



Freelance Scientist – Training Programme on Multi-omics Data Analysis and Integration

About PrecisionTox

[PrecisionTox](#) is an EU-funded research initiative pioneering *precision toxicology*, a transformative approach to chemical safety assessment. By combining comparative genomics, multi-omics, and AI-driven analytics, PrecisionTox aims to replace traditional animal testing with cutting-edge New Approach Methodologies (NAMs). The initiative predicts human health risks by studying the evolutionary conservation of toxicity pathways across multiple species.

To support knowledge transfer and capacity building across sectors, we are developing a structured training programme centred on the **PrecisionTox Data Explorer**, an interactive platform designed to navigate and interpret complex bioactivity data across species and chemicals.

The Work

PrecisionTox is seeking a scientific consultant to **design and develop a complete training programme** for the PrecisionTox Data Explorer. This platform supports exploration of evolutionary genomics, comparative omics, and pathway conservation using PrecisionTox datasets.

The consultant will be responsible for creating **eight training modules**. Each module should use the Data Explorer to illustrate key concepts from the PrecisionTox project and demonstrate data-driven approaches to discovery.

Each module will consist of clear documentation and self-guided instructions and consist of the following elements:

Documentation

- How to Access
- Navigating the User Interface
- User Interface Layout
- Main Filters
- Custom Filters
- Viewing, Exporting and Saving Analysis Results
- Data Visualization

Self-guided instructions

- Video Tutorial (consultant is responsible for the script, Alvertox will assist in filming and editing)
- Written User Stories (giving stakeholder specific use case instructions)

Key Responsibilities

Training Development

- Develop eight training modules, each with clear learning objectives and practical exercises.
- Ensure modules are flexible and adaptable for multiple audiences, including academia, industry, regulators, risk assessors, and management.
- Enable modules to be used individually or combined into sector-specific training pathways.

Collaboration & Co-Design

- Work in close collaboration with PrecisionTox partners to align content with project objectives and data dissemination strategies.

Data Explorer Input & Optimization

- Identify and communicate required fixes, data integration needs, analytical features, and visualisation improvements on the Data Explorer to support the training programme and learning outcomes.

Quality Assurance & Feedback

- Integrate feedback from the PrecisionTox Science Advisory Group (SAG) and ASPIS cluster participants to refine content.
- Support an online pilot run-through of the modules for SAG and ASPIS participants.

Milestones & Deliverables

- Initial coordination meeting with the SAG.
- Online pilot training session with ASPIS and SAG participants.
- Delivery of all eight training modules including the Data Explorer documentation and self-guided instructions.
- Delivery of **8 completed modules by 31 January 2026**.

Your Profile

Education

- Master's or PhD in environmental sciences, (eco)toxicology, biology, bioanalysis, or a related field.

Experience

- Hands-on research and data analysis experience in transcriptomics and/or metabolomics.
- Expertise in human toxicology or ecotoxicology.
- Experience in building educational curriculum

Skills

- Strong organisational skills and ability to work independently.
- Excellent interpersonal and communication skills (oral and written).
- Fluent written and spoken English.

Mindset

- Proactive and motivated to work in an interdisciplinary and international research environment.

Contract Details

- **Start date:** 8 December 2025
- **Completion date:** 31st January 2026
- **Location:** Remote
- **Budget:** 18k euros

How to Apply

To apply, send your **cover letter, full CV and a 1-page brief how you would address the tasks within an 8-week time period** to eu-project@alertox.be by **5:00 PM (CET) on 03/12/2025**.