

Biomedical Genomics Group, Research Unit on Biomedical Informatics, Experimental and Health Science Department
University Pompeu Fabra, 08003 - Barcelona. T 933260507. F 933160550
nuria.lopez@upf.edu - <http://bg.upf.edu>

Current situation

I am an ICREA Research professor at the University Pompeu Fabra. I lead the Biomedical Genomics group (<http://bg.upf.edu>) since April 2006. The main line of research in our group is the integration of genomics data for the study of cancer.

Academic positions

- 01/10/11 - now ICREA research professor position at the University Pompeu Fabra (**UPF, Barcelona, Spain**). Head of the Biomedical Genomics group (<http://bg.upf.edu>).
- 01/04/06 - 01/10/11 Independent research position at the University Pompeu Fabra (**UPF, Barcelona, Spain**) through a Ramon y Cajal contract from the Spanish Ministry of Science. Head of the Biomedical Genomics group (<http://bg.upf.edu>).
- 01/02/06 - 01/05/06 Research visitor at the Laboratory of Molecular Biology (**MRC-LMB, Cambridge, UK**) at the group of Dr. Sarah Teichmann. Funded by EMBO short term fellowship.
- 01/04/05 - 31/03/06 Postdoctoral position at the Centre for Genomic Regulation (**CRG, Barcelona, Spain**) under the supervision of Prof. Roderic Guigó. Funded by Human Frontiers Science Program.
- 01/08/02 - 31/03/05 Postdoctoral position at the European Bioinformatics Institute (**EBI, Cambridge, UK**) under the supervision of Dr. Christos Ouzounis. Funded by Human Frontiers Science Program.
- 01/09/98 – 31/07/02 PhD at the Oncologic Research Institute (**IRO, Barcelona, Spain**) under the supervision of Dr. Xavier Estivill and Dra. Mariona Arbonés. PhD awarded by the University of Barcelona. Research topic: Molecular Causes of Deafness.
- 01/11/01 – 30/11/01
14/04/01 – 15/06/01 Short term research visitor at the Laboratoire de Neurobiologie de L'Audition-Plasticité synaptique INSERM U254 (**INSERM, Montpellier, France**) at the group of Prof. Remy Pujol and Dr. Lionel Simonneau.
- 01/06/00 – 31/07/00 Short term research visitor at the Sackler school of Medicine, Tel Aviv University (**TAU, Tel Aviv, Israel**) at the group of Prof. Karen B. Avraham. Funded by an EMBO short term fellowship.
- 01/06/97 – 30/09/97 Research visitor at the Fred Hutchinson Cancer Research Center (**FHCRC, Seattle, USA**) at the group of Prof. Ronald Reeder.
- 01/06/96 – 30/09/96 Research visitor at the Fred Hutchinson Cancer Research Center (**FHCRC, Seattle, USA**) at the group of Dr. David Martin.

Academic Education

- 1998-2002 PhD in Biology at the University of Barcelona.
- 1994-1998 Biology degree at the University of Barcelona.

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Competitive grants as Principal Investigator

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|-----------|---|
| 2010-2012 | INNOCASH program of Fundaci3n Espa1ola para la Ciencia y la Tecnologia (FECYT). |
| 2010-2013 | Plan Nacional from the Spanish Ministry of Science. |
| 2006-2009 | Human Frontiers Science Program Career Development Award. |
| 2006-2009 | Plan Nacional from the Spanish Ministry of Science. |
| 2006-2011 | Ramon y Cajal contract. |

Participation in other Funded Projects

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| 2009-2014 | Chronic Lymphocytic Leukemia at the International Cancer Genome Consortium. Funding Agency: Spanish Ministry of Science. PI: Elias Campo |
| 2008-2011 | Control of gene expression by PLU1 protein. Funding Agency: American Cancer Society. PI: Elizaveta Benevolenskaya |
| 2008-2011 | COMBIOMED: Red Tem1tica de Investigaci3n Cooperativa de Computaci3n Biom1dica. Funding Agency: Instituto de Salud Carlos III. PI: Fernando Mart3n |
| 2004-2006 | STAR: A SNP and Haplotype map for the rat. Funding Agency: European Community. PI: Norbert Hubner |
| 2003-2006 | ENCODE: The Encyclopedia of Genes and Gene Variants. Funding Agency: National Institutes of Health (USA). PI: Roderic Guig3 |
| 2001-2003 | GENEDEAF. Finding Genes for Deafness. Funding Agency: European Commission. PI: Xavier Estivill. |
| 2000-2004 | Molecular and functional analysis of mitochondrial DNA mutations involved in progressive deafness and diabetes. Funding Agency: Fundaci3 Marat3 de TV3. PI: Xavier Estivill. |
| 1999-2001 | Development of a mouse model for the study of GJB2 associated deafness. Funding Agency: Fundaci3 La Marat3 de TV3. PI: ML Arbon3s. |
| 1999-2000 | Identification of genes involved in deafness. Funding Agency: Fundaci3n Marcelino Bot3n. PI: Xavier Estivill. |

