

# Publications 2018

## Equipe (J. van Meerwijk): Tolérance Immunitaire dépendante des lymphocytes T

**Santamaria J, Darrigues J, van Meerwijk JPM, Romagnoli P.** *Antigen-presenting cells and T-lymphocytes homing to the thymus shape T cell development.* **Immunol Lett.** 2018 Dec;204:9-15. doi: 10.1016/j.imlet.2018.10.003. Epub 2018 Oct 9. Review.

**Darrigues J, van Meerwijk JPM, Romagnoli P.** *Age-Dependent Changes in Regulatory T Lymphocyte Development and Function: A Mini-Review.* **Gerontology.** 2018;64(1):28-35. doi: 10.1159/000478044. Epub 2017 Jul 14. Review.

**Apert C, Romagnoli P, van Meerwijk JPM.** *IL-2 and IL-15 dependent thymic development of Foxp3-expressing regulatory T lymphocytes.* **Protein Cell.** 2018 Apr;9(4):322-332. doi: 10.1007/s13238-017-0425-3. Epub 2017 May 24. Review.

Araujo Furlan CL, Tosello Boari J, Rodriguez C, Canale FP, Fiocca Vernengo F, Boccardo S, Beccaria CG, **Adoue V, Joffre O**, Gruppi A, Montes CL, Acosta Rodriguez EV. *Limited Foxp3<sup>+</sup> Regulatory T Cells Response During Acute Trypanosoma cruzi Infection Is Required to Allow the Emergence of Robust Parasite-Specific CD8<sup>+</sup> T Cell Immunity.* **Front Immunol.** 2018 Nov 5;9:2555. doi: 10.3389/fimmu.2018.02555.

## Equipe (M. Diaz Munoz): Régulation post-transcriptionnelle de la réponse immune adaptative et de la tumorigenèse

Philipp Trulley, Goda Snieckute, Dorte Bekker-Jensen, Manoj B. Menon, Robert Freund, Alexey Kotlyarov, Jesper V. Olsen, **Manuel D. Diaz-Munoz**, Martin Turner, Simon Bekker-Jensen, Matthias Gaestel, Christopher Tiedje. *Alternative translation initiation generates a functionally distinct isoform of the stress-activated kinase MK2.* **BioRxiv.** September 29, 2018. doi: 10.1101/429696

**Díaz-Muñoz MD**, Turner M. *Uncovering the Role of RNA-Binding Proteins in Gene Expression in the Immune System.* **Front Immunol.** 2018 May 23;9:1094. doi: 10.3389/fimmu.2018.01094. eCollection 2018. Review. PubMed PMID: 29875770; PubMed Central PMCID: PMC5974052.

Mendoza P, Martínez-Martín N, Bovolenta ER, Reyes-Garau D, Hernansanz-Agustín P, Delgado P, **Díaz-Muñoz MD**, Oeste CL, Fernández-Pisonero I, Castellano E, Martínez-Ruiz A, Alonso-Lopez D, Santos E, Bustelo XR, Kurosaki T, Alarcón B. *R-Ras2 is required for germinal center formation to aid B cells during energetically demanding processes.* **Sci Signal.** 2018 May 29;11(532). pii: eaal1506. doi: 10.1126/scisignal.aal1506. PubMed PMID: 29844052.

Monzón-Casanova E, Screen M, **Díaz-Muñoz MD**, Coulson RMR, Bell SE, Lamers G, Solimena M, Smith CWJ, Turner M. *The RNA-binding protein PTBP1 is necessary for*

*B cell selection in germinal centers.* **Nat Immunol.** 2018 Mar;19(3):267-278. doi: 10.1038/s41590-017-0035-5. Epub 2018 Jan 22. PubMed PMID: 29358707; PubMed Central PMCID: PMC5842895.

Turner M, **Díaz-Muñoz MD.** *RNA-binding proteins control gene expression and cell fate in the immune system.* **Nat Immunol.** 2018 Feb;19(2):120-129. doi: 10.1038/s41590-017-0028-4. Epub 2018 Jan 18. Review. PubMed PMID: 29348497.

### **Equipe (JC Guéry): Différences liées au sexe dans l'immunité : mécanismes et physiopathologie**

Garnier L, **Laffont S**, Lélou K, Yogev N, Waisman A, **Guéry JC.** *Estrogen Signaling in Bystander Foxp3<sup>neg</sup> CD4<sup>+</sup> T Cells Suppresses Cognate Th17 Differentiation in Trans and Protects from Central Nervous System Autoimmunity.* **J Immunol.** 2018 Dec 1;201(11):3218-3228. doi: 10.4049/jimmunol.1800417. Epub 2018 Oct 24.

