

Experimental platform in vivo for autoimmune and metabolic diseases

PRESENTATION

This platform, titled "Experimental Platform In Vivo for Autoimmune and Metabolic Diseases," was established to provide project-based services to researchers. If interested, please contact directly Emmanuelle Waeckel-Enée and complete the online form below.

You will be asked to give detailed information about your project, including technical, logistical, and feasibility considerations, and requested deadlines.

CONTACT

Engineer: Emmanuelle Waeckel-Enée
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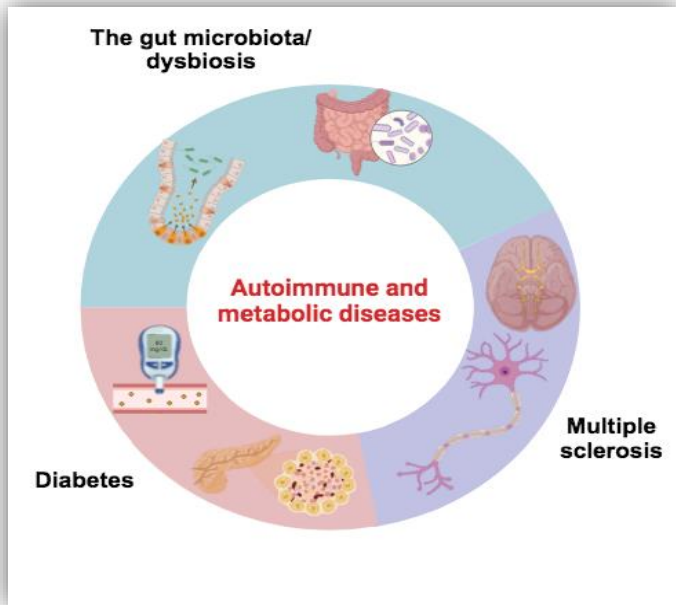
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ONLINE FORM

https://docs.google.com/forms/d/e/1FAIpQLSeYFaPFa_9hkSoOz5vf-pxs6tgln4OA_UEG_rmhlZr7lYVeFw/viewform?usp=header

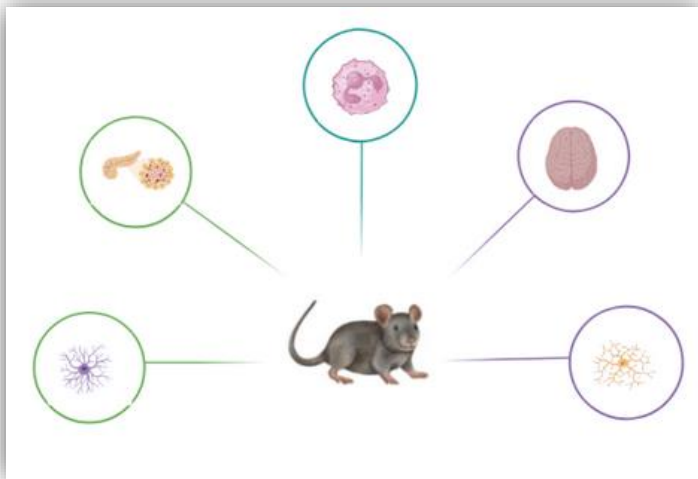
SERVICES OFFERED



1- In vivo phenotyping of preclinical models of autoimmune and metabolic diseases

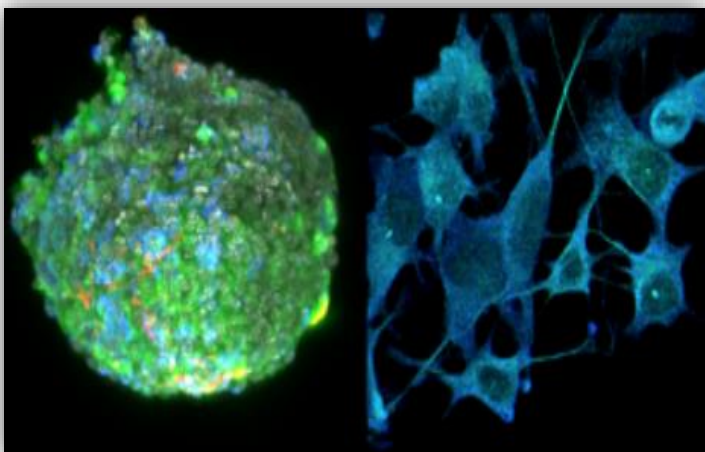
My current expertise is on:

