

CURRICULUM VITAE

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

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

60 Fenwood Road
Hale BTM 8002I
Boston, MA 02115
Tel : +1 617 755 4724
pourquie@genetics.med.harvard.edu

EDUCATION

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

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

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 20th 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

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

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

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

- “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

- 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

- 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
-
- 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

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

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 21st 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 1st 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 14th 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)

- 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)
- 20th 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, 19th 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)
- 2nd 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)
- 7th 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)
- 14th 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, 2nd Annual Meeting Hubrecht Institute, Utrecht, Holland.
- International chick Meeting, Edinburgh, UK (2011)
- Conférence ARB (Académie Royale de Belgique), Bruxelles (2010)
- EMBO plenary lecture, 7th 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)
- 8th 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)
- 3rd Canadian Developmental Biology Conference, Montreal, Quebec, Canada (2006)
- Gordon Research Conference: *Fibroblast Growth Factors in Development and Disease*, Ventura, CA, USA (2006)
- 15th 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)

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
- 5th 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
- 56th Annual Meeting of the Japanese Society of Developmental Biologists, Sendai, Japan
- Stem Cell Niche: Novo Nordisk Foundation Cluster Conference, Copenhagen, Denmark
- 11th 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 86th 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, 12th 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 78th 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
- 75th 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
- 3rd 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 3rd 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, 18th 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
- 112th 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
- 27th annual Mouse Molecular Genetics Meeting, Asilomar, CA, USA
- 10th 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 17th International Congress of Developmental Biology/72nd Annual Meeting of the Society for Developmental Biology, Cancun Mexico
- Special Celebration - 60th 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
- 21st 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
- 2nd Cold Spring Harbor Symposium on Vertebrate Organogenesis in Health and Disease, USA
- Scottish Stem Cell Network meeting, Dundee, UK

2011

- 2nd Batsheva seminar perspectives on the Development of the Musculo-skeletal System, Ein Gedi, Israel
- Symposium "Frontiers in Biology", Barcelona, Spain
- 12th 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
- 19th Scientific Meeting of the German society for developmental biology, Dresden, Germany
- Julian Lewis Retirement Symposium, London, UK
- 4th Annual Canadian Human Genetics Meeting, Banff, Canada
- 2nd EMBO Congress on « The molecular & Cellular mechanisms regulating skeletal muscle development and regeneration », Wiesbaden, Germany
- 4th 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^{ème} 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
- 2nd SFBD-BSDB Joint Meeting, Nice, France
- 24th 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

- 3rd 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
- 13th edition “Young Researchers and Life Science” meeting, Institute Pasteur, Paris, France
- Morphogenesis in Living Systems, Université Paris Descartes, Paris, France
- 2nd 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 4th 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 30th Annual Meeting of the Molecular Biology Society and the 80th 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, 72nd 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, 101st Annual Meeting of the Anatomische Gesellschaft, Freiburg, Germany
- Upstream and Downstream of Hox Genes, EMBO Workshop, CCMB, Hyderabad, India
- 1st 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
- 63rd 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
- 16th International Congress of the International Federation of Association of Anatomists (IFAA), Kyoto, Japan

SELECTED INVITED CONFERENCES (since 2004)

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 Delbruck 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
- 37th 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 Delbrück 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

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 Djéffal, 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.
10. Tension-driven multi-scale self-organisation in human iPSC-derived muscle fibers. Mao Q, Acharya A, Rodríguez-delaRosa A, Marchiano F, Dehapiot B, Al Tanoury Z, Rao J, Díaz-Cuadros M, Mansur A, Wagner E, Chardes C, Gupta V, Lenne PF, Habermann BH, Theodoly O, Pourquoié O, Schnorrer F. *Elife.* 2022 Aug 3;11:e76649. doi: 10.7554/eLife.76649.
11. Transcriptomics, regulatory syntax, and enhancer identification in mesoderm-induced ESCs at single-cell resolution. Khateb M, Perovanovic J, Ko KD, Jiang K, Feng X, Acevedo-Luna N, Chal J, Ciuffoli V, Genzor P, Simone J, Haase AD, Pourquoié O, Dell'Orso S, Sartorelli V. *Cell Rep.* 2022 Aug 16;40(7):111219. doi: 10.1016/j.celrep.2022.111219.
12. Rectified random cell motility as a mechanism for embryo elongation. Regev I, Guevorkian K, Gupta A, Pourquoié O, Mahadevan L. *Development.* 2022 Mar 15;149(6):dev199423. doi: 10.1242/dev.199423. Epub 2022 Mar 28. PMID: 35344041
13. Paraxial mesoderm organoids model development of human somites. Budjan C, Liu S, Ranga A, Gayen S, Pourquoié O, Hormoz S. *Elife.* 2022 Jan 28;11:e68925. doi: 10.7554/eLife.68925. PMID: 35088712
14. Generation of LUMCi041-A-2: Equipping a PAX3 reporter iPSC line with doxycycline inducible H2B-mTurquoise2 for live cell imaging. Arendzen CH, Chaudhari U, Cramer SJ, Freund CMAH, Mummery CL, Ranga A, Pourquoié O, Mikkers HMM. *Stem Cell Res.* 2021 Nov 3;57:102592. doi: 10.1016/j.scr.2021.102592.
15. Optogenetic modeling of human neuromuscular circuits in Duchenne muscular dystrophy with CRISPR and pharmacological corrections. Paredes-Redondo A, Harley P, Maniati E, Ryan D, Louzada S, Meng J, Kowala A, Fu B, Yang F, Liu P, Marino S, Pourquoié O, Muntoni F, Wang J, Lieberam I, Lin YY. *Sci Adv.* 2021 Sep 10;7(37):eabi8787. doi: 10.1126/sciadv.abi8787.

16. Prednisolone rescues Duchenne muscular dystrophy phenotypes in human pluripotent stem cell-derived skeletal muscle *in vitro*. Al Tanoury Z, Zimmerman JF, Rao J, Sieiro D, McNamara HM, Cherrier T, Rodríguez-delaRosa A, Hick-Colin A, Bousson F, Fugier-Schmucker C, Marchiano F, Habermann B, Chal J, Nesmith AP, Gapon S, Wagner E, Gupta VA, Bassel-Duby R, Olson EN, Cohen AE, Parker KK, Pourquié O. *Proc Natl Acad Sci U S A*. 2021 Jul 13;118(28):e2022960118.
17. Dynamics of primitive streak regression controls the fate of neuroesodermal progenitors in the chicken embryo. Guillot C, Djéffal Y, Michaut A, Rabe B, Pourquié O. *eLife*. 2021 Jul 6;10:e64819.
18. Mechanical Coupling Coordinates the Co-Elongation of Axial and Paraxial Tissues in Avian Embryos. Xiong F, Ma W, Bénazéraf B, Mahadevan L, Pourquié O. *Dev Cell*. 2020 Nov 9;55(3):354-366.
19. Exploring the Influence of Cell Metabolism on Cell Fate through Protein Post-translational Modifications. Tarazona O, Pourquié O. *Dev Cell*. 2020 Jul 20;;54(2):282-292.
20. Differentiation of the human PAX7-positive myogenic precursors/satellite cell lineage *in vitro*. Al Tanoury Z, Rao J, Tassy O, Gobert B, Gapon S, Garnier JM, Wagner E, Hick A, Hall A, Gussoni E, Pourquié O. *Development*. 2020 Jun 26;147(12):dev187344.
21. Intracellular pH controls WNT downstream of glycolysis in amniote embryos. Oginuma M, Harima Y, Tarazona OA, Diaz-Cuadros M, Michaut A, Ishitani T, Xiong F, Pourquié O. *Nature*. 2020 Aug;584(7819):98-101.
22. Bioelectrical domain walls in homogeneous tissues. McNamara HM, Salegame R, Al Tanoury Z, Xu H, Begum S, Ortiz G, Pourquié O, Cohen AE *Nat Phys*. 2020 Mar;16(3):357-364.
23. In Situ Printing of Adhesive Hydrogel Scaffolds for the Treatment of Skeletal Muscle Injuries. Russell CS, Mostafavi A, Quint JP, Panayi AC, Baldino K, Williams TJ, Daubendiek JG, Hugo Sánchez V, Bonick Z, Trujillo-Miranda M, Shin SR, Pourquié O, Salehi S, Sinha I, Tamayol A. *ACS Appl Bio Mater*. 2020 Mar 16;3(3):1568-1579. doi: 10.1021/acscabm.9b01176. Epub 2020 Feb 24. PMID: 35021647.
24. *In vitro* characterization of the human segmentation clock. Diaz-Cuadros, M., Wagner, D.E., Budjan, C., Hubaud, A., Tarazona, OA, Donnelly, S., Michaut, A., Al Tanoury, Z., Yoshioka-Kobayashi, K., Niino, N., Kageyama, R., Miyawaki, A., Touboul, J. and Pourquié O. *Nature*, 2020. 2020 Apr;580(7801):113-118. doi: 10.1038/s41586-019-1885-9. Epub 2020 Jan 8.
25. SarcTrack: An Adaptable Software Tool for Efficient Large-Scale Analysis of Sarcomere Function in hiPSC-Cardiomyocytes. Toepfer CN, Sharma A, Cicconet M, Garfinkel AC, Mücke M, Neyazi M, Willcox JA, Agarwal R, Schmid M, Rao J, Ewoldt JK, Pourquié O, Chopra A, Chen C, Seidman JG, Seidman CE. *Circ Res*. 2019 Jan 31.
26. The Lin28/let-7 Pathway Regulates the Mammalian Caudal Body Axis Elongation Program. Robinton DA, Chal J, Lummertz da Rocha E, Han A, Yermalovich AV, Oginuma M, Schlaeger TM, Sousa P, Rodriguez A, Urbach A, Pourquié O, Daley GQ. *Dev Cell*. 2019 Feb 11;48(3):396-405.

