

EURL news

News related to the EURL activities

EU NRL Annual Community review of tests related to rabies: 2014 data Data collection ongoing

Each beginning of year, the EURL laboratory network is invited to participate in the annual overview of tests performed in the NRLs. This work ensures a continuous monitoring of rabies test results carried out in the Community... [Read more](#)

Publication of the Comparison of different Real Time PCR methods study

In 2013, the EURL initiated a cross-platform evaluation of the PCR performance of ten commercial SYBR Green® kits (five two-step kits and five one-step kits) using real-time SYBR Green PCR assays (one-step and two-step methods). We found that the optimised one-step PCR assays had a higher detection sensitivity than the optimised two-step assays regardless of the machine used as well as the pivotal influence of the thermocycler on PCR performance, as well as that of the master mixes... [Read more](#)

7th workshop for EU NRL rabies - Registration open

The annual meeting for the EURL for rabies will take place this year in Zagreb, Croatia. The meeting will be held on the same basis than the last one, over 2 half days, on 27th May afternoon and 28th May 2015 morning. Registration is currently ongoing. The agenda will include talks from the National Reference Laboratories and the EURL on molecular biology analysis for rabies diagnosis and the ongoing standardisation of these methods at a European level. The results of... [Read more](#)

News from laboratories

News related to the EURL for rabies laboratory network

Death of Dr. Rybakov

This is with much sorrow that we heard of Dr. Rybakov's death last 26 February 2015. Dr. Rybakov, from the FGBI Federal Centre for Animal Health "ARRIAH" laboratory of Vladimir, Russia, was deeply involved in rabies control and in studies of field as well as in vaccine rabies virus characterisation in Russia. He made a lot for rabies science in Russia and his death is a huge loss for his country and for rabies knowledge improvement. We address our most sincerest condolences to his family and to all his relatives.

In the spotlight

Focuses on a specific event or presents a laboratory of the EURL network

Rabies Laboratory of the Scientific Institute of Public Health (WIV-ISP, Brussels)

The Rabies Laboratory of the Scientific Institute of Public Health (WIV-ISP, Brussels) is officially recognized as the National Reference Centre for Human Rabies ([NRC Rabies](#): financed by the National Institute for health and Invalidity Insurance, RIZIV-INAMI) and the National Reference Laboratory for Animal Rabies ([NRL Rabies](#): recognized by the Federal Agency for the Safety of the Food Chain, [FAVV-AFSCA](#), and OIE). The lab is also recognized by the European Commission to perform [rabies serology in pets](#) in the frame of travel. The rabies laboratory is embedded... [Read more](#)

Agenda

Forthcoming events

2015

- 15-18 March** Third International One Health Conference 2015, Amsterdam (the Netherlands)
7-9 April 3rd Middle East and Eastern Europe Rabies Expert Bureau Meeting, Lyon (France)
14-16 April 2015 Spring International Conference on Forestry and Animal Husbandry (FAH-S), Beijing (China)
16-17 April OIE 2015 Regional Rabies Scientific Conference, Wuhan, China
22-24 April Vth International Veterinary Congress, Moscow (Russia)
5-8 May Partners for Rabies Prevention meeting 2015, Wolfsberg (Switzerland)
27-28 May 7th Workshop for rabies EU NRL, Zagreb (Croatia)
8-10 July [Infectious Diseases World Summit 2015](#), Boston, MA (USA)
14-17 August 3rd International Southeast Asian Bat Conference, Sarawak (Malaysia)
31 Aug.-2 Sept. OMICS Group Global American Veterinary Summit, Florida (USA)
4-8 October 26th International Conference on Rabies in the Americas (RITA), Fort Collins, Co., USA

Rabies notifications

28 Feb 2015 ★ Tunisia

<http://www.promedmail.org/direct.php?id=3199114>

11 Feb 2015 ★ Israel

<http://www.promedmail.org/direct.php?id=3159708>

<http://www.israelnationalnews.com/News/Flash.aspx/317467>

09 Jan 2015 ★ Slovakia

<http://www.promedmail.org/direct.php?id=3081404>

http://www.oie.int/wahis_2/public/wahid.php/Reviewreport/Review?page_refer=MapFullEventReport&reportid=16910

Rabies publications

A selection of publications on rabies, diagnosis, virology and vaccinology.

Animal and human rabies

The dynamics of fox (*Vulpes vulpes* L.) populations in selected hunting regions of the central-eastern Poland in relation to effectiveness of rabies vaccination.

Bombik E. et al., Vet. Zootech., 2014, 68, pp 9-15.

<http://vetzoo.lva.lt/data/vols/2014/68/lt/bombik.pdf>

Rabies in Podkarpackie voivodeship between 2011 and 2012.

Ciolek J. et al., Med. Wet., 2015, 71, n°1, pp 24-28.

