

# Irene Miguel-Aliaga

## Curriculum vitae

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### Education

09/1997 - 03/2001 DPhil in Genetics. Supervisor: Prof. Kay Davies, Department of Human Anatomy and Genetics, University of Oxford, UK.  
09/1991 - 06/1997 First-class honours in Biochemistry. Universitat Autònoma de Barcelona, UAB, Spain.

### Appointments

07/2017 - present MRC LMS Section Chair (Genes & Metabolism Section).  
09/2016 - present Professor of Genetics and Physiology, Imperial College London.  
07/2015 - present Programme Leader. MRC London Institute of Medical Sciences (LMS, formerly CSC).  
08/2014 - 08/2016 Reader in Genetics and Physiology, Imperial College London.  
10/2012 - 06/2015 Programme Leader Track. MRC LMS.  
06/2008 - 10/2012 Wellcome Trust Research Career Development Fellow. Department of Zoology, University of Cambridge, UK.  
01/2005 - 05/2008 Marie Curie and MRC Postdoctoral Fellow in the lab of Dr. Alex P. Gould. Division of Mammalian Development, MRC National Institute for Medical Research, London.  
03/2001 - 12/2004 Postdoctoral Research Fellow in the lab of Prof. Stefan Thor. Department of Neurobiology, Harvard Medical School, USA and Linköping University, Sweden.

### Awards, Honours and Fellowships

2018 Suffrage Science Women in Science Award.  
2017 Elected to EMBO.  
2015 Featured by the *Journal of Cell Science* as a “cell scientist to watch”.  
2015 Featured in the Physiological Society’s “Women Physiologists” book.  
2012 - 2014 Elected to EMBO Young Investigator Programme (EMBO YIP).  
2008 - 2014 Wellcome Trust Research Career Development Fellowship.  
2008 Royal Society University Research Fellowship (declined in favour of RCDF).  
2005 - 2007 EU Marie Curie Intra-European Fellowship.  
1998 University of Oxford Goodger Scholarship.  
1997 - 1998 “La Caixa”-British Council award.  
1997 Spanish Ministry of Education and Science prize: Best National Academic Record  
1997 UAB Prize for the best academic record.  
1996 Spanish Ministry of Education and Science Studentship.

### Current Funding

2018 - 2023 ERC Advanced Grant: “IntraGutSex”.  
2016 - 2021 MRC core grant “Gut Signalling and Metabolism”.  
2018 - 2020 JSPS Postdoctoral Fellowship to Tomotsune Ameku (postdoc).  
2017 - 2019 EMBO Long-term Fellowship to Alessandro Mineo (postdoc).

### Committee Membership and Reviewer Activities

2019 - present Member of MRC Neurosciences & Mental Health Board.  
2019 - present Member of Scientific Advisory Committee, Centre for Integrative Genomics (CIG), University of Lausanne, Switzerland.

2017 - present Chair of Scientific Advisory Board, Institute of Functional Genomics of Lyon (IGFL), France.

2018 Member of promotion panel, University of Cyprus, Cyprus.

2017 Member of promotion panel, Institut Curie, Paris, France.

2015 - 2019 BBSRC Pool of Experts (frequent reviewer and occasional committee member).

2016 - present Wellcome Trust Pool of Prospective Committee Members.

2015 - present Member of MRC LMS Institute Planning and Operations Group.

2017 - present Member of Imperial College European Advisory Group.

2015 - present Member of MRC LMS Space Committee.

2016 - present Member of Faculty of Medicine Imperial College Research Fellowships Panel.

2016 - 2017 Deputy Chair of Athena Swan Opportunities Committee.

2014 - present Member of the Athena Swan Self-Assessment Team and Opportunities Committee.

2015 - present Academic advisor to the LMS Bioinformatics Facility.

2016 - present Member of LMS Facilities Review Committee.

Ad-hoc reviewer for ERC, Wellcome Trust, MRC, BBSRC, Leverhulme Trust, NC3Rs, ANR (France), DFG (Germany), ANEP (Spain), ISF (Israel), Novo Nordisk (Denmark), Research Foundation Flanders – FWO (Belgium), Research Promotion Foundation (Cyprus) and the Nutrition Obesity Research Center (University of Michigan).