27. Timed Collinear Activation of Hox Genes during Gastrulation Controls the Avian Forelimb Position. Moreau C, Caldarelli P, Rocancourt D, Roussel J, Denans N, Pourquié O, Gros J. *Curr Biol*. 2019 Jan 7;29(1):35-50
28. Recapitulating early development of mouse musculoskeletal precursors of the paraxial. Chal J, Al Tanoury Z, Oginuma M, Moncuquet P, Gobert B, Miyanari A, Tassy O, Guevara G, Hubaud A, Bera A, Sumara O, Garnier JM, Kennedy L, Knockaert M, Gayraud-Morel B, Tajbakhsh S, Pourquié O. *Development*. 2018 Mar 19;145(6).
29. Excitable Dynamics and Yap-Dependent Mechanical Cues Drive the Segmentation Clock. Hubaud A, Regev I, Mahadevan L, Pourquié O. *Cell*. 2017 Oct 19;171(3):668-682.e11. doi: 10.1016/j.cell.2017.08.043. Epub 2017 Sep 21.
30. The TAF10-containing TFIID and SAGA transcriptional complexes are dispensable for early somitogenesis in the mouse embryo. Bardot P, Vincent SD, Fournier M, Hubaud A, Joint M, Tora L, Pourquié O. *Development*. 2017 Oct 15;144(20):3808-3818.
31. The WHHERE coactivator complex is required for retinoic acid-dependent regulation of embryonic symmetry. Vilhais-Neto GC, Fournier M, Plassat JL, Sardiú ME, Saraf A, Garnier JM, Maruhashi M, Florens L, Washburn MP, Pourquié O. *Nat Commun*. 2017 Sep 28;8(1):728.
32. Multi-scale quantification of tissue behavior during amniote embryo axis elongation. Bénazéraf B, Beaupeux M, Tchernookov M, Wallingford A, Salisbury T, Shirtz A, Shirtz A, Huss D, Pourquié O, François P, Lansford R. *Development*. 2017 Dec 1;144(23):4462-4472.
33. A Gradient of Glycolytic Activity Coordinates FGF and Wnt Signaling during Elongation of the Body Axis in Amniote Embryos. Oginuma M, Moncuquet P, Xiong F, Karoly E, Chal J, Guevorkian K, Pourquié O. *Dev Cell*. 2017 Feb 27;40(4):342-353.e10.
34. PAPC couples the segmentation clock to somite morphogenesis by regulating N-cadherin-dependent adhesion. Chal J, Guillot C, Pourquié O. *Development*. 2017 Feb 15;144(4):664-676.
35. Generation of human muscle fibers and satellite-like cells from human pluripotent stem cells in vitro. Chal J, Al Tanoury Z, Hestin M, Gobert B, Aivio S, Hick A, Cherrier T, Nesmith AP, Parker KK, Pourquié O. *Nat Protoc*. 2016 Oct;11(10):1833-50.
36. Independent regulation of vertebral number and vertebral identity by microRNA-196 paralogs. Wong SF, Agarwal V, Mansfield JH, Denans N, Schwartz MG, Prosser HM, Pourquié O, Bartel DP, Tabin CJ, McGlenn E. *Proc Natl Acad Sci U S A*. 2015 Sep 1;112(35):E4884-93. doi: 10.1073/pnas.1512655112. Epub 2015 Aug 17. PMID: 26283362; PMCID: PMC4568285.
37. Differentiation of pluripotent stem cells to muscle fiber to model Duchenne muscular dystrophy. Chal J, Oginuma M, Al Tanoury Z, Gobert B, Sumara O, Hick A, Bousson F, Zidouni Y, Mursch C, Moncuquet P, Tassy O, Vincent S, Miyanari A, Bera A, Garnier JM, Guevara G, Hestin M, Kennedy L, Hayashi S, Drayton B, Cherrier T, Gayraud-Morel B, Gussoni E, Relaix F, Tajbakhsh S, Pourquié O. *Nat Biotechnol*. 2015 Sep;33(9):962-9. doi: 10.1038/nbt.3297. Epub 2015 Aug 3. PMID: 26237517.
38. Control of vertebrate body axis elongation by collinear Hox-dependent Wnt repression. Denans N., Iimura T., Pourquié O. *elife* 2015 Feb 26;4.

39. A relative shift in cloacal location repositions external genitalia in amniote evolution. Tschopp P, Sherratt E, Sanger TJ, Groner AC, Aspiras AC, Hu JK, Pourquié O, Gros J, Tabin CJ. *Nature*. 2014 Dec 18;516(7531):391-4.
40. Integrative data mining highlights candidate genes for monogenic myopathies. Abath Neto O, Tassy O, Biancalana V, Zanoteli E, Pourquié O, Laporte J. *PLoS One*. 2014 Oct 29;9(10):
41. A meta-analysis identifies adolescent idiopathic scoliosis association with LBX1 locus in multiple ethnic groups. Londono D, Kou I, Johnson TA, Sharma S, Ogura Y, Tsunoda T, Takahashi A, Matsumoto M, Herring JA, Lam TP, Wang X, Tam EM, Song YQ, Fan YH, Chan D, Cheah KS, Qiu X, Jiang H, Huang D; Japanese Scoliosis Clinical Research Group, TSRHC IS Clinical Group, International Consortium for Scoliosis Genetics, Su P, Sham P, Cheung KM, Luk KD, Gordon D, Qiu Y, Cheng J, Tang N, Ikegawa S, Wise CA. *J Med Genet*. 2014 Jun;51(6):401-6.
42. Manteia, a predictive data mining system for vertebrate genes and its applications to human genetic diseases. Tassy O, Pourquié O. *Nucleic Acids Res*. 2014 Jan;42(Database issue)
43. Evolutionary plasticity of segmentation clock networks. Krol, A., Roellig, D. Dequéant, M.L., Tassy O., Glynn, E., Hattem, G. Mushegian, A., Oates, A., Pourquié, O. *Development* 138 (13), 2783-92. (2011)
44. Changes in Hox genes' structure and function during the evolution of the squamate body plan. Di-Poi, N., Montoya-Burgos, J.I., Miller, H., Pourquié, O., Milinkovitch, M.C., Duboule, D. *Nature* 464 (7285) 99-103 (2010).
45. Sex-dimorphic gene expression and ineffective dosage compensation of Z-linked genes in gastrulating chicken embryos. Zhang, S.O., Mathur, S., Hattem, G., Tassy, O., & Pourquié, O. *BMC Genomics* 11, 13 (2010).
46. Rere controls retinoic acid signalling and somite bilateral symmetry. Vilhais-Neto, G.C., Maruhashi, M., Smith, K.T., Vasseur-Cognet, M., Peterson, A.S., Workman, J.L., & Pourquié, O., *Nature* 463 (7283), 953-957 (2010).
47. Spatiotemporal compartmentalization of key physiological processes during muscle precursor differentiation. Ozbudak, E.M., Tassy, O., & Pourquié, O., *Proc Natl Acad Sci U S A* (107), 4224-4229 (2010).
48. A random cell motility gradient downstream of FGF controls elongation of amniote embryos Bénazéraf, B., Francois, P., Baker, R.E., Denans, N., Little, C.D., & Pourquié, O. *Nature* 466 (7303), 248-252 (2010).
49. Cyclic Nrarp mRNA expression is regulated by the somitic oscillator but Nrarp protein levels do not oscillate. Wright, D., Ferjentsik, Z., Chong, S.W., Qiu, X., Jiang, Y.J., Malapert, P., Pourquié, O., Van Hateren, N., Wilson, S.A., Franco, C., Gerhardt, H., Dale, J.K., & Maroto, M., *Dev Dyn* 238 (12), 3043-3055 (2009).
50. Incomplete penetrance and phenotypic variability characterize Gdf6-attributable oculo-skeletal phenotypes. Asai-Coakwell, M., French, C.R., Ye, M., Garcha, K., Bigot, K., Perera, A.G., Staehling-Hampton, K., Mema, S.C., Chanda, B., Mushegian, A., Bamforth, S., Doschak, M.R., Li, G., Dobbs, M.B., Giampietro, P.F., Brooks, B.P., Vijayalakshmi, P., Sauve, Y., Abitbol, M., Sundaresan, P., van Heyningen, V., Pourquié, O., Underhill, T.M., Waskiewicz, A.J., & Lehmann, O.J., *IHum Mol Genet* 18 (6), 1110-1121 (2009).

