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 international workshops and University courses (i.e. MPhil in Computation Biology, Cambridge in 2012-2014) on computational biology, scientific programming and Software Carpentry Bootcamps. These teaching activities 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.