

Catherine Bennetau-Pelissero, Ph.D.

Date of Birth: February 27, 1963

Affiliation:

U1215 Inserm Physiopathology of Neuronal Plasticity

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Academic History:

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| 1984 | Occidental Brittany University | Master degree of Marine Biology |
| 1985 | Bordeaux I University | Post graduate in Animal Biology option Marine Biology |
| 1988 | Bordeaux I University | PhD in Animal Biology |
| 1990 | Bordeaux I University | PhD in Physiology of the interactions and adaptations |
| 1998 | Bordeaux I University | Capacity as Research Director: Phytoestrogens as endocrine disruptors from food. |

Professional/Scientific Career:

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| 1990-1992 | Postdoctoral Fellow | Department of Biology and Biochemistry, Brunel University, Uxbridge Middlesex UB8 3PH UK |
| 1992-1993 | Assistant professor | IUT of Mont de Marsan Food Quality Management |
| 1993-2002 | Assistant professor | Bordeaux Sciences Agro, Animal Sciences |
| 2000-2010 | Head of research team | Micronutrients and Reproduction & Health Unit Bordeaux Sciences Agro |
| 2002-2016 | Professor | Bordeaux Sciences Agro, Animal Sciences and Human Nutrition & Health |
| 2000-2010 | Member of research team | Physiopathology of Declarative Memory, U1215 Inserm, University of Bordeaux |
| 2016- Present | Master Course animator | University of Bordeaux |

Domains of expertise

Fish reproductive endocrinology • Endocrine disruptors • Phytoestrogens & polyphenols • Cellular studies • Animal studies • Clinical Pharmacokinetics • Human Nutrition.

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| 1996 | Expert for | The Public Hygiene Superior Council of France |
| 2003-2005 | Expert for | The French Agency for Food and Health Safety (AFSSA) |
| 2010 – Present | Expert for | The French Food Safety Agency (Anses) |
| 2015 | Expert for | The European Food Safety Authority (Efsa) |
| 2006 – Present | Member of | Scientific Council of the French Program on endocrine disruptors. |
| 2010 – Present | Member of | The Scientific Council of the French Society of Nutrition |
| 2011 – Present | Member of | The Administrative Council of the French Society of Nutrition |

Research Area/ Interests:

The scientific interest of my team deals with exploring the phytoestrogens effects in animals and in humans. First discovered in fish (Sturgeon and then Trout) their estrogenic effects were then studied in rodents and in humans. The studies go from organic chemistry to clinical approaches via cellular tests, animal tests of activities, animal and human exposure measurements, and phytoestrogens bioavailability in animal models and in Humans. Chronologically the effects of phytoestrogens were studied on vitellogenesis and reproductive parameters in Sturgeon and in Trout. Then the positive effects of phytoestrogens were explored in both rodents and Humans on bone health. The negative effects were explored on breast cancer cell lines. Nowadays, the positive effects of estrogens and phytoestrogens are studied on aging memory in rodents as model for aging humans.

Selected publication (Original article, 62; Chapter, 11; Book, 1) -* corresponding author

1. **Pelissero C***, Le Menn F, Kaushik S. **1991**. Estrogenic effect of dietary soya bean meal on vitellogenesis in cultured Siberian sturgeon *Acipenser baeri*. *Gen. Comp. Endocrinol.* **83**: 447-457.
2. **Pelissero C***, Flouriot G, Foucher JL, Bennetau B, Dunoguès J, Le Gac F, Sumpter JP. **1993**. Vitellogenin synthesis in hepatocyte culture, an *in vitro* test for the estrogenic potency of chemicals. *J. Steroid. Biochem. Molec. Biol.*, **44**: 263-272.