51. Control of segment number in vertebrate embryos. Gomez, C., Ozbudak, E.M., Wunderlich, J., Baumann, D., Lewis, J., & Pourquié, O., *Nature* 454 (7202), 335-339 (2008).
52. Modeling the segmentation clock as a network of coupled oscillations in the Notch, Wnt and FGF signaling pathways. Goldbeter, A. & Pourquié, O., *J Theor Biol* 252 (3), 574-585 (2008).
53. Comparison of pattern detection methods in microarray time series of the segmentation clock. Dequeant, M.L., Ahnert, S., Edelsbrunner, H., Fink, T.M., Glynn, E.F., Hattem, G., Kudlicki, A., Mileyko, Y., Morton, J., Mushegian, A.R., Pachter, L., Rowicka, M., Shiu, A., Sturmfels, B., & Pourquié, O. *PLoS ONE* 3 (8), e2856 (2008).
54. Mutations in the MESP2 Gene Cause Spondylothoracic Dysostosis/Jarcho-Levin Syndrome. Cornier, A.S., Staehling-Hampton, K., Delventhal, K.M., Saga, Y., Caubet, J.F., Sasaki, N., Ellard, S., Young, E., Ramirez, N., Carlo, S.E., Torres, J., Emans, J.B., Turnpenny, P.D., & Pourquié, O. *Am J Hum Genet* 82 (6), 1334-1341 (2008).
55. A beta-catenin gradient links the clock and wavefront systems in mouse embryo segmentation. Aulehla, A., Wiegraebe, W., Baubet, V., Wahl, M.B., Deng, C., Taketo, M., Lewandoski, M., & Pourquié, O., *Nat Cell Biol* 10 (2), 186-193 (2008).
56. FGF signaling acts upstream of the NOTCH and WNT signaling pathways to control segmentation clock oscillations in mouse somitogenesis. Wahl, M.B., Deng, C., Lewandoski, M., & Pourquié, O., *Development* 134 (22), 4033-4041 (2007).
57. Dual mode of paraxial mesoderm formation during chick gastrulation. Imura, T., Yang, X., Weijer, C.J., & Pourquié, O., *Proc Natl Acad Sci USA* 104 (8), 2744-2749 (2007).
58. Sharp developmental thresholds defined through bistability by antagonistic gradients of retinoic acid and FGF signaling. Goldbeter, A., Gonze, D., & Pourquié, O., *Dev Dyn* 236 (6), 1495-1508 (2007).
59. Collinear activation of Hoxb genes during gastrulation is linked to mesoderm cell ingression. Imura, T. & Pourquié, O., *Nature* 442, 568-571 (2006).
60. A complex oscillating network of signaling genes underlies the mouse segmentation clock. Dequeant, M.L., Glynn, E., Gaudenz, K., Wahl, M., Chen, J., Mushegian, A., & Pourquié, O. *Science* 314 (5805), 1595-1598 (2006).
61. Oscillations of the snail genes in the presomitic mesoderm coordinate segmental patterning and morphogenesis in vertebrate somitogenesis. Dale, J.K., Malapert, P., Chal, J., Vilhais-Neto, G., Maroto, M., Johnson, T., Jayasinghe, S., Trainor, P., Herrmann, B., & Pourquié, O. *Dev Cell* 10, 355-366 (2006).
62. Retinoic acid coordinates somitogenesis and left-right patterning in vertebrate embryos. Vermot, J. & Pourquié, O., *Nature* 435, 215-220 (2005).
63. Synchronised cycling gene oscillations in presomitic mesoderm cells require cell-cell contact. Maroto, M., Dale, J.K., Dequeant, M.L., Petit, A.C., & Pourquié, O., *Int J Dev Biol* 49 (2-3), 309-315 (2005).
64. In vivo analysis of mRNA stability using the Tet-Off system in the chicken embryo. Hilgers, V., Pourquié, O., & Dubrulle, J. *Dev Biol* 284, 292-300 (2005).
65. Control of the segmentation process by graded MAPK/ERK activation in the chick embryo. Delfini, M.C., Dubrulle, J., Malapert, P., Chal, J., & Pourquié, O., *Proc Natl Acad Sci USA* 102, 11343-11348 (2005).

66. Axon fasciculation defects and retinal dysplasias in mice lacking the immunoglobulin superfamily adhesion molecule BEN/ALCAM/SC1. Weiner, J.A., Koo, S.J., Nicolas, S., Fraboulet, S., Pfaff, S.L., Pourquié, O., & Sanes, J.R., *Mol Cell Neurosci* 27 (1), 59-69 (2004).
67. Sequence and comparative analysis of the chicken genome provide unique perspectives on vertebrate evolution. Hillier, L.W., Miller, W., Birney, E., Warren, W., Hardison, R.C., Ponting, C.P., Bork, P., Burt, D.W., Groenen, M.A., Delany, M.E., Dodgson, J.B., Chinwalla, A.T., Cliften, P.F., Clifton, S.W., Delehaunty, K.D., Fronick, C., Fulton, R.S., Graves, T.A., Kremitzki, C., Layman, D., Magrini, V., McPherson, J.D., Miner, T.L., Minx, P., Nash, W.E., Nhan, M.N., Nelson, J.O., Oddy, L.G., Pohl, C.S., Randall-Maher, J., Smith, S.M., Wallis, J.W., Yang, S.P., Romanov, M.N., Rondelli, C.M., Paton, B., Smith, J., Morrice, D., Daniels, L., Tempest, H.G., Robertson, L., Masabanda, J.S., Griffin, D.K., Vignal, A., Fillon, V., Jacobsson, L., Kerje, S., Andersson, L., Crooijmans, R.P., Aerts, J., van der Poel, J.J., Ellegren, H., Caldwell, R.B., Hubbard, S.J., Grafham, D.V., Kierzek, A.M., McLaren, S.R., Overton, I.M., Arakawa, H., Beattie, K.J., Bezzubov, Y., Boardman, P.E., Bonfield, J.K., Croning, M.D., Davies, R.M., Francis, M.D., Humphray, S.J., Scott, C.E., Taylor, R.G., Tickle, C., Brown, W.R., Rogers, J., Buerstedde, J.M., Wilson, S.A., Stubbs, L., Ovcharenko, I., Gordon, L., Lucas, S., Miller, M.M., Inoko, H., Shiina, T., Kaufman, J., Salomonsen, J., Skjoedt, K., Wong, G.K., Wang, J., Liu, B., Yu, J., Yang, H., Nefedov, M., Koriabine, M., Dejong, P.J., Goodstadt, L., Webber, C., Dickens, N.J., Letunic, I., Suyama, M., Torrents, D., von Mering, C., Zdobnov, E.M., Makova, K., Nekrutenko, A., Elnitski, L., Eswara, P., King, D.C., Yang, S., Tyekucheva, S., Radakrishnan, A., Harris, R.S., Chiaromonte, F., Taylor, J., He, J., Rijnkels, M., Griffiths-Jones, S., Ureta-Vidal, A., Hoffman, M.M., Severin, J., Searle, S.M., Law, A.S., Speed, D., Waddington, D., Cheng, Z., Tuzun, E., Eichler, E., Bao, Z., Flicek, P., Shteynberg, D.D., Brent, M.R., Bye, J.M., Huckle, E.J., Chatterji, S., Dewey, C., Pachter, L., Kouranov, A., Mourelatos, Z., Hatzigeorgiou, A.G., Paterson, A.H., Ivarie, R., Brandstrom, M., Axelsson, E., Backstrom, N., Berlin, S., Webster, M.T., Pourquié, O., Reymond, A., Ucla, C., Antonarakis, S.E., Long, M., Emerson, J.J., Betran, E., Dupanloup, I., Kaessmann, H., Hinrichs, A.S., Bejerano, G., Furey, T.S., Harte, R.A., Raney, B., Siepel, A., Kent, W.J., Haussler, D., Eyra, E., Castelo, R., Abril, J.F., Castellano, S., Camara, F., Parra, G., Guigo, R., Bourque, G., Tesler, G., Pevzner, P.A., Smit, A., Fulton, L.A., Mardis, E.R. & Wilson, R.K., *Nature* 432, 695-716 (2004).
68. Fgf8 mRNA decay establishes a gradient that couples axial elongation to patterning in the vertebrate embryo. Dubrulle, J. & Pourquié, O., *Nature* 427 (6973), 419-422 (2004).
69. BEN/DM-GRASP/SC1 expression during mouse facial development: differential expression and regulation in molars and incisors. Fraboulet, S., Kavvadia, K., Pourquié, O., Sharpe, P.T., & Mitsiadis, T.A., *Gene Expr Patterns* 3 (3), 255-259 (2003).
70. Periodic Notch inhibition by Lunatic Fringe underlies the chick segmentation clock. Dale, J.K., Maroto, M., Dequeant, M.L., Malapert, P., McGrew, M., & Pourquié, O., *Nature* 421 (6920), 275-278 (2003).
71. Synthesis of new 3-alkoxy-7-amino-4-chloro-isocoumarin derivatives as new beta-amyloid peptide production inhibitors and their activities on various classes of protease. Bihel, F., Quelever, G., Lelouard, H., Petit, A., Alves da Costa, C., Pourquié, O., Checler, F., Thellend, A., Pierre, P., & Kraus, J.L., *Bioorg Med Chem* 11 (14), 3141-3152 (2003).
72. Onset of the segmentation clock in the chick embryo: evidence for oscillations in the somite precursors in the primitive streak. Jouve, C., Imura, T., & Pourquié, O., *Development* 129 (5), 1107-1117 (2002).

