

## CURRICULUM VITAE

Olivier Pourquié  
Born September 1, 1964, in Angoulême (France)  
Married, 2 children  
Citizenship French and US

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2014- Professor of Genetics, Harvard Medical School, Boston, MA, USA  
2014- Frank Mallory Burr Professor of Pathology, Brigham and Women's Hospital, Boston  
2014- Associate member Broad Institute  
2014- Principal Faculty Harvard Stem Cell Institute

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### EDUCATION

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1996 Habilitation, Paris VI University, Paris, France  
1992 Ph.D. Thesis, AgroParisTech (Thesis advisor: Pr Nicole Le Douarin)  
1988 Engineer diploma, AgroParisTech, Paris  
1988 Diploma Thesis of General Microbiology (DEA), Paris VII University,  
1988 Diploma of General Microbiology, Institut Pasteur, Paris

### PREVIOUS POSITIONS

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2011-2014 Professor (PU-PH) Strasbourg University Medical School, France  
2009-2012 Director, Institute of Genetics and Molecular and Cellular Biology (IGBMC),  
Strasbourg, France  
2009-2011 Research Director INSERM (DR1), Strasbourg, France  
2005-2009 Investigator, Howard Hughes Medical Institute, Kansas City, USA  
2005-2009 Investigator, Stowers Institute for Medical Research, Kansas City, USA  
2002-2004 Associate Investigator, Stowers Institute for Medical Research, Kansas City, USA  
1999-2002 Research Director (DR2), CNRS, Developmental Biology Institute (IBDM),  
Marseilles  
1996-2002 Group Leader, IBDM, Marseilles, France  
1996-1999 Senior Research Scientist (CR1) CNRS, IBDM, Marseilles, France  
1993-1996 Research Scientist (CR2) CNRS, Institut d'Embryologie CNRS/Collège de France,  
Nogent/Marne, France  
1992-1996 Postdoctoral Fellow, Institut d'Embryologie CNRS/Collège de France,  
(Supervisor: Pr Nicole Le Douarin)  
1988-1992 Graduate student, Institut d'Embryologie CNRS/Collège de France (Supervisor: Pr  
Nicole Le Douarin)

### AWARDS/DISTINCTIONS

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2020 Elected to the US National Academy of Sciences  
2020 Elected President of the Society for Developmental Biology  
2012 Richard Lounsbery Grand Prize of the French and US Academy of Sciences

2011 Grand Prix Allianz/Institut de France  
 2011 Elected to the Academia Europea  
 2010 ERC advanced grant  
 2005 Howard Hughes Medical Institute Investigator  
 2005 Edouard Van Beneden Prize, the Royal Academy of Belgium  
 2005 Victor Noury Grand Prize, the French Academy of Sciences  
 2004 Harland Winfield Mossman Award, American Association of Anatomists  
 2004 The segmentation clock, one of 24 milestones of 20<sup>th</sup> century developmental biology  
<http://www.nature.com/milestones/development/milestones/>.  
 2002 Elected European Molecular Biology Organization (EMBO) member  
 1999-2002 President, the French Society for Developmental Biology  
 1998 Science Prize of the Gulbenkian Foundation, Portugal  
 1996 Bronze Medal of the CNRS, Marseilles, France

## EDITORIAL/SCIENTIFIC REVIEWS

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**Editor-in-Chief** *Development* (2009-2018). *Current Topics in Developmental Biology* (2007-2011)  
**Associate Editor** *Developmental Biology* (2000-2009), *Anatomy and Embryology* (2002-2006)  
**Series Editor** *Clinical Genetics* (2010-2013)  
**Editorial Board** *Developmental Biology* (1999-2014), *Mechanisms of Development* (1999-2010)  
*Development* (1999-2008), *Developmental Dynamics* (2004-), *Development, Growth & Differentiation* (2008-), Faculty of 1000 (2000-2009)  
**Guest Editor** Special Issue of *Developmental Dynamics*, "Segmentation" (2007)  
 Special Issue of *Current Opinion in Genetics and Development*, "Pattern Formation and Developmental Mechanism" (2002, 2008)  
**Reviewer** *Cell*, *Nature*, *Science*, *Nature Genetics*, *Nature Cell Biology*, *Nature Biotechnology*, *Nature Communications*, *Developmental Cell*, *Genes and Development*, *Development*, *Developmental Biology*, *Mechanisms of Development*, *Bioessays*.

### Permanent Member:

2019-2020 Swiss National Science Foundation International referee  
 2011-2014 European Research Council (ERC) advanced LS3 panel  
 2004-2008 National Institute of Health (NIH) DEV-1 Study Section

### Independent Expert Reviewer:

2021 NIH review panel Developmental Mechanisms of Human Structural Birth Defects (ZHD1 DSRM50)  
 2021 Search Committee: Director of the Cell and Gene Therapy Center, Brigham and Women's Hospital  
 2021 Developmental Mechanisms of Human Structural Birth Defects (ZHD1 DSR M 50) NIH Review Panel  
 2021 NIH CSR Special Emphasis Panel, Fellowship: Cell Biology, Developmental Biology and Bioengineering (F05-U)  
 2021 Swiss National Science Foundation  
 2017 Search Committee: new Faculty Department of Genetics, Harvard Medical School  
 2011 Search Committee: Chair Institut de Biologie du Développement de Marseille Luminy (IBDML)

- 2011 Committee Chair AERES panel (Institute of Developmental Biology and Cancer, Nice, France)
- 2011 Search Committee: Chair Institut du Cerveau et de la Moelle (ICM, Paris, France)
- 2002; 2005; 2009 European Community FP6 and FP7 programs

**Institutional Animal Care and Use Committee (IACUC):**

- 2002-2005 Stowers Institute for Medical Research, Kansas City, MO

**Scientific Advisory Committees:**

- 2021 Molecular and Cellular Medicine Board Review of the Laboratory of Molecular Biology (LMB, Cambridge, UK) Cell division
- 2020- Scientific Advisory Board Myoneuralp strategic project (French Muscular Dystrophies Association (AFM))
- 2018- Harvard Graduate program BBS admission committee
- 2018- Scientific Advisory Board (Hospital Sainte-Justine, Montreal, Canada)
- 2018 Scientific Academic Advisory Committee (SAAC). Weizmann Institute of Science (Israel)
- 2017-2023 Medical Research Committee Muscular Dystrophy UK
- 2015-2018 Stepping Strong Trauma Center Medical Executive Committee
- 2015- Scientific Advisory Board, Institute of Biotechnology, University of Helsinki (Finland)

**SUPERVISING ACTIVITIES**

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**Postdoctoral (Current)**

- 2024- Thibault Pebrier, Wenhui Tang
- 2023- Jiayi Zhao
- 2021- Clément Bodineau, Alexandra Eicher
- 2019- Yuchuan Miao, Lu Yan
- 2018- Kana Ishimatsu, Kongju Zhu, Oscar Tarazona

**Graduate Students (Current)**

- 2023 Amine Bouchekioua, École Normale Supérieure de Lyon, France
- 2023 Matthew White, Harvard Medical School (BBS), Boston
- 2020- Andrew Silberfeld, Harvard Medical School (BBS), Boston
- 2020- Alejandra Rodriguez de la Rosa, Harvard Medical School (BBS), Boston
- 2020- Jong Gwan Lee, Harvard Medical School (BBS), Boston
- 2019- Rebecca Izen, Harvard Medical School (BBS), Boston

**Postdoctoral (Former/Current Position)**

- 2019-2021 Taiki Nakajima, Scientist, Takeda, Japan
- 2018-2023 Alessandro Mongera, Group Leader, University College London, UK
- 2017-2021 Jyoti Rao, Scientist, Roche Institute for Translational Bioengineering, Switzerland
- 2014-2021 Charlene Guillot, Group leader, GReD Clermont-Ferrand, France
- 2013-2019 Ziad Al-Tanoury, Senior manager, Vertex Pharmaceuticals, Boston, MA, USA
- 2017-2019 Daniel Sieiro-Mosti, Associate, Sofinnova partners
- 2014-2018 Fengzhu Xiong, Group leader, Gurdon Institute, Cambridge, UK.
- 2015-2018 Christoph Budjan, Postdoctoral Fellow, Dana Farber Cancer Institute, Boston,

