

Johannes Schroth

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EDUCATION

PhD in Immunology William Harvey Research Institute, Queen Mary University of London.	2019 – 2023
BSc in Medical Genetics (Hons) First class honours. Queen Mary University of London.	2016 – 2019

PROFESSIONAL EXPERIENCE

Postdoctoral Research Associate William Harvey Research Institute, Queen Mary University of London	Feb 2023 – Present
PhD Student Consultant Adelphi Real World (Part-time)	Dec 2020 – Feb 2023
Undergraduate Research Project William Harvey Research Institute, Queen Mary University of London	Jun 2018 – Mar 2019
Undergraduate Student Internship William Harvey Research Institute, Queen Mary University of London	Summer 2017

GRANT SUPPORT

Small Research Grant (£1,985) British Society for Research on Ageing Title: <i>Tracing T cell glutamine metabolism in older surgical patients.</i>	2023 - 2024
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SERVICE

ECR Representative Cellular metabolism over a life-course in socioeconomically disadvantaged populations network meeting (CELLO) Network	Apr 2021 – Present
PhD/ECR Representative London Immunology Group , British Society for Immunology	Jan 2021 – Present
Postgraduate Research Committee Member William Harvey Research Institute, Queen Mary University of London	Apr 2021 – Feb 2023
HIV Ward Volunteer Mildmay Mission Hospital	Mar 2018 – Dec 2018

PRESENTATIONS

Dysregulated nutrient sensing during immune senescence

- *British Society for Research on Ageing Annual Scientific Meeting* 2023/09/07
London, UK

The metabolic basis of postoperative T cell immune suppression

- *Cellular metabolism over a life-course in socioeconomically disadvantaged populations network meeting* 2023/10/25
Birmingham, UK
- *Critical Care & Perioperative Medicine Research Day* 2023/06/06
London, UK
- *British Society of Immunology Congress 2022* 2022/12/08
Liverpool, UK
- *British Society of Immunology UK immunometabolism meeting 2022* 2022/05/24
Newcastle, UK

GATA3 promotes survival in CD4 T cells during DNA damage

- *William Harvey Research Institute PhD Symposium* 2022/01/17
London, UK
- *William Harvey Research Institute Work in Progress Meeting* 2021/07/23
London, UK

POSTERS

The metabolic basis of postoperative T cell immune suppression

- *William Harvey Research Institute Annual Review*, London, UK 2022/06/27

GATA3 induces mitochondrial biogenesis in primary human T cells during DNA damage

- *British Society of Immunology Congress 2021*, 2021/11/29
Edinburgh, Scotland
- *PhD Symposium*, 2020/01/15
William Harvey Research Institute, Queen Mary University of London

SOFTWARE APPLICATIONS

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| CytoDA (R, ShinyApp) | Explore high-dimensional cytometry data using dimensionality reduction and clustering techniques. |
| CytoSonify (R, ShinyApp) | Create abstract sounds from cytometry data (collaboration with artist Johanna Byström Sims). |

PUBLICATIONS

PEER REVIEWED ARTICLES

1. [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.
4. [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, Patrick M, Richards DC, Hood GA, Hitman GA, Finer S, Henson SM.
Frontiers in Aging, 2021.
5. [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.
7. [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, Thiernemann C and Henson SM.
Frontiers in Cell and Developmental Biology, 2020.

PREPRINTS

1. [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.
2. [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.

(Asterisk denotes coauthors)