Phenomin

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<tr>
<th>Localization</th>
<th>Institut Clinique de la Souris (ICS, Illkirch), Centre for Immunophenomics (CIPHE, Marseille)</th>
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<tbody>
<tr>
<td>Website</td>
<td><a href="http://www.phenomin.fr">http://www.phenomin.fr</a></td>
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<tr>
<td>Contacts</td>
<td><a href="mailto:contact@phenomin.fr">contact@phenomin.fr</a></td>
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<td>Phone</td>
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| Organism(s)  | *Mus musculus*  
*Rattus norvegicus* |
| Applications | - Any kind of mutations from knock-out to full length humanization in mouse  
- Knock-out, small knock-in and conditional knock-out in rats  
- Cell engineering  
- Derivation of ES cells from mutant mouse line  
- Molecular model validation  
- Colony expansion and cryopreservation  
- Phenotypic characterization  
- Preclinical studies |
| Technologies | - CRISPR/Cas9 technology and/or ES-based methods  
- PCR, qPCR and digital PCR genotyping  
- Phenotyping platforms (behavior & cognition, cardiovascular, metabolism, immune-profiling, clinical chemistry & hematology, anatomo-pathology) |

Platform director e-mail: herault@igbmc.fr
## TEFOR Paris-Saclay

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<tr>
<th>Localization</th>
<th>TEFOR Paris-Saclay, Institut des Neurosciences, UAR2010 CNRS UPS, Saclay</th>
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| Website            | [http://celphedia.eu](http://celphedia.eu)  
                     | [http://tefor.net](http://tefor.net)                                          |
| Contacts           | services@tefor.net                                                        |
| Phone              | -                                                                          |
| Organism(s)        | Danio rerio                                                               |
| Applications       | • Knock-Out  
                     | • Knock-In  
                     | • Prime editing for disease models with point mutations |
| Technologies       | • Zebrafish egg injections  
                     | • Zebrafish husbandry with automatic feeding (AB, inbred, Casper)  
                     | • CRISPR/Cas9 technology  
                     | • Prime editing by modified Cas proteins  
                     | • Targeted integrations of a single transgene by CRISPR-Cas9  
                     | • PCR for genotyping  
                     | • CRISPANTS  
                     | • Phenotyping platform (Whole-mount 3D imaging) |

Platform director e-mail: [johanna.djian@cnrs.fr](mailto:johanna.djian@cnrs.fr)
PF iPSC Nantes

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</table>
| Contacts     | Laurent David  
               laurent.david@univ-nantes.fr  
               pf-ipsc@univ-nantes.fr |
| Phone        | 02 28 08 01 46 |
| Organism(s)  | Human |
| Applications | • Production of pluripotent cells from samples of patients with rare diseases, then differentiation into the cell type of interest to mimic the disease |
| Technologies | • Preparation of PBMC from blood samples  
               • Reprogramming somatic cells of patients by transcription factors |

Platform director e-mail: laurent.david@univ-nantes.fr
"Caenorhabditis elegans Biology" Facility

| Localization | CNRS UAR3453, Université Claude Bernard - Lyon I, Faculté de Médecine et de Pharmacie, 8 avenue Rockefeller, 69008 Lyon |
| Website | [https://www.excitingworms.eu/SEGiCel/](https://www.excitingworms.eu/SEGiCel/) |
| Contacts | Thomas Boulin | [thomas.boulin@univ-lyon1.fr](mailto:thomas.boulin@univ-lyon1.fr) |
| Phone | 04 26 68 82 81 |
| Organism(s) | *Caenorhabditis elegans* |
| Applications | • Knock-Out and Knock-In strain generation  
• Mos-engineered mutant strains (KO, KI, tag) development |
| Technologies | • CRISPR/Cas9 technology  
• MosSCI, MosTIC, MosDEL |

Platform director e-mail: [thomas.boulin@univ-lyon1.fr](mailto:thomas.boulin@univ-lyon1.fr)
# TRIP-Nantes

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Séverine Ménoret: [severine.menoret@univ-nantes.fr](mailto:severine.menoret@univ-nantes.fr) |
| Phone        | 02 40 08 74 15 |
| Organism(s)  | *Rattus norvegicus* (with inbred or outbred strains) |

## Applications
- Generation of transgenic by small or large (BAC) DNA microinjection
- Generation of KO and KI by exon exchange with ssODN or by insertion of DNA construct

## Technologies
- DNA, ZFNs, TALENs, CRISPR/Cas9, PiggyBac transposon and lentiviral vectors microinjection
- Embryo freezing
- Q-PCR genotyping (zygosity animals)
- Identification of transgenes integration site (LM-PCR)
- Electroporation of embryos
- Production of animal with conventional health status or with SPF status

Platform directors e-mail: [matthieu.giraud@inserm.fr](mailto:matthieu.giraud@inserm.fr) / [jerome.Jullien@univ-nantes.fr](mailto:jerome.Jullien@univ-nantes.fr)
For any additional information:

- visit the website: https://fondation-maladiesrares.org/plateformes-partenariats/

or

- send an email to: aap-bio@fondation-maladiesrares.com