▪ General information

- Title of the workshop: **Basics of Quantitative Risk Analysis for Veterinary Epidemiologists**
- Name of instructor(s) and short biographies and contact information of the workshop organizer(s):
  - **The workshop is organized in collaboration with University of Minnesota, USA and Federal Center for Animal Health (FGBI ARRIAH), Russia.**
  - **The instructors are:**
    - **Fedor Korennoy, Federal Center for Animal Health (FGBI ARRIAH), Russia, korennoy@arriah.ru. Fedor is a Research Scientist and GIS specialist in the area of veterinary epidemiology. Holding professional certifications in ArcGIS and in Risk Analysis in Animal Health and Food Safety, Fedor teaches some courses for veterinary researchers and university students on the application of spatial and quantitative methods in veterinary epidemiology and biogeography.**
    - **Prof. Andres Perez (DVM, PhD), Department of Veterinary Population Medicine, University of Minnesota, USA. aperez@umn.edu. Andres has led a number of educational activities (teaching courses, workshops, leading consultancies) on quantitative epidemiology on disease modeling, spatial analysis, risk analysis in several countries including Australia, Argentina, Belgium, Canada, Chile, India, Italy, Mexico, Pakistan, Panama, Russia, Spain, South Africa, the UK, the US, Uganda, Uruguay, and Tajikistan.**
- Workshop's learning outcomes: **The workshop is designed for officials and researchers in veterinary science wishing to learn basics of quantitative risk assessment by means of Monte-Carlo simulations. The participants are expected to learn the basics of probability theory and stochastic processes, which are typically applied in the field of Veterinary Epidemiology. Hands-on experience with spreadsheet-based simulation models using @Risk software will be provided.**
- **Microsoft Office Excel hands-on experience is highly recommended. Some basic knowledge of statistics is desirable but not required.**
- The history of the workshop: have you offered this workshop before? Yes [**X**] No [ ]. If yes, please provide a brief summary of the venues, dates, and approximate attendance numbers. **The workshop is based on a regular course led by Fedor for veterinary researchers in Russia (2019); attendance number: 12.**

▪ Workshop specifications

- Do you prefer to organize a pre- or post-workshop? Pre [ ] Post [**X**] Either [**].**
- What's the minimum and max number of attendees for the workshop? [**5-20 attendees**]
- What's the duration (days) of the workshop (max. length is 2 days, but contact us at GeoVet19@ucdavis.edu if you want to propose a longer workshop e.g. 3-4 days): **[1 day]**

- A package of accessories that includes one laptop projector, power strips, extension cords, Easel Board and adapters will be provided. Please contact us at GeoVet19@ucdavis.edu if you need additional material. **Desktops or laptops with Microsoft Office package and @Risk add-on. Participants will be requested to order and download a free trial version of @Risk software package.**
- What is the proposed cost (USD) of the workshop for the participants: [**150 USD full; 75 USD student**]. **May be adjusteдя; at the discretion of the Organizing Committee.**

▪ Workshop contents and schedule

Day	Time	Topic	Presenter	Format
1	8.30-10.30	An introduction to Probability Theory. Stochastic processes and Distributions	Andres Perez, Fedor Korennoy	Theory
	10.30-11.00	Coffee Break		
	11.00-12.00	Principles of stochastic calculations: Monte-Carlo simulation modeling	Fedor Korennoy	Theory + Computer lab
	12.00-1.00	Lunch		
	1.00-3.00	Problem solving in Animal Health and Food Safety: Binomial and Poisson processes	Fedor Korennoy	Theory + Computer lab
	3.00-3.30	Coffee Break		
	3.30-5.00	Problem solving in Animal Health and Food Safety: Hypergeometric process	Fedor Korennoy	Theory + Computer lab