2015-2018 Ernesto Lujan, CEO dNovo Inc., CA, USA  
 2009-2018 Masayuki Oginuma, Group leader, Riken Institute, Kobe, Japan  
 2012-2016 Karine Guevorkian, CNRS Senior Research Scientist, Institut Curie, Paris, France  
 2015-2016 Adrian Ranga, Associate Professor, University of Leuven, Belgium  
 2008-2017 Jérôme Chal, Senior VP head of CMC, Myeloid Therapeutics, Cambridge, USA  
 2006-2014 Olivier Tassy, INSERM Research scientist, Strasbourg, France  
 2004-2013 Matthias Wahl, Associate Director Mdx global solutions, QIAGEN, Koln, Germany  
 2006-2012 Bertrand Benazeraf, CNRS group leader, Toulouse, France  
 2006-2011 Mitsuji Maruhashi, Kurabo Industries LTD, Japan  
 2007-2009 Ertuğrul Özbudak, Professor, Northwestern University, Chicago  
 2005-2009 Alexander Aulehla, Head, developmental biology unit, EMBL, Heidelberg, Germany  
 2006-2008 Mary-Lee Dequéant, Executive director, CRISPR Therapeutics, Cambridge, USA  
 2006-2008 Shaobing Zhang, Postdoctoral Fellow, Stowers Institute, Kansas City, MO, USA  
 2006-2007 Gretchen Dollar, Scientist, Echogen, USA  
 2004-2005 Julien Vermot, Group Leader, Imperial college, London  
 2003-2004 Marie-Claire Delfini, CNRS Research Scientist, IBDML, Marseilles, France  
 2001-2006 Valerie Baubet, Associate Staff Scientist, the Wistar Institute, Philadelphia, USA  
 2001-2004 Alasdair Reid, Postdoctoral Fellow, Children's Mercy Hospital, Kansas City, USA  
 2000-2008 Tadahiro Iimura, Professor, Dental University, Hokkaido, Japan  
 2000-2002 Sandrine Millet, Staff Scientist, GenOway, Lyon, France  
 1999-2005 Miguel Maroto, Group Leader, Wellcome Trust Institute, Dundee, UK  
 1999-2000 Stephane Nicolas, Research Scientist, CNRS, IBDML, Marseilles, France  
 1998-2000 Vincent Ecochard, Assistant Professor, University of Toulouse, Toulouse, France  
 1997-2000 Sandrine Fraboulet, Assistant Professor, University of Grenoble, Grenoble, France  
 1997-2005 Kim Dale, Professor and Associate Dean, University of Dundee, UK  
 1997-2001 Mike McGrew, Professor, Edinburgh University and Roslin Institute, UK

### **Graduate Students (Former/Current Position)**

2021-2023 Yannis Djéffal, University of Creteil Medical School, France  
 2016-2022 Margarete Diaz-Cuadros, Group leader, MGH, Boston USA  
 2014-2019 Arthur Michaut, Postdoctoral Fellow, Institut Pasteur Paris  
 2012-2016 Alexis Hubaud, Principal Scientist, Be Biopharma, Cambridge, USA  
 2009-2012 Agata Bera, Customer service management, Eurofins, Germany  
 2008-2011 Nicolas Denans, Imaging application scientist Janelia Farm, USA  
 2005-2010 Aurelie Krol, Project manager, Institut National du Cancer, France  
 2004-2009 Goncalo Neto, Program and Project officer, Strasbourg, France  
 2005-2008 Céline Gomez, Director of operations, Definigen, Cambridge, UK  
 2002-2008 Jérôme Chal, Senior VP head of CMC, Myeloid Therapeutics, Cambridge, USA  
 2001-2006 Mary-Lee Dequéant, Executive director, CRISPR Therapeutics, Cambridge, USA  
 1997-2000 Caroline Jouve, Pharmacist, France  
 1996-2002 Julien Dubrulle, Staff Scientist, Fred Hutch, Seattle, USA  
 1995-1998 Isabel Palmeirim, Professor Champalimaud Foundation, Portugal  
 1994-1998 Estelle Hirsinger, Senior Research Scientist, CNRS, Institut Pasteur, Paris, France

## **RESEARCH GRANTS**

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### **Current**

- NIH R01 HD085121-NICHD (2016-2026): *Role of Energy Metabolism in Patterning the Vertebrate Musculo-Skeletal Axis.* (Pourquié PI)

- NIH 1R01HD113792-01A1 (2024-2029): *Mechanics of vertebrate embryo elongation* (Pourquié: PI)
- NIH R01GM152811-01 (2023-2026): *Dynamical maintenance of left-right symmetry during vertebrate development* (Touboul: PI, Pourquié, Mahadevan Co-PIs)
- 1R01DK139068-01 (2024-2029): *Engineering human brown adipose in vitro for cell therapy applications* (Pourquié: PI)
- NIH 1R01 AR074526-NIAMS (2019-2024): *Regulators of Development and Quiescence in the Human Muscle Stem Cell Lineage* (Pourquié: PI and Gussoni : co-PI)
- NIH R01 AR077132-NIAMS (2021-2026): *Suturable bioprinted vascularized muscle constructs for treatment of skeletal muscle loss* (Shin/Tamayol PIs, Pourquié subproject PI)
- 20434/23941 Specific Research Contract, The French Muscular Dystrophy Association (AFM-Telethon) (2019-2025): *Toward cell therapy for Duchenne Muscular Dystrophy: characterization of regenerative potential of hIPS-derived Pax7+ cells* (Pourquié PI)

### Pending

- NIH 1R01HD113617-01 (2024-2029): *Using human iPSC-derived in vitro models to study the role of HOX genes in musculo-skeletal development* (Pourquié PI)
- European Research Council 101118651 (2024-2029): *Decoding skeletal muscle tissue repair dysfunction in Duchenne Muscular Dystrophy* (Pourquié, Relaix, Birchmeier, Colomé-Tatché, co-PIs)
- NIH 1R01EB034923-01A1 (2024-2029): *An in situ bioprinter for engineering of scaffolds within vasculature* (Tamayol and Sinha PIs, Pourquié Co-PI)
- NIH R01AR084059 (2024-2029): *Decellularized muscular connective tissue-derived scaffolds for tissue regeneration* (Shin: PI, Pourquié: Co-PI)

### Completed

- 23898 The French Muscular Dystrophy Association (AFM-Telethon) (2022-2023): *Comparative study of iPSC-derived myogenic precursors proposed for cell therapy in a model of Duchenne Muscular Dystrophy (MyoPilot)*
- NIH R01 AR073822 (2018-2023): *Microengineered scaffolds carrying patient-specific cells and growth factors for treatment of volumetric muscle loss* (Tamayol, PI, Sinha, Shin, Pourquié co-PIs)
- NIH R01 HD097068-NICHD (2018-2023): *Mechanics of Vertebrate Embryo Elongation* (Pourquié: PI and Mahadevan: co-PI)
- BWH Stepping Strong Innovator Award (2020-2022): *Connective tissue reprogramming biomaterials for creating muscle tissues differentiated from pluripotent stem cells* (Shin, PI; Pourquié Co-Investigator)
- Human Frontier Science Program (HFSP) Research Grant (2018-2021): *Muscle building: Dissecting tension-driven myofibrillogenesis in vitro, in vivo and in silico* (Schnorrer coordinator, Friedrich and Pourquié co-PIs)
- Harvard Brain Science Initiative (HBI) Bipolar Disorder Seed Grant (2020-2021): *Understanding Developmental Origin of Bipolar Disorder and Brain Laterality* (Pourquié PI)
- Harvard Stem Cell Institute (2015-2016) *In vitro derivation of brown fat cells from mouse and human ES and iPSC cells*
- HFSP Research grant coordinator (2012-2014) *“Quantitative analysis of somitogenesis using avian transgenic lines and real time imaging”*, with Paul François (Mc Gill) and Rusty Lansford (Caltech).
- ERC Advanced (2010-2015): *“Building the vertebrate Body”*
- AFM strategic project (2010-2014): *“Differentiating ES Cells or Induced Pluripotent cells into skeletal muscles as Therapy for muscular Dystrophies”*

