

# JACQUES SERIZAY

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Churchill College, University of Cambridge, UK

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## Current position

**PhD student – University of Cambridge (UK)**

**Thesis: Tissue-specific chromatin organization in *C. elegans***

Julie Ahringer lab – Gurdon Institute / Department of Genetics

## Educational background

**Master's degree in Genetics – Ecole Normale Supérieure de Paris-Saclay**

Partnership with Paris Diderot (Paris VII) and with the Pasteur Institute

Graduated with highest honors.

Rank: 2/25. Grade: 16.75/20

First (UK) / *summa cum laude* (USA)

**Bachelor's degree in Biology and Health – Ecole Normale Supérieure de Paris-Saclay**

Partnership with Paris Sud Orsay

## Research experience

2016  
6 months

**Raphael Margueron Lab**  
**Institut Curie, France**

Project: *Functional role of BAP1 in transcription activation.C*

Expertise: ChIP-seq, SILAC & Mass spectrometry, Bioinformatics analysis, mammalian cell culture

2014 – 2015  
10 months

**Kathrin Plath Lab**  
**Department of Biological Chemistry, University of California Los Angeles, USA**

Project: *Xist 5'-located repeats and their role in Xist cloud formation* (personal project); *Importance of Xist repeats and their interacting proteins for the initiation of X Chromosome Inactivation* (shared project).

Expertise: Bioinformatics analysis, Optimization of RNA Antisense Purification (RAP-seq) and Nascent-RNA sequencing, DNA/RNA-FISH, design of RNA Interaction Assay, mammalian cell culture.

2014  
2 months

**Maite Huarte Lab**  
**Center for Applied Medical Research – University of Navarra, Spain**

Project: *Long intergenic non-coding RNA frequently amplified or deleted in cancerous cells play a role in cancer phenotypes.*

Expertise: Bioinformatics analysis, RT-qPCR, cancerous cell culture.

2013  
2 months

**Edith Heard Lab**  
**Institut Curie, France**

Project: *Study of random monoallelic expression of autosomal genes.*

# Entrepreneurial experience

2018 – 2019  
5 months

**EnterpriseTECH PhD+ programme**  
**Cambridge Judge Business School – University of Cambridge, UK**  
Project: Distributed ledger for genomic data (Leader)

## Awards & funding

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|------|--|
| 2018 | Winner of the Genomics Hackathon <b>&gt;sudo: sequence</b> (“Wildtype Challenge”).<br>Conceptualized and designed a platform to integrate patient’s genomic data in diagnostic process by non-expert clinicians. |
| 2016 | Medical Research Council Doctoral Training Grant<br>School of Biological Sciences PhD funding (3 ½ years)<br>Sackler Fund PhD funding (3 years)<br>Diploma of the Ecole Normale Supérieure de Paris-Saclay       |
| 2015 | Diploma of the Pasteur Institute for the course ‘Genome Analyses’  |
| 2012 | Ecole Normale Supérieure de Cachan: 4-year studentship funding (2012-2016)   |

## Qualifications

|                              |   |
|------------------------------|---|
| Basic informatics            | Bash programming (advanced)<br>R language and Shiny applications (advanced)<br>Python (intermediate)<br>HTML and web server design (intermediate)<br>Adobe Creative Suite (advanced)<br>Microsoft Office Suite (advanced)<br>Latex (intermediate)     |
| Bio-informatics              | Genome-wide sequencing (RNA/ATAC/ChIP/others) analysis<br>Mapping/analysis pipeline automation<br><i>In silico</i> advanced investigation of large sets of high-throughput sequencing data<br>Machine Learning algorithms for classification problems |
| English<br>French<br>Spanish | Fluent (TOEIC 2014: 955/990, TOEFL 2016: 110/120)<br>Native language<br>Intermediate  |