73. New protease inhibitors prevent gamma-secretase-mediated production of Abeta40/42 without affecting Notch cleavage. Petit, A., Bihel, F., Alves da Costa, C., Pourquié, O., Checler, F., & Kraus, J.L., *Nat Cell Biol* 3, 507-511 (2001).
74. Notch signalling acts in postmitotic avian myogenic cells to control MyoD activation. Hirsinger, E., Malapert, P., Dubrulle, J., Delfini, M.C., Duprez, D., Henrique, D., Ish-Horowicz, D., & Pourquié, O., *Development* 128 (1), 107-116. (2001).
75. FGF signaling controls somite boundary position and regulates segmentation clock control of spatiotemporal Hox gene activation. Dubrulle, J., McGrew, M.J., & Pourquié, O., *Cell* 106 (2), 219-232 (2001).
76. Mediolateral somitic origin of ribs and dermis determined by quail-chick chimeras. Olivera-Martinez, I., Coltey, M., Dhouailly, D., & Pourquié, O., *Development* 127 (21), 4611-4617 (2000).
77. Oscillating expression of c-hey2 in the presomitic mesoderm suggests that the segmentation clock may use combinatorial signaling through multiple interacting bHLH factors. Leimeister, C., Dale, K., Fischer, A., Klamt, B., Hrabe de Angelis, M., Radtke, F., McGrew, M.J., Pourquié, O., & Gessler, M., *Dev Biol* 227 (1), 91-103 (2000).
78. Notch signalling is required for cyclic expression of the hairy-like gene HES1 in the presomitic mesoderm. Jouve, C., Palmeirim, I., Henrique, D., Beckers, J., Gossler, A., Ish-Horowicz, D., & Pourquié, O., *Development* 127 (7), 1421-1429 (2000).
79. Expression of DM-GRASP/BEN in the developing mouse spinal cord and various epithelia. Fraboulet, S., Schmidt-Petri, T., Dhouailly, D., & Pourquié, O., *Mech Dev* 95 (1-2), 221-224 (2000).
80. Delta 1-activated notch inhibits muscle differentiation without affecting Myf5 and Pax3 expression in chick limb myogenesis. Delfini, M., Hirsinger, E., Pourquié, O., & Duprez, D., *Development* 127, 5213-5224 (2000).
81. BEN/SC1/DM-GRASP expression during neuromuscular development: a cell adhesion molecule regulated by innervation. Fournier-Thibault, C., Pourquié, O., Rouaud, T., & Le Douarin, N.M., *J Neurosci* 19 (4), 1382-1392 (1999).
82. Chick Delta-1 gene expression and the emergence of feather primordia. Viallet, J.P., Prin, F., Olivier-Martinez, I., Hirsinger, E., Pourquié, O., & Dhouailly, D., *Mech Dev* 72, 159-168 (1998).
83. Uncoupling segmentation and somitogenesis in the chick presomitic mesoderm. Palmeirim, I., Dubrulle, J., Henrique, D., Ish-Horowicz, D., & Pourquié, O., *Dev Genet.* 23, 77-85 (1998).
84. The lunatic fringe gene is a target of the molecular clock linked to somite segmentation in avian embryos. McGrew, M.J., Dale, J.K., Fraboulet, S., & Pourquié, O., *Curr Biol* 8 (17), 979-982 (1998).
85. Delta-1 activation of notch-1 signaling results in HES-1 transactivation. Jarriault, S., Le Bail, O., Hirsinger, E., Pourquié, O., Logeat, F., Strong, C.F., Brou, C., Seidah, N.G., & Isra I, A., *Mol Cell Biol* 18 (12), 7423-7431 (1998).
86. Expression of genes (CAPN3, SGCA, SGCB, and TTN) involved in progressive muscular dystrophies during early human development. Fougousse, F., Durand, M., Suel, L., Pourquié, O., Delezoide, A.L., Romero, N.B., Abitbol, M., & Beckmann, J.S., *Genomics* 48 (2), 145-156 (1998).

87. The characterization, molecular cloning, and expression of a novel hematopoietic cell antigen from CD34+ human bone marrow cells. Uchida, N., Yang, Z., Combs, J., Pourquié, O., Nguyen, M., Ramanathan, R., Fu, J., Welply, A., Chen, S., Weddell, G., Sharma, A.K., Leiby, K.R., Karagogeos, D., Hill, B., Humeau, L., Stallcup, W.B., Hoffman, R., Tsukamoto, A.S., Gearing, D.P., & Peault, B., *Blood* 89 (8), 2706-2716 (1997).
88. Avian hairy gene expression identifies a molecular clock linked to vertebrate segmentation and somitogenesis. Palmeirim, I., Henrique, D., Ish-Horowicz, D., & Pourquié, O., *Cell* 91, 639-648 (1997).
89. Expression of the cell adhesion proteins BEN/SC1/DM-GRASP and TAG-1 defines early steps of axonogenesis in the human spinal cord. Karagogeos, D., Pourquié, C., Kyriakopoulou, K., Tavian, M., Stallcup, W., Peault, B., & Pourquié, O., *J Comp Neurol* 379 (3), 415-427 (1997).
90. Noggin acts downstream of Wnt and Sonic Hedgehog to antagonize BMP4 in avian somite patterning. Hirsinger, E., Duprez, D., Jouve, C., Malapert, P., Cooke, J., & Pourquié, O., *Development* 124 (22), 4605-4614 (1997).
91. Maintenance of neuroepithelial progenitor cells by Delta-Notch signalling in the embryonic chick retina. Henrique, D., Hirsinger, E., Adam, J., Le Roux, I., Pourquié, O., Ish-Horowicz, D., & Lewis, J., *Curr Biol* 7 (9), 661-670 (1997).
92. Lateral and axial signals involved in avian somite patterning: a role for BMP4. Pourquié, O., Fan, C.M., Coltey, M., Hirsinger, E., Watanabe, Y., Breant, C., Francis-West, P., Brickell, P., Tessier-Lavigne, M., & Le Douarin, N.M., *Cell* 84 (3), 461-471 (1996).
93. Induction of oligodendrocyte progenitors in the trunk neural tube by ventralizing signals: effects of notochord and floor plate grafts, and of Sonic hedgehog. Poncet, C., Soula, C., Trousse, F., Kan, P., Hirsinger, E., Pourquié, O., Duprat, A.M., & Cochard, P., *Mech Dev* 60, 13-32 (1996).
94. BEN/SC1/DM-GRASP, a homophilic adhesion molecule, is required for in vitro myeloid colony formation by avian hemopoietic progenitors. Corbel, C., Pourquié, O., Cormier, F., Vaigot, P., & Le Douarin, N.M., *Proc Natl Acad Sci USA* 93, 2844-2849 (1996).
95. BEN as a presumptive target recognition molecule during the development of the olivocerebellar system. Chedotal, A., Pourquié, O., Ezan, F., San Clemente, H., & Sotelo, C., *J Neurosci* 16, 3296-3310 (1996).
96. Control of somite patterning by signals from the lateral plate. Pourquié, O., Coltey, M., Breant, C., & Le Douarin, N.M., *Proc Natl Acad Sci USA* 92 (8), 3219-3223 (1995).
97. Initial tract formation in the brain of the chick embryo: selective expression of the BEN/SC1/DM-GRASP cell adhesion molecule. Chedotal, A., Pourquié, O., & Sotelo, C., *Eur J Neurosci* 7 (2), 198-212 (1995).
98. Identification in the chicken of GRL1 and GRL2: two granule proteins expressed on the surface of activated leukocytes. Thomas, J.L., Pourquié, O., Coltey, M., Vaigot, P., & Le Douarin, N.M., *Exp Cell Res* 204 (1), 156-166 (1993).
99. Control of dorsoventral patterning of somitic derivatives by notochord and floor plate. Pourquié, O., Coltey, M., Teillet, M.A., Ordahl, C., & Le Douarin, N.M., *Proc Natl Acad Sci USA* 90 (11), 5242-5246 (1993).
100. Association of BEN glycoprotein expression with climbing fiber axonogenesis in the avian cerebellum. Pourquié, O., Hallonet, M.E., & Le Douarin, N.M., *J Neurosci* 12 (4), 1548-1557 (1992).