- ANR (French National Research Agency) Blanche NanoOscar (2011-2013) “*Development of a stem cell-based nanostructured implant for osteochondral repair*” with Nadia Jessel (Strasbourg University)
- ANR chaire d’excellence (2009-2011)
- NIH 2R01HD043158 (2007-2011): “*Molecular Analysis of the Segmentation Clock*”
- Defense Advanced Research Projects Agency (DARPA) (2005-2009) “*Microstate to Macrodynamics: a New Mathematics of Biology*”
- NIH 1R01HD043158 (2003-2007): “*Molecular Analysis of the Segmentation Clock*”
- Muscular Dystrophy Association (2003-2006): “*Role of Atrophins in Patterning/Differentiating Early Muscle Precursors*”
- Action Concertée Incitative Physiologie et développement (2001-2003): Ministère de la recherche
- HFSP Research grant Coordinator (1999-2002): “*Molecular Analysis of Segmentation Mechanisms in Vertebrates and Arthropods*” with Nipam Patel, David Ish-Horowicz and Christoph Niehrs.
- AFM-Telethon (1999-2001): “*Molecular Mechanisms of Somitogenesis and Role of BEN Cell Surface Protein in Motoneuron Development and Establishment of the Neuromuscular Junction*”
- Association pour la recherche contre le Cancer (ARC) (1998-2000)
- ATIPE CNRS (1997-2000)
- European Union Biotech Contract (1997-2000): “*Molecular Mechanisms for Building the Brain*”
- Aide à l’implantation de nouvelles équipes de la Fondation pour la Recherche Médicale (FRM) (1997)

## INSTITUTIONAL GRANTS

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- “Laboratoire d’Excellence/Laboratory of Excellence” National program “Investments for the futur/Investissements d’avenir” (2011-2020) 20 million euros. Principal Investigator
- Infrastructure Biologie Santé/Infrastructure Biology and Health “Investments for the futur/Investissements d’avenir” Stem Cell Differentiation platform (2011-2016) 2.7 million euros. Coordinator.

## INDUSTRIAL EXPERIENCE

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- Scientific founder of Somite Therapeutics (2023): a biotech company developing cell therapy protocols for diseases of the musculoskeletal system
- Consultant for CRISPR-TX Boston (2017)
- Founder of Anagenesis Biotechnologies SAS (2011): a biotech company specialized in production of muscle precursors from pluripotent cells.
- Co-founder of Trophos SA (1999): a biotech company specializing in high-throughput screening for neuroprotective drugs on primary neurons. Trophos’s compound Olesoxime successfully completed phase 2b clinical trial for Spinal Muscular Atrophy and the company was acquired by Roche in 2015.
- Member of the board of the “Pôle de compétitivité, Alsace Biovalley” (2010-2012)
- Co-founder and President (2007): International Consortium for Vertebral Anomalies and Scoliosis, Inc. (ICVAS)
- Scientific Advisory Board (2000-2005): Vivalis SA (Nantes, France)

## TEACHING ACTIVITIES

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- Rachel Swope, DAC committee, 2023-
  - Heer Joisher, DAC committee, 2022-
  - Axelle Wilmerding, PhD committee 2021
  - Helen Yang PQE committee 2020, DAC committee 2021-
  - Henry Bushnell PQE committee 2021, DAC committee 2021-
  - Hasreet Gill DAC committee 2020-2023
  - Anna Cha DAC committee 2020-
  - Hailey Cambra DAC committee 2020-
  - Rebecca Franck PQE committee 2020
  - Mukul Tewary, PhD committee 2018
  - Daisy Robinton, PhD Committee 2018
  - Tyler Huycke DAC committee 2014-2017
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- Developmental Biology Course, Harvard Medical School BBS graduate program (2016-)
  - MIT-HMS HST070 medical curriculum reproductive biology course, Cambridge, USA (2016-)
  - Developmental and Regenerative Biology (DRB) Bootcamp lecture, HMS (2019-)
  - David Rockefeller Graduate Program. Stem Cells in Tissue Morphogenesis and Cancer course lecture, Rockefeller University, New York, USA. (2019, 2023)
  - Cold Spring Harbor Laboratory Short course: Mouse Development, Stem Cells and Cancer, New York, USA. (2023)
  - International Master Program in Life Sciences, Université de Lyon, France (2022-)
  - Gulbenkian Foundation for sciences, PhD program, Oeiras, Portugal (2021)
  - Ecole de l'INSERM, Fondation Bettencourt Schueller, France (Virtual) (2021)
  - Spring 2019 Course in Developmental Biology, Shanghai Jiao Tong University, China (2019)
  - BBS230 Analysis of Scientific Literature Course Harvard Medical School BBS graduate program (2017)
  - Developmental neurobiology class, guest lecture to MIT undergrads (2017)
  - Woods Hole Marine Biology Laboratories, Developmental Biology course, Instructor. (2004-2006, 2017)
  - Biotrail PhD programme Marseilles, France (2016)
  - Developmental Biology course: from stem cells to morphogenesis, Institut Curie/UPMC, Paris, France (2014)
  - Congenital disorders and their embryonic origins, Ecole doctorale des Sciences de la vie et de la santé, Université de Strasbourg, France (2014)
  - International Course in Developmental Biology, CIMARQ, Quintay, Chile (2014)
  - Concepts in Developmental Biology Summer School Karolinska Institute's Developmental Biology and Regenerative Medicine, Bodrum, Turkey (2014)
  - Stem Cell Course on Advances in Stem Cell Biology, Institut Pasteur, Paris (2013)
  - Advanced Course on «Mesoscopic origins of cells behaviors during tissue morphogenesis: biochemical circuits and mechanics», Cargese, France (2012)
  - MyoGrad Summer school for Myology (European PhD program), Berlin, Germany (2012)
  - UNESCO chair, Brazil (2011)
  - Université de Strasbourg, L3, Université de Montpellier M2. (2011)
  - Ecole de l'INSERM, Fondation Bettencourt Schueller, Sèvres, France (2010)
  - Bone and Tooth Seminar, UMKC, University of Missouri at Kansas City, School of Medicine and Dentistry, Kansas City, MO, USA

- Spring 2007 Course in Genetics and Genomic Analysis of Human Biology Colloquium presentation, University of Wisconsin-Madison, WI, USA
- Pediatric Grand Rounds, University of Kansas Medical Center, Kansas City, KS, USA
- Developmental Biology Training Grant Seminar, Huntsman Cancer Institute, Salt Lake City, UT, USA
- Developmental Colloquium, Duke University, Raleigh-Durham, NC, USA
- Ph.D. Program, Tamasek Life Sciences Laboratory, National University of Singapore
- Ph.D. Program, University of Coimbra, Coimbra, Portugal
- Ph.D. Program in Developmental Biology, Children's Hospital Medical Center, Cincinnati, OH, USA
- Frontiers in Human Embryonic Stem Cells Advance Training Course, Pittsburgh Development Center, Pittsburgh, PA, USA
- Molecular Aspects of Vertebrate Segmentation, Sonderforschung Bereich, Freiburg, Germany
- Ph.D. Program, Developmental Biology, Paris VI University, Paris, France (1998-2011)
- Ph.D. Program, Kansas University Medical School, Kansas City, KS, USA

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## PROFESSIONAL SOCIETIES

- French Society for Developmental Biology
- International Society for Differentiation (member of the board of directors)
- Society for Developmental Biology
- American Association for the Advancement of Science
- Collège des Alumni, Académie Royale de Belgique

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## SCIENTIFIC MEETING ORGANIZER

