

SECOND INTERNATIONAL SYMPOSIUM ON RANAVIRUSES

ECOLOGY AND EPIDEMIOLOGY OVERVIEW DISCUSSION SESSION

LOCATION: Medallion Room, Holiday Inn World's Fair Park, Knoxville, TN

TIME AND DATE: 14:45 – 15:45, July 28, 2013

LEAD BY: Dr. Matthew Gray, University of Tennessee

MINUTES TAKEN BY: Dr. Trent Garner, Institute of Zoology

POTENTIAL ACTION ITEMS:

1. Research Needs

- Development of genetic markers to differentiate RVs
 - i. Moving past the use of the MCP: Using markers and whole genomes
- Understanding the differences among sites, virulence and risk
- Determining significant routes of transmission.
 - i. Including within vs among species (and not just amphibians!)
- Understanding the importance of environmental stressors in RV emergence and outbreaks.
- Use of ecologically relevant, quantitative estimates to help guide study design.
- Developing accurate methods of detecting ranaviruses in water outside of outbreaks and what it means.

2. Outreach:

- Discussions with virologists to understand virus taxonomy and how genes are named.
 - i. May require more detailed understanding of RV molecular biology, including determining gene function.
- More interaction with stakeholders, testing centers etc.
- Emphasize the potential impact at the community level and use these to engage the public.

3. Tasks:

- Development of a formal GRC committee to identify and address issues that involve the ecology and epidemiology of ranaviruses and provides recommendations on how to approach them.
- Standardization of sampling methods and study design
 - i. Including standardization of sample sizes and background prevalence rates.
- Determine if there is currently enough data available to determine basic sampling effort needs.
- Creation of minimum guidelines for experimental work.
- Development of guidance notes for sampling strategies and for working with monitoring groups.
 - i. Important to note that OIE standards are not necessarily in line with research standards.
 - ii. Guidance notes should take host ecology into account and if possible include decision trees.
- Providing guidelines of how to effectively study patterns in prevalence.
- Develop proposals for intervention strategies and testing their effectiveness.
- Comparing host population trends and ranavirus dynamics.