

AIRR Community Newsletter!

September 2025



Dear AIRR Community members,

As we move into fall, the AIRR Community continues to grow, connect, and innovate; there's a lot happening across our community! In this issue, you'll find upcoming events, opportunities to get involved, and highlights of recent achievements.

Contact us at newsletter@airr-community.org if you have any news or highlights you want to share with the AIRR Community!

Save the Date: AIRR-C Meeting VIII, June 8–11, 2026 at Yale!

We are thrilled to announce that the AIRR Community Meeting VIII will be held at **Yale University from June 8 to 11, 2026!** The theme is: Decoding and Recoding Immunity. Join us for four days of cutting-edge talks, discussions, and community-building centered on immune receptor research, featuring exciting keynote speakers including Drs. **Mark Davis**, **Gabriel Victora**, and **David Schatz**.

Stay tuned – more details on registration, abstract submissions, and program highlights coming soon! Information will be continuously added to [the website](#).

We are still seeking sponsors – if your organization is interested in supporting the AIRR Community's mission, which will help build connections with leaders in the field and increase your visibility, please reach out to meetings@airr-community.org.



Upcoming Online Events

IEDB User Workshop November 18–20, 2025

The [Immune Epitope Database](#) (IEDB) is a freely available resource that captures experimental data on antibody and T cell epitopes, including epitope-specific immune receptors, across infectious disease, allergy, autoimmunity, and transplantation. In addition, the IEDB provides a suite of epitope prediction and analysis tools. The IEDB team will host a free virtual user workshop on 18–20 November 2025 (8:00–12:00 Pacific Time daily). Sessions will cover database structure and curation, highlighting updates to the immune receptor data, as well as practical guidance on data querying and exporting, an overview of IEDB tools, and opportunities for live Q&A with the IEDB team. [Details and registration can be found here](#).

Immcantation Users Group Meeting January 22, 2026

Are you an [Immcantation](#) user or interested in advancing your work with B cell receptor repertoires? Don't miss the 2026 Immcantation Users Group Meeting, a free virtual event designed to connect users, share insights, and explore the latest in B cell repertoire analysis. Learn how AIRR-seq can be used in combination with other technologies (single cell transcriptomics, CITE-seq,...) to study infection, vaccination, allergic responses, clonal lineages,

and more. Event Details:  Date: January 22, 2026;  Time: 10:00 AM – 1:30 PM (ET); 
Location: Online. [Click here for details and registration.](#)

Curation Task Force - Call to Action!

The AIRR Community will soon launch a Curation Task Force, a new subdivision of the Common Repository Working Group. While the number of AIRR-seq publications continues to rise, many datasets are not yet represented in the AIRR Data Commons (ADC). The task force's mission is to identify published AIRR-seq studies, curate them according to the MiAIRR standard, and publish them in the ADC. By joining, you will gain experience with AIRR standards, learn practical curation skills, expand your professional network, and help make valuable data accessible for the global research community. *Both early career researchers and senior investigators are welcome to participate!* [Click here for more information and signup details.](#)

Type 1 Diabetes AIRR Consortium - Invitation to Participate!

The Type 1 Diabetes (T1D) AIRR Consortium – a collaboration led by the [Brusko Lab](#) at the University of Florida, the [Michels Lab](#) at Colorado, [iReceptor Genomic Services](#), and [the\(sugar\)science](#) – has built a freely available T1D **TCR and BCR** Repository of AIRR-seq datasets as part of the AIRR Data Commons (ADC). The repository aims to integrate scRNA-seq datasets, large-scale sequencing projects, gene expression (GEX) data, and rich study metadata including HLA typing, diagnostic autoantibodies, disease progression, antigen specificity, and more.

The T1D AIRR Consortium encourages researchers to share their valuable T1D data and welcomes new collaborators to the consortium. To learn more and join the monthly consortium working group, contact: T1DAIRR@thesugarscience.org. To access the data please visit the iReceptor Gateway (<https://gateway.ireceptor.org>) or email support@ireceptor.org. For more information on this initiative, please see our recent paper in Diabetologia: doi.org/10.1007/s00125-024-06298-y.

Recent Publications

Immunoinformatics Special Issue



We are excited to announce that our [Immunoinformatics Special Issue](#) already features five published papers, with several more currently under review.

- Corey T. Watson et al., [Building immunoglobulin and T cell receptor gene databases for the future](#)
- James M. Heather et al., [The gremlin in the works: why T cell receptor researchers need to pay more attention to germline reference sequences](#)
- Ulrik Stervbo et al., [Challenges and future directions of AIRR-seq-based diagnostics](#)
- Andrew M. Collins et al., [Challenges for the immunoglobulin and T cell receptor gene nomenclatures in the modern genomics era](#)
- Vanessa Mhanna et al., [AnalyzAIRR: A user-friendly guided workflow for AIRR data analysis](#)

AIRR Knowledge Commons Announcement Paper

Commentary

The Adaptive Immune Receptor Repertoire Knowledge Commons: An invitation to the community

Lindsay G. Cowell^{1,2}  , Scott Christley¹, Felix Breden³, Kevin A. Burns^{4,5}, Brian D. Corrie³, William D. Lees⁶, James A. Overton⁷, Bjoern Peters⁸, Eve Richardson⁸, Krishna M. Roskin^{4,5}, Lonneke Scheffer⁸, Randi Vita⁸, Corey T. Watson⁹, Gur Yaari¹⁰



The AIRR Knowledge Commons (AKC) is an integration effort of various community-backed repositories of AIR repertoire, specificity and genomic data. The AKC was recently announced publicly in a *Cell Systems* paper by Lindsay G. Cowell et al., read the paper here:

doi.org/10.1016/j.cels.2025.101401.

