

# M GLOBAL RANAVIRUS REPORTING SYSTEM

The Global Ranavirus Reporting System allows users to create and manage records for Ranavirus studies and reports, import and export data, view tables and maps of reports, and leave reviews and comments on reports.

**BACKGROUND** Ranaviruses are known to cause mass mortality episodes in multiple species of amphibians, reptiles, and fish and are listed as a notifiable disease by the World Organization for Wildlife Health (OIE). However, current Ranavirus reporting systems are fragmented and lack interpretability, with data siloed in multiple isolated data stores. The Global Ranavirus Reporting System was created to enable scientists and managers to easily communicate and share disease information in a centralized repository.

**DATA ORGANIZATION** The Global Ranavirus Reporting System data are organized by study, with each study containing a number of individual observations, or reports. A study is created first and is associated with contact information for the corresponding author. Default values for various fields like species, vertebrate class, or screening reason can also be set at the study level. Reports added to the study assume these defaults unless they are explicitly overridden. This facilitates faster data entry by allowing the researcher to only enter the data that differ for each report.

Study data can be imported in bulk from a CSV-

formatted file and all publicly shared data in the system can be exported in CSV format for loading into a spreadsheet or use in other applications. Filters can be used to export only data that match desired criteria, like belonging to a particular study or user, or concerning a certain species.

Users can also create studies and reports using an intuitive form-based workflow and critique existing report data by submitting reviews.

Publicly shared data in the system can be analyzed with the table view or map view, as well as all reports submitted by the logged-in user, regardless of permissions.

The screenshot displays the user interface of the Global Ranavirus Reporting System. On the left, there is a table listing studies with columns for Name, Submitted by, and search icons. Below the table are sections for 'Age classes', 'Ranavirus confirmation methods', and 'Type of Sample Used for Ranavirus Confirmation', each with a list of checkboxes. To the right, a 'Filter' panel is open, showing options for 'Group' (Genus, Groups), 'Property', and 'Predicate'. A map view is visible in the background, showing a location pin for 'Study - River A' with a pop-up window displaying details like Date, Type of population, and Species affected name.

Name	Submitted by
Geophysiology of wood frogs	Jesse Brunner
Georgia Amphibian Disease Dynamics	Betsie Rothermel
Homan et al 2013	Sarita harris
RV in NYS (Herp Rev. 2011)	Jesse Brunner
ReshetnikovEtAl2014	Jesse Brunner
Waterton Lakes National Park - Tiger Salamander die off	Barb Johnston

**Age classes**

- Egg
- Larvae/Hatchling
- Juvenile
- Adult

**Ranavirus confirmation methods**

- Traditional PCR
- Quantitative Real Time PCR
- Virus Isolation
- Sequencing
- Electron Microscopy
- In Situ Hybridization
- Immunohistochemistry
- Other

**Type of Sample Used for Ranavirus Confirmation**

- Internal Swabs
- External Swabs
- Internal Organ Tissues
- Tail/Toe Clips
- Blood
- Other

**Total Number of Animals Tested**

**Total Number of Animals Confirmed Infected**

**Total Number of Animals Confirmed Diseased**