Ad-hoc reviewer for *Science*, *Nature*, *Elife*, *Cell Metab*, *Nat Genet*, *Nat Cell Biol*, *Dev Cell*, *Genes Dev*, *Nat Methods*, *PLoS Biol*, *Proc Natl Acad Sci U S A*, *EMBO J*, *Curr Biol*, *PLoS Genetics*, *Nat Commun*, *Aging Cell*, *Trends Endoc Metab*, *Development*, *Dis Model Mech*, *Cell Rep*, *J Insect Physiol*, *J Exp Biol*, *Cell Res*, *BMC Genomics*, *PLoS One*.

Guest Editor for *PLoS Genetics*.

Scientific reviewer and committee member for “Ramon y Cajal” awards 2010 (Spanish government returning fellowships for independent researchers).

Interviewer for EMBO Long-Term Fellowships.

## Meeting Organiser

2021 (TBD) Keystone Symposium “Metabolic Decisions in Development and Disease”. Symposium co-organiser.

08/2020 - 07/2026 EMBO Conference “Molecular and Developmental Biology of Drosophila”. Organising committee co-chair.

03/2020 EMBO Symposium “Inter-organ Communication in Development and Disease”. Symposium co-organiser.

07/2014 - 07/2020 EMBO Conference “Molecular and Developmental Biology of Drosophila”. Organising committee member.

09/2017 25<sup>th</sup> European Drosophila Research Conference, London, UK. Workshop co-organiser and chair.

10/2016 Brainy Tongue: The Sensory Logic of the Gastronomic Brain, San Sebastian, Spain. Workshop co-organiser.

09/2015 24<sup>th</sup> European *Drosophila* Research Conference, Heidelberg, Germany. Workshop co-organiser and chair.

10/2013 23<sup>rd</sup> European *Drosophila* Research Conference, Barcelona, Spain. Workshop co-organiser and chair.

09/2011 22<sup>nd</sup> European *Drosophila* Research Conference, Lisbon, Portugal. Workshop co-organiser and chair.

2016 - present LMS external seminar series coordinator.

2014 - 2015 LMS external seminar series organiser.

2010 - 2012 Department of Zoology Tea Talks organiser (University of Cambridge).

2010 - present London Gut Club (formerly Cambridge Gut Club) organiser: a biannual series of presentations by members of labs working on the mammalian or invertebrate intestine.

## Invited Talks

### Conference speaker

04/2020 EMBO meeting “Gender and Cancer Susceptibility”. Les Diablerets, Switzerland.

10/2019 10th Meeting of the Latin American Society for Developmental Biology, Buenos Aires, Argentina.

09/2019 26<sup>th</sup> European Drosophila Research Conference, Lausanne, Switzerland. Plenary Speaker.

07/2019 8<sup>th</sup> International Symposium on Molecular Insect Science, Sitges, Spain.

07/2019 4<sup>th</sup> Insect Hormone Meeting, Kolymbari, Crete, Greece.

