Johannes Schroth

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EDUCATION		
PhD in Immunology		2019 - 2023

2019 - 2023William Harvey Research Institute, Queen Mary University of London. **BSc in Medical Genetics (Hons)** 2016 - 2019First class honours. Queen Mary University of London. **PROFESSIONAL EXPERIENCE Postdoctoral Research Associate** Feb 2023 – Present William Harvey Research Institute, Queen Mary University of London **Scientific Consultant** Dec 2020 - Present Adelphi Real World, Access Infinity, and Avalere Health (Freelance, part-time, > 200 hours) **Undergraduate Research Project** Jun 2018 – Mar 2019 William Harvey Research Institute, Queen Mary University of London **Undergraduate Student Internship** Summer 2017 William Harvey Research Institute, Queen Mary University of London **GRANT SUPPORT Small Research Grant** (£1,985) 2023 - 2024British Society for Research on Ageing Title: Tracing T cell glutamine metabolism in older surgical patients. **SERVICE ECR Representative** Oct 2023 – Present Cellular metabolism over a life-course in socioeconomically disadvantaged populations (CELLO) Network **PhD/ECR Representative** Jan 2021 – Present London Immunology Group, British Society for Immunology **Postgraduate Research Committee Member** Apr 2021 – Feb 2023 William Harvey Research Institute, Queen Mary University of London **HIV Ward Volunteer** Mar 2018 – Dec 2018

Mildmay Mission Hospital

PRESENTATIONS

 Dysregulated nutrient sensing during immune senescence British Society for Research on Ageing Annual Scientific Meeting, London, UK 	2023/09/07
The metabolic basis of postoperative T cell immune suppression	
CELLO Network Meeting, Birmingham, UK	2023/10/25
• Critical Care & Perioperative Medicine Research Day, London, UK	2023/06/06
British Society of Immunology Congress, Liverpool, UK	2022/12/08
• British Society of Immunology UK immunometabolism meeting, Newcastle, UK	2022/05/24

GATA3 promotes survival in CD4 T cells during DNA damage • *PhD Symposium*, William Harvey Research Institute, London, UK 2022/01/17 2021/07/23 Work in Progress Meeting, William Harvey Research Institute, London, UK • POSTERS The metabolic basis of postoperative T cell immune suppression • British Society of Immunology Congress, Belfast, Northern Ireland 2023/12/05 2022/06/27 William Harvey Research Institute Annual Review, London, UK GATA3 induces mitochondrial biogenesis in primary human T cells during DNA damage • British Society of Immunology Congress 2021, Edinburgh, Scotland 2021/11/29 2020/01/15 • PhD Symposium William Harvey Research Institute, London, UK SOFTWARE APPLICATIONS Explore high-dimensional cytometry data using dimensionality **CytoDA** (R, ShinyApp) reduction and clustering techniques. Create abstract sounds from cytometry data (collaboration with CytoSonify (R, ShinyApp) artist Johanna Byström Sims).

PUBLICATIONS

PEER REVIEWED ARTICLES

- Efficacy of PD-1 checkpoint inhibitor therapy in melanoma and beyond: are peripheral T cell phenotypes the key?
 Flaherty KR, Kucykowicz S, Schroth J, Traves W, Mincham KT, Finney GE. Immunotherapy Advances, 2023
- 2. Senescent-like blood lymphocytes and disease progression in amyotrophic lateral sclerosis. Yildiz O, Schroth J, Tree T, Turner MR, Shaw PJ, Henson SM, Malaspina A. Neurology Neuroimmunology & Neuroinflammation, 2022
- **3.** The expression of active CD11b monocytes in blood and disease progression in amyotrophic lateral sclerosis.

Yildiz O, **Schroth J**, Lombardi V, Pucino V, Bobeva Y, Yip PK, Schmierer K, Mauro C, Tree T, Henson SM, Malaspina A. *International Journal of Molecular Sciences*, 2021.

- Altered nutrient uptake causes mitochondrial dysfunction in senescent CD8⁺ EMRA T cells during type 2 diabetes.
 Callender LA, Carroll EC, Ketchley CG, Schroth J, Bystrom J, Berryman V, Pattrick M, Richards DC, Hood GA, Hitman GA, Finer S, Henson SM. *Frontiers in Aging*, 2021.
- GATA3 induces mitochondrial biogenesis in primary human CD4⁺ T cells during DNA damage. Callender LA*, Schroth J*, Carroll EC, Romano LEL, Hendy E, Kelly A, Lavender P, Akbar AN, Chapple JP, Henson SM. *Nature Communications*, 2021.
- 6. Preoperative lymphopenia, mortality, and morbidity after elective surgery: systematic review and meta-analysis.

Schroth J*, Weber V*, Jones TF, Del Arroyo AG, Henson SM, Ackland GL. *British Journal of Anaesthesia*, 2021.

- Mitochondrial dysfunction accelerates ageing. Schroth J, Henson SM. Immunometabolism, 2020.
- 8. Senescence and the aging immune system as major drivers of chronic kidney disease. Schroth J, Thiemermann C and Henson SM. *Frontiers in Cell and Developmental Biology*, 2020.

PREPRINTS

1. Convergent evolution of monocyte differentiation in adult skin permits repair of the Langerhans cell network.

Appios A, Davies J, Sirvent S, Henderson S, Trzebanski S, **Schroth J**, Law ML, Carvalho IB, Kan HYH, Major C, Vallejo A, Hall NJ, Jones MA, Henson SM, Emmerson E, Jung S, Polak ME, Bennett CL. 2023.

 Impact of human CD8+ T cell senescence on 89Zr radiolabelling and homing properties. Bystrom J, Miniño AC, Keeling GP, Pham T, Ketchley CG, Schroth J, De Rosales RTM, Terry SYA, Henson SM. 2023.

(Asterisk denotes coauthors)

Updated Jan 2024