

## Fanny GARLAN

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### GARLAN Fanny

French nationality

Born 19th March, 1988 in Ankara (Turkey)

E-mail: fanny.garlan<at>gmail.com

Linkedin

**PhD student at Paris Descartes, Translational Research and Microfluidics team - ESPCI ParisTech Engineer**

### EXPERIENCE

#### ***Since Sept 2013***

PhD student at Paris Descartes, Lab.: Molecular Bases of Response to Xenobiotics, Pr Pierre Laurent-Puig; Team: Translational Research and Microfluidics, Dr Valérie Taly (supervisor). Doctoral school Frontières du Vivant ED 474.

***Digital PCR in microdroplets to analyze circulating tumor DNA as part of personalized follow-up of patients suffering from colorectal cancer.***

#### ***Feb-Jul 2013***

MSc 6 months internship, French Alternative Energies and Atomic Energy Commission (CEA), Institute of Biomedical Imaging (I<sup>2</sup>BM), Molecular Imaging Research Center (MIRCEn), Fontenay aux Roses, 92, France, <http://www-dsv.cea.fr/MIRCEn>

***Modelization of Alzheimer Disease in rodent: new approach using induction of Tau expression in the retina by intraocular injection of an AAV vector, follow-up of tau aggregation and consequences on axonal transport.*** Small animal surgery, immunohistochemistry, MRI.

#### ***May-July 2012***

Research Project at the **University of Oxford, Department of Pharmacology**. **Development of clinically safe small molecules** for treatment of bipolar disorder as an alternative to lithium. Technique: RT-PCR, enzymatic assay, ELISA.

#### ***July-December 2011***

Internship at NONY, **Industrial Property Attorney** (Paris), Patents engineering. Patents' Writing, study of reports researches and answers to national offices, exploitation's freedom bases.

#### ***July 2009***

Internship at TUNZINI (French Company of **Heat Ventilation Air Conditioning engineering**). Assessing ventilation systems

figures.

### **July 2008**

**Practical nurse** at André Mignot hospital (Le Chesnay, France, 78). Help to patients (washing, eating), human relations, medicines distribution.

### **July-August 2006/7**

**Hospital worker** at André Mignot hospital (Le Chesnay, France, 78). Patients' assistance, hygiene maintenance.

## **EDUCATION**

### **2012-2013**

MSc student at **Université Paris Descartes, BME Master MCB track**. Immunology and genetic associated to current research on **molecular therapy**: viral **vectors** using AV, AAV, Lenti/Retroviruses; **Cellular therapy**: **regenerative medicine and cell engineering**, induced Pluripotent Stem cells.

### **2009-2012**

Student at **ESPCI ParisTech**, a graduate engineering school of physics, chemistry and biology, belonging to the top tier French graduate engineering schools, the ParisTech Group. 10 rue Vauquelin 75005 Paris ([www.espci.fr](http://www.espci.fr))

### **2007-2009**

University-level preparation in **physics and chemistry** at Polytech'Paris-Sud, a French engineering school belonging to University of Orsay.

### **2006-2007**

PCEM 1: 1st year of medicine school, University of Versailles (France, 78). Alternative 1st year of university level.

### **2005-2006**

French scientific baccalauréat, secondary school leaving certificate, option Physics and Chemistry, awarded with honours.

## **LANGUAGES**

French: Mother tongue

English: Upper intermediate skills

German: Intermediate skills

## **EXTRACURRICULAR ACTIVITIES**

First Aid Diploma (April 2004)

Sports: swimming (3 years), hip-hop dance (7 years), cardio-training (4 years), skiing (16 years).

Interests: reading (Tsiolkas, Houellebecq, Reza, Gavalda, Pamuk).

Teaching: gave private tuition (mathematics, physics secondary school level, 2 hours/week, 1 year).

## **PUBLICATIONS AND COMMUNICATIONS**

*Papers in peer-reviewed journals (accepted or published)*

Multiplex Detection of Rare Mutations by Picoliter Droplet Based Digital PCR: Sensitivity and Specificity Considerations. Zonta E, Garlan F, Pécuchet N, Perez-Toralla K, Caen O, Milbury C, Didelot A, Fabre E, Blons H, Laurent-Puig P, Taly V. PLoS One. 2016 Jul 14;11(7):e0159094. doi: 10.1371/journal.pone.0159094. eCollection 2016.

A Study of Hypermethylated Circulating Tumor DNA as a Universal Colorectal Cancer Biomarker. Garrigou S, Perkins G, Garlan F, Normand C, Didelot A, Le Corre D, Peyvandi S, Mulot C, Niarra R, Aucouturier P, Chatellier G, Nizard P, Perez-Toralla K, Zonta E, Charpy C, Pujals A, Barau C, Bouché O, Emile JF, Pezet D, Bibeau F, Hutchison JB, Link DR, Zaanani A, Laurent-Puig P, Sobhani I, Taly V. Clin Chem. 2016 Aug;62(8):1129-39. doi: 10.1373/clinchem.2015.253609.

[Digital PCR compartmentalization I. Single-molecule detection of rare mutations]. Perez-Toralla K, Pekin D, Bartolo JF, Garlan F, Nizard P, Laurent-Puig P, Baret JC, Taly V. Med Sci (Paris). 2015 Jan;31(1):84-92. doi: 10.1051/medsci/20153101017. Review. French.

*Selected conferences*

**American Association for Cancer Research (AACR) 2016 meeting, April 2016, New Orleans, US.** Prognostic value of circulating tumor DNA in advanced colorectal cancer patients: quantification of hypermethylated or mutant sequences using picoliter-droplet based digital PCR. Garlan F, Laurent-Puig P, Siauve N, Didelot A, Perkins G, Blons H, Taieb J, Taly V, Zaanani A. Poster.

**Nano Bio Tech Montreux- November 17-19 2014 at Montreux- Switzerland.** Picoliter droplet-based digital PCR to quantify circulating DNA in plasma of metastatic colorectal cancer patients Oral Presentation.