05/2019 Mechanisms of Insect Nutritional Homeostasis workshop, Bonn, Germany

01/2019	Keystone Symposia on Cellular Plasticity/ Developmental Signaling, Keystone, Colorado, USA.
09/2018	EU-LIBRA Workshop “Sex and Gender in Research and Experimental Design”, Babraham Institute, Cambridge, UK.
09/2018	“Developing Brains” Conference, Stockholm, Sweden.
08/2018	EMBO Workshop “Cell and Developmental Systems”, Arolla, Switzerland.
07/2018	Gordon Research Conference on Neural Development, Newport, USA.
07/2018	“1 <sup>st</sup> International Helmholtz Conference on Engineering Biomedical and Metabolic Breakthroughs”, Venice, Italy.
05/2018	“Gastronauts: A Symposium on Gut-brain Matters”, Duke-NUS Singapore.
05/2018	6th UK Workshop on Developmental Cell Biology of <i>Drosophila</i> , The Burn, Scotland, UK.
03/2018	Annual Postdoc Symposium, Sir William Dunn School of Pathology, University of Oxford, UK. Keynote speaker.
02/2018	Keystone Symposium on Endoderm Development and Disease: Cross-Organ Comparison and Interplay, Taos, New Mexico.
12/2017	“Hot Topics in Biology” workshop. Max Planck Institute for Biophysical Chemistry, Goettingen, Germany.
10/2017	SEG- SEBC- SEBD Joint Congress, Gijon, Spain.
10/2017	MDC Careers Day, Berlin, Germany.
09/2017	Portuguese <i>Drosophila</i> Meeting, Tomar, Portugal. Keynote speaker.
06/2017	ISDB 18th International Congress of Developmental Biology, Singapore.
05/2017	EMBO Conference “Stem Cells in Cancer and Regenerative Medicine”, EMBL Heidelberg, Germany.
05/2017	4th Asia-Pacific <i>Drosophila</i> Research Conference, Osaka, Japan.
05/2017	EMBO   EMBL Symposium “Metabolism in time and space”, Heidelberg, Germany.
03/2017	58 <sup>th</sup> Annual <i>Drosophila</i> Research Conference, San Diego, USA. Plenary talk.
11/2016	18 <sup>th</sup> EMBL PhD Symposium “Life by Numbers: Towards Quantitative Biology”. EMBL Heidelberg, Germany.
10/2016	Cell Press/Fondation IPSEN Exciting Biologies meeting “Biology of Commitment”. Phoenix, Arizona, USA.
09/2016	German <i>Drosophila</i> Meeting. Cologne, Germany. Keynote speaker.
07/2016	Rank Prize Funds mini-symposium on Dietary Restriction and Ageing, Cumbria, UK.
07/2016	10 <sup>th</sup> FENS Forum of Neuroscience, Copenhagen, Denmark. Symposium speaker.
06/2016	20 <sup>th</sup> EMBO Conference Development of <i>Drosophila</i> , Crete, Greece.
05/2016	Shaping Life, Marseille, France.
05/2016	EMBO Workshop “Neural control of metabolism and eating behaviour”, Cascais, Portugal.
04/2016	Fondation des Treilles “Integrative Physiology” meeting, France.
07/2015	Society for Developmental Biology 74th Annual Meeting. Snowbird, Utah, USA.
04/2015	Enteric Nervous System 2015, Rotterdam, the Netherlands.
04/2015	British Societies of Developmental Biology and Cell Biology Meeting, Warwick, UK.
09/2014	5 <sup>th</sup> ASM Conference on Beneficial Microbes, Washington, USA.
06/2014	Gordon Research Conference on Molecular and Cellular Neurobiology, Hong Kong, China (declined because of conflicting dates).
06/2014	19 <sup>th</sup> EMBO Conference Development of <i>Drosophila</i> , Crete, Greece.
04/2014	“Visions in Cell Biology” Symposium, Max Planck Institute, Dresden, Germany.
06/2012	18 <sup>th</sup> EMBO Conference “Development of <i>Drosophila</i> ”, Crete, Greece. I was also invited to write the meeting report.
01/2012	Temasek Life Sciences Laboratory Annual Symposium, Singapore (declined because of maternity leave).
10/2011	25 <sup>th</sup> Annual French <i>Drosophila</i> Conference, Lyon, France.
09/2011	1 <sup>st</sup> Junior European <i>Drosophila</i> Investigator Meeting, Leysin, Switzerland.
06/2010	17 <sup>th</sup> EMBO Conference “Development of <i>Drosophila</i> ”, Crete, Greece. Talk highlighted in an EMBO reports article: <i>EMBO reports</i> 11, 724 - 726.
03/2009	21 <sup>st</sup> Cambridge Neuroscience Meeting “New Approaches in Neuroscience”, UK.
<u>Seminars</u>	
01/2020	NIH/NIDDK, Bethesda, USA.
11/2019	University of Münster, Münster, Germany.

