

Robert Schauner

Education

Bachelor of Arts

Department of Biology–Coe College

May 2018

Doctor of Philosophy

Department of Pathology–Case Western Reserve University

Dissertation Title: O-GlcNAcylation and Response Prediction in Acute Myeloid Leukemia: A Data-Driven Approach

Mentors: Dr. David Wald and Dr. Tae Hyun Hwang

August 2024

Research Experience

Higher Education Research Experience Fellow

Molecular and Cellular Imaging Group–Oak Ridge National Lab, Oak Ridge, TN

August 2017–December 2017

Postdoctoral Scholar

Infectious Diseases–Case Western Reserve University, Cleveland, OH

August 2024–current

Awards

Minority Scholar in Cancer Research Awardee

AACR Annual Meeting 2022

Publications

Single Cell and Bulk RNA Expression Analyses Identifies Enhanced Hexosamine Biosynthetic Pathway and O-GlcNAcylation in Acute Myeloid Leukemia blasts and stem cells–*Frontiers in Immunology* 2024

Robert Schauner, Jordan Cress, Changjin Hong, David Wald, and Parameswaran Ramakrishnan

NK cells from COVID-19 positive patients exhibit enhanced cytotoxic activity upon NKG2A and KIR2DL1 blockade–*Frontiers in Immunology* 2023

Grace Lee, **Robert Schauner**, Juanita Burke, Jade Borocz, Smitha Vasana, Lukasz Sobieraj, Maria Giraudo, Zachary Jackson, Qasim Ansari, Maria Navas, Hany Sakr, and David Wald

Sequential Single-Cell Transcriptional and Protein Marker Profiling Reveals TIGIT as a Marker of CD19 CAR-T Cell Dysfunction in Patients with Non-Hodgkin Lymphoma–*Cancer Discovery* 2022

Zachary Jackson, Changjin Hong, **Robert Schauner**, Boro Dropulic, Paolo F. Caimi, Marcos de Lima, Maria Florencia Giraudo, Kalpana Gupta, Jane S. Reese, Tae Hyun Hwang, and David N. Wald

Single cell RNA sequencing of AML initiating cells reveals RNA-based evolution during disease progression–*Leukemia* 2021

L. C. Stetson, Dheepa Balasubramanian, Susan Pereira Ribeiro, Tammy Stefan, Kalpana Gupta, Xuan Xu, Slim Fourati, Anne Roe, Zachary Jackson, **Robert Schauner**, Ashish Sharma, Banumathi Tamilselvan, Samuel Li, Marcos de Lima, Tae Hyun Hwang, Robert Balderas, Yogen Sauntharajah, Jaroslaw Maciejewski, Thomas LaFramboise, Jill S. Barnholtz-Sloan, Rafick-Pierre Sekaly, and David N. Wald

Automated Manufacture of Autologous CD19 CAR-T Cells for Treatment of Non-hodgkin Lymphoma–*Frontiers in Immunology* 2020

Zachary Jackson, Anne Roe, Ashish Arunkumar Sharma, Filipa Blasco Tavares Pereira Lopes, Aarthi Talla, Sarah Kleinsorge-Block, Kayla Zamborsky, Jennifer Schiavone, Shivaprasad Manjappa, **Robert Schauner**, Grace Lee, Ruifu Liu, Paolo F. Caimi, Ying Xiong, Winfried Krueger, Andrew Worden, Mike Kadan, Dina Schneider, Rimas Orentas, Boro Dropulic, Rafick-Pierre Sekaly, Marcos de Lima, David N. Wald, and Jane S. Reese

Presentations

Transcriptional State Evolution in Pediatric Acute Myeloid Leukemia

Biomedical Graduate Student Symposium

2020

Discovering Biomarkers for Pediatric Acute Myeloid Leukemia using single-cell RNA sequencing

ISMB/ECCB Annual Meeting

2021

New platform for novel biomarker discovery using single-cell RNA sequencing on pediatric acute myeloid leukemia samples

AACR Annual Meeting

2022

Development of a Platform for Biomarker Discovery using scRNA sequencing on Pediatric AML Samples
St. Jude Children's Hospital Future Fellows Research Conference, Memphis, TN

2022

Enhanced Hexosamine Biosynthetic Pathway and O-GlcNAcylation in Acute Myeloid Leukemia: A Data-Driven Approach
Immunology Retreat, Case Western Reserve University

2024

Skills

Computer Skills	Analysis Skills	Laboratory Techniques
Languages: R, Python	Single-cell RNA seq	High-parameter Flow Cytometry
Linux, Mac, HPC	<ul style="list-style-type: none">• Feature Barcoding• Immune Repertoire	10x Genomics Library Preparation
Seurat, tidyverse	RNA seq	Primary Cell Culture
git, SLURM	<i>In silico</i> flow cytometry	DNA/RNA extraction
Snakemake, scverse	FlowJo	BSL-3 and BSL-2+ practices
Affinity Creative Suite		

Voulenteer/Non-profit work

Director of Media and Public Relations
Rise Up: Northeast Ohio, Cleveland, OH

2020-2023

Scientific Officer
Rise Up: Northeast Ohio, Cleveland, OH

2020-current

Memberships

American Association of Immunologists

2020-current

American Association for Cancer Research

2022-current

International Society for Computational Biology

2021-current