



Magali Richard Ph.D in Genetics

Research Experience

- 2013-present **LBMC - École Normale Supérieure, CNRS, Lyon, France, 3 years.**
Post-doctoral fellow in Gael Yvert lab, *System genetics of a regulatory network and analysis of fitness dynamic in yeast.*
- 2008-2012 **IBENS - École Normale Supérieure, INSERM, Paris, France, 4 years.**
Ph.D student in Jean-Louis Bessereau lab, *Biosynthesis of cholinergic receptors in nematodes.*
- 2008 **IBENS - École Normale Supérieure, INSERM, Paris, France, 8 months.**
Master internship in Jean-Louis Bessereau lab, *Biosynthesis of cholinergic receptors in nematodes.*
- 2007 **Skirball Institute, NYU, New York, USA, 5 months.**
Master internship in Jessica Treisman lab, *Genetics screen for genes required in photoreceptor differentiation in flies.*
- 2006 **Welcome Trust Biocenter, Dundee, UK, 3 months.**
Licence internship in Nicolas Stanley-Wall lab, *Control of biofilms formation in bacteria.*

Teaching Experience

- 2015 **Teaching assistant, Ecole Normale Supérieure, Lyon, 40 hours.**
Practical course of genetics in nematodes.
- 2008-2011 **Teaching assistant, University Paris VI - Pierre et Marie Curie, Paris, 64 hours/year.**
Genetics and Cell biology.

Education

- 2015 **University Diploma in Statistics, University of Strasbourg, Strasbourg, France.**
- 2008-2012 **Ph.D in Genetics and Cell Biology, University Paris VI, Paris, France.**
- 2005-2008 **Magistère of genetics, University Paris VII, Paris, France.**
2nd year of master, First class honours, 1st/22.
1st year of master, First class honours, 1st/45.
Licence, With honours, 2nd/34.
Pasteur Institute Diploma in Cell Biology, Institut Pasteur, Paris.
- 2003-2005 **Preparation for the french *Grandes Écoles*, Lycée Clémenceau, Nantes, France.**
Specialities : Biology, Chemistry, Physics, Mathematics and Geology.

Publications

- 2014 **How does evolution tune biological noise.**
M. Richard and G. Yvert, *Front Genet*, 2014.
- 2013 **Biosynthesis of ionotropic acetylcholine receptors requires the evolutionarily conserved ER membrane complex.**
M. Richard, T. Boulin, V. Robert, J. Richmond, and J-L. Bessereau, *PNAS*, 2013.
- 2011 **A Screen for X-linked mutations affecting drosophila photoreceptor differentiation identifies casein kinase 1 α as an essential negative regulator of wingless signaling.**
K. Legent, J. Steinhauer, M. Richard, and J.E. Treisman, *Genetics*, 2011.

Magali Richard - 125 avenue Berthelot – 69007 LYON

☎ +33 689 37 17 68 • ☎ +33 472 72 86 15 • ☎ +33 472 72 80 80
✉ mag.richard@orange.fr • date of birth : 27th march 1986

Work in Preparation

Functional genetic diversity of the yeast galactose network.

M. Richard, D. Jost, F. Chuffart, H. Duplus-Bottin and Gael Yvert, *In preparation*.

Genetics of yeast fitness in dynamic environments.

J. Salignon*, M. Richard* and G. Yvert, *In preparation*.

A general method to map single-cell probabilistic trait loci of the genome.