<http://medycynawet.edu.pl/index.php/archives/339/5263-summary-med-weter-71-1-24-28-2015>

Mass vaccination of dogs, control of canine populations and post-exposure vaccination – necessary but not sufficient for achieving childhood rabies elimination.

Durrheim D.N. et al., Trop. Med. Int. Health, 2015, sous presse.

<http://onlinelibrary.wiley.com/doi/10.1111/tmi.12474/abstract>

Australian bat lyssavirus: implications for public health.

Francis J.R. et al., *Med. J. Aust.* 2014, 201, n°11, pp 647-649.

<https://www.mja.com.au/journal/2014/201/11/australian-bat-lyssavirus-implications-public-health>



Knowledge, attitudes and practices regarding rabies and exposure to bats in two rural communities in Guatemala.

Moran D. et al., BMC Res. Notes, 2015, 8, n°1.

<http://rd.springer.com/article/10.1186%2Fs13104-014-0955-1>

Do the college students know about rabies and its prevention: a study from a university of North India.

Pawan P. et al., Int. J. Contemp. Med., 2015, 3, n°1, pp 212-6.

<http://www.indianjournals.com/ijor.aspx?target=ijor:ijcm1&volume=3&issue=1&article=007>

The One Health approach for the management of an imported case of rabies in mainland Spain in 2013.

Perez de Diego A.C. et al., Eurosurveillance, 2015, 20, n°6.

<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=21033>

Cost differences between complete and incomplete post-exposure courses of rabies vaccination.

Sittichanbuncha Y. et al., Southeast Asian J. Trop. Med. Public Health, 2014, 45, n°5, pp 1048-1052.

<http://www.tm.mahidol.ac.th/seameo/2014-45-5-abstract/10-MS-14-201427.pdf>

Do open garbage dumps play a role in canine rabies transmission in Biyem-Assi health district in Cameroon?

Tabue N.R. et al., Infect. Ecol. Epidemiol., 2015, sous presse.

<http://www.infectionecologyandepidemiology.net/index.php/iee/article/view/26055>

Surveillance of human rabies by national authorities – A global survey.

Taylor L.H. et al., Zoon. Public Health, 2015, sous presse.

<http://onlinelibrary.wiley.com/doi/10.1111/zph.12183/abstract;jsessionid=2D78D1DDF6247C2D695D61B0B1FDBC4B.f03t02>

Comparison of mark-resight methods to estimate abundance and rabies vaccination coverage of free-roaming dogs in two urban areas of south Bhutan.

Tenzin T. et al., Prev. Vet. Med., 2015, sous presse.

<http://www.sciencedirect.com/science/article/pii/S0167587715000239>

Rabies encephalitis in a child: a failure of rabies post exposure prophylaxis?

Tinsa F. et al., BMJ Case Reports, 2015; doi:10.1136/bcr-2014-206191

<http://casereports.bmj.com/content/2015/bcr-2014-206191.abstract>

Diagnosis, virology and vaccinology

Antemortem diagnosis of rabies from skin by Taqman real time PCR.

Bansal K. et al., Ind. J. Anim. Res., 2014, 48, n°6, pp 597-600.

<http://www.indianjournals.com/ijor.aspx?target=ijor:ijar1&volume=48&issue=6&article=015>

A behaviorally-explicit approach for delivering vaccine baits to mesopredators to control epizootics in fragmented landscapes.

Beasley J.C. et al., PLoS ONE, 2015, 10, n°1, e0113206.

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0113206>

Comparative evaluation of clinicopathological, immunohistochemical, and immunofluorescent techniques for diagnosis of rabies in animals.

Beigh A.B. et al., Comp. Clin. Pathol., 2015, sous presse.

<http://rd.springer.com/article/10.1007/s00580-014-2057-9#>

RNAi –based treatment for rabies: Current achievements and insights towards a cure.

Brandao P.E., Brit. J. Virol., 2015, 2, n°1, pp 5-8.

<http://smithandfranklin.com/current-issues/RNAi-Based-Treatment-for-Rabies-Current-Achievements-and-Insights-Towards-a-Cure/6/8/80/html>

Rabies surveillance in bats in Northwestern State of São Paulo.

Casagrande A.D. et al., Rev. Soc. Bras. Med. Trop., 2014, 47 n°6, pp 709-715.

http://www.scielo.br/scielo.php?script=sci_abstract&pid=S0037-86822014000600709&lng=en&nrm=iso&tling=en



Biting back: Vaccine efforts redoubled as rabies deadline looms.

Chakradhar S., Nat. Med., 2015, 21, n°1, pp 8-10.

<http://www.nature.com/nm/journal/v21/n1/full/nm0115-8.html>

Rabies encephalitis.

Co S.J. et al., Radiographics, 2015, 35, 1.