- Co-organizer of the Company of Biologist workshop “From Stem cells to Human Development”, (2014, 2016, 2018, 2024)
- Co-organizer with Alain Chédotal of “Developmental Biology in the 21<sup>st</sup> century”, Fondation des Treilles, France (2023)
- Co-organizer with Denis Duboule of College de France Symposium on Developmental timing, Paris, France (2023)
- Co-organizer with Chris Amemiya of the Joined Annual PASEDB-SDB meeting in Vancouver (2022)
- Co-organizer with F. Schnorrer of “Myogenesis-from forces to structure and treatment”, Fondation des Treilles, France (2022)
- Co-organizer with P. Keller, K. McDole, and S. Srinivas of the meeting “Imaging Mouse Development”, Janelia Farms, USA (2022)
- Local organizer, Society for Developmental Biology, Boston, USA (2019)
- Co-organizer with L. Mahadevan (Harvard) and A. Srivastava (Florida) of the workshops “Morphogenesis: Geometry and Physics” and “Morphometrics, Morphogenesis and Mathematics” at the Center of Mathematical Sciences and Applications”, Harvard, (2018)
- EMBO conference. Advances in Stem Cells and Regenerative Medicine (Heidelberg). Co-organizer (2017)
- Organizer and Session Chair: Sun Valley Workshop Session, *Recent Advances in Skeletal Development and Regeneration*, Sun Valley, ID, USA (2009)

- Organizer (with Kenro Kusumi, Arizona State University, Tempe, AZ, USA): *Somitogenesis: from Models to Therapeutics*, Satellite Symposium to the Society for Developmental Biology Meeting and First Pan American Congress in Developmental Biology, Cancun, Mexico (2007)
- Member of the International Organizing Committee, Annual Conference of the Indian Society of Developmental Biologists (ISDB) and International Symposium on Cellular Signaling during Development, Agharkar Research Institute, Pune, India (2006)
- Organizer (with Dave Burt, Roslin Institute, UK): *Chicken Genomics and Development Workshop*, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, USA (2005, 2006)
- Organizer (with Kenro Kusumi, University of Pennsylvania and Benjamin Alman, University of Toronto) *Congenital Scoliosis Workshop*, Stowers Institute for Medical Research, Kansas City, MO, USA (2005)
- Organizer (with Kenro Kusumi, University of Pennsylvania): *Segmentation Meeting*, Satellite Symposium to the Society for Developmental Biology Meeting, San Francisco, CA, USA (2005)
- Organizer: *Animal Segmentation*, Fondation des Treilles, Tourtour, France (2005)
- Organizer (with David W. Burt, Roslin Institute, UK): *The Chicken Genome: New Tools and Concepts*, Stowers Institute for Medical Research, Kansas City, MO, USA (2004)
- Co-organizer (with Paul Trainor [principal organizer], Robb Krumlauf and Alan Goldwin): *Midwest Society for Developmental Biology*, Stowers Institute for Medical Research, Kansas City, MO, USA (2004)
- Organizer: *16th International Congress of the International Federation of Association of Anatomists*, Kyoto, Japan (2004)
- Organizer (with M. Rudnicki and R. Sander-Williams): *Molecular Biology of Muscle Development and Regeneration Meeting*, Banff, Alberta, Canada (2003)
- Co-organizer (with Paul Trainor [principal organizer], Robb Krumlauf and Alan Goldwin): *Midwest Society for Developmental Biology Meeting*, Stowers Institute for Medical Research, Kansas City, MO, USA (2003)
- Organizer (with David W. Burt, Roslin Institute): *The 1<sup>st</sup> International Chicken Genome Workshop*, The Wellcome Trust Genome Center, Hinxton Hall, Cambridge, UK (2003)
- Organizer: French Society for Developmental Biology Annual Meeting, Marseilles, France (2001)
- Member of the Organizing Committee: *The 14<sup>th</sup> Meeting of the International Society for Developmental Biology*, Kyoto, Japan (2001)
- Organizer: *The European Neuroscience Association Forum*, Berlin, Germany (1998)
- Organizer: *International Meeting on Somite Development*, Ile des Embiez, France (1997)

## KEYNOTE LECTURES (SINCE 2002)

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- Society for Developmental Biology Satellite Symposium, “Unraveling human development with organoids and tissue engineering”, Atlanta, USA (2024)
- French Society for Stem Cell Research meeting, Paris, France (2023)
- 20<sup>th</sup> French Society of Myology Meeting, Nantes, France (2023)
- EMBO Workshop “Developmental Metabolism – flows of energy, matter and information”, Heidelberg, Germany (2023)
- International Society for Stem Cell Research Annual Meeting, Anne McLaren Memorial lecture, Boston, MA, USA (2023)

- Northeast Society for Developmental Biology meeting, Woods Hole, MA, USA (2023)
- Keystone Symposia "Organoids as Models of Development and Disease", Keystone, CO, USA (2023)
- EMBO lecture, 19<sup>th</sup> International Society of Developmental Biologists congress, Faro, Portugal (2022)
- EMBO Workshop "Muscle Formation, Maintenance, Regeneration and Pathology", Chantilly, France (2022)
- Keystone meeting on Metabolic Decisions in Development and Disease (Virtual) (2021)
- Stowers Research Conference: Developmental Cell Biology, Stowers Institute (Virtual) (2021)
- Discovery Lecture, University of Dundee, UK (2019)
- Neural Tube Defects Conference, Harvard Medical School (2019)
- "The Jones Lecture" Dartmouth College, USA (2019)
- Joint meeting of the German and Israeli Societies of Developmental Biology, Vienna, Austria (2019)
- Santa Cruz Developmental Biology Meeting, Santa Cruz, CA, USA (2017)
- 2<sup>nd</sup> Joint SFBD / SBCF Meeting, "When Development Meets Cell Biology", Lyon, France (2017)
- Musculoskeletal Regenerative Medicine and Biology; From Development to Regeneration. Washington University, Saint-Louis, MO, USA (2017)
- Spring Symposium, ISCRM, Institute for Stem Cell and Regenerative Medicine, University of Washington, Seattle, WA, USA (2017)
- 7<sup>th</sup> Asia Oceania Zebrafish Meeting, Singapore (2016)
- Stem Cell and Regenerative Biology Department (HSCR) retreat, Harvard University, Boston, MA, USA (2016)
- Genomic Approaches to Understanding and treating scoliosis, ICVAS/ICSG meeting, Dallas, TX, USA (2016)
- Joint meeting of the French Societies for Cell and Developmental Biology, Lyon, France (2016)
- 14<sup>th</sup> International Phillip Zorab Symposium, Edinburgh, Scotland (2015)
- Jacques Monod Conference, " Building, Repairing, and Evolving Biological Tissues", Roscoff, France (2015)
- ISCB RECOMB Regulatory and Systems Genomics, Toronto, Canada (2013)
- Berlin-Brandenburg School for Regenerative Therapies, PhD symposium, Berlin, Germany (2013)
- Jenkinson Lecture, Oxford University, UK (2013)
- "Signaling Pathways in Development" symposium, Tel Aviv University, Israel (2013)
- Joint Spring meeting of the BSCB and BSDB Warwick, UK (2013)
- Orthopedic Research Society Meeting, San Antonio, Texas, USA (2013)
- Chick 7, Avian Model Systems, Nagoya, Japan (2012)
- Inaugural Gordon conference on Notch signaling, Lewiston, USA (2012)
- David W Smith Workshop on Malformations and morphogenesis, Lake Lanier, GA, USA (2012)
- Dutch Society for Development Biology, 2<sup>nd</sup> Annual Meeting Hubrecht Institute, Utrecht, Holland.
- International chick Meeting, Edinburgh, UK (2011)
- Conférence ARB (Académie Royale de Belgique), Bruxelles (2010)
- EMBO plenary lecture, 7<sup>th</sup> ISCCR meeting, Barcelona, Spain (2009)
- EMBO Workshop on Myogenesis, *The Molecular and Cellular Mechanisms Regulating Skeletal Muscle Development and Regeneration*, Sant Feliu de Guixols, Spain (2008)

