



Cornell University  
College of  
Veterinary Medicine



## **2008 CORNELL SUMMER PROGRAM**

### **“TOOLS FOR INFECTIOUS-DISEASE EPIDEMIOLOGY: DIAGNOSIS, MODELING AND RISK”**

**Part I: June 17-19; Part II: August 11-13, 2008**

College of Veterinary Medicine  
Cornell University  
Ithaca, NY

### **Introduction**

Cornell University will offer a summer course in epidemiologic methods. The course, “Tools for Infectious-Disease Epidemiology,” will be offered at Cornell from June 17-19 and from August 11-13, 2008. The course contents are distributed among three major topics: diagnostic test evaluation, infectious-disease models and risk assessment. Part I (June 17-19) will cover basic material in diagnostic test evaluation and risk analysis. Part II (August 11-13) will cover more advanced material on risk analysis and infectious disease modeling. Case studies and examples specifically include infections and zoonotic diseases (e.g., paratuberculosis, *salmonella*, and *cryptosporidium*).

This course is designed for veterinarians, other animal-health professionals, and graduate students who need proficiency in infectious-disease epidemiology. Participants are expected to come to the course with a basic understanding of infectious-disease biology and diagnostic-test terminology.

After the course, participants will be able to: 1) contribute to the design of programs for disease control/prevention; and 2) interpret/evaluate protocols and literature on these topics.

The previous versions of the course have been offered at Cornell in summers 2002 and 2004 and in connection with the ISVEE in Chile 2003 and in Australia 2006.

### **Faculty**

Hollis N. Erb, Cornell University  
Yrjö T. Gröhn, Cornell University  
Hussni O. Mohammed, Cornell University  
Daryl V. Nidam, Cornell University  
Ynte H. Schukken, Cornell University  
Lorin D. Warnick, Cornell University

**Schedule** – includes lunch, a.m. & p.m. breaks

**Part I:**

**Tuesday, June 17, 2008**

**Diagnostic test evaluation:**

Morning: Test evaluation, sensitivity & specificity, case studies.  
Afternoon: Herd-level testing and freedom from infection.

**Wednesday, June 18, 2008**

**Diagnostic test evaluation:**

Morning: Combining tests, conditional independence of tests.

**Risk Analysis:**

Afternoon: Concepts of risk assessment. Application to epidemiology.

**Evening 7:30pm-Dinner at restaurant**

**Thursday, June 19, 2008**

**Risk Analysis:**

Morning: Risk-assessment tools: qualitative and quantitative methods in risk assessment.  
Dose-response relationships. Demonstration of concepts with the @risk program.  
Afternoon: Risk analysis continues

**Part II:**

**Monday, August 11, 2008**

**Infectious Disease Modeling – Deterministic models**

Morning: Biology and mathematics of different types of models.  
Afternoon: Evaluating interventions in simulation models. Modeling of vector born infections. Case study: Johne's disease in dairy cattle.

**Tuesday, August 12, 2008**

**Risk Analysis- Stochastic Models**

Morning Dose-response relationships. Demonstration of concepts with the @risk program.  
Development of risk models. Case study  
Afternoon Stochastic models and dose-response. Case study: Cryptosporidium in man and animals. Uncertainty and variability Sensitivity analysis. Case study: Giardia in watersheds.

**Evening 7:30pm-Dinner at restaurant**

**Wednesday, August 13, 2008**

**Infectious Disease - Stochastic Modeling**

Morning: Stochastic models – small sample size, fade out. Case study: Risk and control of salmonella in calf-raising operations.  
Afternoon: Stochastic models continue. Case study: Culling policies in Johne's disease.

Participants may enroll in Part I (\$500) or Part II (\$500) separately or combined (\$900).  
Students fee \$350 per part and \$600 combined. Accommodations not included.

**Further Information and Registration**

Please direct inquiries to: Amanda Mott, Cornell College of Veterinary Medicine, S2 169 VEC,  
Cornell University, Ithaca, NY, 14853-6401, Telephone: 607-253-3200, Fax: 607-253-3198,  
Email: amm36@cornell.edu

## Registration

Please register me for the 2008 Summer Program, “**Tools for Infectious-Disease Epidemiology: Diagnosis, Modeling and Risk,**” being held at Cornell’s College of Veterinary Medicine.

Registration includes 3 lunches, 6 breaks, 1 dinner, 1 copy of proceedings, a certificate of completion, and a parking permit if requested for each registered 3 day session.

Name \_\_\_\_\_

Employer Name \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Daytime telephone \_\_\_\_\_ Email address \_\_\_\_\_

\_\_\_ \$500 for Part I (June 17-19)

\_\_\_ \$500 for Part II (August 11-13)

\_\_\_ \$900 for Parts I and II (June 17-19 and August 11-13) if paid before May 16, registrations received after May 16 please pay

\_\_\_ \$1000 for Parts I and II

### Student registration:

\_\_\_ \$350 for Part I (June 17-19)

\_\_\_ \$350 for Part II (August 11-13)

\_\_\_ \$600 for Parts I and II (June 17-19 and August 11-13) if paid before May 16, registrations received after May 16 please pay

\_\_\_ \$700 for Parts I and II

\_\_\_ I am driving and will need a parking permit.

\_\_\_ I will require vegetarian meals.

Please make checks payable to Cornell University.

Bill my credit card \_\_\_ Visa \_\_\_ Mastercard \_\_\_ Discover \_\_\_ AmEx

Card Number: \_\_\_\_\_

Expiration date: \_\_\_\_\_ CVV: \_\_\_\_\_

**Please mail or fax registration to:** Amanda Mott, Cornell College of Veterinary Medicine, S2 169 VEC, Ithaca, NY, 14853-6401, Telephone: 607-253-3200, Fax: 607-253-3198, Email: amm36@cornell.edu

Cancellation Policy: Your fee, less a \$100 processing charge, will be refunded for cancellations on or before May 16, 2008. No refund will be granted for failure to attend without notification.

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## Housing

Participants are responsible for making hotel reservations. Hotel rooms have been blocked at the **Ramada Inn**, 2310 N. Triphammer Road, Ithaca, NY, 607-257-3100. Please refer to the Epidemiology Conference to receive the \$89.95/night rate. Room blocks are being held for Part I until May 16 and for Part II until July 10. Hotel includes shuttle service to and from Cornell University starting at 7:00am.