**Souyris M, Mejía JE,** Chaumeil J, **Guéry JC.** *Female predisposition to TLR7-driven autoimmunity: gene dosage and the escape from X chromosome inactivation* **Semin Immunopathol.** 2018 Oct 1. doi: 10.1007/s00281-018-0712-y. [Epub ahead of print] Review.

**Laffont S, Blanquart E, Guéry JC.** *Sex-bias in allergic asthma: androgens and group 2 innate lymphoid cells* **Med Sci (Paris).** 2018 Mar;34(3):247-252. doi: 10.1051/medsci/20183403013. Epub 2018 Mar 16. Review. French.

**Souyris M, Cenac C, Azar P,** Daviaud D, Canivet A, Grunenwald S, Pienkowski C, Chaumeil J, **Mejía JE, Guéry JC.** *TLR7 escapes X chromosome inactivation in immune cells.* **Sci Immunol.** 2018 Jan 26;3(19). pii: eaap8855. doi: 10.1126/sciimmunol.aap8855.

**Rosa N,** Triffaux E, Robert V, Mars M, Klein M, Bouchaud G, Canivet A, Magnan A, **Guéry JC, Pelletier L, Savignac M.** *The  $\beta$  and  $\alpha 2\delta$  auxiliary subunits of voltage-gated calcium channel 1 ( $Ca_v1$ ) are required for T<sub>H</sub>2 lymphocyte function and acute allergic airway inflammation.* **J Allergy Clin Immunol.** 2018 Sep;142(3):892-903.e8. doi: 10.1016/j.jaci.2017.09.045. Epub 2017 Nov 10.

**Pelletier L, Savignac M.** *involvement of ion channels in allergy.* **Curr Opin Immunol.** 2018 Jun;52:60-67. doi: 10.1016/j.coi.2018.04.006. Epub 2018 Apr 25. Review.

Basso L, **Garnier L,** Bessac A, Boué J, Blanpied C, Cenac N, **Laffont S,** Dietrich G. *T-lymphocyte-derived enkephalins reduce T<sub>H</sub>1/T<sub>H</sub>17 colitis and associated pain in mice.* **J Gastroenterol.** 2018 Feb;53(2):215-226. doi: 10.1007/s00535-017-1341-2. Epub 2017 Apr 19.

## **Equipe (N Fazilleau / S Guerder): Cellules présentatrices de l'Antigène et Réponses T CD4**

Bernard I, Sacquin A, Kassem S, Benamar M, Colacios C, **Gador M, Pérals C, Fazilleau N**, Saoudi A. *A Natural Variant of the Signaling Molecule Vav1 Enhances Susceptibility to Myasthenia Gravis and Influences the T Cell Receptor Repertoire.* **Front Immunol.** 2018 Oct 25;9:2399. doi: 10.3389/fimmu.2018.02399. eCollection 2018.

**Fazilleau N, Aloulou M.** *Several Follicular Regulatory T Cell Subsets With Distinct Phenotype and Function Emerge During Germinal Center Reactions.* **Front Immunol.** 2018 Aug 13;9:1792. doi: 10.3389/fimmu.2018.01792. eCollection 2018. Review.

Nguyen XH, Dauvilliers Y, Quériault C, **Perals C**, Romieu-Mourez R, Paulet PE, Bernard-Valnet R, **Fazilleau N**, Liblau R. *Circulating follicular helper T cells exhibit reduced ICOS expression and impaired function in narcolepsy type 1 patients.* **J Autoimmun.** 2018 Nov;94:134-142. doi: 10.1016/j.jaut.2018.07.021. Epub 2018 Aug 6.

**Guerder S, Hassel C**, Carrier A. *Thymus-specific serine protease, a protease that shapes the CD4 T cell repertoire.* **Immunogenetics.** 2018 Sep 17. doi: 10.1007/s00251-018-1078-y. [Epub ahead of print] Review.

## **Equipe (R Liblau / A Saoudi): Maladies Inflammatoires du Système Nerveux Central : Mécanismes et Thérapies**

Montalban X, Gold R, Thompson AJ, Otero-Romero S, Amato MP, Chandraratna D, Clanet M, Comi G, Derfuss T, Fazekas F, Hartung HP, Havrdova E, Hemmer B, Kappos L, **Liblau R**, Lubetzki C, Marcus E, Miller DH, Olsson T, Pilling S, Selmaj K, Siva A, Sorensen PS, Sormani MP, Thalheim C, Wiendl H, Zipp F. *ECTRIMS/EAN Guideline on the pharmacological treatment of people with multiple sclerosis.* **Mult Scler.** 2018 Feb;24(2):96-120. doi: 10.1177/1352458517751049. Epub 2018 Jan 20.