Awards, Fellowships and Distinctions

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|------|---|
| 2006 | Career Development Award from the Human Frontiers Science Program Organization (HFSP) (April 2006) |
| 2006 | Best Presentation Award at the ESF-JSPS Frontier Science Meeting for Young Researchers. Kanagawa, Japan, (March 2006) |
| 2006 | EMBO Short Term Fellowship to visit the Laboratory of Molecular Biology (LMB-MRC) in Cambridge, UK (February 2006) |

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- 2003 Long Term Fellowship Award from the Human Frontiers Science Program Organization (HFSPO) (April 2003)
- 2003 Best Poster Award in ESF-JSPS Frontier Science Meeting for Young Researchers. San Feliu de Guixols, Spain, (October 2003)
- 2002 Fellowship for Specialization in International Organisms, Spanish Ministry of Science and Technology (2002–2003)
- 2001 Fellowship from the European Genetics Foundation to attend the 2nd course in Bioinformatics. European school of bioinformatics. Bertinoro (Italy) – November 14-18, 2001
- 2000 EMBO Short Term Fellowship to visit Sackler School of Medicine, Tel Aviv University, Israel. (May 2000)
- 2000 Predoctoral Fellowship BEFI, Instituto de Salud Carlos III (2000–2002)
- 1999 Fellowship from the European Genetics Foundation to attend the 14th course in Medical Genetics. Sestri Levante (Italy) – March 25 – 31, 1999
- 1997 Under-graduate fellowship for research collaboration from the University of Barcelona (1997-1998)
- 1997 Summer Student Fellowship from the Fred Hutchinson Cancer Research Center, Seattle, USA. (July–September 1997)

Academic Collaborators

Elizaveta Benevolenskaya, University of Illinois at Chicago.
Maxim Frolov, University of Illinois at Chicago.
Sarah Teichmann, LMB, Cambridge UK.
Luciano di Croce, Center for Regulatory Genomics, Barcelona.
Anna Bigas, IMIM, Barcelona.
Miguel Angel Pujana, Catalan Oncology Institute, Barcelona.
Esteban Ballestar, Catalan Oncology Institute, Barcelona.
Pedro Larrañaga, Department of Artificial Intelligence at the Polytechnic University of Madrid.
Oriol Bachs, Clinic Hospital, Barcelona.
Ana Caño-Delgado, CSIC, Barcelona.

Collaboration with companies

Sistemas Genómicos, Valencia, Spain. Project: Computational system for the management and analysis of genomic data for personalized medicine.

Constellation Pharmaceuticals, Cambridge MA, USA. Project: Understanding JARID biology and its implications in disease.

International conferences as invited speaker

Invited speaker at RECOMB 2011: Conference on Cancer Informatics. Barcelona. October 2011 (<http://recomb-dream2011.org>)

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Invited speaker at the XXXIV meeting of the Spanish Society of Biochemistry and Molecular Biology. Barcelona, September 2011

Invited speaker at the 2011 Annual conference of the Society for Bioinformatics in the Nordic Countries. Helsinki. May 2011 (<http://research.med.helsinki.fi/bioinformatics2011/index.html>)

Invited speaker at the 12th Bologna winter school in bioinformatics organized by the Associazione Italiana per la Ricerca in Biofisica e Biologia Computazionale. 7 - 11 February 2011.

Invited speaker at the CIBER course on Medical genomics, bioinformatics and nanomedicine. Catalan Institute of Cardiovascular Sciences ICCV. 23 and 24 November 2010.

Invited speaker at the 10th International Conference on Environmental Mutagens (ICEM). Florence, Italy. Title: "Integration of oncogenomics data for the study of cancer". August 2009.