11/2019 Dundee School of Life Sciences, UK.  
08/2019 The Biosciences Patricia Clarke Lecture 2019, UCL London, UK.  
06/2019 University of Sheffield, Sheffield, UK.  
05/2019 Molecular and Cellular Biology Department, Harvard University, USA.  
03/2019 Max Planck Institute of Molecular Cell Biology and Genetics, Dresden, Germany.  
12/2018 MRC Harwell Institute, Harwell, UK.  
09/2018 UCL Metabolism Club, London, UK.  
05/2018 CIG Lausanne, Switzerland.  
04/2018 Centre for Developmental Neurobiology, King's College London, UK.  
01/2018 Berlin Life Science Colloquium, Germany.  
01/2018 Centre for Molecular Neurobiology, Hamburg, Germany.  
11/2017 ESPCI-CNRS Paris, France.  
07/2017 Helmholtz Center and Helmholtz Pioneer Campus, Munich, Germany.  
04/2017 Linda Partridge's lab retreat, Ringberg Castle, Germany.  
04/2017 Stanford University School of Medicine, Stanford, USA.  
03/2017 University of California Los Angeles (UCLA), USA.  
02/2017 Gurdon Institute, University of Cambridge, UK.  
12/2016 Institute of Metabolic Science, University of Cambridge, UK.  
12/2016 Max Delbrück Center for Molecular Medicine, Berlin, Germany.  
02/2016 Max Planck Institute of Neurobiology, Martinsried, Germany.  
01/2016 Manchester University, UK.  
12/2015 Oxford University, UK.  
10/2015 Université Nice Sophia Antipolis, France.  
02/2015 Umea University, Sweden.  
10/2014 Skirball Institute, New York, USA.  
02/2014 École Polytechnique Fédérale de Lausanne, Switzerland.  
01/2014 Randall Division of Cell & Molecular Biophysics, King's College London, UK.  
12/2013 Institut Curie, Paris, France.  
11/2013 MRC Laboratory for Molecular Cell Biology, UCL, London.  
03/2013 Institute of Molecular Life Sciences, University of Zurich, Switzerland.  
02/2013 MRC Centre for Developmental Neurobiology, King's College London.  
02/2013 VIB and KU Leuven School of Medicine, Leuven, Belgium.  
11/2012 Beatson Institute for Cancer Research, Glasgow, UK.  
06/2012 Oxford University, UK.  
02/2012 Trinity College Dublin, Ireland (declined because of maternity leave).  
07/2011 Queen Mary University of London, UK.  
06/2011 École Polytechnique Fédérale de Lausanne, Switzerland.  
05/2011 IRB Barcelona, Spain.  
02/2011 Institut de Biologie du Développement de Marseille Luminy, France.  
10/2010 Centre de Biologie du Développement, Toulouse, France.  
10/2010 UCL, London, UK.  
09/2010 University of Helsinki, Finland.  
10/2009 Wolfson Centre for Age-Related Diseases, London, UK.

## Public Engagement

04/2018 Imperial Festival. We contributed an interactive installation to demonstrate the use of *Drosophila* to replace and reduce animal experimentation.  
10/2016 "Brainy Tongue: The Sensory Logic of the Gastronomic Brain" workshop (San Sebastian, Spain), featuring world-renowned chefs and neurobiologists. Included open session featured by media worldwide (e.g. <http://www.bbc.co.uk/news/business-37800097>).  
02/2016 BBC Radio 4 interview (<http://www.bbc.co.uk/programmes/b0713p30>).  
02/2016 Hudry *et al.* featured by The Daily Mail, The Daily Telegraph, Medical News Today, i (the paper for today), Press and Journal (Scotland), Medical Xpress, Yahoo! News, BT.com, Irish Examiner, The Conversation.  
02/2016 Lab stand at the "Imperial Fringe: Food of Tomorrow" public engagement event.  
01/2016 My lab contributed a talk to the University of the Third Age visit.  
10/2015 Hosted Minister for the Life Sciences George Freeman during his visit to the LMS. In the lab, we showed him how flies can be used to study obesity and cancer.

