

MOLECULAR NEURO-IMMUNO-ENDOCRINOLOGY

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Group Description

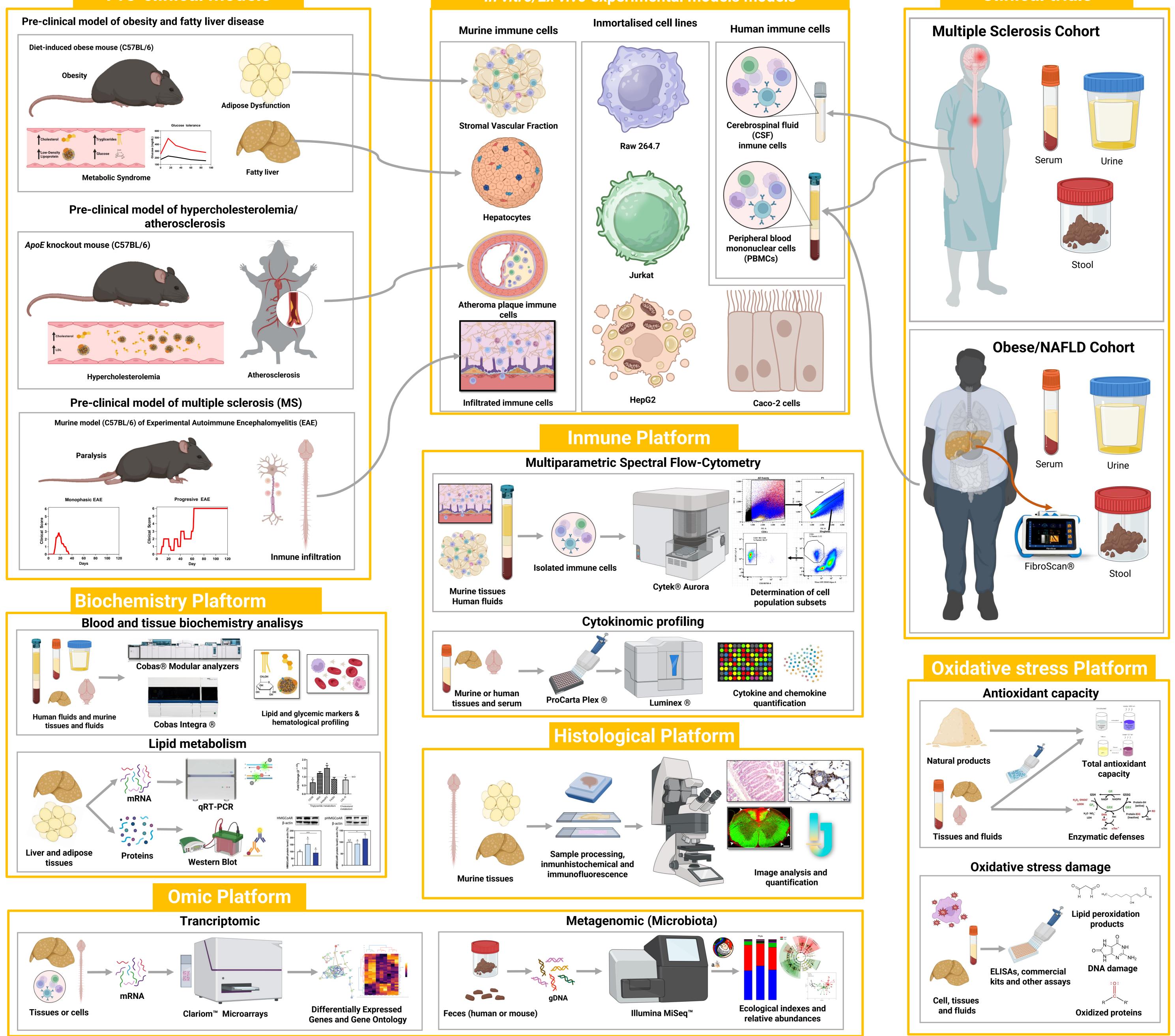
Evaluation of the effects of interventions based on nutritional and pharmacological combinations as prevention strategies associated to systemic and local inflammatory response as well as oxidative stress in the context of acute neuroinflammation, and chronic inflammation related to metabolic diseases. The scientific goals of the group are a) evaluation of immunoendocrine actions of plant bioactive peptides and other natural compounds in the main components of metabolic syndrome, obesity and fatty liver disease as a basis for the development of functional foods; b) Analysis of the immunomodulatory and **neuroprotective** role of melatonin in **multiple sclerosis** as a basis for the development of **anti-inflammatory therapies**.

Services

Pre-clinical models

In vitro/Ex vivo experimental models models

Clinical trials



Publications

- 1. Lupine protein hydrolysates decrease the inflammatory response and improve the oxidative status in human peripheral lymphocytes. Food Res Int. 2019 Dec;126:108585.
- 2. Safety and Efficacy of a Beverage Containing Lupine Protein Hydrolysates on the Immune, Oxidative and Lipid Status in Healthy Subjects: An Intervention Study (the Lupine-1 Trial). *Mol Nutr Food Res. 2021* Jul;65(14):e2100139.
- 3. Lupinus angustifolius Protein Hydrolysates Reduce Abdominal Adiposity and Ameliorate Metabolic Associated Fatty Liver Disease (MAFLD) in Western Diet Fed-ApoE-/- Mice. Antioxidants (Basel). 2021 Jul 29;10(8):1222.
- 4. Bioactive Peptides from Lupin (Lupinus angustifolius) Prevent the Early Stages of Atherosclerosis in Western Diet-Fed ApoE-/- Mice. J Agric Food Chem. 2022 Jul 13;70(27):8243-8253.
- 5. Pleiotropic biological effects of Lupinus spp. protein hydrolysates. Trends in Food Science & Technology Volume 133, March 2023, Pages 244-266.
- 6. Chemical and biological characterization of the DPP-IV inhibitory activity exerted by lupin (Lupinus angustifolius) peptides: From the bench to the bedside investigation. Food Chem. 2023 Nov 15;426:136458.