101. BEN, a surface glycoprotein of the immunoglobulin superfamily, is expressed in a variety of developing systems. Pourquié, O., Corbel, C., Le Caer, J.P., Rossier, J., & Le Douarin, N.M., *Proc Natl Acad Sci U S A* 89 (12), 5261-5265 (1992).
102. BEN, a novel surface molecule of the immunoglobulin superfamily on avian hemopoietic progenitor cells shared with neural cells. Corbel, C., Cormier, F., Pourquié, O., & Bluestein, H.G., *Exp Cell Res* 203 (1), 91-99 (1992).
103. An antigen expressed by avian neuronal cells is also expressed by activated T lymphocytes. Corbel, C., Bluestein, H.G., Pourquié, O., Vaigot, P., & Le Douarin, N.M., *Cell Immunol* 141 (1), 99-110 (1992).
104. Phenotypic plasticity of avian embryonic sympathetic neurons grown in a chemically defined medium: direct evidence for noradrenergic and cholinergic properties in the same neurons. Barbu, M., Pourquié, O., Vaigot, P., Gateau, G., & Smith, J., *J Neurosci Res* 32 (3), 350-362 (1992).
105. A widely distributed antigen developmentally regulated in the nervous system. Pourquié, O., Coltey, M., Thomas, J.L., & Le Douarin, N.M., *Development* 109 (4), 743-752 (1990).
106. A molecular map of the chicken major histocompatibility complex: the class II beta genes are closely linked to the class I genes and the nucleolar organizer. Guillemot, F., Billault, A., Pourquié, O., Behar, G., Chausse, A.M., Zoorob, R., Kreibich, G., & Auffray, C., *Embo J* 7 (9), 2775-2785 (1988).

Preprints

1. Control of epiblast cell fate by mechanical cues. Guillot C, Djefal Y, Serra M, Pourquié O. *bioRxiv* 2024 Jun 25:2024.06.24.600402. doi: 10.1101/2024.06.24.600402. PMID: 38979228.
2. A human pluripotent stem cell-based somitogenesis model using microfluidics. Liu Y, Kim YS, Xue X, Kobayashi N, Sun S, Yang Q, Pourquié O, Fu J. *bioRxiv*. Nov 1:2023.10.29.564399. doi: 10.1101/2023.10.29.564399. Preprint. PMID: 37961125 (2023). Now published in *Dev Cell*.
3. Reconstructing human Brown Fat developmental trajectory in vitro. Jyoti Rao, Jerome Chal, Fabio Marchianò, Chih-Hao Wang, Ziad Al Tanoury, Svetlana Gapon, Yannis Djefal, Alicia Mayeuf-Louchart, Ian Glass, Elizabeth M. Sefton, Bianca Habermann, Gabrielle Kardon, Fiona M. Watt, Yu-Hua Tseng, Olivier Pourquié. doi: <https://doi.org/10.1101/2022.06.01.494355> (2022). Now published in *Dev Cell*.
4. Metabolic regulation of species-specific developmental rate. Margarete Diaz-Cuadros, Teemu P. Miettinen, Dylan Sheedy, Carlos Manlio Díaz-García, Svetlana Gapon, Alexis Hubaud, Gary Yellen, Scott R. Manalis, William Oldham, Olivier Pourquié doi: <https://doi.org/10.1101/2021.08.27.457974> (2022). Now published in *Nature*.
5. Activity-driven extracellular volume expansion drives vertebrate axis elongation. Arthur Michaut, Alessandro Mongera, Anupam Gupta, Mattia Serra, Pietro Rigoni, Jong Gwan Lee, Felipe Duarte, Adam Hall, L. Mahadevan, Karine Guevorkian, Olivier Pourquié doi: <https://doi.org/10.1101/2022.06.27.497799> (2022)
6. Reconstruction and deconstruction of human somitogenesis in vitro. Yuchuan Miao, Yannis Djefal, 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 Pourquié
doi: <https://doi.org/10.1101/2022.05.11.491561> (2022). Now published in *Nature*.
7. Paraxial mesoderm organoids model development of human somites.
Christoph Budjan, Shichen Liu, Adrian Ranga, Senjuti Gayen, Olivier Pourquie, Sahand Hor moz. doi: <https://doi.org/10.1101/2021.03.22.436471> (2021). Now published in *e-life*.
 8. Direct Reprogramming of Non-limb Fibroblasts to Cells with Properties of Limb Progenitors.
Yuji Atsuta, Changhee Lee, Alan R. Rodrigues, Charlotte Colle, Reiko R. Tomizawa, Ernesto G. Lujan, Patrick Tschopp, Joshua M. Gorham, Jean-Pierre Vannier, Christine E. Seidman, Jonathan G. Seidman, Olivier Pourquié, Clifford J. Tabin. doi: <https://doi.org/10.1101/2021.10.01.462632> (2021) Now published in *Dev Cell*.
 9. Tension-driven multi-scale self-organisation in human iPSC-derived muscle fibers.
Qiyao Mao, Achyuth Acharya, Alejandra Rodríguez-delaRosa, Fabio Marchiano, Benoit Dehapiot, Ziad Al Tanoury, Jyoti Rao, Margarete Díaz-Cuadros, Arian Mansur, Erica Wagner, Claire Chardes, Vandana A. Gupta, Pierre-François Lenne, Bianca H. Habermann, Olivier Pourquie, Frank Schnorrer. <https://doi.org/10.1101/2021.10.24.465614> (2021). Now published in *e-life*.
 10. Prednisolone rescues Duchenne Muscular Dystrophy phenotypes in human pluripotent stem cell-derived skeletal muscle *in vitro*. Ziad Al Tanoury, John F. Zimmermann, Jyoti Rao, Daniel Sieiro, Harry McNamara, Thomas Cherrier, Aurore Hick, Fanny Bousson, Charlotte Fugier, Fabio Marchiano, Bianca Habermann, Jérôme Chal, Alexander P. Nesmith, Svetlana Gapon, Erica Wagner, Rhonda Basel-Duby, Eric Olson, Adam E. Cohen, Kevin Kit Parker, Olivier Pourquié. <https://doi.org/10.1101/2020.10.29.360826>(2020). Now published in *PNAS*.
 11. Rere-dependent Retinoic Acid signaling controls brain asymmetry and handedness. Michael Rebagliati, Gonçalo C. Vilhais-Neto, Alexandra Petiet, Merlin Lange, Arthur Michaut, Jean-Luc Plassat, Julien Vermot, Fabrice Riet, Vincent Noblet, David Brasse, Patrice Laquerrière, Delphine Cussigh, Sébastien Bedu, Nicolas Dray, Mohamed Sayed Gomaa, Claire Simons, Hamid Meziane, Stéphane Lehericy, Laure Bally-Cuif, Olivier Pourquié. bioRxiv 578625; doi: <https://doi.org/10.1101/578625> (2019)
 12. Bioelectrical signaling via domain wall migration. Harold M. McNamara, Rajath Salegame, Ziad Al Tanoury, Haitan Xu, Shahinoor Begum, Gloria Ortiz, Olivier Pourquié, Adam E. Cohen. bioRxiv 570440; doi: <https://doi.org/10.1101/570440> (2019). Now published in *Nature Physics*.
 13. Intracellular pH controls Wnt signaling downstream of glycolysis in the vertebrate embryo. Masayuki Oginuma, Yukiko Harima, Fengzhu Xiong, Olivier Pourquié. bioRxiv 481259; doi: <https://doi.org/10.1101/481259> (2018). Now published in *Nature*.
 14. In vitro characterization of the human segmentation clock. Margarete Diaz-Cuadros, Daniel Wagner, Christoph Budjan, Alexis Hubaud, Jonathan Touboul, Arthur Michaut, Ziad Al Tanoury, Kumiko Yoshioka-Kobayashi, Yusuke Niino, Ryoichiro Kageyama, Atsushi Miyawaki, Olivier Pourquié. bioRxiv 461822; doi: <https://doi.org/10.1101/461822> (2018). Now published in *Nature*.
 15. Mechanical Coupling Coordinates the Co-elongation of Axial and Paraxial Tissues in Avian Embryos. Fengzhu Xiong, Wenzhe Ma, Bertrand Benazeraf, L Mahadevan, Olivier Pourquié. bioRxiv 412866; doi: <https://doi.org/10.1101/412866> (2018). Now published in *Developmental Cell*.
 16. Timed collinear activation of Hox genes during gastrulation controls the avian forelimb position. Chloe Moreau, Paolo Caldarelli, Didier Rocancourt, Julian Roussel, Nicolas Denans, Olivier Pourquié, Jerome Gros. bioRxiv 351106; doi: <https://doi.org/10.1101/351106> (2018). Now published in *Current Biology*.

