Risiken erkennen – Gesundheit schützen

Bundesinstitut für Risikobewertung (BfR)
Federal Institute for Risk Assessment

Location Diedersdorfer Weg 1
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Short Course on

Advanced Methods for Test Validation

14-16 May 2008

BfR, Berlin

- Travel information
- Suggested reading
- Software

Course Venue

BfR, Berlin-Marienfelde, Diedersdorfer Weg 1, Room D146
Reached from the bus stop via a foodpath (*Fußweg* on the map) through a small park area.

Transport

There is organised transport between Hotel Best Western Steglitz International and BfR
Pick-up at hotel: 8.15am, 14-16 May 2008.

Currency and fares

Local currency is EUR. Taxi fares are about 30-50 EUR for a ride from airport to Hotel. Public transport from any airport to the hotel takes 40-100 min depending on daytime and costs 2.10 EUR (AB area ticket valid for 2 hours incl. changes). Purchase tickets from a ticket machine or from the bus driver. Bus drivers usually do not change bills larger than 5 EUR and often don't speak English.

Suggested hotel

Best Western Hotel Steglitz International
Albrechtstraße 2
12165 Berlin
Telefon: +49 (0)30-790050
Telefax: +49 (0)30-79005550

http://www.si-hotel.com

Only a limited number of rooms is reserved at this hotel. Note that you have to make your own reservation and payment directly to the hotel.

Arrival/Departure: 13th /16th May
Rate: 82.50 EUR (single), 102.50 EUR (double), breakfast included

Contact: info@steglitz.bestwestern.de

Deadline: 15 April 2008

Keyword: BfR Diagnostic Test Course

Connection between airports and Hotel SI

TEGEL (TXL)	→ Bus 109 or X9 *(direction Zoologischer Garten)* to "U Jakob-Kaiser-Platz" → Underground U7 *(dir. Rudow)* to "U Berliner Straße" → Underground U9 *(dir. U+S Rathaus Steglitz)* to "U+S Rathaus Steglitz "
Schöne-feld (SXF)	→ S-Train S9 (*direction S Spandau Bhf*) to "S Baumschulenweg" → S-Train S47 (dir. *S+U Bundesplatz*) to "S Schöneberg " → S-Train S1 *(dir. S Wannsee Bhf)* to "S+U Rathaus Steglitz"
Tempel-hof (THF)	→ footpath 5 min. to underground station "U Platz der Luftbrücke" → Underground U6 (*dir. U Alt-Tegel*) to "U Mehringdamm" → Underground U7 (*dir. U Rathaus Spandau*) to "U Berliner Straße" → Underground U9 *(dir. U+S Rathaus Steglitz)* to "U+S Rathaus Steglitz "

More information about Berlin

http://www.berlin.de/english/

Suggested reading

Branscum, A. J., I. A. Gardner, and W. O. Johnson. Estimation of diagnostic-test sensitivity and specificity through Bayesian modeling. *Prev.Vet Med* 68 (2-4):145-163, 2005. Link

Branscum, A. J., W. O. Johnson, and I. A. Gardner. Sample size calculations for disease freedom and prevalence estimation surveys. *Stat.Med* 25 (15):2658-2674, 2006. 10.1002/sim.2449 Link

Christensen, J. and I. A. Gardner. Herd-level interpretation of test results for epidemiologic studies of animal diseases. *Prev.Vet.Med.* 45:83-106, 2000. Link

Collins, M.T., I. A. Gardner, F. B. Garry, A. J. Roussel, and S. J. Wells. Consensus recommendations on diagnostic testing for the detection of paratuberculosis in cattle in the United States. *J Am Vet Med Assoc* 229 (12):1912-1919, 2006. Link

Gardner, I. A. and M. Greiner. Receiver-operating characteristic curves and likelihood ratios: improvements over traditional methods for the evaluation and application of veterinary clinical pathology tests. *Vet Clin Pathol* 35 (1):8-17, 2006. Link

Gardner, I. A.. An epidemiologic critique of current microbial risk assessment practices: the importance of prevalence and test accuracy data. *J Food Prot* 67 (9):2000-2007, 2004. Link