Invited speaker at the PhD Program in Computational Biology of Gulbenkian Institute. Oeiras, Portugal. Title: "Integration and data-mining of multidimensional oncogenomic data". 29 June 2009.

Invited speaker at the Computational Biology Course of Gulbenkian Advanced Training program for Medical Doctors. Oeiras, Portugal. Title: "Integrating genomics data for the study of cancer". 21 November 2008

Invited speaker at the XXXI meeting of the Spanish Society of Biochemistry and Molecular Biology. Bilbao, 10-13 September 2008

Invited speaker at the Bioinformatics & Cancer Minisymposium, organized by the Spanish National Institute of Bioinformatics (INB) and the Spanish Genotyping Centre (CenGen). Title: "Properties and prediction of genes involved in cancer". Barcelona, Spain. 21st November 2005.

Invited speaker at the Bioinformatics Workshop organized by Institute of Agrobiotechnology, CERTH – Title: "Computational prediction of human disease genes". Thessaloniki, Greece. 30 September- 1 October 2004.

Selected list of invited seminars in international research centres

Institute of Molecular Life Sciences. University of Zurich, Switzerland. Title: "Integration and data mining of cancer genomics data". 13 July 2011.

IMPPC, Predictive and Personalized Cancer Medical Institute, Badalona, Spain. Title: "Integration of oncogenomics data for the study of cancer". 5 July 2010.

USC Epigenome center, Los Angeles, USA. Title: "Integration of oncogenomics data for the study of cancer". 23 January 2009.

Ludwig Center at Johns Hopkins, Baltimore, USA. Title: "Integration of oncogenomics data for the study of cancer". 23 January 2009.

Laboratory of Molecular Biology, MRC-LMB. Cambridge University. UK. Title: "Integration of genomic data for the study of cancer". 22th July 2008.

European Bioinformatics Institute, Hinxton, Cambridge. UK. Title: "Integration of genomic data for the study of cancer". 21th July 2008.

Netherlands Cancer Institute, Amsterdam, Netherlands. Title: "Integration of genomic data for the study of cancer". 10th July 2008.

Research Institute of Bellvitge, IDIBELL, Barcelona. Title: "Integration of oncogenomics data for the study of cancer". 8 February 2008.

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Catalan Net of Genomics and Proteomics. Hospital Clinic, Barcelona. Title: "Genome-wide analysis of the H3K4 histone demethylase RBP2 reveals a transcriptional program controlling differentiation." 14 December 2007

National Center for Oncologic Research, CNIO, Madrid. Title: "Genome-wide analysis of the H3K4 histone demethylase RBP2 reveals a transcriptional program controlling differentiation". 11 December 2007

University Illinois Chicago. Title: "Computational study and prediction of cancer genes". May 14th 2007.

National Center for Oncologic Research, CNIO, Madrid. Title: "Computational study of human genetic diseases and human evolution". 19 April 2007

Koc University, Istanbul. Title: "Computational study of human genetic diseases" 19 July 2006

Centro Superior de Investigaciones Científicas, Barcelona. Title: "Computational study of human genetic diseases". 7 July 2006

Centro de Investigación Príncipe Felipe, Valencia. Title: "Computational Study of human genetic diseases and human evolution" 20 June 2006.

MRC-Laboratory of Molecular Biology, Cambridge, UK- Title: "Properties and prediction of genes involved in cancer". 2nd March 2006.

University of the Basque Country, San Sebastian. Title: "Properties of genes involved in human genetic disease". 15 June 2005

European Bioinformatics Institute-EBI - Title "Properties of genes involved in human genetic disease". 1st December 2004.

Banting & Best Department of Medical Research. University of Toronto, Canada - Title "Genome-wide identification of genes likely to be involved in human genetic disease". 26 August 2004.

European Molecular Biology Laboratory - EMBL, Heidelberg, Germany - Title "Genome-wide identification of genes likely to be involved in human genetic disease". 17 June 2004.

Ecole Normal Supérieure, Lyon, France- Title: "Computational analysis of genes causing hereditary diseases". 16 December 2003.

University Pompeu Fabra, Barcelona- Title: "Computational analysis of genes causing hereditary diseases". 19 December 2003.

International meetings attended

EMBO Cancer Genomics Meeting. Selected Oral Presentation: "Large-scale functional analysis and visualization of mutations from cancer genome projects.". 17-19 September 2011.