07/2015	Reiff <i>et al.</i> featured by New Scientist, Daily Mail, Daily Telegraph, Daily Mirror, Evening Standard, Metro, CBS News, Irish Independent, SBS and 9 News (amongst others).
03/2014	Contributed video to New York Imagine Science Films Festival ( <a href="http://imaginesciencefilms.org/">http://imaginesciencefilms.org/</a> ).
01/2014	Joint MRC / University of the Arts London workshop “Fabrics of Life” ( <a href="http://csc.mrc.ac.uk/fabrics-of-life-2014-big-data/">http://csc.mrc.ac.uk/fabrics-of-life-2014-big-data/</a> ).
2013 - present	Microscopy demonstrations ( <i>Drosophila</i> life cycle) to primary school children.
07/2012	Contributed images to “The Cell: An Image Library” ( <a href="http://www.cellimagelibrary.org/">www.cellimagelibrary.org/</a> ).
03/2012	My lab contributed a video to the University of Cambridge “Under the microscope” series, accessible on YouTube ( <a href="http://www.youtube.com/watch?v=CDg2Keu3HT8">http://www.youtube.com/watch?v=CDg2Keu3HT8</a> ).
03/2011	BBC audio slideshow ( <a href="http://www.bbc.co.uk/news/science-environment-12686745">http://www.bbc.co.uk/news/science-environment-12686745</a> ).
03/2011	Cambridge Science Festival. Organiser of the event “Playing with the entrails of fruit flies”.
01/2011	Cognigni <i>et al.</i> featured by New Scientist, Times Higher Education, CBS News, Le Point, Discover Magazine, Times of India (amongst others).
01/2010	Contributed images to the University of Cambridge’s 800 <sup>th</sup> anniversary light show. One of them was also the exclusive image used for the posters and flyers advertising the event.
01/2010	Interviewed by ITV Anglia (800 <sup>th</sup> anniversary feature).
2001/02	Freelance writer (press releases) for the scientific journal <i>Neuron</i> .

## Mentoring and Teaching

2016 - present	External mentor to Dr. Sveta Chakrabarti (Wellcome Trust/DBT India Alliance Fellow, Bangalore, India).
2015 - present	External mentor to Dr. Julia Cordero (Wellcome Trust Henry Dale Fellow, University of Glasgow).
2016 - present	Internal mentor to Drs. Santiago Vernia and Saravana Ramasamy (LMS junior Group Heads).
2015 - present	I am one of four postdoctoral mentors at the MRC London Institute of Medical Sciences.
2017 - present	Lecturer, “Functional Omics” MSc (Imperial College London).
2017 - present	Lecturer, “Gut Signalling and Metabolism”, MRC LMS PhD Programme.
2015 - present	Lecturer, “Microbiome in Health and Disease” MRes (Imperial College London).
2016	Lecturer, “Human Culture: the human experience of materials applied to eating food” post-graduate student project, Design Products (Royal College of Art).
2009 - 2012	Neurogenesis sessions of Core Course in Developmental Biology (Wellcome PhD Programme, University of Cambridge).
1998 - 2000	<i>Drosophila</i> Genetics Practicals Demonstrator (University of Oxford).
1999 - 2000	Microbial Genetics Practicals Demonstrator (University of Oxford).
	Supervision of 6 PhD students and 4 Erasmus/Masters students.
	Second advisor to 12 PhD students.
	Examiner for 8 PhD and 1 MSc vivas.

## Additional Information

Member of the Biochemical Society, Genetics Society, British Society for Developmental Biology, British Society for Cell Biology, Physiological Society, Society for Developmental Biology, Organization for the Study of Sex Differences and Genetics Society of America.

Invited by Springer to edit an academic book on the brain-gut axis (declined).

## Publications

### Book chapters

**Miguel-Aliaga, I.**, Jasper, H., Lemaitre, B. (2018) Anatomy and Physiology of the Digestive Tract of *Drosophila melanogaster*. In Development & Growth section of **FlyBook**, edited by Cooley, L., Hawley, S., Markow, T., Spradling, A. In *Genetics* 210(2):357-396.

