

Mallory A Freeberg, PhD

Who I Am	Community Builder. Human Data Sharing Expert. Metadata Enthusiast. Open Science Advocate.		
Contact	Address: Wellcome Trust Genome Campus Website: malloryfreeberg.github.io/whoami	LinkedIn: mallory-freeberg ORCID: 0000-0003-2949-3921	
Professional Experience	EMBL European Bioinformatics Institute , Cambridge, UK		
	Human Genomics Team Leader		May 2024 - present
	<ul style="list-style-type: none">Leading multiple teams contributing to Ensembl, a foundational resource providing scientists with data and tools to study genomesProviding scientific and strategic oversight of the DECIPHER platform for enabling clinical interpretation of human genomic variation		
	Coordinator, European Genome-phenome Archive		Jun 2021 - Apr 2024
	<ul style="list-style-type: none">Contributed expertise to help establish the Federated EGA Network for transnational discovery of and access to sensitive human data (blog post)Engaged with external partners and stakeholders to ensure human data submission, discovery, and distribution services align with community standards and data protection regulationsManaged a 14-person team responsible for operating production data archive services (publication)		
	Project Lead, UK Biobank, European Genome-phenome Archive		Aug 2019 - May 2021
	<ul style="list-style-type: none">Oversaw data flow to archive 500,000 whole human genomes totalling 12PB of dataBuilt and led 3-person team to successfully distribute 4PB of data to cloud-based analysis platform		
	Senior Bioinformatician, Human Cell Atlas Data Coordination Platform		Oct 2017 - Jul 2019
	<ul style="list-style-type: none">Coordinated data wrangling work for 6-person team across UK- and US-based institutionsPerformed curation and ingestion of flagship HCA datasets into the PlatformDeveloped HCA metadata standard for cellular-resolution transcriptomics data (publication)		
	Johns Hopkins University , Baltimore, MD USA		
	Trainer, Galaxy Training Network, The Galaxy Project		Jan 2017 - Sep 2017
	<ul style="list-style-type: none">Designed and delivered seven Galaxy training workshops in three countries (publication)Created training materials and computational workflows to support reproducible transcriptomics research (contributions)		
	Postdoctoral Research Fellow, Department of Biology		Jun 2015 - Sep 2017
	<ul style="list-style-type: none">Investigated post-transcriptional gene regulatory networks using neural networksPiloted Oxford Nanopore direct RNA sequencing protocols to catalog transcriptomes		
Education	PhD Bioinformatics , University of Michigan, USA		
	Department of Computational Medicine and Bioinformatics		
	Dissertation: Computational analysis of the post-transcriptional gene regulatory network (thesis)		May 2015
	BSc Bioinformatics , Saint Vincent College, USA		
	Herbert M. Boyer School of Natural Science, Mathematics, and Computing		
	Dissertation: Functional annotation of non-coding elements in the <i>Amphioxus</i> genome		May 2009
Selected Publications	Corvo A, Matalonga L, Spalding D, et al. (2023) Remote visualization of large-scale genomic alignments for collaborative clinical research and diagnosis of rare diseases. <i>Cell Genomics</i> . DOI: 10.1016/j.xgen.2022.100246		
	Thakur M, Bateman A, Brooksbank C, Freeberg MA, et al. (2022) EMBL's European Bioinformatics Institute (EMBL-EBI) in 2022. <i>Nucleic Acids Res</i> . DOI: 10.1093/nar/gkac1098		

Freeberg MA, Fromont L, D'Altri T, *et al.* (2021) The European Genome-phenome Archive in 2021. *Nucleic Acids Res.* DOI:[10.1093/nar/gkab1059](https://doi.org/10.1093/nar/gkab1059)

Rehm HL, Page AJH, Smith L, *et al.* (2021) GA4GH: International policies and standards for data sharing across genomic research and healthcare. *Cell Genomics.* DOI:[10.1016/j.xgen.2021.100029](https://doi.org/10.1016/j.xgen.2021.100029)

Lawson J, Cabili MN, Kerry G, *et al.* (2021) The Data Use Ontology to streamline responsible access to human biomedical datasets. *Cell Genomics.* DOI:[10.1016/j.xgen.2021.100028](https://doi.org/10.1016/j.xgen.2021.100028)

⇒ Full list of publications can be found on [Google Scholar](#).

Selected Invited Talks	Federated EGA: Providing global discovery and access for sensitive human data. <i>ISMB/ECCB</i> ; Jul 2023; Lyon, FR (slides)	
	The Federated EGA: Global discovery and access for sensitive human data. <i>GA4GH 10th Plenary</i> ; Sep 2022; Barcelona, ES (slides)	
	FAIR principles and promoting openness in the life sciences. <i>NIHR Statistics Group Workshop</i> ; Feb 2022; virtual (slides)	
	The European Genome-phenome Archive Metadata Model. <i>GHGA Workshop on Metadata in Biomedical Genome Research</i> ; Jun 2021; virtual (slides)	
Selected Conferences & Workshops	"Exploring gene and environmental exposure interactions to understand human health and disease" <i>EMBL-EBI Training Course</i> ; Feb 2024; Cambridge, UK; Scientific Organiser and Trainer (course)	
	"Demonstrating Federated EGA services for sensitive data discovery and access" <i>ELIXIR All Hands</i> ; Jun 2023; Dublin, IE; Organiser and Presenter (workshop)	
Leadership Roles	Co-lead, <i>GA4GH Implementation Forum</i> (Mar 2024 - Present) Support adoption of GA4GH products and tools, working closely with organisations in the genomics and health community to address key challenges and promote best practices in genomic data sharing	
	Co-lead, <i>GA4GH "Future of VCF" Working Group</i> (Mar 2022 - Feb 2024) Guide discussions and assessment of solutions for scaling the Variant Call File format for representing genetic variants across large-scale studies	
	Organiser, <i>ELIXIR Federated Human Data Community</i> (Feb 2022 - Apr 2024) Set agenda and priority topics for FHD Community meetings, co-organise FHD Community Day event, coordinate federated human data activities across ELIXIR members	
Mentoring	Mentor, Bioinfo4Women (Jul 2024 - Present) Promoting research done by women in computational biology with a focus on their transition from postdoc to junior independent positions	
	Mentor, Open Life Science (Jul 2020 - Present) Mentor participants on open science practices as part of a 16-week mentorship and training program to empower open science ambassadors	
Training Courses	ELIXIR LEadership And Diversity (ELEAD) mentoring programme	2023-2024
	Emotional Intelligence and Mindfulness	2020
	Talented Women's Impact Programme	2019-2020
	EICAT Complementary Scientific Skills Training - Scientific Project Management	2019
	Handling Conflict and Difficult Conversations	2018