17. Motility-gradient induced elongation of the vertebrate embryo. Ido Regev, Karine Guevorkian, Olivier Pourquié, L Mahadevan. bioRxiv 187443; doi: <https://doi.org/10.1101/187443> (2017). Now published in *Development*.
18. The TAF10-containing TFIIID and SAGA transcriptional complexes are dispensable for early somitogenesis in the mouse embryo. Paul Bardot, Stéphane D. Vincent, Marjorie Fournier, Alexis Hubaud, Mathilde Joint, László Tora, Olivier Pourquié. bioRxiv 071324; doi: <https://doi.org/10.1101/071324> (2017). Now published in *Development*.
19. Recapitulating early development of mouse musculoskeletal precursors of the paraxial mesoderm in vitro. Jérôme Chal, Ziad Al Tanoury, Masayuki Oginuma, Philippe Moncuquet, Bénédicte Gobert, Ayako Miyanari, Olivier Tassy, Getzabel Guevara, Agata Bera, Olga Sumara, Jean-Marie Garnier, Leif Kennedy, Marie Knockaert, Barbara Gayraud-Morel, Shhrahgim Tajbakhsh, Olivier Pourquié. bioRxiv 140574; doi: <https://doi.org/10.1101/140574> (2017). Now published in *Development*.
20. Multiscale quantification of tissue behavior during amniote embryo axis elongation. Bertrand Bénazéraf, Mathias Beaupeux, Martin Tchernookov, Allison Wallingford, Tasha Salisbury, Amelia Shirtz, Andrew Shirtz, Dave Huss, Olivier Pourquié, Paul François, Rusty Lansford. bioRxiv 053124; doi: <https://doi.org/10.1101/053124> (2016). Now published in *Development*.
21. Warburg-like metabolism coordinates FGF and Wnt signaling in the vertebrate embryo. Masayuki Oginuma, Philippe Moncuquet, Fengzhu Xiong, Edward Karoly, Jérôme Chal, Karine Guevorkian, Olivier Pourquié. bioRxiv 101451; doi: <https://doi.org/10.1101/101451> (2016). Now published in *Developmental Cell*.
22. A new coactivator complex required for retinoic acid-dependent regulation of embryonic symmetry. Goncalo C. Vilhais-Neto, Marjorie Fournier, Jean-Luc Plassat, Mihaela E. Sardu, Anita Saraf, Jean-Marie Garnier, Mitsuji Maruhashi, Laurence Florens, Michael P. Washburn, Olivier Pourquié. bioRxiv 089201; doi: <https://doi.org/10.1101/089201> (2016). Now published in *Nature Communications*.
23. P APC couples the Segmentation Clock to somite morphogenesis by regulating N-cadherin dependent adhesion Jerome Chal, Charlene Guillot, Olivier Pourquié. bioRxiv 071084; doi: <https://doi.org/10.1101/071084> (2016). Now published in *Development*.

Reviews and Book Chapters

1. Cellular and molecular control of vertebrate somitogenesis. Miao Y, Pourquié O. Nat Rev Mol Cell Biol. 2024 Feb 28. doi: 10.1038/s41580-024-00709-z. Online ahead of print. PMID: 38418851
2. The Clockwork Embryo: Mechanisms Regulating Developmental Rate. Diaz-Cuadros M, Pourquié O. Annu Rev Genet. 2023 Nov 27;57:117-134. doi: 10.1146/annurev-genet-022123-104503. PMID: 38012023
3. Modeling Human Paraxial Mesoderm Development with Pluripotent Stem Cells. Miao Y, Diaz-Cuadros M, Pourquié O. Methods Mol Biol. 2023 Oct 17. doi: 10.1007/7651_2023_507. Online ahead of print. PMID: 37843773
4. A brief history of the segmentation clock. Pourquié O. Dev Biol. 2022 May;485:24-36. doi: 10.1016/j.ydbio.2022.02.011. Epub 2022 Feb 26. PMID: 35231452
5. Bioinks and bioprinting strategies for skeletal muscle tissue engineering. Samandari M, Quint J, Rodríguez-de-laRosa A, Sinha I, Pourquié O, Tamayol A. Adv Mater. 2021 Nov 13:e2105883.

6. Patterning with clocks and genetic cascades: Segmentation and regionalization of vertebrate versus insect body plans. Diaz-Cuadros M, Pourquoié O, El-Sherif E. PLoS Genet. 2021 Oct 14;17(10):e1009812. doi: 10.1371/journal.pgen.1009812. eCollection 2021 Oct.
7. *In vitro* systems: A new window to the segmentation clock. Diaz-Cuadros M, Pourquoié O. Dev Growth Differ. 2021 Feb;63(2):140-153.
8. Human muscle production *in vitro* from pluripotent stem cells: Basic and clinical applications. Yan L, Rodriguez-delaRosa A, Pourquoié O. Semin Cell Dev Biol. 2021 Apr 30:S1084-9521(21)00090-2.
9. Mechanics of Anteroposterior Axis Formation in Vertebrates. Mongera A., Michaut, A., Guillot, C., Xiong, F. and Pourquoié. Annual review Cell Biol, 2019, 35 : 259-283.
10. The Long Road to Making Muscle In Vitro. Pourquoié O, Al Tanoury Z, Chal J. Curr Top Dev Biol. 2018;129:123-142.
11. Somite formation in the chicken embryo. Pourquoié O. Int J Dev Biol. 2018;62(1-2-3):57-62.
12. Making muscle: skeletal myogenesis in vivo and in vitro. Chal J, Pourquoié O. Development. 2017 Jun 15;144(12):2104-2122. doi: 10.1242/dev.151035.
13. Signalling dynamics in vertebrate segmentation. Hubaud A, Pourquoié O. Nat Rev Mol Cell Biol. 2014 Nov;15(11):709-21.
14. Formation and segmentation of the vertebrate body axis. Bénazéraf B, Pourquoié O. Annu Rev Cell Dev Biol. 2013;29:1-26.
15. A non-directional cell migration gradient in the presomitic mesoderm contributes to axis elongation in chicken embryos Bénazéraf, B., François, P., Denans, N., Little, C., D., Pourquoié, O. Biol Aujourd'hui. 2011;205(2):95-103.
16. Vertebrate segmentation: from cyclic gene networks to scoliosis. Pourquoié, O. Cell, 145 (5), 650-663. (2011)
17. Genic expression control during development. Vincent S., Pourquoié O. Biofutur. (2011).
18. Signaling Gradients during Paraxial Mesoderm Development. Aulehla, A., Pourquoié, O., Cold Spring Harbor Perspectives in Biology (2010) (2).
19. Lighting up developmental mechanisms: how fluorescence imaging heralded a new era. Mavrakis, M., Pourquoié, O., & Lecuit, T. Development 137 (3), 373-387 (2010).
20. The Genetics and Development of Scoliosis. Kusumi, K., Eckalbar, W., Pourquoié, O. (2010). Genetic Regulation of Somite and Early Spinal Patterning. In: Kusumi, K., Dunwoodie, S. (eds) Springer, New York, NY. https://doi.org/10.1007/978-1-4419-1406-4_1
21. Establishment of Hox vertebral identities in the embryonic spine precursors. Iimura, T., Denans, N., & Pourquoié, O., Curr Top Dev Biol 88, 201-234 (2009).
22. Developmental control of segment numbers in vertebrates. Gomez, C. & Pourquoié, O., J Exp Zool B Mol Dev Evol 312 (6), 533-544 (2009).
23. Progress in the understanding of the genetic etiology of vertebral segmentation disorders in humans. Giampietro, P.F., Dunwoodie, S.L., Kusumi, K., Pourquoié, O., Tassy, O., Offiah, A.C., Cornier, A.S., Alman, B.A., Blank, R.D., Raggio, C.L., Glurich, I., & Turnpenny, P.D., Ann N Y Acad Sci 1151, 38-67 (2009).