### Primary publications

- Grmai, L., Hudry, B., **Miguel-Aliaga, I.**, Bach, E. A. (2018) Chinmo prevents transformer alternative splicing to maintain male sex identity. *PLOS Genet* 14(2):e1007203.
- Perea, D., Guiu, J., Hudry, B., Konstantinidou, C., Milona, A., Hadjieconomou, D., Carroll, T., Hoyer, N., Natarajan, D., Kallijärvi, J., Walker, J.A., Soba, P., Thapar, N., Burns, A.J., Jensen, K.B., **Miguel-Aliaga, I.** (2017) Ret receptor tyrosine kinase sustains proliferation and tissue maturation in intestinal epithelia. *EMBO J* 36(20):3029-3045. **Recommended in F1000.**
- Hudry, B., Khadayate, S., **Miguel-Aliaga, I.** (2016) The sexual identity of adult intestinal stem cells controls organ size and plasticity. *Nature* 530:344-8. **Recommended in F1000 and highlighted by Cell Stem Cell Preview, Curr Biol Dispatch and Nature News and Views.**
- Reiff, T., Jacobson, J., Cognigni, P., Antonello, Z.A., Ballesta, E., Tan, K.J., Yew, J.Y., Dominguez, M., **Miguel-Aliaga, I.** (2015) Endocrine remodelling of the adult intestine sustains reproduction in Drosophila. *Elife* 4:e06930. **Recommended in F1000 and highlighted by Elife Insight and Curr Biol Dispatch.**
- Soba, P., Han, C., Zheng, Y., Perea, D., **Miguel-Aliaga, I.**, Jan, L.Y., Jan, Y.N. (2015) The Ret receptor regulates sensory neuron dendrite growth and integrin mediated adhesion. *Elife* 4:05491.
- Wayland, M.T., Defaye, A., Rocha, J., Jayaram, S.A., Royet, J., **Miguel-Aliaga, I.**, Leulier, F., Cognigni, P. (2014) Spotting the differences: Probing host/microbiota interactions with a dedicated software tool for the analysis of faecal outputs in Drosophila. *J Insect Physiol* 69:126.
- Martorell, O., Merlos-Suárez, A., Campbell, K., Barriga, F.M., Christov, C.P., **Miguel-Aliaga, I.**, Batlle, E., Casanova, J., Casali, A. (2014) Conserved mechanisms of tumorigenesis in the Drosophila adult midgut. *PLoS One* 9(2):e88413.
- Linneweber, G.A., Jacobson, J., Busch, K.E., Hudry, B., Christov, C.P., Dormann, D., Yuan, M., Otani, T., Knust, E., de Bono, M., **Miguel-Aliaga, I.** (2014) Neuronal control of metabolism through nutrient-dependent modulation of tracheal branching. *Cell* 156(1-2):69. **Recommended in F1000 and highlighted in EMBO J.**
- Sarraf-Zadeh, L., Christen, S., Sauer, U., Cognigni, P., **Miguel-Aliaga, I.**, Stocker, H., Köhler, K., Hafen, E. (2013) Local requirement of the *Drosophila* insulin binding protein imp-L2 in coordinating developmental progression with nutritional conditions. *Dev Biol* 381(1):97.
- Talsma, A., Christov, C.P., Terriente-Felix, A., Linneweber, G., Shafer, O.T., **Miguel-Aliaga, I.** (2012) Remote control of renal function by an intestinal neuropeptide. *Proc Natl Acad Sci U S A* 109(30):12177.
- Oyallon, J., Aplitz, H., **Miguel-Aliaga, I.**, Timofeev, K., Ferreira, L., Salecker, I. (2012) Regulation of locomotion and motoneuron trajectory selection and targeting by the *Drosophila* homolog of Olig family transcription factors. *Dev Biol* 369(2):261.
- Pulver S, Cognigni P, Denholm B, Fabre C, Gu W, Linneweber G, Prieto-Godino L, Urbancic V, Zwaart, M. **Miguel-Aliaga I.** (2011) Why flies? Inexpensive public engagement exercises to explain the value of basic biomedical research on *Drosophila melanogaster*. *Adv Physiol Educ* 35(4):384.
- Cognigni, P., Bailey, A.P., **Miguel-Aliaga, I.** (2011) Enteric neurons and systemic signals couple nutritional and reproductive status with intestinal homeostasis. *Cell Metab* 13(1): 92.
- Suska, A., **Miguel-Aliaga, I.**, Thor, S. (2011) Segment-specific generation of *Drosophila* capability neuropeptide neurons by multi-faceted Hox cues. *Dev Biol* 353(1): 72.
- Bardet, P.L., Kolahgar, G., Mynett, A., **Miguel-Aliaga, I.**, Briscoe, J., Meier, P., Vincent, J.P. (2008). A fluorescent reporter of caspase activity for live imaging. *Proc Natl Acad Sci U S A* 105(37): 13901.
- Miguel-Aliaga, I.**, Thor, S., Gould, A.P. (2008) Postmitotic specification of *Drosophila* insulinergic neurons from pioneer neurons. *PLoS Biol* 6(3): e58.