F. Chuffart, M. Richard, D. Jost, H. Duplus-Bottin and G. Yvert, *In revision, Plos Genet*.

Communications at Conferences

- 2015 **Design optimization and control in system and synthetic biology**, *Poster*, Paris, France.
Functional Genetic Diversity of the Yeast Galactose Network
JOBIM, *Poster*, Clermont-Ferrand.
Identification of fitness advantage in dynamic environment by modelisation of BAR-seq data
Quatrièmes Rencontres R, *Talk*, Grenoble, France.
A general method to map single-cell probabilistic trait loci of the genome
- 2014 **Experimental Approaches to Evolution and Ecology using Yeast and other Model Systems**, *Poster*, Heidelberg, Germany.
Genetics of fitness in dynamic environments
Single cells genomics, *Poster*, Stockholm, Sweden.
Competition between cells in dynamic environments
- 2012 **Young Researcher in Life Sciences**, *Talk*, 3rd prize, Paris, France.
Control of acetylcholine receptor maturation and ER homeostasis by a new transmembrane complex
LBMC Seminar, *Invited speaker*, Lyon, France.
Control of acetylcholine receptor maturation and ER homeostasis by a new transmembrane complex
Ver midi, *Talk*, Paris, France.
Control of acetylcholine receptor maturation and ER homeostasis by a new transmembrane complex
- 2011 **18th International Worm Meeting**, *Poster*, Los Angeles, USA.
Control of acetylcholine receptor maturation and ER homeostasis by a new transmembrane complex
- 2010 **Neuronal development, synaptic function and behaviour in C. elegans**, *Poster*, Madison, USA.
TMEM-93 is a conserved transmembrane protein required for assembly or stability of acetylcholine receptors
- 2009 **17th International Worm Meeting**, *Poster*, Los Angeles, USA.
TMEM-93 is a conserved transmembrane protein required for assembly or stability of acetylcholine receptors

Experimental Skills

Genetics.

Classic genetic manipulations, analysis and screening in *D. Melanogaster*, *C. elegans* and *S. cerevisiae*

Quantitative Genetics.

Whole genome sequencing, Genome assembly and alignment, Quantitative Trait Loci mapping, BAR-Seq

Molecular biology.

DNA engineering, Quantitative PCR, DNA extraction, RNA extraction

Biochemistry.

Western Blot, Antibody production, Protein extraction

Imaging.

Laser-scanning confocal microscopy, Spinning disk confocal microscopy, Flow cytometry, Cell sorting, Microfluidics

Magali Richard - 125 avenue Berthelot – 69007 LYON

☎ +33 689 37 17 68 • ☎ +33 472 72 86 15 • ☎ +33 472 72 80 80

✉ mag.richard@orange.fr • date of birth : 27th march 1986

Computational Skills

Data treatment : Bioinformatics.

ssh, bash, python (notions), batch-queuing systems (OAR, PBS)

Data analysis : Softwares and Statistical Methods.

R, Matlab (notions), ImageJ, VMD, Tests methodology, Multivariate Analysis, Linear Models (including GLMs)

Robotic and Automatisation.

TECAN Evoware200

Operating systems.

Mac OS X, Linux

Others.

L^AT_EX, Sweave, OpenOffice, Microsoft Office, Adobe Creative Suite

Languages

French, Native speaker.

English, Scientific, conversational and written.

German, Basic.

Volunteer Work

2010-2014 **Treasurer of the Möbius-band theater compagny.**

30 000 euros/year budget. <http://mobiusband.fr/>.

2009-2010 **Co-founder and president of the SPIBENS association.**

Student and Post-doc association of Institut of Biology of Ecole Normale Supérieure. <http://www.biologie.ens.fr/depbio/?article23>

Volunteering at the Paris-Montagne association.

Scientific communications with young people. <http://www.paris-montagne.org/>

2005-2007 **Student representative at the administrative council of the University, University Paris VII - Denis Diderot.**

2005-2006 **Vice-President of the BGA association, University Paris VII - Denis Diderot.**

Student association of the Magistère of Genetics. <http://bga.asso.free.fr/index.html>

Hobbies

Arts, Practice of classic and improvisational theatre.

Member of the association Arts en scènes. <https://www.artsenscene.com/>

Sports, Mountain hiking, running, climbing, swimming.

Member of the association ASVEL Ski Montagne. <http://www.asvelskimontagne.fr/>

Magali Richard - 125 avenue Berthelot – 69007 LYON

☎ +33 689 37 17 68 • ☎ +33 472 72 86 15 • ☎ +33 472 72 80 80

✉ mag.richard@orange.fr • date of birth : 27th march 1986