24. Temporal control of gene expression by combining electroporation and the tetracycline inducible systems in vertebrate embryos in *Electroporation and sonoporation in developmental biology*. Dubrulle, J. & Pourquié, O., (Springer Japan, 2009), pp. 25-36.
25. Patterning and differentiation of the vertebrate spine in *The Skeletal System*, edited by O. Pourquié. Chal, J. & Pourquié, O., (Cold Spring Harbor Laboratory Press, 2009), pp. 41-116.
26. Signaling gradient during paraxial mesoderm development in *Reading and Interpreting Gradients during Development*, Aulehla, A. & Pourquié, O., edited by J. Briscoe, P. Lawrence, & JP. Vincent (Cold Spring Harbor Laboratory Press, 2009).
27. Segmental patterning of the vertebrate embryonic axis. Dequeant, M.L. & Pourquié, O., *Nat Rev Genet* 9 (5), 370-382 (2008).
28. Tissue micromanipulation in zebrafish embryos. Picker, A., Roellig, D., Pourquié, O., Oates, A.C., & Brand, M., *Methods Mol Biol* 546, 153-172 (2009).
29. The vertebrate segmentation clock: the tip of the iceberg. Ozbudak, E.M. & Pourquié, O., *Curr Opin Genet Dev* 18 (4), 317-323 (2008).
30. Manipulation and electroporation of the avian segmental plate and somites in vitro. Imura, T. & Pourquié, O., *Methods Cell Biol* 87, 257-270 (2008).
31. Oscillating signaling pathways during embryonic development. Aulehla, A. & Pourquié, O., *Curr Opin Cell Biol* (2008).
32. Abnormal vertebral segmentation and the notch signaling pathway in man. Turnpenny, P.D., Alman, B., Cornier, A.S., Giampietro, P.F., Offiah, A., Tassy, O., Pourquié, O., Kusumi, K., & Dunwoodie, S., *Dev Dyn* 236 (6), 1456-1474 (2007).
33. Building the spine: the vertebrate segmentation clock. Pourquié, O., *Cold Spring Harb Symp Quant Biol* 72, 445-449 (2007).
34. Hox genes in time and space during vertebrate body formation. Imura, T. & Pourquié, O., *Development, growth & differentiation* 49 (4), 265-275 (2007).
35. On periodicity and directionality of somitogenesis. Aulehla, A. & Pourquié, O., *Anat Embryol (Berl)* 211 Suppl 7, 3-8 (2006).
36. Segmentation and somitogenesis in vertebrates, Pourquié, O. *Yearbook of Science and Technology* (McGraw-Hill, New York, 2005), pp. 298-300.
37. The chick embryo: a leading model in somitogenesis studies. Pourquié O. *Mech Dev*. 2004 Sep;121(9):1069-79. doi: 10.1016/j.mod.2004.05.00.. PMID: 15296972.
38. Coupling segmentation to axis formation. Dubrulle, J. & Pourquié, O., *Development* 131, 5783-5793 (2004).
39. The segmentation clock: converting embryonic time into spatial pattern. Pourquié, O., *Science* 301 (5631), 328-330 (2003).
40. Vertebrate somitogenesis: a novel paradigm for animal segmentation? *Int J Dev Biol* 47 (7-8), 597-603 (2003).
41. Vertebrate segmentation: lunatic transcriptional regulation. Pourquié, O., *Curr Biol* 12 (20), R699-701 (2002).
42. From head to tail: links between the segmentation clock and antero-posterior patterning of the embryo. Dubrulle, J. & Pourquié, O., *Curr Opin Genet Dev* 12 (5), 519-523 (2002).

43. A nomenclature for prospective somites and phases of cyclic gene expression in the presomitic mesoderm. Pourquié, O. & Tam, P.P., *Dev Cell* 1 (5), 619-620 (2001).
44. When body segmentation goes wrong. Pourquié, O. & Kusumi, K., *Clin Genet* 60 (6), 409-416 (2001).
45. A molecular clock linked to vertebrate segmentation Pourquié, O., Dale, J.K., Dubrulle, J., Jouve, C., Maroto, M., & McGrew, M., in *The origin and fate of somites*, edited by E. J. Sanders, J. W. Lash, & C. Ordahl (IOS Press, 2001), pp. 64-70.
46. A molecular clock involved in somite segmentation. Maroto, M. & Pourquié, O. *Curr Top Dev Biol* 51, 221-248 (2001).
47. Vertebrate somitogenesis. Pourquié, O., *Annu Rev Cell Dev Biol* 17, 311-350 (2001).
48. A molecular clock linked to vertebrate segmentation. Pourquié, O., Dale, J.K., Dubrulle, J., Jouve, C., Maroto, M., & McGrew, M., in *The origin and fate of somites*, edited by E. J. Sanders, J. W. Lash, & C. Ordahl (IOS Press, 2001), pp. 64-70.
49. A biochemical oscillator linked to vertebrate segmentation. Pourquié, O., in *Vienna Series in Theoretical Biology*, edited by E.D. Muller & S. Neumann (MIT Press, 2001).
50. The vertebrate segmentation clock. Pourquié, O., *J Anat* 199, 169-175 (2001).
51. A molecular clock involved in somite segmentation. Maroto, M. & Pourquié, O., *Curr Top Dev Biol* 51, 221-248 (2001).
52. Segmentation of the paraxial mesoderm and vertebrate somitogenesis. Pourquié, O., *Curr Top Dev Biol* 47, 81-105 (2000).
53. Vertebrate segmentation: is cycling the rule? Pourquié, O., *Curr Opin Cell Biol* 12 (6), 747-751. (2000).
54. Somite formation and patterning. Hirsinger, E., Jouve, C., Dubrulle, J., & Pourquié, O., *Int Rev Cytol* 198, 1-65 (2000).
55. A clock-work somite. Dale, J.K. & Pourquié, O., *Bioessays* 22 (1), 72-83 (2000).
56. Notch around the clock. Pourquié, O., *Curr Opin Genet Dev* 9 (5), 559-565 (1999).
57. Somite patterning and segregation of different somite lineages. Hirsinger, E. & Pourquié, O., *J Soc Biol* 193 (3), 257-262 (1999).
58. Une horloge moléculaire liée à la segmentation des vertébrés. Pourquié, O. & Palmeirim, I., *Médecine/sciences* (14), 344-347 (1998).
59. Clocks regulating developmental processes. Pourquié, O., *Curr Opin Neurobiol* 8 (5), 665-670 (1998).
60. Somitogenesis: segmenting a vertebrate. McGrew, M.J. & Pourquié, O., *Curr Opin Genet Dev* 8 (4), 487-493 (1998).
61. Molecular genetics of skeletal muscle genetics. McGrew, M., Xavier-Nieto, J., Pourquié, O., & Rosenthal, N., in *Heart Development*, edited by R. Harvey & N. Rosenthal (Academic Press, Harcourt Brace & Company, Publishers, 1998), pp. 493-512.
62. Role of growth factors in shaping the developing somite. Hirsinger, E., Jouve, C., Malapert, P., & Pourquié, O., *mol cell endocrinol* 140 (1-2), 83-87 (1998).
63. La ségrégation des lignages somitiques. Pourquié, O., *Médecine/sciences* 13, 1145-1156 (1997).

64. Cell migrations and establishment of neuronal connections in the developing brain: a study using the quail-chick chimera system. Le Douarin, N.M., Hallonet, M.E., & Pourquié, O., *Prog Brain Res* 100, 3-18 (1994).
65. Ben, a Surface Glycoprotein of the Immunoglobulin Superfamily on Avian Hematopoietic Progenitor Cells and Activated T-Lymphocytes Shared with Neural Cells. Corbel C., Pourquié O., Cormier F., Bluestein, HG. In F. Coudert (Ed.) "Avian Immunology in Progress: August 31st – September 2nd [1993], Tours, France." (p. 85-90.) Les colloques INRA, no. 62. Paris: INRA, 1993.
66. Expression of Grl1 and Grl2 Antigens in Chicken Hematopoietic Cells. Thomas J.L., Pourquié O., Coltey M., Vaigot P. Ledourin NM. In F. Coudert (Ed.) "Avian Immunology in Progress: August 31st – September 2nd [1993], Tours, France." (p. 293-300.) Les colloques INRA, no. 62. Paris: INRA, 1993.
67. New molecular insights on the development of the peripheral nervous system. Dulac, C., Cameron-Curry, P., Pourquié, O., & Le Douarin, N.M., *Adv Exp Med Biol* 296, 1-11 (1991).

