



European Network for Neglected Vectors and  
Vector-Borne Infections



## Newsletter March 2016

Teita Myrseli sent a link to the recently published [Leishmaniasis Gap Analysis and Action Plan](#) which shows that leishmaniasis continues to be a neglected disease.

The 'Guidelines for the detection of vector-borne pathogens' prepared under WG2 and led by Muriel, is currently under review. It is envisaged that all papers will be published together as a special issue of *Vector borne and zoonotic diseases* later on this year.

### Upcoming conferences, workshops & festivals:

Symposium: [Species barriers to emerging viral diseases](#), 31 March-1 April, Berlin, Germany

Symposium: [Current findings on Q fever](#), 19-20 April in Brussels, Belgium

Workshop on the development and implementation of anti-tick vaccines in Europe: [An ANTIDotE for tickborne diseases](#), 3 June in Potsdam, Germany

[Soipa EVPC congress: Parasites, poverty and social commitment](#), 21 to 24 June, in Bari, Italy.

[1st International Parasite Film Festival](#), 20-24 July in Turku, Finland

[10<sup>th</sup> International symposium on geospatial health](#), 17-18 September in Brisbane, Australia

ESCCAP: [Conference to examine emerging vector-borne diseases, their epidemiology and clinical management](#), 19-20 October in Granada, Spain

### Twitter sites

@gr\_pathobiome

Ecological and evolutionary aspects of the microbial communities associated with pathogens and hosts

@jeffoscoulos

Information from the COST programme, as well as other infos about infectious diseases, new molecular methods and policy in science

## Recent publications by network members with acknowledgment to Eurnegvec:

- S Moutailler, I Popovici, E Devillers, M Vayssier-Taussat, M Eloit. Diversity of viruses in *Ixodes ricinus*, and characterization of a neurotropic strain of Eyach virus In press. *New Microbes and New Infections* - **This is a STSM outcome (Ivona Popovici)**
- M Vayssier-Taussat, S Moutailler, F Féménia, Philippe Raymond, O Croce, B La Scola, PE Fournier, D Raoult. Identification of Novel Zoonotic Activity of *Bartonella* spp., France. 2016. *Emerging Infectious Disease*. Vol 22, 3.
- Sara Moutailler, Claire Valiente Moro, Elise Vaumourin, Lorraine Michelet, FH Tran, E Devillers, JF Cosson, P Gasqui, Van Tran Van, P Mavingui, G Vourc'h, and M Vayssier-Taussat. Co-infection of ticks: the rule rather than the exception. In press in *PNTD*.
- Bichaud L, de Lamballerie X, Alkan C, Izri A, Gould EA, **Charrel RN**. Arthropods as a source of new RNA viruses. *Microb Pathog*. 2014 Sep 17. pii: S0882-4010(14)00126-0. doi: 10.1016/j.micpath.2014.09.002. [Epub ahead of print]. **EDENext#262. COST TD1303**
- Fares W, **Charrel RN**, Dachraoui K, Bichaud L, Barhoumi W, Derbali M, Cherni S, Chelbi I, de Lamballerie X, Zhioua E. Infection of sand flies collected from different bio-geographical areas of Tunisia with phleboviruses. *Acta Trop*. 2014 Sep 22. pii: S0001-706X(14)00300-3. doi: 10.1016/j.actatropica.2014.09.009. [Epub ahead of print] PubMed PMID: 25255967. **COST TD1303**.
- Sakhria S, Alwassouf S, Fares W, Bichaud L, Dachraoui K, Alkan C, Zoghalmi Z, de Lamballerie X, Zhioua E, **Charrel RN**. Presence of sandfly-borne phleboviruses of two antigenic complexes (*Sandfly fever Naples virus* and *Sandfly fever Sicilian virus*) in two different bio-geographical regions of Tunisia demonstrated by microneutralisation-based seroprevalence study in dogs. *Parasit Vectors*. 2014 Oct 12;7(1):476. **EDENext#266. COST TD1303**
- Andayi F, **Charrel RN**, Kieffer A, Richet H, Pastorino B, Leparç-Goffart I, Ahmed AA, Carrat F, Flahault A, de Lamballerie X. A Sero-epidemiological Study of Arboviral Fevers in Djibouti, Horn of Africa. *PLoS Negl Trop Dis*. 2014 Dec 11;8(12):e3299. doi: 10.1371/journal.pntd.0003299. **EDENext#278. COST TD1303**.
- Marlinge M, Crespy L, Zandotti C, Piorkowski G, Kaphan E, **Charrel R**, Ninove L. Afebrile meningoencephalitis with transient central facial paralysis due to Toscana virus infection, south-eastern France, 2014. *Euro Surveill*. 2014 Dec 4;19(48). pii: 20974. **EDENext#270. COST TD1303**
- Menard A, Ninove L, Zandotti C, Leparç-Goffart I, Klitting R, Baronti C,