- CENUM Retreat, University of Montreal, Quebec, Canada (2008)
- The Notch Meeting 2007, Session Chair, *Developmental Regulation, Cell Fates in Specific Systems*, Athens, Greece (2007)
- Duke Systems Biology Symposium, Raleigh-Durham, NC, USA (2007)
- 8<sup>th</sup> Meeting of the International Skeletal Dysplasia Society, Albi, France (2007)
- International Chick Meeting, Barcelona, Spain (2007)
- Union of Swiss Societies of Experimental Biology (USGEB): *Mathematics in Biology*, Basel, Switzerland (2007)
- West Coast Regional Developmental Biology Meeting, Pacific Grove, CA, USA (2007)
- MYORES Annual Congress, *European Muscle Development Network*, Prague, Czech Republic (2006)
- 3<sup>rd</sup> Canadian Developmental Biology Conference, Montreal, Quebec, Canada (2006)
- Gordon Research Conference: *Fibroblast Growth Factors in Development and Disease*, Ventura, CA, USA (2006)
- 15<sup>th</sup> International Society of Developmental Biology Congress, Sydney, Australia (2005)
- Vanderbilt University Program in Developmental Biology, Nashville, TN, USA (2005)
- MYORES Conference 2005, European Muscle Development Network, Rome, Italy (2005)
- Mossman Award Lecture in Developmental Biology, American Association of Anatomists, Experimental Biology, Washington, DC, USA (2004)
- Society for Developmental Biology, Regional Midwest Meeting, Columbia, MO, USA (2002)

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## INVITATIONS TO SCIENTIFIC MEETINGS (since 2004)

### 2024

- Keystone Symposium on Synthetic Embryology, Asilomar, USA
- ISCCR Symposium: “Stem Cells in Development and Disease”, Cincinnati, USA
- New Directions in Biology and Disease of Skeletal Muscle conference, Fort Lauderdale, USA

### 2023

- Cell Bio 2023, ASCB|EMBO meeting Special Interest Subgroup, “Feedback Loops and Spatiotemporal Patterning”, Boston, MA, USA
- 5<sup>th</sup> International Conference on Stem Cells, Heraklion, Crete, Greece
- International Consortium for Spinal Genetics, Development and Disease (ICSGDD) Annual Meeting, Montreal, Canada
- JST International Symposium, Kyoto, Japan
- 56<sup>th</sup> Annual Meeting of the Japanese Society of Developmental Biologists, Sendai, Japan
- Stem Cell Niche: Novo Nordisk Foundation Cluster Conference, Copenhagen, Denmark
- 11<sup>th</sup> International Meeting of the NRW Stem Cell Network, Aachen, Germany
- Institute for the Advanced Study of Human Biology (ASHBi) workshop, “Deconstructing and reconstructing embryonic development”, Kyoto University, Japan
- Cold Spring Harbor Asia “Human Development – from embryos to stem cells”, Awaji, Japan

### 2022

- EMBO/EMBL Symposium “Biological Oscillators: Design, mechanisms, function” Heidelberg, Germany
- EMBO workshop “Timing mechanisms linking development and evolution”, Barcelona, Spain
- Company of Biologists Workshop “Developmental Metabolism and the Originals of Health and Disease”, Ashdown Forest, UK

### 2021

- Constraints and Plasticity in Development and Evolution, College de France, Paris, France (virtual)
- Keystone e-Symposia, “Metabolic Decisions in Development and Disease” (EK27-2021) (virtual)
- Cold Spring Harbor 86<sup>th</sup> Symposium: Biological Timekeeping (virtual)
- Japanese Society of Developmental Biologists Symposium: “Synthetic developmental biology” (virtual)
- 2020**
- EMBO workshop, “Neuromesodermal progenitors in development, evolution and regeneration” (virtual)
- AACR Special Conference on Epigenetics and Metabolism (virtual)
- 2019**
- IIM 2019, Interuniversity Institute of Myology, Assisi, Italy
- Metabolism in Development and disease, 12<sup>th</sup> Annual Developmental Genetics Symposium, NYU, New York, USA
- Frontiers in Myogenesis-Skeletal muscle: Development, Regeneration and Disease, San Jose, Costa Rica
- Society for Developmental Biology 78<sup>th</sup> Annual Meeting, Boston, MA, USA
- Mechanical Forces in Development, EMBO Workshop, EMBL, Heidelberg, Germany
- ISSCR Annual meeting, Los Angeles, USA
- France-USA Stem Cell Symposium, Los Angeles, USA
- Cartilage Biology and Pathology Gordon Research Conference, Galveston, TX, USA
- Controlled and self-organized morphogenesis Symposium, Collège de France, Paris, France
- 2018**
- Indian Society for Developmental Biology, Kanpur, India
- Exciting biologies meeting (Cell Press and Ipsen Foundation), Biology of Time, Phoenix, AZ, USA
- Engineering Multicellular Self-Organization III, Cambridge, UK
- 10th International Conference on Avian Model Systems, Institut Pasteur, Paris, France
- “Morphogens on the move” Collège de France, Paris, France
- Myogenesis and Muscle disease meeting, Berlin, Germany
- 75<sup>th</sup> Anniversary of the British Society for Developmental Biology, Warwick, UK
- “American Physical Society Annual Meeting”, Los Angeles, CA, USA
- 2017**
- International Society for Stem Cell Research (ISSCR) International Symposium, “Translational Opportunities in Stem Cell Research”, Basel, Switzerland
- EMBO-EMBL Symposium, “Metabolism in Time and Space: Emerging Links to Cellular and Developmental Programs”, Heidelberg, Germany
- EMBO Conference: Advances in Stem Cells and Regenerative Medicine, Heidelberg, Germany
- “Dynamics of living systems” EMBO Workshop, Carghese, Corsica
- Inaugural Symposium, Helmholtz Stem Cell Center, Munich, Germany
- 2016**
- Development and Homeostasis of Skeletal Muscle in Health and Disease, a Frontiers in Myogenesis Meeting, Society for Muscle Biology, Pacific Grove, CA, USA
- Janelia Farm Workshop: Imaging Mouse Development, Ashburn, VA, USA
- 3<sup>rd</sup> Gordon Research Conference on Notch Signaling in Development, Regeneration, and Disease, Bates College, ME, USA

- Company of Biologists workshop “From stem cells to human development”, Southbridge, MA, USA
- EMBO | EMBL Symposium: Metabolism in time and space: emerging links to cellular and developmental programs, Heidelberg, Germany
- EMBO conference. Advances in Stem Cells and Regenerative Medicine, Heidelberg, Germany
- Workshop on The Biological Challenges in Morphogenesis, Mathematical Biosciences Institute, Ohio State University, Columbus, OH, USA

#### **2015**

- The 3<sup>rd</sup> Seminar on Integrative Perspectives on Musculoskeletal development, Ein Gedi, Israel
- Simons Foundation Conference on Theory and Biology, New York, NY, USA
- Toward Cell Therapy for Muscular Dystrophies, 18<sup>th</sup> ASGCT Annual Meeting, New Orleans, LA, USA
- Hunter Cell Meeting, NSW, Australia
- "Time in Development" CDB Symposium, Riken Center for Developmental Biology, Kobe, Japan
- « Frontiers in Development, Cancer, and Stem Cell Biology », SickKids Research Institute, Toronto, Canada
- "Cell- and tissue communication during organogenesis", Fondation des Treilles, France
- The Notch Meeting IX, Athens, Greece
- 112<sup>th</sup> International Titisee Conference on “Organoids: modelling, development and disease in 3D culture”, Titisee, Germany
- Ingestem Congress "Pluripotent Stem Cells, Reprogramming and Tissue Engineering", Paris, France

#### **2014**

- EMBO Workshop “Upstream and Downstream of Hox genes”, Hyderabad, India
- 27<sup>th</sup> annual Mouse Molecular Genetics Meeting, Asilomar, CA, USA
- 10<sup>th</sup> Royant International Congress on Stem Cell Biology and Technology, Tehran, Iran
- XIII International Congress on Neuromuscular Diseases, Nice, France
- Presidential Symposium, ISSCR meeting, Vancouver, Canada
- “Rhythms in Biology” conference, Center for Integrative Biology, Lausanne, Switzerland
- EMBO Workshop “Molecular basis of muscle development and regeneration”, Lecce, Italy
- Symmetry and Asymmetry in Biology Museum d’Histoire Naturelle, Paris, France
- Fibroblast Growth Factors in Development & Disease Gordon Conference, Ventura, USA
- Mechanics and Growth of Tissues: From Development to Cancer, Institut Curie, Paris, France