5th International Cancer Genome Consortium meeting. Kyoto, Japan. June 2010.

3rd International Cancer Genome Consortium meeting. Communication "IntOGen and Gitools: Frameworks for integration, visualisation and data-mining of multidimensional oncogenomic data". Madrid, Spain. March 2010.

EMBO meeting 2010. Barcelona, Spain. 4-7 September 2010.

10th International Conference on Environmental Mutagens (ICEM). Communication "Integration of oncogenomics data for the study of cancer" Florence, Italy. August 2009.

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CNIO Cancer Conferences: Cancer-omics: Multilevel interpretation of cancer genome data. Communication "IntOGen: integration and data-mining of multidimensional oncogenomic data". Madrid July 2009.

2nd International Cancer Genome Consortium meeting. Communication "IntOGen: integration and data-mining of multidimensional oncogenomic data". Hinxton, Cambridge, UK. June 2009.

Cancer Genetics & Epigenetics Gordon Research Conference. Communication "IntOGen: integration and data-mining of multidimensional oncogenomic data" Ventura, California, USA. January 2009.

8th Annual Human Frontiers Science Program Awardees Meeting. Communication "Integration for genomic data for the study of cancer" Berlin, Germany. July 2008.

The Biology of Genomes meeting 2008. Communications "Genome-wide analysis of the H3K4 histone demethylase RBP2 reveals a transcriptional program controlling differentiation" and "IntOGen: Integrating different types of oncogenomics data". Cold Spring Harbor Laboratory, NY. May 2008.

Fourth Annual Human Frontiers Science Program Awardees Meeting. Oral Communication "Evolvability and protein divergence in the evolution of Homo sapiens". Brisbane, Australia, 18-21 July 2007.

Nature-CNIO Conference on Oncogenes and Human Cancer: The next 25 years. Communications "Integration of oncogenomic and genic data for the prediction of human cancer genes" and "Genome-wide analysis of the H3K4 histone demethylase RBP2 reveals a transcriptional program controlling differentiation". CNIO Madrid. 3-6 October 2007

The Biology of Genomes meeting 2007. Communication "Evolvability and protein divergence in the evolution of Homo sapiens". Cold Spring Harbor Laboratory, NY. May 2007.

Mechanisms and Models of Cancer. Communication "Computational prediction of cancer genes". Cold Spring Harbor Laboratory, NY. August 2006.

ESF-JSPS Frontier Science Meeting for Young Researchers. Follow-up workshop on functional genomics. Oral communication: "Properties and prediction of genes involved in cancer". Kanagawa, Japan, March 6-11, 2006.

European Conference of Computational Biology. Communication "Properties and prediction of Genes involved in Human Cancer". Madrid, Spain. 28 September – 1 October, 2005.

Fourth Annual Human Frontiers Science Program Awardees Meeting. Poster Communication "Computational analysis of genes causing hereditary disease". Hakone, Japan, 15-18 May 2004.

68th Cold Spring Harbor Symposium on Quantitative Biology. The Genome of Homo Sapiens. New York. USA. May 28 - June 2, 2003.

ESF-JSPS Frontier Science Meeting for Young Researchers. Functional Genomics - from the bench to bioinformatics. Title: "Genome-wide identification of disease genes". San Feliu de Guixols, Spain, 25-31 October 2003.

4th EMBL Minisymposium on Molecular Medicine: "Molecular Medicine at EMBL". EMBL-Heidelberg, Germany, December 16, 2002.

European Human Genetics Conference. Communication "Expression of connexin 32 in the developing mouse peripheral auditory system". Strasbourg, May 2002.

2nd course in Bioinformatics. European school of genetic medicine. Bologna University Residential Center, Bertinoro (Italy) – November 14-18, 2001.

14th course in Medical Genetics. European school of genetic medicine. La Nunziata Centre, Sestri Levante (Italy) – March 25 – 31, 2001.

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50th Annual Meeting of the American Society of Human Genetics, 2000. Communication "An amino acid deletion in the human connexin 31 gene (GJB3) is associated with sensorineural deafness and hereditary sensory neuropathy" Philadelphia, October 2000.

31st Annual Meeting of the European Society of Human Genetics. 1999. Communication "PDS mutations in Spanish and Italian families with Pendred syndrome". Geneva, May 1999.