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Bernard I, Sacquin A, **Kassem S, Benamar M,** Colacios C, Gador M, Pérals C, Fazilleau N, **Saoudi A.** *A Natural Variant of the Signaling Molecule Vav1 Enhances Susceptibility to Myasthenia Gravis and Influences the T Cell Receptor Repertoire.* **Front Immunol.** 2018 Oct 25;9:2399. doi: 10.3389/fimmu.2018.02399. eCollection 2018.

Secher T, Maillet I, Mackowiak C, Le Bérichel J, Philippeau A, Panek C, Boury M, Oswald E, **Saoudi A,** Erard F, Le Bert M, Quesniaux V, Couturier-Maillard A, Ryffel B. *The probiotic strain Escherichia coli Nissle 1917 prevents papain-induced respiratory barrier injury and severe allergic inflammation in mice.* **Sci Rep.** 2018 Jul 26;8(1):11245. doi: 10.1038/s41598-018-29689-9.

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**Bernard-Valnet R, Pignolet B,** Biotti D, Ciron J, Lafontan JF, Dumas H, Bonneville F, **Brassat D.** *Unexpected high multiple sclerosis activity after switching from fingolimod to alemtuzumab* **Mult Scler Relat Disord.** 2018 Oct;25:216-218. doi: 10.1016/j.msard.2018.08.006. Epub 2018 Aug 7.

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Durozard P, Maarouf A, Boutiere C, Ruet A, Brochet B, Vukusic S, Carra-Dalliere C, Labauge P, Mathey G, Debouverie M, Papeix C, Maillart E, Lubetzki C, Bensa C, Gout O, Giannesini C, Stankoff B, Ciron J, **Brassat D**, Pelletier J, Rico Lamy A, Audoin B; SFSEP and OFSEP groups. *Efficacy of rituximab in refractory RRMS*. **Mult Scler**. 2018 May 1:1352458518772748. doi: 10.1177/1352458518772748. [Epub ahead of print]

Tugues S, Amorim A, Spath S, **Martin-Blondel G**, Schreiner B, De Feo D, Lutz M, Guscetti F, Apostolova P, Haftmann C, Hasselblatt P, Núñez NG, Hottiger MO, van den Broek M, Manz MG, Zeiser R, Becher B. *Graft-versus-host disease, but not graft-versus-leukemia immunity, is mediated by GM-CSF-licensed myeloid cells*. **Sci Transl Med**. 2018 Nov 28;10(469). pii: eaat8410. doi: 10.1126/scitranslmed.aat8410.

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### **Equipe (J Izopet): Infection virale : persistance, réponse de l'hôte et physiopathologie**

**C. Pasquier**, G. Joguet, **C. Mengelle**, **S. Chapuy-Regaud**, L. Pavili, N. Prisant, **J. Izopet**, L. Bujan, JM. Mansuy. *Kinetics of anti-ZIKV antibodies after zika infection using two commercial enzyme-linked immunoassays*. **Diagn Microbiol Infect Dis** 2018;90:26-30.

C. Montpellier, C. Wychowski, IM. Sayed, JC. Meunier, JM. Saliou, M. Ankavay, A. Bull, **F. Abravanel**, F. Helle, E. Brochot, H. Drobecq, R. Farhat, CM. Aliouat, **J. Izopet**, P. Meuleman, A. Goffard, J. Dubuisson, L. Cocquerel. *Hepatitis E Virus lifecycle and identification of 3 forms of the ORF2 capsid protein*. **Gastroenterology** 2018;154:211-223.

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**S. Raymond**, **F. Nicot**, **R. Carcenac**, **C. Lefèbvre**, **N. Jeanne**, **K. Sauné**, **P. Delobel**, **J. Izopet**. *HIV-1 genotypic resistance testing using the Vela automated next generation sequencing platform*. **J Antimicrob Chemother** 2018;73:1152-1157.

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**F. Abravanel, S. Lhomme, S. Chapuy-Regaud, JM. Mansuy, J. Boineau, K. Sauné, J. Izopet.** *A fully automated system using transcription-mediated amplification for the molecular diagnosis of HEV in blood and stools.* **J Clin Virol** 2018;105:109-111.

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