#### **2013**

- Physics in Biology, ESF conference, Geneva, Switzerland
- Exciting Biologies 2013: Biology of Boundaries, IPSEN Foundation meeting, Istria, Croatia
- "HOX and TALE Transcription Factors in Development and Disease", Egmond aan Zee, Holland
- David-Ish-Horowicz retirement symposium, CRUK, London, UK
- Dynamics of Stem Cell Decisions, Niels Bohr Institute, Copenhagen, Denmark
- KITP workshop on Morphogenesis in Cell and Developmental Biology - Santa Barbara, CA USA)
- Gordon Research Conference on "Myogenesis: Models and Mechanisms" – Il Ciocco, Italy

- *Making and breaking the left-right axis: implications of laterality in development and disease* satellite symposium of the 17<sup>th</sup> International Congress of Developmental Biology/72<sup>nd</sup> Annual Meeting of the Society for Developmental Biology, Cancun Mexico
- Special Celebration - 60<sup>th</sup> Anniversary of double Helix - CSHL Meeting, Cold Spring Harbor, NY, USA

### **2012**

- Cold Spring Harbor Asia (CSHA) meeting, "Developmental Mechanisms and Stem Cells". Suzhou, China
- Joint Meeting of the International Society of Differentiation and the Netherlands Institute of Regeneration, Amsterdam, Holland
- International Congress on Cell Biology, Rio de Janeiro, Brazil
- Society for Developmental Biology annual meeting, Montreal, Canada
- The mouse model for basic and biomedical research, Mouse Clinical Institute, Illkirch, France
- 21<sup>st</sup> Anniversary Meeting. The Gurdon Institute, Cambridge, UK
- The Stem Cell Niche. Copenhagen Bioscience Conferences, Copenhagen, Denmark.
- Frontiers in Muscle Biology, New York, NY, USA
- Joint meeting of the Japanese Society for Developmental biology and Society for Cell Biology, Kobe, Japan
- 2<sup>nd</sup> Cold Spring Harbor Symposium on Vertebrate Organogenesis in Health and Disease, USA
- Scottish Stem Cell Network meeting, Dundee, UK

### **2011**

- 2<sup>nd</sup> Batsheva seminar perspectives on the Development of the Musculo-skeletal System, Ein Gedi, Israel
- Symposium "Frontiers in Biology", Barcelona, Spain
- 12<sup>th</sup> International Philipp Zorab Symposium, London
- Workshop at the Max-Planck Institute for the Physics of complex systems "Mechanics and Growth of tissues: from development to cancer", Dresden, Germany
- 19<sup>th</sup> Scientific Meeting of the German society for developmental biology, Dresden, Germany
- Julian Lewis Retirement Symposium, London, UK
- 4<sup>th</sup> Annual Canadian Human Genetics Meeting, Banff, Canada
- 2<sup>nd</sup> EMBO Congress on « The molecular & Cellular mechanisms regulating skeletal muscle development and regeneration », Wiesbaden, Germany
- 4<sup>th</sup> International Congress of Myology, Lille, France
- Pierre-Gilles de Gennes Foundation Spring Symposium, Paris, France
- Operon Model & its impact on modern molecular biology Symposium, Institut Pasteur, Paris, France
- Meeting on Cell Cycle Cancer & Development, Saint Malo, France
- 9<sup>ème</sup> édition des journées Scientifiques de l'Ecole Doctorale CBS2, Montpellier, France
- Gordon Research Conference on Developmental Biology, Proctor Academy, Andover, USA
- Technische Universität Braunschweig, Braunschweig, Germany
- 2<sup>nd</sup> SFBD-BSDB Joint Meeting, Nice, France
- 24<sup>th</sup> Annual Mouse Developmental Genetics & Genomics Meeting, Hinxton, UK
- Hox & Tale Transcription Factors in developmental and Disease, Carry Le Rouet, France
- International Society for Human Genetics Meeting (ISHG&ASHG), Montreal, Canada
- Karlsruhe Institute of Technology/IGBMC, Eggenstein-Leopoldshafen, Germany
- XIII UNESCO chair on Developmental Biology Meeting, Fortaleza, Brazil
- Frontiers in Development and Cell Biology Mini Symposium, Rio de Janeiro, Brazil

### **2010**

- 3<sup>rd</sup> biannual Genetics Society of America meeting. “Model Organisms to Human Biology”, Boston, MA, USA
  - First Cold Spring Harbor Vertebrate Organogenesis Meeting, Cold Spring Harbor, NY, USA
  - CDB Symposium “Frontiers in Organogenesis”, Kobe, Japan
  - Gordon Research Conference: Fibroblast Growth Factors in Development and Disease, Ventura, CA, USA
  - Journée Claude Bernard de la Société de Biologie, Académie Nationale de Médecine, Paris, France
  - Joint Meeting of the Portuguese and Spanish Developmental Biology Societies, Badajoz, Portugal
  - Colloque inaugural, ITMO Biologie Cellulaire, développement et évolution, Collège de France, Paris, France
  - SFB 592 Symposium, from Signal to Structure in Embryogenesis and organogenesis, Freiburg, Germany
  - EMBO Meeting: Modeling Biological Patterns, Barcelona, Spain
  - 13<sup>th</sup> edition “Young Researchers and Life Science” meeting, Institute Pasteur, Paris, France
  - Morphogenesis in Living Systems, Université Paris Descartes, Paris, France
  - 2<sup>nd</sup> Joint meeting of the French and Japanese Societies for Developmental Biology, Institut Pasteur, France
  - “Development of pattern in the nervous system” meeting, Minerve, France
  - Program of the Interdisciplinary Workshop on Pattern formation in Morphogenesis, IHES conference, Bures sur Yvette, France
  - DARPA fundamental Laws of Biology (FunBio) meeting, DanaPoint, CA, USA
- 2009**
- FP7 Myores network Meeting, Malta
  - Developmental Regulation, Cell Fates in Specific Systems, Notch meeting, Athens, Greece
  - All Roads Wnt to the Nucleus, ASBMR meeting, Denver, Co, USA
  - IBMS Sun Valley workshop on musculo-skeletal biology, Idaho, USA
  - “Developmental Biology: organizing tissues in time and space” London Research Institute Symposium, UK
  - Perspectives on the Evolution of Animal Form, Marie Curie ZooNet Meeting, Budapest, Hungary
- 2008**
- Morphogenesis and Cell Behavior, Barcelona BioMed Conference, Institute for Research in Biomedicine, Barcelona, Spain
  - Etiology of Idiopathic Scoliosis: an International Challenge, Colloque 2008 Institut de France, Fondation Yves Cotrel, Paris, France
  - Frontiers in Developmental Biology, Joint Meeting of the French and Japanese Societies of Developmental Biology, Giens, France
  - Organ Systems in Vertebrate Development, the Society for Developmental Biology, Philadelphia, PA, USA
  - Conference on Systems Biology of Mammalian Cells (SBMC 2008), Dresden, Germany
  - Molecular Mechanisms of Developmental Timing, Janelia Farm, Ashburn, VA, USA
  - Genomes to Systems, the Consortium for Post-Genome Science 4<sup>th</sup> Conference, Manchester, UK
  - Straightening Out the Curves, American College of Medical Genetics Annual Meeting, Phoenix, AZ, USA
  - Idiopathic and Congenital Scoliosis: Genetics and Current Approaches, University of Arizona College of Medicine, Phoenix, AZ, USA