- Stein A, de Lamballerie X, **Charrel RN**. A secondary dengue 4 infection in patient returning from Haiti confirmed by virus isolation, complete genome sequencing and neutralisation assay. *Travel Med Infect Dis*. 2015 Jan 3. pii:S1477-8939(14)00264-6. doi: 10.1016/j.tmaid.2014.12.009. [Epub ahead of print]. **EDENext#292. COST TD1303**.
- Alkan C, Alwassouf S, Piorkowski G, Bichaud L, Tezcan S, Dincer E, Ergunay K, Ozbel Y, Alten B, Lamballerie X, **Charrel RN**. Isolation, genetic characterization and seroprevalence of Adana virus a novel phlebovirus belonging to the Salehabad virus complex in Turkey. *J Virol*. 2015 Feb 4. pii: JVI.03027-14. [Epub ahead of print] PubMed PMID: 25653443. **EDENext316. COST TD1303**
  - Moureau G, Cook S, Lemey P, Nougairede A, Forrester NL, Khasnatinov M, **Charrel RN**, Firth AE, Gould EA, de Lamballerie X. New insights into flavivirus evolution, taxonomy and biogeographic history, extended by analysis of canonical and alternative coding sequences. *PLoS One*. 2015 Feb 26;10(2):e0117849. doi:10.1371/journal.pone.0117849. **EDENext299. COST TD1303**
  - Ajaoud M, Es-Sette N, **Charrel RN**, Laamrani-Idrissi A, Nhammi H, Riyad M, Lemrani M. *Phlebotomus sergenti* in a Cutaneous Leishmaniasis Focus in Azilal Province (High Atlas, Morocco): Molecular Detection and Genotyping of *Leishmania tropica*, and Feeding Behavior. *PLoS Negl Trop Dis*. 2015 Mar 31;9(3):e0003687. doi: 10.1371/journal.pntd.0003687. eCollection 2015 Mar. PubMed PMID: 25826399. **EDENext331. COST TD1303**
  - Radoshitzky SR, Bào Y, Buchmeier MJ, **Charrel RN**, Clawson AN, Clegg CS, DeRisi JL, Emonet S, Gonzalez JP, Kuhn JH, Lukashevich IS, Peters CJ, Romanowski V, Salvato MS, Stenglein MD, de la Torre JC. Past, present, and future of arenavirus taxonomy. *Arch Virol*. 2015 May 3. [Epub ahead of print] PubMed PMID: 25935216. **EDENext#261. COST TD1303**
  - Alkan C, Allal-Ikhlef AB, Alwassouf S, Baklouti A, Piorkowski G, de Lamballerie X, Izri A, **Charrel RN**. Virus isolation, genetic characterization, and seroprevalence of Toscana virus in Algeria. *Clin Microbiol Infect*. 2015 Jul 30. **COST TD1303**
  - Alkan C, Zapata S, Bichaud L, Moureau G, Lemey P, Firth AE, Gritsun TS, Gould EA, de Lamballerie X, Depaquit J, **Charrel RN**. Ecuador Paraiso Escondido virus, a new flavivirus isolated from New World sandflies in Ecuador is the first representative of a novel clade in the genus *Flavivirus*. *J Virol*. 2015 Sep 9. pii: JVI.01543-15. [Epub ahead of print] PubMed PMID: 26355096. **COST TD1303**
  - Temmam S, Monteil-Bouchard S, Robert C, Pascalis H, Michelle C, Jardot P, **Charrel R**, Raoult D, Desnues C. Host-Associated Metagenomics: A Guide to Generating Infectious RNA Viromes. *PLoS One*. 2015 Oct 2;10(10):e0139810. doi:10.1371/journal.pone.0139810. eCollection 2015. PubMed PMID: 26431175. **COST TD1303**
  - Bichaud L, Dachraoui K, Alwassouf S, Alkan C, Mensi M, Piorkowski G, Sakhria S, Seston M, Fares W, de Lamballerie X, Zhioua E, **Charrel RN**. Isolation, full genomic characterisation and neutralisation-based human seroprevalence of Medjerda Valley virus, a novel sandfly-borne phlebovirus belonging to the Salehabad virus complex in northern

