021-0275602A1  | 09 Sep 2021      | 11,439,671    | 13 Sep 2022 | Granted      |
| USA               | 17/324,899                        | 19 May 2021                      | 2021-0341458       | 04 Nov 2021      | 11,376,285    | 05 Jul 2022 | Granted      |
| USA               | 17/834,584                        | 07 Jun 2022                      | US-2023-0090495A1  | 23 Mar 2023      |               |             | Pending      |
| WIPO              | PCT/GB2021/051206                 | 19 May 2021                      | WO2021/234380      | 25 Nov 2021      |               |             | Nationalised |
| WIPO              | PCT/GB2021/051208                 | 19 May 2021                      | WO2021/234382      | 25 Nov 2021      |               |             | Nationalised |