- Organization of Biological Clocks, Institute for Mathematics and its Applications (IMA) Conference, University of Minnesota, Minneapolis, MN, USA
  - Physics and Biology of Morphogenesis, Kavli Institute for Theoretical Physics, University of Southern California, Santa Barbara, CA, USA
  - Gene Networks in Animal Development and Evolution, Arthur M. Sackler Colloquia of the National Academy of Sciences, Irvine, CA, USA
- 2007**
- Comparative Systems Biology on Biological Rhythms, Biochemistry and Molecular Biology (BMB), The 30<sup>th</sup> Annual Meeting of the Molecular Biology Society and the 80<sup>th</sup> Annual Meeting of the Japanese Biochemistry Society, Yokohama, Japan
  - Hox Genes in Development and Evolution, Fondation des Treilles, Tourtour, France
  - Developmental Biology, Gordon Research Conference, Proctor Academy, Andover, NH, USA
  - Designing the Body Plan: Developmental Mechanisms, Lorentz Center, Leiden, Netherlands
  - Cell Communication in Morphogenesis, Sigrid Joselius Symposium, Helsinki, Finland
  - Clocks and Rhythms, 72<sup>nd</sup> Cold Spring Harbor Laboratory Symposium, Cold Spring Harbor, NY, USA
  - Quantitative Approaches to Early Development, Center for Biological Physics, Tempe, USA
  - Cartilage Biology and Pathology, Gordon Research Conference, Ventura, CA, USA
  - Joint Meeting of the Genetics Society, the British Society for Developmental Biology and the British Society for Cell Biology, Session Chair, Annual Spring Symposium, Edinburgh, UK
- 2006**
- Cellular Signaling during Development, Annual Conference of the Indian Society of Developmental Biologists, Aghakar Research Institute, Pune, India
  - From Functional Genomics to Systems Biology, EMBO Conference, Heidelberg, Germany
  - The Genomics of Development, EMBO-SNF Symposium, Arolla, Wallis, Switzerland
  - Notch Signaling in Vertebrate Development and Disease, Cantoblanco Workshop, Madrid, Spain
  - Frontiers in Myogenesis, Society for Muscle Biology, Pine Mountain, GA, USA
  - Signal Mechanisms in Somite and Limb Development, 101<sup>st</sup> Annual Meeting of the Anatomische Gesellschaft, Freiburg, Germany
  - Upstream and Downstream of Hox Genes, EMBO Workshop, CCMB, Hyderabad, India
  - 1<sup>st</sup> Annual St. Jude Children's Research Hospital Biomedical Research Symposium, Memphis, TN, USA
  - The Molecular and Cellular Mechanisms Underlying Skeletal Muscle Formation and Repair, EMBO/FEBS Meeting, Fontevraud, France
- 2005**
- The Defense Advanced Research Projects Agency (DARPA): New Directions in Mathematical Biology Workshop, Arlington, VA, USA
  - The Terminal Addition Symposium, The 2005 Annual Meeting for the Society for Integrative and Comparative Biology (SICB), San Diego, CA, USA
  - Developmental Biology, Gordon Research Conference, Andover, NH, USA
  - Growth Factor Receptor Tyrosine Kinases in Mitogenesis, Morphogenesis & Tumorigenesis, Federation of American Societies for Experimental Biology (FASEB), Tucson, AZ, USA
- 2004**
- Vertebrate Signaling in Organogenesis, Keystone Symposium, Santa Fe, NM, USA
  - Myogenesis, Gordon Research Conference, Il Ciocco, Italy
  - 63<sup>rd</sup> Annual Meeting of the Society for Developmental Biology, Calgary, Alberta, Canada
  - Santa Cruz Conference on Developmental Biology, Santa Cruz, CA, USA
  - Origins and Regeneration of the Vascular Tree, IPSEN Foundation, Paris, France

- European Life Scientist Organization (ELSO), Nice, France
- Development Epigenetics & Plasticity, Indian Society of Developmental Biology, Bangalore, India
- 16<sup>th</sup> International Congress of the International Federation of Association of Anatomists (IFAA), Kyoto, Japan

## **SELECTED INVITED CONFERENCES (since 2004)**

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### **2024**

- Department of Developmental biology, UMASS Amherst, USA
- MCB Graduate program seminar series, Brown University, USA

### **2023**

- Department of Cell, Developmental, and Regenerative Biology seminar, Icahn School of Medicine at Mount Sinai, New York, NY, USA
- Osaka University, Japan
- Butler Seminar, Princeton University, NJ, USA
- iSTEM, Evry, France (Virtual)
- KAUST Smart-Health Initiative, King Abdullah University of Science and Technology (KAUST), KAEC, Saudi Arabia
- MGM/CMB Thursday Seminar Series, Duke University, Durham, NC, USA

### **2022**

- Brandeis Math Bio Seminar, Brandeis University, MA, USA (Virtual)
- MeLis/INMG Lyon, France (Virtual)
- Molecular and Cellular Biology Department Seminar Series, Harvard University, Cambridge, MA, USA
- Conferences IRCM series, Institut de Recherches Cliniques de Montréal, Montreal, Canada

### **2021**

- Human Cell Atlas, Developmental Seminar Series (Virtual)
- Stem Cell seminar series, UCL Great Ormond Street Institute of Child Health, UK (Virtual)
- Regenerative Biology & Stem Cells Seminar, Northwestern University (Virtual)
- IBPS, Paris, France (Virtual)

### **2020**

- Caltech/USC Developmental Biology seminar series (Virtual)
- Max Delbrück Centrum, Charite, Berlin (Virtual)
- King's college, Stem Cells@lunch Webinar (Virtual)

### **2019**

- ReMS Lecture, Stanford University, CA, USA
- JiaoTong University Shanghai, China
- University of Dundee, UK
- Chan-Zuckerberg Biohub, San Francisco, CA, USA
- Roslin Institute, UK
- Orthopedic Translational Research Seminar, BWH, Boston USA

### **2018**

- President's Research Seminar Series, Sloan Kettering Cancer Center, New York, USA
- Institute of Functional Genomics, Lyon, France
- Special Seminar, Caltech, CA, USA
- Stem Cell Seminar Series, Broad Center of Regenerative Medicine, UCLA, CA, USA
- USC Distinguished Seminar Speaker series, Los Angeles, CA, USA

- Institute of Molecular Pathology (IMP), Seminar series, Vienna, Austria  
**2017**
- LSA, Biophysics Seminar, University of Michigan, Ann Harbor, MI, USA
- 37<sup>th</sup> annual Viktor Hamburger Lecture, Washington University, Saint-Louis, MO, USA
- NYU school of Medicine Honors series, New York, NY, USA
- Stem Cells & Regenerative Biology Seminar Series, Northwestern University, Chicago, USA
- Department of Embryology Seminar Series, Carnegie Institute, Baltimore, MD, USA  
**2016**
- Department of Biology, Wesleyan University, Middletown, CT, USA
- Institute for Molecular Medicine (IMM), Lisboa Portugal
- Northeastern University Biology department, Boston, MA, USA  
**2015**
- Frontiers in Biological Research Seminar Series, Stanford University, Stanford, CA, USA
- Cell Biology, MGM and CMB Departments, Duke University, NC, USA  
**2014**
- IBDM, Marseilles, France
- Novartis, Basel, Switzerland  
**2013**
- Rockefeller University, New York, NY, USA
- Cambridge University, Cambridge, UK
- Technion Institute, Haifa, Israel
- Weizmann Institute, Rehovot, Israel
- Mount Sinai Hospital, New York, NY, USA
- **2012**
- Department of Genetics, Harvard Medical School, Boston, MA, USA
- UCSF, Broad Stem Cell Institute San Francisco, CA, USA
- Hubrecht Laboratories, Utrecht, Netherlands
- Columbia University, New York, NY, USA
- ETH Zurich, Switzerland
- DKFZ, Heidelberg, Germany
- Distinguished Scientist EMBL seminar, Monterotondo, Italy
- Max Delbruck Center for Molecular Medicine, Berlin, Germany
- Centro Nacional de Investigaciones Cardiovascular Carlos III, Madrid, Espagne  
**2011**
- Distinguished Visitor Lecture series, Max Planck Institute for Biochemistry, Martinsried, Germany
- MRC Center for Developmental Biology, seminar series, King's college, London, UK
- Institut de Génétique Humaine, Montpellier, France
- Institut de Neurobiologie Alfred Fessard, Gif Sur Yvette, France
- Dept. de Biologie du Développement, Institut Pasteur, Paris, France  
**2010**
- Institute Cochin, Paris, France
- Zentrum für Zahnmedizin, Institut für Orale Biologie, Zürich, Switzerland
- Institut du Cerveau et de la Moelle épinière, Hôpital de la Salpêtrière, Paris, France
- The Wellcome Trust/Cancer Research UK Gurdon Institute, Cambridge, UK
- Discovery lecture: School of Life Sciences, University of Dundee, Dundee, UK
- Lewis-Sigler Institute/Princeton University, Princeton, NJ, USA
- Biozentrum der Universität Basel, Switzerland