Gardner, I.A. and M. Greiner. Receiver-operating characteristic curves and likelihood ratios: improvements over traditional methods for the evaluation and application of veterinary clinical pathology tests. *Vet Clin Pathol* 35 (1):8-17, 2006. Link

Gardner, I.A., H. Stryhn, P. Lind, and M. T. Collins. Conditional dependence between tests affects the diagnosis and surveillance of animal diseases. *Prev.Vet.Med.* 45:107-122, 2000. Link

Georgiadis, M.P., W. O. Johnson, and I. A. Gardner. Sample size determination for estimation of the accuracy of two conditionally independent tests in the absence of a gold standard. *Prev.Vet Med* 71 (1-2):1-10, 2005. Link

Greiner, M. and I. A. Gardner. Application of diagnostic tests in veterinary epidemiologic studies. *Prev.Vet.Med.* 45:43-59, 2000. Link

Greiner, M. and I. A. Gardner. Epidemiologic issues in the validation of veterinary diagnostic tests. *Prev.Vet.Med.* 45:3-22, 2000. Link

Greiner, M., C. R. Franke, D. Böhning, and P. Schlattmann. Construction of an intrinsic cut-off value for the sero-epidemiological study of Trypanosoma evansi infections in a canine population in Brazil: a new approach towards an unbiased estimation of prevalence. *Acta Trop.* 56:97-109, 1994. Link

Greiner, M., D. Sohr, and P. Göbel. A modified ROC analysis for the selection of cut-off values and the definition of intermediate results of serodiagnostic tests. *J.Immunol.Methods* 185 (1):123-132, 1995. Link

Greiner, M., D. U. Pfeiffer, and R. D. Smith. Principles and practical application of the receiver operating characteristic analysis (ROC) for diagnostic tests. *Prev.Vet.Med.* 45:23-41, 2000. Link

Greiner, M.. *Serodiagnostische Tests. Evaluierung und Interpretation in der Veterinaermedizin und anderen Fachgebieten*, Berlin, Heidelberg, New York:Springer-Verlag, 2003. Link

Johnson, W.O., C. L. Su, I. A. Gardner, and R. Christensen. Sample size calculations for surveys to substantiate freedom of populations from infectious agents. *Biometrics* 60 (1):165-171, 2004. Link

Pouillot, R., G. Gerbier, and I. A. Gardner. "TAGS", a program for the evaluation of test accuracy in the absence of a gold standard. *Prev.Vet Med* 53 (1-2):67-81, 2002. Link

Software

The following software will be mentioned and partly demonstrated during the course. It is recommended that participants download and install the programmes on their notebooks. The software is either open source, free or restricted demo version. All installation files will also be provided during the course.

Software	Licence	Main purpose relevant for the course	Download
MedCalc	Free trial version	ROC analysis	http://www.medcalc.be/
xbinci	Open source	EXCEL-spreadsheet to calculate exact binomial confidence intervals for sensitivity, specificity or other proportions	http://www.dina.kvl.dk/~nt/workshops/dtw/exercises.htm
HerdAcc	Free	Calculation of sensitivity and specificity for classification of a herd based on sampling and testing individual animals	http://www.vetschools.co.uk/EpiVetNet/Sampling_software.htm
TAGS	HTML online calculator	Estimating sensitivity and specificity without gold standard (maximum likelihood method)	http://www.epi.ucdavis.edu/diagnostictests/tags.html
R[1)]	Open source	Statistical computing and programming environment (this programme package may be downloaded to run TAGS or other advanced statistical programmes locally on your PC)	http://www.r-project.org/
WinBugs[1)]	Open	Markov chain Monte Carlo estimation of statistical models (may be used to conduct Bayesian estimation of sensitivity and specificity without gold standard)	http://www.mrc-bsu.cam.ac.uk/bugs/winbugs/contents.shtml
BRugs[1)]	Open Source	OpenBugs interface for R and S-Plus (this package may be downloaded to run some advanced Bayesian estimation in order to run some advanced statistical programmes locally in R)	http://cran.r-project.org/src/contrib/Descriptions/BRugs.html

[1)] Only recommended for participants with interest in advanced computational methods.

Links

Bayesian Epidemiologic Screening techniques (UC-Davis)

OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals: Chapter on Test Validation

OIE Procedure of Validation and Certification of Diagnostic Assays