

Gwenaëlle Lemoine

Bioinformatics PhD student

Co-expression Transcriptomics Network Human

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PUBLICATIONS

Conferences

- CR CHU research Day (Québec) • 05/2019 • Poster

GWENapp, a pipeline for candidate genes discovery through augmented gene co-expression analysis

- ACCEM Troubleshooting Day (Québec) • 03/2019 • Talk

Introduction à l'analyse des réseaux de gènes et leur visualisation

- Health research Day (Québec) • 05/2018 • Poster

Caractérisation fonctionnelle de modules de co-expression provenant d'épiderme humain

- Endo-Nephro Axis Seminar of CHU Québec – Université Laval (Québec) • 03/2018 • Talk

Étude des variations de l'expression génique dans l'épiderme humain par l'analyse de réseaux de co-expression

- JOBIM (France) • 07/2017 • Poster

Functional characterization of human epidermis co-expression modules

ACTIVITIES

Scientifique communications

- Bioinfo-fr.net • Since 11/2015 • Administrator and Author

French speaking community blog from bioinformatics people. Multiple missions : help people to discover and popularize bioinformatics, to show the scope and diversity of this profession, to share our knowledge, to create posts and reports on bioinformatics.

- Pint of science Canada • Since 2019 • Event manager

Annual science festival that aims to communicate contemporary scientific developments to the public in an interesting, engaging and accessible way by bringing scientists to the pub and other accessible places.

Associative work

- ACCEM • Since 08/2018 • VP communication

The Association des chercheuses et chercheurs étudiant à la Faculté de médecine de l'Université Laval aims to defend the interests of graduate students. The VP Communication coordinates information and transmits ACCEM news, events and actions to members.

- JeBiF • From 01/2014 to 07/2016 • Treasurer and event manager

The association of the young bioinformaticians of France aims to bring together young actors in bioinformatics. Realization of friendly meetings with the intervention of professionals in the field, contribution to the popularization with the creation of the Bioinfuse competition, and participation in the Science Festival in France.

EXPERIENCES

Bioinformatics PhD student

CHU Québec Research Center – Université Laval
• Québec (Canada) • Since 01/2017 • Employment

- Study of gene co-regulation networks in the context of skin aging
- L'Oréal Research Chair in Research and Innovation in Digital Biology



Research and development engineer in Bioinformatics

Infogène (consulting for L'Oréal) • Aulnay-sous-Bois (France)
• From 09/2015 to 12/2016 • Employment

- Further development of an application for predicting the effect of cosmetic molecules through supervised learning models and stacking of models



Research and development engineer in Bioinformatics

L'Oréal • Aulnay-sous-Bois (France) • From 03/2015 to 09/2015 • Internship

- Development of an application for predicting the effect of cosmetic molecules via supervised learning models and stacking of models



Statistician assistant

Statistics Canada • Ottawa (Canada) • From 02/2013 to 06/2013 • Internship

- Updating the processes for calculating Canadian oil company statistics
- Consolidation and aggregation of several historical databases based on statistical methods of similarity



Medical laboratory operator

CHU Brabois • Nancy (France) • From 05/2011 to 12/2011 • Internship

- Creation of a determination of Krebs cycle metabolites by gas chromatography and mass spectrometry in a clinical study



SKILLS

Bioinformatics / Biostatistics

- Biological data analysis ★★★★★
- Statistical modelling ★★★★★
- Genomics ★★★★★
- Machine learning ★★★★★

Computer science

- R ★★★★★
- C# ★★★★★
- Management/Creation of databases ★★★★★
- Software architecture ★★★★★
- Python ★★★★★
- SQL ★★★★★
- Web (HTML, CSS, JS) ★★★★★

Biology

- Cellular and molecular biology ★★★★★
- Biochemistry ★★★★★
- Microbiology ★★★★★
- Biological systems in industry ★★★★★

TRAINING

Bioinformatics and Biostatistics MSc

Université Paris Sud – Polytechnique • Paris (France) • From 09/2013 to 09/2015

- Design and development of algorithms and software adapted to biological problems
- Statistical analysis of molecular biology data
- Design and development of databases and websites for biology and health

Statistics and decisional informatics BSc

Université de Lorraine • Metz (France) • From 09/2012 to 07/2013

- Participation in modelling and development of information systems
- Design of performance indicators and knowledge extraction
- Data management through databases

Bioanalyses and controls higher technician's certificate

Établissement Georges de la Tour • Metz (France) • From 09/2010 to 07/2012

- Contribution to the development, implementation and monitoring of an industrial production.
- Learning of techniques in the fields of biochemistry, microbiology, immunology and molecular or cellular biology