- Monitoring of Type 1 (NOD) and Type 2 (diet-induced obese) diabetic mice (glycemia, glucose tolerance test...)
- Induction and scoring of mouse experimental autoimmune encephomyelitis (EAE)
- Adoptive transfer cell models and injections (ip, iv, im, subcutaneous, intrathecal...)



2- Isolation of specific tissues and cell types

- Tissue sampling (brain, spinal cord, bone marrow, lymph nodes, mammary glands, blood...)
- Isolation of pancreatic islets
- Tissue digestion and cell sorting



3- Follow-up of ex vivo/tissue analyses

- Cell Culture
- Molecular biology
- Immunohistochemistry and imaging
- Confocal microscopy, spinning disk
- Flow Cytometry

PUBLICATIONS

-Cathelicidin antimicrobial peptide expression in neutrophils and neurons antagonistically modulates neuroinflammation.

Verma SC*, **Waeckel-Enée E***, Manasse K, Rebhi F, Penc A, Romeo-Guitart D, Bui Thi C, Titeux M, Oury F, Fillatreau S, Liblau R, Diana J.

*: co-authors J Clin Invest. 2024.

-ERAP1-dependent extreme antigen processing efficacy can govern MHC class I expression hierarchy.

Jacqueline Leib*, **Emmanuelle Waeckel-Enée***, Sylvie Fabrega and memberst, Nadia Keelan*, Alice Senni*, François-Xavier Mauvais*†, Rebecca Deprez-Poulain, Barbara Bertocci*, Peter van Endert*.

*: co-authors Journal of immunology 2024

-Islet cell stress induced by insulin-degrading enzyme deficiency promotes regeneration and protection from autoimmune diabetes.

Zhu S, **Waeckel-Énée E**, Oshima M, Moser A, Bessard MA, Gdoura A, Roger K, Mode N, Lipecka J, Yilmaz A, Bertocci B, Diana J, Saintpierre B, Guerrera IC, Scharfmann R, Francesconi S, Mauvais FX, van Endert P.

iScience. 2024.

-Insulin-degrading enzyme regulates insulin-directed cellular autoimmunity in murine type 1 diabetes.

Bessard, Marie-Andrée*; Moser, Anna*; **Waeckel-Énée, Emmanuelle**; Lindo, Vivian; Gdoura, Abdelaziz; You, Sylvaine; Wong, F. Susan; Greer, Fiona; van Endert, Peter.

*: co-authors Frontiers in Immunology, 2024

-Mast cell-mediated inflammation relies on insulin-regulated aminopeptidase controlling cytokine export from the Golgi.

Weimershaus, Mirjana; Carvalho, Caroline; Rignault, Rachel; **Waeckel-Enee, Emmanuelle**; Dussiot, Michael; van Endert, Peter; Maciel, Thiago Trovati; Hermine, Olivier.

The Journal of Allergy and Clinical Immunology, June 2023

-Intestinal Cathelicidin Antimicrobial Peptide Shapes a Protective Neonatal Gut Microbiota Against Pancreatic Autoimmunity.

Liang W, **Waeckel-Enée E**, Andre-Vallee C, Falcone M, Sun J, Diana J.

Gastroenterology. 2022.

-Gut Microbiota-Stimulated Innate Lymphoid Cells Support β -Defensin 14 Expression in Pancreatic Endocrine Cells, Preventing Autoimmune Diabetes.

Miani M, Le Naour J, **Waeckel-Enée E**, Verma SC, Straube M, Emond P, Ryffel B, van Endert P, Sokol H, Diana J.

Cell Metabolism. 2018.