## Other interests

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|-------------------------------|--|
| Miscellaneous classes         | Plant Biology (University Paris Sud Orsay)<br>Geology (Ecole Normale Supérieure de Paris-Saclay)<br>Oceanography (University Pierre et Marie Curie, Paris) |
| Active member of associations | Churchill College of University of Cambridge<br>Cambridge University Hill Walking Association<br>Cambridge University Underwater Exploration Group         |

# Scientific communication

|                            |                 |   |
|----------------------------|-----------------|---|
| Peer-reviewed publications | In preparation: | <b>The analysis of copy number alterations from a lncRNA perspective reveals a mediator of NSCLC immune evasion</b> , Alejandro Athie, Jovanna González, Teresa Lozano, Ivan Raimondi, Oskar Marin-Bejar, <a href="#">Jacques Serizay</a> , Dannys Martínez, Juan Sandoval, Luis Montuenga, Chandrasekhar Kanduri, Juan José Lasarte, Maite Huarte  |
|                            | In review       | <b>A phase-separated multi-molecular assembly formed by Xist, PTBP1, MATR3, CELF1 and TDP-43 is essential for Xist localization and gene silencing during X-inactivation</b> , Amy Pandya-Jones, Yolanda Markaki, <a href="#">Jacques Serizay</a> , Tsotne Chitiashvili, Walter Mancia, Andrey Damianov, Costantinos Chronis, Bernadett Papp, Chun-Kan Chen, Robin McKee, Anthony Chau, Heinrich Leonardt, Sika Zheng, Mitchell Guttman, Douglas L. Black, and Kathrin Plath, <i>Science</i>  |
|                            | 2018            | <b>Genome organization at different scales: nature, formation and function</b> , <a href="#">Jacques Serizay</a> and Julie Ahringer, <i>Current Opinion in Cell Biology</i> (DOI: 10.1016/j.ceb.2018.03.009)<br><br><b>Chromatin accessibility dynamics across C. elegans development and ageing</b> , Jurgen Janes <sup>§</sup> , Yan Dong <sup>§</sup> , Michael Schoof*, <a href="#">Jacques Serizay</a> *, Alex Appert, Chiara Cerrato, Carson Woodbury, Ron Chen, Carolina Gemma, Ni Huang, Djem Kissiov, Przemyslaw Stempor, Annette Steward, Eva Zeiser, Sascha Sauer, Julie Ahringer, <i>Elife</i> (DOI: 10.7554/eLife.37344) |
| Scientific communication   | 2019:           | Evolution, Structure and Function of Chromosomes High Order Structure [Pasteur Institute] (Poster)<br>International <i>C. elegans</i> Conference [UCLA] (Talk) <b>(Selected)</b><br>Mechanisms of Eukaryotic Transcription [Cold Spring Harbor] (Poster)  |
|                            | 2018:           | Research in Genetics Conference [Cambridge] (Poster)  |
|                            | 2017:           | sciLife / LMB Bioscience Symposium [Cambridge University, UK] (Poster)<br>International <i>C. elegans</i> Conference [UCLA] (Poster)<br>Conference on Everything – Churchill College [Cambridge University, UK] (Poster) <b>(Selected)</b><br>Shell Research Prize [Cambridge University, UK] (Poster) <b>(Selected)</b>  |
| Teaching & supervisions    |                 | 1A Biology of the Cells class (University of Cambridge, UK)<br>BTEC Higher National Diploma, Biotechnology (Gif s/ Yvette, France)<br>Supervision of master students (4~6 months lab internships)<br>Student supervision (Sixth form students, first year undergraduates)   |
| Outreach                   |                 | Scientists' Collaborative Project with Educators (SCoPE) - 2019   |

# Scientific references

|                   |                            |
|-------------------|----------------------------|
| Julie Ahringer    | ja219@cam.ac.uk            |
| Raphael Margueron | raphael.margueron@curie.fr |
| Kathrin Plath     | kplath@mednet.ucla.edu     |
| Maite Huarte      | maitehuarte@unav.es        |
| Edith Heard       | edith.heard@curie.fr       |