In Case You Missed It

Zooming into the Community III: A Milestone Virtual Gathering!

On May 21–22, 2025, the AIRR Community hosted the **Zooming into the Community III** virtual meeting, celebrating 10 years of collaboration and innovation in adaptive immune receptor research. With over 100 attendees registered each day, the event built on the success of previous mid-cycle gatherings, virtually bringing members together from across the globe. This year's theme, "**Specificity**", focused on how to define, measure, and share immune receptor specificity data in a FAIR manner.



The program featured updates from AIRR Working Groups and Sub-Committees, two scientific sessions exploring specificity from both immunological and computational perspectives, and inspiring talks from international experts including Antonio Lanzavecchia, Victor Greiff, Maria Rodriguez Martinez, and David Klatzmann. The celebration also included a special General Assembly marking the community's 10th anniversary. Learn more about the event [here](#). Recordings are available on the [AIRR Community YouTube Channel](#).

New in 2025: Catch the Latest On AIRR Podcast Releases

The AIRR Community's **On AIRR** podcast has released three new episodes for 2025. Co-hosted by Dr. Ulrik Stervbo and Dr. Zhaoqing Ding, these conversations dive deep into the latest advances and perspectives in immune receptor research from innovations in TCR sequencing, to the critical role of high-quality data in AI-driven immunology, to decoding the "grammar" of immune repertoires. Listen now via your favorite podcast platform or [here](#).



2025 Episodes:

- On AIRR 16: Deciphering the grammar of immune repertoires with Dr. Thierry Mora and Dr. Aleksandra Walczak
- On AIRR 17: Data over algorithms – key lessons from the Immune Epitope Database with Dr. Bjoern Peters

- On AIRR 18: From single-chain TCR sequencing to paired high-throughput methods with Dr. Paul Thomas
- On AIRR 19: Pandemic Preparedness Through Antibody Discovery with Williamson, Carnahan, and Vogt

A Note from the Organizers of the Computational Immunology Summer School, Tartu

When you think of immune repertoire data analysis, Tartu, Estonia, might not be the first place that comes to mind. We set out to change that perception by building one of the most intensive and ambitious [summer schools in computational immunology](#), bringing together leading experts so researchers from many countries could learn together. We had never planned an event before, but thinking outside the box can change everything. Last November, we had a spontaneous idea to organise a summer school focused on TCR repertoire analysis within immunoinformatics. Almost a year later, after inviting speakers, shaping the program, scheduling sessions, and partnering with an Australian designer on the visual identity, that idea became reality.

Our program covered the full end-to-end pipeline, from generating AIRR data to analysis across multiple levels: data preprocessing, bulk repertoire analysis, single-cell workflows, and an optional module on disease-predictive TCRs. We also added lectures on the fundamentals and advanced topics of antigen-specific TCRs, plus practical applications of the methods we taught. Bringing together 20 participants from many countries and backgrounds was a rewarding challenge and a highlight of the experience.

We are grateful to everyone who made this possible, including all the speakers and people involved in organisation: Pärt Peterson (University of Tartu, Estonia), Kai Kisand (University of Tartu, Estonia), Helene Vantomme (Sorbonne University, France), Martin Peuzos (Sorbonne University, France), Lisa Dratva (University of Cambridge, United Kingdom), Dawit A. Yohannes (University of Helsinki, Finland), and Juan C. Nieto Sáchica (CNAG, Barcelona, Spain); as well as University of Tartu, University of Helsinki, CSC (Finland), Project SysAge, AIRR Community, EFIS and yEFIS, ImmuneWatch, and MiLaboratories, Eliisa Kekäläinen and Encarnita Mariotti-Ferrandiz. And most of all, thanks to everyone who joined us.

It is inspiring to see interest in the field grow year over year. More people are engaging with AIRR data analysis and complete pipeline workflows, and the ecosystem is maturing quickly. This is an excellent moment for the community to learn, collaborate, and grow.



Stay up to date with AIRR-C news on [LinkedIn](#), [Twitter/X](#), [Bluesky](#), [Mastodon Fediscience](#), [Youtube](#) or [Slack](#).

This newsletter was written by Lonneke Scheffer, Lorissa Corrie and Monica Fernandez-Quintero, and reviewed by the Meetings and Communications Sub-Committees. Questions, comments, or something to share? Contact us at newsletter@airr-community.org