<http://pubs.rsna.org/doi/abs/10.1148/rq.351140035>

The prevention and management of rabies.

Crowcroft N.S. et al., BMJ, 2015, 350.

<http://www.bmj.com/content/350/bmj.g7827.long>

Transient expression of rabies virus G-glycoprotein using BHK-21 cells cultured in suspension.

Fernandez-Nunez E.G. et al., Biotechnol. Lett., 2015, sous presse.

<http://rd.springer.com/article/10.1007/s10529-015-1787-3#>

Rhabdovirus glycoproteins.

Gaudin Y. et al., in "Biology and Pathogenesis of Rhabdo- and Filoviruses" A.K. Pattnaik and M.A. Whitt Eds., World Scientific, 2015, pp 49-73.

http://www.worldscientific.com/doi/abs/10.1142/9789814635349_0004

30 years of rabies vaccination with Rabipur: a summary of clinical data and global experience.

Giesen A. et al., Expert Rev. Vacc., 2015, 14, n°3, pp 351-367.

<http://informahealthcare.com/doi/abs/10.1586/14760584.2015.1011134>

The importance of rabies immunoglobulin in postexposure prophylaxis.

Gozdas H.T., Am. J. Emerg. Dis., 2015, sous presse.

<http://www.sciencedirect.com/science/article/pii/S073567571500039X#>

Rabies virus vaccines.

Huang Y. et al., in "Biology and Pathogenesis of Rhabdo- and Filoviruses" A.K. Pattnaik and M.A. Whitt Eds., World Scientific, 2015, pp 387-426.

http://www.worldscientific.com/doi/abs/10.1142/9789814635349_0016

Parainfluenza virus 5 expressing the G protein of rabies virus protected 2 mice after rabies virus infection.

Huang Y. et al., J. Virol., 2014, sous presse.

<http://jvi.asm.org/content/early/2014/12/26/JVI.03656-14.abstract>

Rabies virus replication and pathogenesis.

Hudacek A.W. et al., in "Biology and Pathogenesis of Rhabdo- and Filoviruses" A.K. Pattnaik and M.A. Whitt Eds., World Scientific, 2015, pp 335-351.

http://www.worldscientific.com/doi/abs/10.1142/9789814635349_0014

Review on dog rabies vaccination coverage in Africa: A question of dog accessibility or cost recovery?

Jibat T. et al., Plos Negl. Trop. Dis., 2015, 9, n°2, pp 1-13.

<http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0003447>

A case report of post Rabipur (purified chick embryo rabies vaccine) acute disseminated encephalomyelitis.

Kumar R. et al., J. Ass. Phys. Ind., 2015, 63, pp 56-58.

http://www.japi.org/january_2015/011_cr_a_case_report_of_post_rabipur.pdf

Lymph node but not intradermal injection site macrophages are critical for germinal center formation and antibody responses to rabies vaccination.

Lytte A.G. et al., J. Virol., 2014, sous presse.

<http://jvi.asm.org/content/early/2014/12/18/JVI.03409-14.abstract>

Comparative study on the immunogenicity and safety of a purified chick embryo cell rabies vaccine (PCECV) administered according to two different simulated post exposure intramuscular regimens (Zagreb versus Essen).

Mahendra B.J. et al., Hum. Vacc. Immunother., 2015, sous presse.
http://www.tandfonline.com/doi/abs/10.4161/21645515.2014.995059?url_ver=Z39.88-2003&rft_id=ori%3Arid%3Aacrossref.org&rft_dat=cr_pub%3Dpubmed&

Cross-neutralization of antibodies induced by vaccination with Purified Chick Embryo Cell Vaccine (PCECV) against different Lyssavirus species.

Malerczyk C. et al., Hum. Vacc. Immunother., 2014, 10, 10.
<http://www.tandfonline.com/doi/abs/10.4161/21645515.2014.972741>

Complete genomic sequence of European Bat Lyssavirus 1, isolated from Eptesicus isabellinus in Spain.

Marston D. et al., Genome Announcements, 2015, 5, n°1, 2 p.
<http://genomea.asm.org/content/3/1/e01518-14.abstract>

Postgenomics biomarkers for rabies. The next decade of proteomics.

Mehta Shraddha M. et al. OMICS: J. Integr. Biol., 2015, sous presse.
<http://online.liebertpub.com/doi/abs/10.1089/omi.2014.0127>

Long-term toxicity of freeze-dried rabies vaccine for human use (Vero cells) for intramuscular injection in machins.

Miao L. et al., Chin. J. Biol., 2014, 27, n°11, pp 1369-1374.
<http://www.scopus.com/record/display.url?eid=2-s2.0-84922366199&origin=SingleRecordEmailAlert&txGid=9D0314A72400F2060EFEBFA0BB1BE410.CnvicAmOODVwpVrjSeqQ%3a12>

Comparison of anamnestic responses to rabies vaccination in dogs and cats with current and out-of-date vaccination status.