Manuscripts reviewed for:

Nature Biotechnology, Nucleic Acids Research, Database, Genomics, BMC Genomics, BMC Cancer, BMC Medical Genomics, Bioinformatics, European Conference of Computational Biology 2006, In Silico Biology, Molecular Biology and Evolution, Human Mutation, European Journal of Human Genetics, Plos Computational Biology, Biology Letters, BMC research notes, Briefings in Bioinformatics, EMBO Mol Medicine, Eurasisp, IEEE/ACM Transactions on Computational Biology and Bioinformatics

Management of research activities

Member of the local organizing committee of the RECOMB-DREAM 2011: Conference on Cancer Informatics. <http://recomb-dream2011.org>. October 2011.

Leader of the "Functional Prediction of DNA Variants Working Group" of the International Cancer Genome Consortium. Since March 2010.

Participation in the advance course Leading for Success in Science, Team Leadership and Management Skills Training. HFP Consulting, Heidelberg. Course held in Barcelona. Duration: 40 hours. June 2011.

Participation in the course Leading for Success in Science, Team Leadership and Management Skills Training. HFP Consulting, Heidelberg. Course held in Barcelona. Duration: 40 hours. June 2008.

Project Coordinator of the Biomedical Informatics Node (GN9) of the Spanish National Institute of Bioinformatics (INB). Since 2007.

Organizer of the First Integrative Cancer Genomics course (3 days course) in the frame of the Gulbenkian Training Programme in Bioinformatics. Oeiras, Portugal.

Co-organizer of the 2009 PRBB computational genomics annual meeting. March 2009.

PhD Thesis supervision

2003 - 2007 Codirector of Dr. Simon J. Furney thesis. Title: "In silico analysis of human disease and cancer genes". Defended successfully in the Faculty of Medicine of the University College Dublin on 8th February 2007

2007 - 2011 Director of the thesis of Gunes Gundem. Title: "Integration of genomic data for the study of cancer". University Pompeu Fabra. Defended successfully at the UPF on 29th September 2011

from 2008 Director of the thesis of Khademul Islam. Title: "Study of pRB/JARID1 pathways". University Pompeu Fabra. Co-supervised with Dr. Elizaveta Benevolenskaya, University of Illinois Chicago.

from 2009 Director of the thesis of Alba Jené-Sanz. Title: "Integrative study of the regulatory and epigenomic programs involved in cancer development". University Pompeu Fabra.

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from 2011 Director of the thesis of Christian Perez-Llamas. Title: "Predictive and integrative cancer genomics". University Pompeu Fabra.

from 2011 Director of the thesis of Michael Schroeder. Title: "Driver and synergistic alterations in cancer". University Pompeu Fabra. Co-supervised with Dr. Abel Gonzalez-Perez, UPF.

Master Thesis supervision

2009-2010 Supervisor of the Master thesis of Christian Perez-Llamas. Title: "Gitoools: analysis and visualization of genomics data". University Pompeu Fabra

2009-2010 Supervisor of the Master thesis of Michael Schroeder. Title: "Studying coalterations in human cancer". University Pompeu Fabra

2008-2009 Supervisor of the Master thesis of Alba Jené. Title: "Study of regulatory programs involved in cancer". University Pompeu Fabra

2007-2008 Supervisor of the Master thesis of Andrea Grilli. Title: "Integrative genomic analysis of microarray data". University of Bologna.

2007-2008 Supervisor of the Master thesis of Albert Mascarell. Title: "Meta-Analysis of brassinosteroid signalling during vascular cell differentiation in *Arabidopsis thaliana*". University Pompeu Fabra

Teaching activities

Lecturer and coordination of the subject "Elements of Biocomputing" at the Msc on Bioinformatics for Health Sciences at the University Pompeu Fabra. **2011**

Organizer of the Bioinformatics for Integrative Genomics course (3 days course) in the frame of the Gulbenkian Training Programme in Bioinformatics. Oeiras, Portugal. November **2011**

Lecturer and Organizer of the Bioinformatics for Integrative Genomics course (2 days course) at the University Pompeu Fabra. Barcelona. June **2011**

Lecturer and organizer of the First Integrative Cancer Genomics course (3 days course) in the frame of the Gulbenkian Training Programme in Bioinformatics. Oeiras, Portugal. October **2010**

Lecturer at the PhD Program in Computational Biology of Gulbenkian Institute. Oeiras, Portugal. Title: "Integration and data-mining of multidimensional oncogenomic data". 29 June **2009**