Baumgardt, M., **Miguel-Aliaga, I.**, Karlsson, D., Ekman, H., Thor, S. (2007) Specification of neuronal identities by feedforward combinatorial coding. *PLoS Biol* 5, e37.

Sheldon, T.J., **Miguel-Aliaga, I.**, Gould, A.P., Taylor, W.R., Conklin, D. (2007) A novel family of single VWC-domain proteins in invertebrates. *FEBS Lett* 581(27): 5268.

**Miguel-Aliaga, I.**, Thor, S. (2004) Segment-specific prevention of pioneer neuron apoptosis by cell-autonomous, postmitotic Hox gene activity. *Development* 131(24): 6093.

**Miguel-Aliaga, I.**, Allan, D.W., Thor, S. (2004) Independent roles of the dachshund and eyes absent genes in BMP signaling, axon pathfinding and neuronal specification. *Development* 131(23): 5837.

Allan, D.W., St Pierre, S.E., **Miguel-Aliaga, I.**, Thor, S. (2003) Specification of neuropeptide cell identity by the integration of retrograde BMP signaling and a combinatorial transcription factor code. *Cell* 113(1): 73.

Chan, Y.B., **Miguel-Aliaga, I.**, Franks, C., Thomas, N., Trulzsch, B., Sattelle, D.B., Davies, K.E., van den Heuvel, M. (2003) Neuromuscular defects in a *Drosophila* survival motor neuron gene mutant. *Hum Mol Genet* 12(12): 1367.

Vargas, J.D., Culetto, E., Ponting, C.P., **Miguel-Aliaga, I.**, Davies, K.E., Sattelle, D.B. (2002) Cloning and developmental expression analysis of *ltd-1*, the *Caenorhabditis elegans* homologue of the mouse kyphoscoliosis (*ky*) gene. *Mech Dev* 117(1-2): 289.

**Miguel-Aliaga, I.**, Chan, Y.B., Davies, K.E., van den Heuvel, M. (2000) Disruption of SMN function by ectopic expression of the human SMN gene in *Drosophila*. *FEBS Lett* 486(2): 99.

**Miguel-Aliaga, I.**, Culetto, E., Walker, D.S., Baylis, H.A., Sattelle, D.B., Davies, K.E. (1999) The *Caenorhabditis elegans* orthologue of the human gene responsible for spinal muscular atrophy is a maternal product critical for germline maturation and embryonic viability. *Hum Mol Genet* 8(12): 2133.

Talbot, K., **Miguel-Aliaga, I.**, Mohaghegh, P., Ponting, C.P., Davies, K.E. (1998). Characterization of a gene encoding survival motor neuron (SMN)-related protein, a constituent of the spliceosome complex. *Hum Mol Genet* 7(13): 2149.

#### Review articles

Lemaître, B., **Miguel-Aliaga, I.** (2013) The digestive tract of *Drosophila melanogaster*. *Annu Rev Genet* 47:377.

**Miguel-Aliaga, I.** (2012) Nerveless and gutsy: intestinal nutrient sensing from invertebrates to humans. *Semin Cell Dev Biol* 23(6):614.

**Miguel-Aliaga, I.**, Oliver, B., Teleman, A. A. (2012) The flies of Icarus: science with wings in Crete. *EMBO Rep* 13(11):945.

**Miguel-Aliaga, I.**, Thor, S. (2009) Programmed cell death in the nervous system--a programmed cell fate? *Curr Opin Neurobiol* 19(2): 127.

#### Interviews

**Miguel-Aliaga, I.** (2017) Q&A: Irene Miguel-Aliaga. *Curr Biol* 27: R286-R287.

**Miguel-Aliaga, I.** and Bobrowska, A. (2015) Cell scientist to watch--Irene Miguel-Aliaga. *J Cell Sci* 128: 3519-20.