Commentaries and Editorials

1. Modeling human trunk development. Miao Y, Pourquié O. *Nat Biotechnol*. 2023 Nov 16. doi: 10.1038/s41587-023-02048-4. Online ahead of print. PMID: 37974011
2. Mapping mouse axial progenitor dynamics in vitro. Miao Y, Pourquié O. *Dev Cell*. 2024 Jun 17;59(12):1487-1488. doi: 10.1016/j.devcel.2024.05.026. PMID: 38889690
3. Metabolic decisions in development and disease-a Keystone Symposia report. Cable J, Pourquié O, Wellen KE, Finley LWS, Aulehla A, Gould AP, Telemann A, Tu WB, Garrett WS, Miguel-Aliaga I, Perrimon N, Hooper LV, Walhout AJM, Wei W, Alexandrov T, Erez A, Ralser M, Rabinowitz JD, Hemalatha A, Gutiérrez-Pérez P, Chandel NS, Rutter J, Locasale JW, Landoni JC, Christofk H. *Ann N Y Acad Sci*. 2021 Dec;1506(1):55-73
4. Ce n'est qu'un au revoir. Pourquié O. *Development*. 2018 Oct 11;145(19).
5. Human development: recent progress and future prospects. Pourquié O, Brown K. *Development*. 2018 Aug 28;145(16).
6. Advocating developmental biology. Maartens A, Prokop A, Brown K, Pourquié O. *Development*. 2018 Jun 26;145(12):dev167932. doi: 10.1242/dev.167932. PMID: 29945987.
7. Human embryonic stem cells get organized Pourquié O. *Nature*. 2018 Jun;558(7708):35-36.
8. Editorial changes. Pourquié O, Brown K. *Development*. 2017 Jul 21. pii: dev.156919.
9. Introducing preLights: preprint highlights, selected by the biological community. Brown K, Pourquié O. *Development*. 2018 Feb 22;145(4).
10. And one last thing. Pourquié O. *Development*. 2018 Jan 10;145(1).
11. Summary of the first inaugural joint meeting of the International Consortium for scoliosis genetics and the International Consortium for vertebral anomalies and scoliosis, March 16-18, 2017, Dallas, Texas. Giampietro PF, Pourquié O, Raggio C, Ikegawa S, Turnpenney PD, Gray R, Dunwoodie SL, Gurnett CA, Alman B, Cheung K, Kusumi K, Hadley-Miller N, Wise CA. *Am J Med Genet A*. 2018 Jan;176(1):253-256.

12. Going format-free. Brown K, Pourquié O. *Development*. 2017 Jun 1;144(11):1919. doi: 10.1242/dev.154161. PMID: 28559235.
13. The times they are a-changin'. Pourquié O. *Development*. 2017 Jan 1;144(1):1-2. doi: 10.1242/dev.147447. PMID: 28049686.
14. Introducing cross-referee commenting in peer review. Pourquié O, Brown K. *Development*. 2016 Sep 1;143(17):3035-6. doi: 10.1242/dev.143198. PMID: 27578173.
15. Standing Up for Sticklebacks. Pourquié O. *Cell*. 2016 Jan 14;164(1-2):9-10. doi: 10.1016/j.cell.2015.12.052. PMID: 26771479.
16. Future developments: your thoughts and our plans. Pourquié O, Brown K. *Development*. 2016 Jan 1;143(1):1-2. doi: 10.1242/dev.133355. PMID: 26732837.
17. Developing a new look. Pourquié O, Brown K, Moulton C. *Development*. 2015 Nov 15;142(22):3803-4. doi: 10.1242/dev.131979. PMID: 26577202.
18. Human development: a Special Issue. Pourquié O. *Development*. 2015 Sep 15;142(18):3071-2. doi: 10.1242/dev.129767. PMID: 26395134.
19. Developing peer review. Pourquié O, Brown K. *Development*. 2015 Apr 15;142(8):1389. doi: 10.1242/dev.124206. PMID: 25852196.
20. Looking inwards: opening a window onto human development. Pourquié O, Bruneau B, Keller G, Smith A. *Development*. 2015 Jan 1;142(1):1-2.
21. Developmental Biology. Managing patterns and proportions over time. Pourquié O. *Science*. 2014 Sep 26;345(6204):1565-6.
22. Ethical development. Pourquié O, Brown K, Moulton C. *Development*. 2014 Sep;141(18):3439-40.
23. Developing with the community. Pourquié O. *Development*. 2014 Jan;141(1):3-4. doi: 10.1242/dev.105965. PMID: 24346694.
24. Stem cells and regeneration: a special issue. Pourquié O, Bruneau B, Götz M, Keller G, Smith A. *Development*. 2013 Jun;140(12):2445. doi: 10.1242/dev.098350. PMID: 23715535.
25. The San Francisco declaration on research assessment. Pourquié O. *Development*. 2013 Jul;140(13):2643-4. doi: 10.1242/dev.099234. Epub 2013 May 22. PMID: 23698352.
26. Making the clock tick: right time, right pace. Hubaud A, Pourquié O. *Dev Cell*. 2013 Jan 28;24(2):115-6.
27. Reprogramming development. *Development*. Pourquié O. 2013 Jan 1;140(1):1-2. doi:
28. Development: looking to the future. Pourquié O. *Development*. 2012 Jun;139(11):1893-4.
29. A niche for stem cell research. Pourquié, O., *Development* 139 1-2 (2012).
30. Steering a changing course. Pourquié, O., *Development* 138 (1), 1-2 (2011).
31. The Node: a place to discuss, debate and deliberate developmental biology. Amsen, E., Alfred, J., Pourquié, O., *Development* 137 (14), 2251-2251 (2010).
32. The four revolutions of Development. Pourquié, O., *Development* 137 (1), 1-2 (2010).
33. An interview with Olivier Pourquié. Briscoe, J., Pourquié, O., *Development* 137 (3), 361-362 (2010).

34. More than patterning--Hox genes and the control of posterior axial elongation. Aulehla, A. & Pourquié, O., *Dev Cell* 17 (4), 439-440 (2009).
35. Retinoic acid. Vilhais-Neto, G.C. & Pourquié, O., *Curr Biol* 18 (5), R191-192 (2008).
36. Pattern formation and developmental mechanisms. Leyser, O. & Pourquié, O., *Curr Opin Genet Dev* 18 (4), 285-286 (2008).
37. Developmental biology: cell intercalation one step beyond. Benazeraf, B. & Pourquié, O., *Curr Biol* 18 (3), R119-121 (2008).
38. Editorial on segmentation focus. Pourquié, O., *Dev Dyn* 236 (6), 1377-1378 (2007).
39. Poultry genomics puts meat on the table. Smith, E., Pourquié, O., & Burt, D., *Comp Funct Genomics* 6 (5-6), 311-316 (2005).
40. Signal transduction: a new canon. Pourquié, O., *Nature* 433, 208-209 (2005).
41. Chicken genome: new tools and concepts. Dequeant, M.L. & Pourquié, O., *Dev Dyn* 232, 883-886 (2005).
42. Entrails, heart, brain, limbs, and lymphatics- a recipe for success? Stainier, D.Y. & Pourquié, O., *Dev Cell* 5 (2), 193-196 (2003).
43. Segmentation clock: insights from computational models. Pourquié, O. & Goldbeter, A., *Curr Biol* 13 (16), R632-634 (2003).
44. Pattern formation and developmental mechanisms. From cell patterning to organogenesis. Ephrussi, A. & Pourquié, O., *Curr Opin Genet Dev* 13 (4), 323-325 (2003).
45. Welcome to syndetome: a new somitic compartment. Dubrulle, J. & Pourquié, O., *Dev Cell* 4 (5), 611-612 (2003).
46. Genetics. Chicken genome--science nuggets to come soon. Burt, D. & Pourquié, O., *Science* 300 (5626), 1669 (2003).
47. Developmental biology. A macho way to make muscles. Pourquié, O., *Nature* 409 (6821), 679-680 (2001).
48. Skin development: delta laid bare. Pourquié, O., *Curr Biol* 10, R425-428 (2000).
49. Developmental biology gets high. Pourquié, O. & Lemaire, P., Jacques Monod Conference--Early Developmental Biology, Aussois, France, 31 May-3 June 1998. ESF Conference--Developmental Biology, Lenggrries, Germany, 6-11 June 1998. *Trends Genet* 14 (10), 384-385 (1998).

BOOKS

The skeletal system

O. Pourquié, Editor, Cold Spring Harbor Laboratory press (2009)

Hox Genes

O. Pourquié, Editor, Current Topics in Developmental Biology, Elsevier (2009)

Biologie du Développement (220 pages)

O. Pourquié Editions Hermann, Paris (2001)

Biologie du développement : la construction du système nerveux (128 pages)

PATENTS

Novel Nucleic Acids and Associated Diagnostics. US patent 11 555 982. Pourquié O, Staehling-Hampton K.

Method for preparing induced paraxial mesoderm and their use US patent 20130052729A1. Chal J and Pourquié O

Generation of brown adipose tissue from pluripotent stem cells in vitro. US patent. WO2017223457A1. Chal J and Pourquié O.

Generation of brown adipose from pluripotent stem cells in vitro. Provisional US patent (2022). WO2023150555A1. Rao J, Miao Y and Pourquie O.

Integrated pipeline for cell culture design (MGB/AFM). Provisional US patent (2023). Pourquie O. and Djefal Y.

Isolation of muscle satellite cells (Provisional patent MGB/AFM). Provisional US patent (2023). Pourquie O. and Djefal Y.