AIRR Community Newsletter

December 2024

Happy Holiday Season!



We wanted to end the year with the first AIRR Community Newsletter highlighting what has been accomplished in 2024 and what we have to look forward to in 2025. Below you'll find links to the AIRR Community social media platforms, past seminars and webinars, as well as new dates and upcoming events in 2025. Additionally, we share updates from current Working Groups and highlight the new Machine Learning Working Group. The Working Groups and Sub-Committees are always excited for new members, so please do not hesitate to reach out if you want to join! Contact us at newsletter@airr-community.org if you have any news and highlights you want to share with the AIRR Community!

Short news

- Members of the AIRR Community, working with an international consortium of type 1 diabetes (T1D) researchers, have established a T1D specific repository in the AIRR Data Commons. Read the recently published T1D AIRR Consortium article here.
- The <u>Inferred Allele Review Sub-committee</u> and <u>Germline Database Working Group</u> have applied to host a member societies symposium at FOCIS 2025 in Boston stay tuned!
- The AIRR Community and TAbS were represented by AIRR-C Founding Chair, Felix Breden at the International Union of Immunological Societies (IUIS) Council Meeting in November 2024.

Immunoinformatics special issue - Call for papers!



Bridging on our #AIRRC7 meeting, we are happy to announce that our AIRR-C Special issue on "Perspectives of Machine Learning and Germline Variation Research In Adaptive Immune Receptor Repertoires" hosted by Immunoinformatics journal is open for submissions! Take this opportunity to share your latest results, thoughts, vision! Guest editors: Encarnita Mariotti Ferrandiz, Corey Watson, Justin Barton, and William Lees. Submission deadline: 15 February 2025.

AIRR Community III virtual meeting May 21 & 22, 2025

The Zooming into the AIRR Community III virtual meeting will take place on **May 21st & 22nd**, **2025** (8:00 PST, 17:00 CEST - 12:00 PST, 21:00 CEST) - save the date!

This virtual event will consist of two half-day sessions that will include the celebration of the AIRR Community 10th anniversary, a brief General Assembly session, scientific talks, and round table "hot topic" breakout discussions.

AIRR Community seminars and webinars

In 2024, the AIRR Community offered 7 fantastic seminars that are available online (links below) and while the new dates for 2025 have been released, we are still looking for established and early career speakers. Contact Victor Greiff with your speaker suggestions! All videos from the AIRR Community are available here.

Links to the 2024 seminars:

- Jan 23rd
 - Stefan Schattgen, St. Jude Children's Research Hospital
- Feb 22nd
 - Brian Hie, Stanford University, US
 - Mamie Wang, Yale University, US
- March 28th
 - Oscar Rodriguez, University of Louisville, US
 - Melissa Smith, University of Louisville, US
- April 25th
 - Marta T. Borowska, Stanford University, US
- Sept 26th
 - Sol Efroni, Bar-Ilan University, Israel
 - Giulio Isacchini, Imprint Labs, USA
- Oct 24th
 - Scott Boyd, Stanford University, US
 - Suhas Sureshchandra, University of California, Irvine
- Nov 21st
 - Roy Ehling, ETH Zurich, Switzerland
 - Camilla Engblom, Karolinska Institutet, Sweden

Save the dates for the 2025 AIRR Community Seminar Series (16:00 - 17:30 CET)

- Jan 30th
- Feb 27th
- March 27th
- April 24th
- June 26th
- Sept 25th
- Oct 23rd

■ Nov 20th

See also

- AIRR Community Meeting VII recordings
- AIRR Community Webinar Series

Launch of Machine Learning Working Group

The Machine Learning Working Group (<u>machine-learning@airr-community.org</u>) has launched and will soon be holding meetings to discuss benchmarking competitions, reproducibility standards, and other initiatives to drive the community forward. If you would like to join <u>please sign up here</u>.

Highlights of the Germline Database Working Group

As the Open Germline Receptor Database (OGRDB) is AIRR Community's hub for germline sequence discovery and for the download of open-source germline sets, the Germline Database Working Group made step-by-step guidelines for using the AIRR Community Reference Sets (airr c sets with igblast) from OGRDB with IgBLAST and MiXCR available in October 2024.

The upcoming plenary meeting for the Germline Database Working Group is scheduled for 21st/22nd of January. Invitations to current members will be sent two weeks prior. If you are interested in joining, reach out to William Lees (william@lees.org.uk) for more information.

On AIRR Podcast

Did you know that the AIRR Community Diagnostics Working Group hosts a podcast? **On AIRR** is a podcast with a focus on the use and application of T and B cell receptor repertoires in diagnostics and other clinical settings. In a recent episode, we interviewed Dr. Corey Watson and William Lees from the Germline Database Working Group about the importance and challenges in creating a database that holds all relevant germline information considering the increased discovery rate.



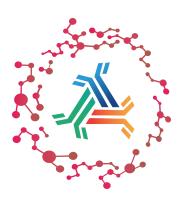
If you have questions for our next guest, suggestions for guests that you would like us to invite, or interesting topics to discuss, send an email to onairr@airr-community.org. For more info, see the podcast webpage.

You can find On AIRR on your favorite podcast app: Amazon Music Apple Podcasts

Podbean App Spotify TuneIn + Alexa PlayerFM

The AIRR Knowledge Commons

In collaboration with multiple research groups within the AIRR Community, the <u>AIRR Knowledge Commons (AKC)</u> is being established as a centralized public repository for data and knowledge. The AKC links together information across existing AIRR-related repositories and enables the application of cross-cutting knowledge-generation algorithms to this integrated data. Sources include 1) adaptive immune receptor and repertoire data from the <u>AIRR Data Commons</u>, 2) genomic data from the <u>OGRDB</u> and <u>VDJbase</u>, and 3) antigen specificity data from the <u>IEDB</u> and <u>IRAD</u>. The AKC is funded by a U24 grant from NIAID (Lindsay Cowell, PI). Stay tuned for updates!



The AIRR Community is active on social media!

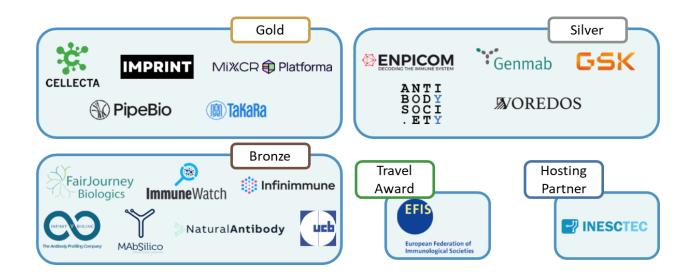
To stay up to date and hear about the latest events and seminars, follow the AIRR Community on social media:

- LinkedIn: https://www.linkedin.com/company/the-airr-community/
- Twitter/X: https://x.com/airr community
- Bluesky: https://bsky.app/profile/airr-community.bsky.social
- Mastodon Fediscience https://fediscience.org/@airr_community
- Youtube https://www.youtube.com/@AIRRCommunity
- **‡** Slack

https://www.antibodysociety.org/airr-community/join-the-airr-community-slack-workspace

Thanks again to our AIRR-C Meeting VII sponsors!

Finally, we extend a big thank you to all of our sponsors for their generous support of the recent AIRR Community Meeting VII.



Thanks to everyone for joining the AIRR-C Meeting VII!