Lecturer at the Computational Biology Course of Gulbenkian Advanced Training program for Medical Doctors. Oeiras, Portugal **2008**

Lecturer at the Msc on Bioinformatics for Health Sciences at the University Pompeu Fabra. **2006, 2007 and 2008**

Lecturer of the Bioinformatics subject of the Biology Degree at the University Pompeu Fabra. **2006, 2007, 2008, 2009 and 2011**

Preparation of written materials for the Bioinformatics course at the Open University of Catalonia (UOC). **2006**

Nuria Lopez-Bigas, PhD - Curriculum Vitae

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Bioinformatics course at the Vic University. Organised by National Institute of Bioinformatics (INB). 6h. September **2005**

Lecturer at the Computational Analysis of DNA sequences courses at the COSMOCAIXA (Science Museum). Organised by Fundació La Caixa. 8h. July **2005**

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PUBLICATIONS

Members from my group are shown in bold and italics. # Denotes that the authors contributed equally to the work.

Publications summary

50 refereed publications (13 as first author and 9 as last author). Average number of 55 citations per article and a global h-index (number of articles with more than h cites) of 20 (according to Google Scholar). Please visit <http://bg.upf.edu/papers.php> to see the full and updated list of publications.

Google Scholar Citations: http://scholar.google.com/citations?hl=en&user=I_QcK7oAAAAJ

Refereed publications since independent position

Pippa R, Espinosa LI, **Gundem G**, García-Escudero R, Dominguez A, Saiz C, Besson A, Pujol MJ, **López-Bigas N**, Paramio JM, Bigas A, Bachs O. p27Kip1 represses transcription by direct interaction with p130/E2F4 at the promoters of target genes. **Oncogene 2012**. In press.

Rafael-Palou X, **Schroeder MP** and **Lopez-Bigas N**. SVGMap: configurable image browser for experimental data. **Bioinformatics 2011**. In press

Guberman JM et al (including **Gundem G**, **Perez-Llamas C**, **Lopez-Bigas N**). BioMart Central Portal: an open database network for the biological community. **Database 2011**. 2011 Sep 18;2011:bar041.

Truscott M, **Islam AB**, **Lopez-Bigas A**, and Frolov MV. mir-11 limits the pro-apoptotic function of its host gene, dE2f1. **Genes and Development 2011**. In press.

Islam AB, Richter WF, Jakobs L, **Lopez-Bigas N**, Benevolenskaya EV. Coregulation of Histone Modifying Enzymes in Cancer. **PLoS ONE 2011**. 6(8): e24023.

Perez-Llamas C#, **Gundem G**#, **Lopez-Bigas N**. Integrative cancer genomics (IntOGen) in BioMart. **Database 2011**. In press.

Perez-Llamas C and **Lopez-Bigas N**. Gitoools: analysis and visualisation of genomic data using interactive heat-maps. **PLoS One 2011**. 6(5): e19541.

Gonzalez-Perez A and **Lopez-Bigas N**. Improving the assessment of the outcome of non-synonymous SNVs with a Consensus deleteriousness score (Condel). **Am J Hum Genet 2011**. 88(4):440-449.

Nicolay BN, Bayarmagnai B, **Islam AB**, **Lopez-Bigas N**, Frolov MV. Cooperation between dE2F1 and Yki/Sd defines a distinct transcriptional program necessary to bypass cell cycle exit. **Genes Dev 2011**. Feb 15;25(4):323-35.

Islam AB, Richter WF, **Lopez-Bigas N**, Benevolenskaya EV. Selective targeting of histone methylation. **Cell Cycle 2011**. 10(3):413-24

The International Cancer Genome Consortium (including **Lopez-Bigas N**). International network of cancer genome projects. **Nature 2010**. 464, 993-998

Gunes Gunes, **Christian Perez-Llamas**, **Alba Jené**, **Khademul Islam**, Anna Kedzierska, **Jordi Deu-Pons**, **Simon J. Furney** and **Nuria Lopez-Bigas**. IntOGen: A novel framework for integration and data-mining of multidimensional oncogenomic data. **Nature Methods 2010**. 7, 92-93

Holger Richly, Luciana Rocha-Viegas, Joana Domingues Ribeiro, Santiago Demajo, **Gunes Gundem**, **Nuria Lopez-Bigas**, Tekeya Nakagawa, Sabine Rospert, Takashi Ito and Luciano Di Croce. Transcriptional Activation of Polycomb-repressed genes by the H2A-ubiquitin binding protein ZRF1. **Nature 2010**. 468, 1124-1128.