Tunisia. J Gen Virol. 2015 Dec 24. doi:10.1099/jgv.0.000389. [Epub ahead of print] PubMed PMID: 26704069. **EDENext443 / EVAg / COST TD1303**

- Baklouti A, Leparc Goffard I, Piorkowski G, Coutard B, Papageorgiou N, De Lamballerie X, **Charrel RN**. Complete Coding Sequences of Three Toscana Virus Strains Isolated from Sandflies in France. Genome Announc. 2016 Feb 11;4(1). pii:e01676-15. doi: 10.1128/genomeA.01676-15. PubMed PMID: 26868387. **EVAg / EDENext441 / COST.**
- Ricklin ME, García-Nicolás O, Brechbühl D, Python S, Zumkehr B, Nougairede A, **Charrel RN**, Posthaus H, Oevermann A, Summerfield A. Vector-free transmission and persistence of Japanese encephalitis virus in pigs. Nat Commun. 2016 Feb 23;7:10832. doi: 10.1038/ncomms10832. PubMed PMID: 26902924. **EVAg / PREDEMICS / COST**
- Alkan C, Kasap OE, Alten B, de Lamballerie X, **Charrel RN**. Sandfly-borne phlebovirus isolations from Turkey: new insight into the Sandfly Fever Sicilian and Sandfly Fever Naples species, *PLoS Negl Trop Dis*, in press. **EVAg / EDENext448 / COST**
- **Charrel RN**, Leparc-Goffart I, Pas S, de Lamballerie X, Koopmans M & Reusken C. State of knowledge on Zika virus for an adequate laboratory response [Submitted]. Bull World Health Organ E-pub: 10 Feb 2016. doi: <http://dx.doi.org/10.2471/BLT.16.171207>. **EVAg / PREDEMICS / EDENext444 / COST**

Two papers on the use of NGS for the epidemiology and the surveillance of bacterial zoonotic pathogens in wildlife

- [Razzauti M, Galan M, Bernard M, Maman S, Klopp C, Charbonnel N, et al. \(2015\) A Comparison between Transcriptome Sequencing and 16S Metagenomics for Detection of Bacterial Pathogens in Wildlife. PLoS Negl Trop Dis 9\(8\): e0003929. doi:10.1371/journal.pntd.0003929](#)
- [Galan et al. 16S rRNA amplicon sequencing for epidemiological surveys of bacteria in wildlife: the importance of cleaning post-sequencing data before estimating positivity, prevalence and co-infection.](#) deposited on the pre-print server bioRxiv and under review in mSystems
- Differential ecological traits of two *Phlebotomus sergenti* mitochondrial lineages in southwestern Europe and their epidemiological implications. Merino-Espinosa G, Corpas-López V, Callejón-Fernández R, Porcel-Rodríguez L, Díaz-Sáez V, Gállego M, Ballart C, Molina R, Jiménez I, Morillas-Márquez F, Martín-Sánchez J. Trop Med Int Health. 2016 Feb 26. doi: 10.1111/tmi.12686. [Epub ahead of print]

