

Adam Pennycuick

MRCP PhD MBBS MPhys

Medical oncologist and bioinformatician. Research interests in early carcinogenesis of lung cancer, chromosomal instability, immune evasion and tumour aggression.

Education

- 2020 2023 **Postgraduate Diploma in Oncology (PGDip)**, The Institute of Cancer Research, London.
- 2017 2020 **Doctor of Philosophy (PhD) Wellcome Clinical Fellowship**, *University College London*, London.
- 2015 2016 Membership of the Royal College of Physicians (MRCP), Royal College of Physicians, London.
- 2009 2013 Bachelor of Medicine, Bachelor of Surgery (MBBS), King's College London, London.
- 2001 2005 Master of Physics (MPhys), University of Warwick, Coventry.

Work experience

- 2021 now NIHR Clinical Lecturer in Medical Oncology, University College London, London.
- 2021 2021 **Specialist Registrar in Medical Oncology**, Mount Vernon Hospital, Northwood.
- 2020 2021 **Specialist Registrar in Medical Oncology**, St Bartholomew's Hospital, London.

- 2017 2020 Wellcome Clinical PhD Fellowship, University College London, London.
- 2015 2017 Academic Clinical Fellow, University College London, London.
- 2013 2015 Academic Foundation Programme, King's College Hospital, London.
- 2006 2008 Aerospace Engineer, Stirling Dynamics, Bristol.

Grants Awarded:

- Epi-ASCENT: The epigenetic landscape of screen-detected lung cancers (Co-I). Cancer Research UK. 2022-2025, £194,000.
- o ELIMINATE: Reinterpreting the 'field of injury' through understanding cellular level damage and dynamics and consequences for the Prediction, Prevention and Early Detection, of lung cancer (Co-I). Cancer Research UK. 2020-2025, £2.5m
- o ASCENT: Analysis of screen-detected lung cancer genomic traits (Co-I). Cancer Research UK. 2019-2022, £600,000
- Wellcome Trust/UCL PhD Training Fellowship: Bioinformatic analysis of early lung cancer pathogenesis. 2017-2021. £270,000.
- Oslr medical bedside teaching platform. 2019. InnovateUK. £70,000.

Supervision:

- O Secondary PhD supervisor for Ryan Chuen, UCL 2022-present.
- O Secondary PhD supervisor for Hugh Selway, UCL 2021-present.
- Secondary PhD supervisor for Lukas Kalinke, clinical fellow at UCL 2021-present.
- Supervised MRC-DTP project for Kate Fodder, UCL 2021.
- O Primary supervisor for Ayu Syarif, MSc in Precision Oncology, UCL 2020.

Teaching and Leadership:

- Founder and CEO of Oslr Ltd., a platform connecting medical students with doctors willing to teach. Supporters include Health Education England, the BMJ, Jisc, King's College London, Guy's and St Thomas' NHS Foundation Trust. Our platform has won innovation awards and is live across multiple hospital sites. £230,000 funding has been raised to date through a combination of grants and private investment, including Innovate UK funding. I lead a team of 5 people.
- Lead for Denmark Hill Teaching Group 2013-14, coordinating all teaching delivered by junior doctors to medical students at King's College Hospital to include bedside teaching, lectures and mock OSCEs.
- Regular bedside teaching experience throughout clinical training.
- Written and presented lectures on core medical topics to groups of up to 40 medical students.
- Non-medical teaching experience including maths and science tutoring at age 10-16, and teaching English as a foreign language at Moscow State University.

— Key Selected Publications

- 2020 Immune Surveillance in Clinical Regression of Preinvasive Squamous Cell Lung Cancer, Adam Pennycuick, Vitor H. Teixeira, Khalid AbdulJabbar, Shan E. Ahmed Raza, Tom Lund, Ayse U. Akarca, et. al, Cancer Discovery.

 o https://doi.org/10.1158/2159-8290.CD-19-1366
- 2019 Deciphering the genomic, epigenomic, and transcriptomic landscapes of pre-invasive lung cancer lesions, (Co-first author) Vitor H. Teixeira, Christodoulos P. Pipinikas, Adam Pennycuick, Henry Lee-Six, Deepak Chandrasekharan, Jennifer Beane, et. al, Nature Medicine.