Aguiar H, Sole X, Bonifaci N, Serra-Musach J, **Islam A**, **Lopez-Bigas N**, Méndez-Pertuz M, Beijersbergen RL, Lázaro C, Urruticochea A, Pujana MA. Biological reprogramming in acquired resistance to endocrine therapy of breast cancer. **Oncogene 2010**. Aug 16.

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Ferreiro I#, Joaquin M#, **Islam A**, Gomez G, Barragan M, Lombardía L, Domínguez O, Pisano DG, **Lopez-Bigas N**, Nebreda AR, Posas F. Whole genome analysis of p38 SAPK-mediated gene expression upon stress. **Genome Biology** 2010.1;11(1):144

Beshiri ML, **Islam A**, DeWaal DC, Richter WF, Love J, **Lopez-Bigas N**, Benevolenskaya EV. Genome-wide Analysis using ChIP to Identify Isoform-specific Gene Targets. **JoVE** doi: 10.3791/2101.

Mascarell-Creus A, Cañizares J, Vilarrasa J, Mora-García S, Blanca J, Gonzalez-Ibeas D, Saladié M, Roig C, Deleu W, Picó B, **López-Bigas N**, Aranda MA, Garcia-Mas J, Nuez F, Puigdomènech P, Caño-Delgado A. An oligo-based microarray offers novel transcriptomic approaches for the analysis of pathogen resistance and fruit quality traits in melon (*Cucumis melo* L.) **BMC Genomics** 2009. 10(1):467.

Rodilla, V., Villanueva, A., Obrador-Hevia, A., Robert-Moreno, A., Fernández-Majada, V., **Grilli, A.**, **López-Bigas, N.**, Bellora, N., Albà, M., Duñach, M, Sanjuan, X., Gonzalez, S., Gridley, T., Capella, G., Bigas, A., Espinosa, Ll. Notch is an Essential Component Downstream of β -catenin in Colorectal Cancer. **PNAS** 2009. 106(15):6315-20.

Solé, X., Bonifaci, N., **López-Bigas, N.**, Berenguer, A., Hernández, P., Reina, O., Maxwell, C., Aguilar, H., Urruticoechea, A., de Sanjosé, S., Comellas, F., Capellá, G., Moreno, V., Pujana, MA. Biological convergence of cancer signatures. **PLoS ONE** 2009. 4(2): e4544

Furney SJ, Calvo B, Larranaga P, Lozano JA, **Lopez-Bigas N**. Prioritization of candidate cancer genes - an aid to oncogenomic studies. **Nucleic Acids Research** 2008. e115.

Lopez-Bigas N, **Kisiel TA**, Volkert T, Gupta S, Love J, Murria H.L., Young R.A., and Benevolenskaya E.V. Genome-wide analysis of the H3K4 histone demethylase RBP2 reveals a transcriptional program controlling differentiation. **Molecular Cell** 2008. 31:520-530.

The STAR consortium (including **Shikhagaie M** and **Lopez-Bigas N**). SNP and haplotype mapping for genetic analysis in the Rat. **Nature Genetics** 2008. 40:560-6.

Subhajyoti De, **Lopez-Bigas N**, Sarah A Teichmann. Patterns of evolutionary constraints on genes in humans. **BMC Evolutionary Biology** 2008. 8:275.

Lopez-Bigas N, De S. & Teichmann SA. Evolvability and protein divergence in the evolution of Homo sapiens. **Genome Biology** 2008. 9:R33.

Furney SJ#, Madden SF#, **Kisiel TA**, Higgins DG and **Lopez-Bigas N**. (2007). Distinct patterns in the regulation and evolution of human cancer genes. **In Silico Biology** 2008. 8:33-46.

The ENCODE Project Consortium (including **Lopez-Bigas N**). Identification and analysis of functional elements in 1% of the human genome by the ENCODE pilot project. **Nature** 2007. 447(7146): 799-816.

Calvo, B., **Lopez-Bigas N**, **Furney SJ**, Larranaga P, Lozano JA. A partially supervised classification approach to dominant and recessive human disease gene prediction. **Comput Methods Programs Biomed** 2007. 85(3): 229-37.

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