Moore M.C. et al., J. Am. Vet. Med. Ass., 2015, 246, n°2, pp 205-211.
<http://avmajournals.avma.org/doi/abs/10.2460/javma.246.2.205>

A retrospective epidemiological study of delay for updated Thai red cross intradermal anti-rabies vaccination schedule amongst animal bite cases attending ARV clinic at a tertiary care centre.

Patil A.R. et al., Int. J. Comm. Med. Public Health, 2015, 2, n°1, pp 19-24.
<http://www.ijcmph.com/?mno=176179>

Cross-platform evaluation of commercial real-time SYBR Green RT-PCR kits for sensitive and rapid detection of European bat lyssavirus type 1.

Picard-Meyer E. et al., Biomed. Res. Int., 2015, ID 839518, 18 p.
<http://www.hindawi.com/journals/bmri/2015/839518/abs/>

A preliminary study of recombinant human interferon- α -2a activity against rabies virus in murine model.

Roy S. et al., Indian J. Med. Microbiol., 2015, 33, pp 132-135.
<http://www.ijmm.org/article.asp?issn=0255-0857;year=2015;volume=33;issue=1;spage=132;epage=135;aulast=Roy;type=0>

Establishing conditions for the storage and elution of rabies virus RNA using FTA® cards.

Sakai T. et al., J. Vet. Med. Sci., 2014, sous presse.
https://www.jstage.jst.go.jp/article/jvms/advpub/0/advpub_14-0227/_pdf

Chimeric rabies SADB19-VSVg-pseudotyped lentiviral vectors mediate long-range retrograde transduction from the mouse spinal cord.

Schoderboeck L. et al., Gene Therapy, 2015, sous presse.
<http://www.nature.com/gt/journal/vaop/ncurrent/full/gt20153a.html>

Comparison of immunochromatographic diagnostic test with heminested reverse transcriptase polymerase chain reaction for detection of rabies virus from brain samples of various species.

Sharma P. et al., Vet. World, 2015, 8, n°2, pp 135-138.
<http://www.veterinaryworld.org/Vol.8/February-2015/1.pdf>

Development of an automated dispenser for the delivery of medicinal or vaccine-laden baits to raccoons (*Procyon lotor*).

Smyser T.J. et al., *J. Wildl. Dis.*, 2015, 51, n°2, sous presse.
<http://www.jwildlifedis.org/doi/abs/10.7589/2014-08-211>

Molecular mechanisms of raccoon rabies virus progression in its natural host.

Srithayakumar V. et al., *Adv. Microbiol.*, 2014, 4, pp 1222-1236.
<http://www.scirp.org/journal/PaperInformation.aspx?paperID=52621#.VPWPmSzwvNE>

Comparative immune responses of children after intradermal and intramuscular rabies vaccination.

Subawa A.A.N. et al., *Bali Med. J.*, 2014, 3, n°3, pp 154-156.
<http://www.balimedicaljournal.org/index.php/bmj/article/view/93>

Unusual ultrastructural findings in dendrites of pyramidal neurons in the cerebral cortex of rabies-infected mice.

Torres-Fernandez O. et al., *PeerJ. PrePrints*, 2015, 3:e1047.
<https://peerj.com/preprints/847v1/>

Cellular immune response following pre-exposure and postexposure rabies vaccination by intradermal and intramuscular routes.

Venkataswamy M.M. et al., *Clin. Exp. Vaccine Res.*, 2015, 4, n°1, pp 68-74.
<http://www.ecevr.org/search.php?where=aview&id=10.7774/cevr.2015.4.1.68&code=9995CEVR&vmode=AONLY>

Optimization and verification of condition for determination of rabies virus titer by direct immunofluorescence assay.

Wang M.S. et al., *Chin. J. biol.*, 2014, 27, n°11, pp 1477-1480.
<http://www.scopus.com/record/display.url?eid=2-s2.0-84922352719&origin=SingleRecordEmailAlert&txGid=D85867010A16D00CF3D1C6D56F537B6E.fM4vPBipdL1BpirDq5Cw%3a1#>

Rabies: the clinical features, management and prevention of the classic zoonosis.

Warrell M.J. et al., *Clin. Med.* 2015, 15, n°1, pp 78-81.
<http://www.clinmed.rcpjournals.org/content/15/1/78.abstract>

Oral immunization of mice with recombinant rabies vaccine strain (ERAG3G) induces complete protection.

Yang D.K. et al., *Clin. Exp. Vaccine Res.* 2015, 4, n°1, pp 107-113.
<http://ecevr.org/search.php?where=aview&id=10.7774/cevr.2015.4.1.107&code=9995CEVR&vmode=AONLY>

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