 o https://doi.org/10.1038/s41591-018-0323-0

Other Publications

- 2022 Chemoviz: an Interactive Web-based Tool for Time-series Analysis of Systemic Anti-cancer Therapy: Application to Analysis of Dose Modifications of CDK4/6 Inhibitors in Clinical Practice, P. Pennycuick, W. Ng, Clinical Oncology.
- 2022 The CLIMB study: immune checkpoint inhibitor effects on lung airway mutational burden, Nitika Kaushal, Helen Hall, Kate Gowers, Adam Pennycuick, Peter Campbell, Sam Janes, Lung Cancer.
- 2022 **Power of Transcriptomics in Lung Biology**, Marie-Belle El Mdawar, Adam Pennycuick, Kyren A Lazarus, Encyclopedia of Respiratory Medicine.
- 2021 BAP1 and YY1 regulate expression of death receptors in malignant pleural mesothelioma, Yuki Ishii, Krishna K. Kolluri, Adam Pennycuick, Xidan Zhang, Ersilia Nigro, Doraid Alrifai, et. al, Journal of Biological Chemistry.
- 2021 Lrig1 expression identifies airway basal cells with high proliferative capacity and restricts lung squamous cell carcinoma growth, Laura Succony, Sandra Gómez-López, Adam Pennycuick, Ahmed S.N. Alhendi, Derek Davies, Sarah E. Clarke, et. al, European Respiratory Journal.
- 2021 Toll-like receptor 2 orchestrates a potent anti-tumor response in non-small cell lung cancer, bioRxiv.
 - o http://dx.doi.org/10.1101/2021.06.04.446876
- 2021 Histological characteristics of screen-detected lung cancers: should rate of growth influence management?, Helen Hall, Kate Davies, Zoe Frazer, Adam Pennycuick, Robert Hynds, Laura Hughes, et. al, Lung Cancer.

- 2021 Induction of APOBEC3 Exacerbates DNA Replication Stress and Chromosomal Instability in Early Breast and Lung Cancer Evolution, Subramanian Venkatesan, Mihaela Angelova, Clare Puttick, Haoran Zhai, Deborah R. Caswell, Wei-Ting Lu, Michelle Dietzen, Panagiotis Galanos, Konstantinos Evangelou, Roberto Bellelli, Emilia L. Lim, Thomas B.K. Watkins, Andrew Rowan, Vitor H. Teixeira, Yue Zhao, Haiquan Chen, Bryan Ngo, Lykourgos-Panagiotis Zalmas, Maise Al Bakir, Sebastijan Hobor, Eva Grönroos, Adam Pennycuick, et. al, Cancer Discovery.
- 2021 Stem cells and lung cancer, Kyren A. Lazarus, Adam Pennycuick, Robert E. Hynds, Sam M. Janes, Lung Stem Cells in Development, Health and Disease.
- 2020 Podoplanin as a Marker of a Subset of Proximal Human Airway Basal Cells with Higher Stemness, S. Clarke, K. Gowers, A. Pennycuick, S. Janes, A65. EPITHELIAL CELL BIOLOGY: THE PLOT THICKENS.
- 2020 Cell-intrinsic differences between human airway epithelial cells from children and adults, Elizabeth F. Maughan, Robert E. Hynds, Adam Pennycuick, Ersilia Nigro, Kate H.C. Gowers, Celine Denais, et. al.

 o https://doi.org/10.1101/2020.04.20.027144
- 2020 On the Origin of Lung Cancers, Adam Pennycuick, Sam M. Janes, American Journal of Respiratory and Critical Care Medicine.
 https://doi.org/10.1164/rccm.201911-2176ED
- 2016 Molecular Characterization of Acute Cellular Rejection Occurring During Intentional Immunosuppression Withdrawal in Liver Transplantation., (Co-first author) Bonaccorsi-Riani E, Pennycuick A, Londoño MC, Lozano JJ, Benítez C, Sawitzki B, et. al.
 - ${\color{red} \circ \ http://europepmc.org/abstract/med/26517400}$
- Transplantation for hepatocellular carcinoma—worth waiting for?, Pennycuick A, Suddle AR, Villanueva A.
 http://europepmc.org/abstract/med/24975123
- 2012 Routine EGFR and KRAS Mutation analysis using COLD-PCR in non-small cell lung cancer., Pennycuick A, Simpson T, Crawley D, Lal R, Santis G, Cane P, et. al.
 - o http://europepmc.org/abstract/med/22805266