Laurent Gatto, PhD

Senior Research Associate

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Department of Biochemistry http://cpu.sysbiol.cam.ac.uk
University of Cambridge https://github.com/lgatto

Appointments Senior Research Associate

Senior Research Associate

Cambridge, UK

University of Cambridge

October 2013 –

Group Leader - Computational Proteomics Unit

Visiting Scientist EMBL/EBI Cambridge, UK January 2010 –

Member of the Proteomics identifications database (PRIDE) team.

Software Sustainability Institute Fellow 2014.

Software Carpentry Instructor.

Bioconductor project, associated member.

Previous Post-Doctoral Research Associate Jan 2010 – Sept 2013

APPOINTMENTS University of Cambridge, Cambridge, UK

Bioinformatician, Project Leader Aug 2006 – Dec 2009

DNAVision, Gosselies, Belgium

EDUCATION **2000** – **2006** (viva 2006-07-27)

PhD in Science (Molecular Biology Department) Free University of Brussels (ULB), Belgium

2000 - 2001

Master of Advanced Studies (DEA) in Sciences Free University of Brussels (ULB), Belgium

1997 - 2000

Masters in Biology (highest honors)

Free University of Brussels (ULB), Belgium

SELECTED
PUBLICATIONS
(OUT OF 26)

Huber W. et al., Orchestrating high-throughput genomic analysis with Bioconductor, Nat Methods 2015 Jan 29;12(2):115-21.

Gatto L., Breckels LM, Burger T, Wieczorek S and Lilley KS *Mass-spectrometry based spatial proteomics data analysis using* pRoloc, **Bioinformatics**, 2014 May 1;30(9):1322-4.

Gatto L., Christoforou A. Using R and Bioconductor for proteomics data analysis. Biochim Biophys Acta 2014 Jan;1844(1 Pt A):42-51.

Chambers M. et al. A Cross-platform Toolkit for Mass Spectrometry and Proteomics, Nature Biotechnology, 30, 918 – 920, 2012.

Gatto L. and Lilley K.S. MSnbase – an R/Bioconductor package for isobaric tagged mass spectrometry data visualisation, processing and quantitation, Bioinformatics, 28(2), 288-289, 2012.

SELECTED SOFTWARE DEVELOPMENT

Manipulating and exploring protein and proteomics data, 2014.

pRolocGUI: Interactive visualisation of organelle (spatial) proteomics data, 2014.

rpx: An R interface to the ProteomeXchange repository, 2014.

pRoloc: A unifying bioinformatics framework for organelle proteomics, 2012.

hpar: A simple interface to and data from the Human Protein Atlas project, 2012.

rols: An R interface to the Ontology Lookup Service, 2012.

MSnbase: Base Functions and Classes for MS-based Proteomics, 2011.

mzR: Raw mass-spectrometry data parsig library.

SELECTED ORAL COMMUNICATIONS (INVITED TALKS)

Gatto L. Spatial proteomics: Combining experimental and annotation data to predict protein sub-cellular localisation. 13 Jan 2015, European Bioconductor Developer meeting, EMBL, Heidelberg.

Gatto L. An overview of the (growing) R/Bioc ecosystem for mass spectrometry and proteomics, MRC Clinical Sciences Centre, Imperial College London, 5 December 2014, London.

Gatto L. Computational Challenges in Mass Spectrometry-Based Spatial Proteomics, HUPO meeting, Computational Mass Spectrometry Initiative, 8 Oct 2014, Madrid.

Current Grants

May 2014 – Oct. 2015 BBSRC Tools and Resources Development Fund (£144,112). Automated identification of optimal data-specific organelle clusters using freely available protein annotations. **PI Laurent Gatto**, University of Cambridge.

March 2014 – February 2018 BBSRC Strategic Longer and Larger grant. A spatio-temporal map of the developmental fly interactome. Research co-investigator, with PI Professor Simon Hubbard, University of Manchester.

March 2013 – November 2015 Addenbrookes Charitable Trust. *Protein biomarkers for vascular calcification in end-stage renal disease*. **Co-applicant**, with PI Dr Thomas Hiemstra, University of Cambridge.

Teaching

I am regularly teaching at national and internations workshops on computational biology, scientific programming and Software Carpentry Bootcamps. My teaching at the University of Cambridge (such as in the MPhil in Computation Biology in 2012-2014) are on a voluntary basis.

REVIEWING ACTIVITIES

Journals: Proteomics, Bioinformatics, BMC Genomics, BMC Research Notes, Expert Reviews in Proteomics, Journal of Proteomics, F1000Research, PeerJ, Journal of Open Research Software.

Conferences: ISMB/ECCB. Funding agencies: Medical Research Council.