Bordeaux Sciences Agro
Department Food and Feed

Guillaume Durand, Ph.D., Agricultural Engineer

Date of Birth: July 15, 1984

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Academic History:

2007	Agricultural engineer	Agrocampus Ouest, Rennes, France
2011	PhD	Department of Life Sciences University François Rabelais, Tours, France

Professional/Scientific Career:

2011-2012	Postdoctoral Fellow	Department of reproductive physiology, INRA of Tours, France
2012-2016	Postdoctoral Fellow	Department of Artificial and Natural regulation of RNA (ARNA) Inserm of Bordeaux, France
2016-present	Postdoctoral Fellow	Department Food and Feed Bordeaux Sciences Agro, Bordeaux, France (GIP-TRIAD)

Research Area/ Interests:

I am currently interested in developing aptamer-based analytical method for the detection of meat quality biomarkers. Aptamers are single stranded oligonucleotides that have the ability to bind to a cognate target with a high affinity and specificity thanks to their 3D shape. They are obtained through a process termed SELEX.

Publications * equally contribution

Durand G, Dausse E, Goux E, Fiore E, Peyrin E, Ravelet C, Toulmé JJ. A combinatorial approach to the repertoire of RNA kissing motifs; towards multiplex detection by switching hairpin aptamers.
Nucleic Acids Res. 2016. May 19;44(9):4450-9.

Durand G, Lisi S, Ravelet C, Dausse E, Peyrin E, Toulmé JJ. Riboswitches based on kissing complexes for the detection of small ligands.
Angew Chem Int Ed Engl. 2014 Jul 1;53(27):6942-5.

Durand G*, Heitzler D*, Gallay N, Rizk A, Ahn S, Kim J, Violin JD, Dupuy L, Gauthier C, Piketty V, Crépieux P, Poupon A, Clément F, Fages F, Lefkowitz RJ, Reiter E. Competing G protein-coupled receptor kinases balance G protein and β-arrestin signaling.
Mol Syst Biol. 2012 Jun 26;8:590.

Durand G*, Tranchant T*, Gauthier C, Crépieux P, Ulloa-Aguirre A, Royère D, Reiter E. Preferential β-arrestin signalling at low receptor density revealed by functional characterization of the human FSH receptor A189 V mutation.
Mol Cell Endocrinol. 2011 Jan 1;331(1):109-18.

Chovelon B, **Durand G**, Dausse E, Toulmé JJ, Faure P, Peyrin E, Ravelet C. ELAKCA: Enzyme-Linked Aptamer Kissing Complex Assay as a Small Molecule Sensing Platform.
Anal Chem. 2016 Mar 1;88(5):2570-5.

Takeuchi Y, Endo M, Suzuki Y, Hidaka K, **Durand G**, Dausse E, Toulmé JJ, Sugiyama H. Single-molecule observations of RNA-RNA kissing interactions in a DNA nanostructure.
Biomater Sci. 2016 Jan;4(1):130-5.

Goux E, Lisi S, Ravelet C, **Durand G**, Fiore E, Dausse E, Toulmé JJ, Peyrin E. An improved design of the kissing complex-based aptasensor for the detection of adenosine.
Anal Bioanal Chem. 2015 Aug;407(21):6515-24.

Landomiel F, Gallay N, Jégot G, Tranchant T, **Durand G**, Bourquard T, Crépieux P, Poupon A, Reiter E. Biased signalling in follicle stimulating hormone action.
Mol Cell Endocrinol. 2014 Jan 25;382(1):452-9.

Casas-González P, Scaglia HE, Pérez-Solís MA, **Durand G**, Scaglia J, Zariñán T, Dias JA, Reiter E, Ulloa-Aguirre A. Normal testicular function without detectable follicle-stimulating hormone. A novel mutation in the follicle-stimulating hormone receptor gene leading to apparent constitutive activity and impaired agonist-induced desensitization and internalization.
Mol Cell Endocrinol. 2012 Nov 25;364(1-2):71-82.

Wehbi V, Decourtye J, Piketty V, **Durand G**, Reiter E, Maurel MC. Selective modulation of follicle-stimulating hormone signaling pathways with enhancing equine chorionic gonadotropin/antibody immune complexes.
Endocrinology. 2010 Jun;151(6):2788-99.

Wehbi V, Tranchant T, **Durand G**, Musnier A, Decourtye J, Piketty V, Butnev VY, Bousfield GR, Crépieux P, Maurel MC, Reiter E. Partially deglycosylated equine LH preferentially activates beta-arrestin-dependent signaling at the follicle-stimulating hormone receptor.
Mol Endocrinol. 2010 Mar;24(3):561-73.

Dupuy L, Gauthier C, **Durand G**, Musnier A, Heitzler D, Herledan A, Sakanyan V, Crépieux P, Reiter E. A highly sensitive near-infrared fluorescent detection method to analyze signalling pathways by reverse-phase protein array.
Proteomics. 2009 Dec;9(24):5446-54.

Musnier A, Heitzler D, Boulo T, Tesseraud S, **Durand G**, Lécureuil C, Guillou H, Poupon A, Reiter E, Crépieux P. Developmental regulation of p70 S6 kinase by a G protein-coupled receptor dynamically modelized in primary cells.
Cell Mol Life Sci. 2009 Nov;66(21):3487-503.