3. Le Houérou C, **Bennetau-Pelissero C***, Lamothe V, Le Menn F, Babin P, Bennetau B. **2000**. Synthesis of novel hapten-protein conjugates for production of highly specific antibodies to formononetin, daidzein and genistein. *Tetrahedron* **56**: 295-301.
4. Picherit C, Coxam V*, **Bennetau-Pelissero C**, Kati-Coulibaly S, Davicco MJ, Lebecque P, Barlet JP. **2000**. Daidzein is more efficient than genistein in preventing ovariectomy-induced bone loss in rats. *J Nutr.* **130(7)**: 1675-1681.
5. Picherit C, Coxam V*, **Bennetau-Pelissero C**, Kati-Coulibaly S, Davicco P, Lebecque P, Barlet JP. **2000**. Genistein and daidzein effects on ovariectomy-induced bone loss in rats. *J. Nutr* **130**: 1675-1681.
6. **Bennetau-Pelissero C***, Davail - Cuisset B, Bennetau B, Corraze G, Le Menn F, Breton B, Helou C, Kaushik SJ. **2001**. Effect of genistein enriched diets on the endocrine process of gametogenesis and on reproduction efficiency of the rainbow trout *Oncorhynchus mykiss*. *Gen. Comp. Endocrinol.* **121(2)**: 173-187.
7. Mathey J., Lamothe V., Coxam V., Potier M., Sauvart P., **Bennetau-Pelissero C***. **2006**. Concentrations of isoflavones in plasma and urine of post-menopausal women chronically ingesting high quantities of soy isoflavones. *J. Pharm. Biomed. Anal.* **41**: 957-965.
Gontier-Latonnelle K, Cravedi J-P, Laurentie M, Lamothe V, Le Menn F, **Bennetau-Pelissero C***. **2006**. Disposition of genistein in rainbow trout (*Oncorhynchus mykiss*) and Siberian sturgeon (*Acipenser baeri*). *Gen Comp Endocrinol.* **150**: 298-308.
8. Vergne S, **Bennetau-Pelissero C**, Lamothe V, Chantre P, Potier M, Asselineau J, Durand M, Garreau JJ, Moore N, Sauvart P*. **2008**. Higher bioavailability of isoflavones after a single ingestion of a soya-based supplement than a soya-based food in young healthy males. *Brit. J. Nutr.* **99**: 333-344.
9. Mathey J, Lamothe V, **Bennetau-Pelissero C**, Davicco MJ, Tondu F, Bornet FRJ, Paineau D, La Droitte P, Coxam V*. **2008**. Improvement of Bone-Sparing Effect of Soy Isoflavones by Pre- and Probiotics in Postmenopausal women. *Clinical Medicine: Women's Health.* **1**: 15-23.
10. Carreau C, Flouriot G, **Bennetau-Pelissero C**, Potier M*. **2009**. Respective contribution exerted by af-1 and af-2 transactivation functions in estrogen receptor α induced transcriptional activity by isoflavones and equol in breast cancer cells. *Mol. Nutr. Food Res.* **53(5)**: 652-658.

11. Vergne S, Sauvant P, Lamothe V, Chantre P, Asselineau J, Perez P, Durand M, Moore N, **Bennetau-Pelissero C***. 2009. Influence of ethnic origin (Asian vs Caucasian), and background diet on the bioavailability of isoflavones. *Brit. J. Nutr.* **102(11)**: 1642-1653.
12. Shinkaruk S, Carreau C, Flouriot G, **Bennetau-Pelissero C**, Potier M*. 2010. Comparative Effects of *R*- and *S*-equol and Implication of Transactivation Functions (AF-1 and AF-2) in Estrogen Receptor-Induced Transcriptional Activity. *Nutrients* **2(3)**: 340-354.
13. Shinkaruk S, Durand M, Lamothe V, Carpaye A, Martinet A, Chantre P, Vergne S, Nogues X, Moore N, **Bennetau-Pelissero C*** 2012. Bioavailability of glycitein relatively to other soy isoflavones in healthy young Caucasian men. *Food Chemistry*. **135**: 1104–1111.
14. Shinkaruk S, Pinot E, Lamothe V, SchmitterJ-M, Baguenard L, Bennetau B, **Bennetau – Pelissero C***. 2014. Design and Validation of a Novel Immunological Test for Enterolactone. *Talanta* **119** 116–124.
15. Constans J, **Bennetau-Pelissero C**, Martin J-F, Rock E, Mazur A, Bedel A, Morand C, Bérard AM*. 2015. Marked antioxidant effect of orange juice intake and its phytochemicals in a preliminary randomized cross-over trial on mild hypercholesterolemic men. *Clin Nutrition*. **34(6)**:1093-100.
16. Al Abed AS*, Sellami A, Oulé M, Brayda-Bruno L, Lamothe V, Noguès X, Potier M, **Bennetau-Pelissero C**, Marighetto A. 2016. Estradiol enhances retention but not organization of hippocampus-dependent memory in intact male mice. *Psychoneuroendocrinology* **69**:77–89.