- Ecole polytechnique Fédérale de Lausanne, Switzerland
- Tissue Systems Seminar Series at the University of Manchester, UK
- Institut Jacques Monod, Paris, France
- **2009**
- Developmental Biology and Genetics Lecture, University of Virginia, Charlottesville, USA
- Institute of Genetics & Molecular Medicine (IGMM), Distinguished Speaker Series, Edinburgh, UK
- Mill Hill Lecture Series, Rosa Beddington Annual Lecture, NIMR, London, UK
- **2008**
- The Rockefeller University Seminar Series, Center for Studies in Physics and Biology, New York, NY, USA
- Developmental Biology and Stem Cell Research Seminar, Hubrecht Institute, Utrecht, The Netherlands
- Frontiers in Biology Lecture Series, Stanford University, Stanford, CA, USA
- Distinguished Lecturer Seminar, Children's Memorial Research Hospital, Chicago, IL, USA
- Cells, Development and Cancer Seminar Series, University of Colorado Health Sciences Center, Denver, CO, USA
- Department of Biology, New York University Spring Seminar Series, New York, NY, USA
- The Honors Program Lecture Series, New York University School of Medicine, New York, NY, USA
- Yale Developmental Biology Symposium, New Haven, CT, USA
- **2007**
- Invited Special Seminar, IHES, Paris, France
- General Biology Seminar, California Institute of Technology, Pasadena, CA, USA
- CHU Sainte-Justine Research Center Seminar Series, Montreal, Quebec, Canada
- Invited Speaker Seminar, Columbia University, New York, NY, USA
- **2006**
- Cancer & Developmental Biology Seminar Program, Kansas University Medical Center, Kansas City, KS, USA
- Mittwochs-Kolloquium, Max Planck Institute for Developmental Biology, Tuebingen, Germany
- Marshfield Clinic Seminar Series, Marshfield, WI, USA
- Biochemistry Department Seminar Series, UT Southwestern Medical Center at Dallas, USA
- Cell Biology Affinity Group Seminars, The Scripps Research Institute, La Jolla, CA, USA
- Spring 2006 Formal Seminar Series, The Burnham Institute, La Jolla, CA, US
- Math Department Computational Biology Seminar, University of California at Berkeley, Berkeley, CA USA
- **2005**
- Max Planck Institute of Molecular Cell Biology and Genetics, Dresden, Germany
- Research Institute of Molecular Pathology Seminar Series, Vienna, Austria
- Fred Hutchinson Cancer Research Center, Seattle, WA, USA
- Max Planck Institute for Immunobiology, Freiburg, Germany
- Institut Jacques Monod, Paris, France
- Department of Cell and Developmental Biology, University of Pennsylvania, Philadelphia, PA, USA
- Samuel Lunenfeld Research Institute (SLRI) Seminar Series, Toronto, Ontario, Canada
- Tamasek Lifesciences Laboratory, National University of Singapore
- Department of Cell & Developmental Biology, University of Michigan Medical School, Ann Arbor, MI, USA

- Department of Biological Sciences, University of Iowa, Iowa City, IA, USA  
**2004**
- Molecular & Development Biology Seminar Series, Sloan-Kettering Institute for Cancer Research, New York, NY, USA
- Orthopaedic Research Seminar Series, Boston Children's Hospital, Boston, MA, USA
- Harvard Cutaneous Biology Research Center (CBRC) Lecture, Massachusetts General Hospital, Cambridge, MA, USA
- Blaffer Lecture Series, MD Anderson Cancer Center, Houston, TX, USA
- Institut de recherches cliniques de Montréal (IRCM), Montreal, Quebec, Canada
- Student and Postdoc Sponsored Seminar Series, Rockefeller University, New York, NY, USA
- Skirball Seminar Series, Skirball Institute of Biomolecular Medicine, New York University School of Medicine, New York, NY, USA
- Kumamoto University, Kumamoto, Japan
- Molecular, Cellular and Developmental Biology Seminar Series, University of Colorado, Boulder, CO, USA

## PUBLICATIONS

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### Peer Reviewed Research Articles

1. A human pluripotent stem cell-based somitogenesis model using microfluidics. Liu Y, Kim YS, Xue X, Miao Y, Kobayashi N, Sun S, Yan RZ, Yang Q, Pourquié O, Fu J. *Cell Stem Cell*. 2024 Aug 1;31(8):1113-1126.e6. doi: 10.1016/j.stem.2024.06.004. Epub 2024 Jul 8. PMID: 38981471
2. The universe is asymmetric, the mouse brain too. Rivera-Olvera A, Houwing DJ, Ellegood J, Masifi S, Martina SL, Silberfeld A, Pourquie O, Lerch JP, Francks C, Homberg JR, van Heukelum S, Grandjean J. *Mol Psychiatry*. 2024 Aug 6. doi: 10.1038/s41380-024-02687-2. Online ahead of print. PMID: 39107583
3. Engineering Stem Cell Fate Controlling Biomaterials to Develop Muscle Connective Tissue Layered Myofibers. Han S, Lee MC, Rodríguez-delaRosa A, Kim J, Barroso-Zuppa M, Pineda-Rosales M, Kim SS, Hatanaka T, Yazdi IK, Bassous N, Sinha I, Pourquié O, Park S, Shin SR. *Adv Funct Mater*. 2024 Jan 15;34(3):2304153. doi: 10.1002/adfm.202304153. Epub 2023 Oct 12. PMID: 38707790
4. Direct reprogramming of non-limb fibroblasts to cells with properties of limb progenitors. Atsuta Y, Lee C, Rodrigues AR, Colle C, Tomizawa RR, Lujan EG, Tschopp P, Galan L, Zhu M, Gorham JM, Vannier JP, Seidman CE, Seidman JG, Ros MA, Pourquié O, Tabin CJ. *Dev Cell*. 2024 Feb 5;59(3):415-430.e8. doi:10.1016/j.devcel.2023. 12.010. PMID: 38320485
5. Reconstructing human brown fat developmental trajectory in vitro. Rao J, Djeflal Y, Chal J, Marchianò F, Wang CH, Al Tanoury Z, Gapon S, Mayeuf-Louchart A, Glass I, Sefton EM, Habermann B, Kardon G, Watt FM, Tseng YH, Pourquié O. *Dev Cell*. 2023 Nov 6;58(21):2359-2375.e8. doi: 10.1016/j.devcel.2023.08.001. Epub 2023 Aug 29. PMID: 37647896

6. Chemical QuantArray: A Quantitative Tool for Mass Spectrometry Imaging. Stopka SA, Ruiz D, Baquer G, Bodineau C, Hossain MA, Pellens VT, Regan MS, Pourquoié O, Haigis MC, Bi WL, Coy SM, Santagata S, Agar NYR, Basu SS. *Anal Chem.* 2023 Aug 1;95(30):11243-11253. doi: 10.1021/acs.analchem.3c00803. Epub 2023 Jul 19.
7. Direct force measurement and loading on developing tissues in intact avian embryos. Chan CU, Xiong F, Michaut A, Vidigueira JMN, Pourquoié O, Mahadevan L. *Development.* 2023 May 1;150(9):dev201054. doi: 10.1242/dev.201054. Epub 2023 May 4.
8. Metabolic regulation of species-specific developmental rates. Margarete Diaz-Cuadros, Teemu P. Miettinen, Dylan Sheedy, Carlos Manlio Díaz García, Svetlana Gapon, Alexis Hubaud, Gary Yellen, Scott R. Manalis, William Oldham, Olivier Pourquoié, *Nature*, 2023 Jan 4. doi: 10.1038/s41586-022-05574-4.
9. Reconstruction and deconstruction of human somitogenesis in vitro. Yuchuan Miao, Yannis Djeffal, Alessandro De Simone, Kongju Zhu, Andrew Silberfeld, Jong Gwan Lee, Jyoti Rao, Oscar A. Tarazona, Alessandro Mongera, Pietro Rigoni, Margarete Diaz-Cuadros, Laura Min Sook Song, Stefano Di Talia, Olivier Pourquoié, *Nature*, 2022 Dec 21. doi: 10.1038/s41586-022-05655-4.
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