

CURRICULUM VITAE

Dr. Marie MANCEAU

Born on June 5th, 1979

French Nationality

Current Position

Group Leader / Research Director DR2 CNRS

Center for Interdisciplinary Research in Biology (CIRB), Collège de France, Paris, France.

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Education

2007 – 2013 Postdoctoral research fellow in Evolution and Developmental Biology, Harvard University; Advisor: Dr. Hopi Hoekstra

2003 – 2007 Ph.D. in Developmental Biology, University Aix-Marseille II, France ; Advisor: Dr. Christophe Marcelle

2002 – 2003 DEA (Valedictorian; Master II) in Developmental and Cellular Biology, University Aix-Marseille II, France ; Advisors: Drs. C. Marcelle and D. Gros

2001 – 2002 Maîtrise (Master I) in Developmental Biology and Genetics, University Aix-Marseille II, France.

1998 – 2001 License in Cell Biology and Genetics, Louis Pasteur University, France.

Visiting Scholar Molecular Oncology Institute INSERM U119; Advisor: Dr. P. Pontarotti

Teaching Experience

2013 – 2020 Guest Lecturer, Colour Pattern Evolution and Genetics (6 lectures), Ecole Normale Supérieure, Paris, France,

Guest Lecturer, Evo-Devo, Curie Institute Developmental Biology Course (2 lectures).

Guest Lecturer, Evo-Devo, UPMC, Genetics Master Course (2 lectures).

2008 – 2011 Guest Lecturer, Model Organisms (3 lectures), Dept. Molecular and Cellular Biology, Harvard University, USA.

Mentor for two graduate students and one undergraduate student, Dept. Organismic and Evolutionary Biology, Harvard University, USA.

2003 – 2006 Teaching Assistant and Guest Lecturer, Molecular and Cellular Biology

Mentor for two undergraduate students, University Aix-Marseille II, France.

Grants, Fellowships and Awards

2020 Bettencourt 2020 Prize “Coups d’élans pour la recherche française” laureate.

Richard Lounsbery Prize (joined US and FR National Science Academies) 2020 Laureate.

2019 Fondation Schlumberger pour l’Enseignement et la Recherche (Cercle FSER) Laureate.

CNRS Bronze Medal 2019 Laureate.

HSFP Collaborative Grant (with M. Shawkey and JS Yeo; funding started in 07/2019).

2017 Labex MemoLife collaborative Grant (with X. Morin; funding started in 02/2017).

2015 European Research Council (ERC) Starting Grant (funding started in 06/2015).

2014 IDEX-PSL (Paris Science et Lettres) Research Grant (funding started in 01/2015).

2012 INSERM-CNRS ATIP / AVENIR Research Grant (funding started in 08/2013).

2012 Harvard University, Museum of Comparative Zoology Putnam Expeditionary Grant.

2008 Harvard University, Museum of Comparative Zoology Barbour Expeditionary Grant.

2007 French Association against Myopathy (AFM) PhD Fellowship.

2003 French Ministry of National Education Research and Technology PhD Fellowship.

French Ministry of National Education Research and Technology Teaching Assistant Fellowship.

2002 French Ministry of National Education Research and Technology DEA Fellowship.

2001 University Aix-Marseille II CROUS Master Fellowship.

Field Work and Guiding Activity

Organization and collection of bird and rodent adult individuals, fertilized eggs, embryos, and specimens from natural populations, zoos, museums, and local suppliers in Massachusetts, Nebraska, New Mexico, Florida, The Falkland Islands, France, Australia, Ireland, the UK, Germany, and Italy.

IAATO and AECO Certified Expedition Guide and Lecturer in Greenland, Svalbard (Spitzbergen), South Georgia, the Falklands, and the Antarctic Peninsula for Ponant (France) and Oceanwide Expeditions (The Netherlands). Holder of zodiac and small boat driving licenses

Memberships, Advisory Boards, Reviewing Activity

Member of the ANR 2017 selection committee.

Member of the GDR “Groupe Aviaire”, Paris, France.

Member of the French Society for Developmental Biology (SFBD).

Member of the Scientific Advisory Board of the Polar World Museum, Les Rousses, France.

Reviewer for *Science*, *Genes*, *Journal of Heredity*, *Journal of Zoology*, *Genetics*, *PloS Genetics*, *Evolution*, *Molecular and developmental Evolution*, *Development*, *PNAS*, *Current Biology*.

Invited Presentations

[General public presentations:](#)

2019 *Session speaker*, “Les grandes avancées françaises présentées par leurs auteurs”, Académie des Sciences, Paris, France

Session speaker, Les 80 ans du CNRS au Collège de France: relève de l'excellence, Paris, France.

Speaker, "A la une de la science", La tête au Carré (France Inter Radio)

2016 *Keynote Speaker, Mix-IT Conference*, (Basic Science and Evo-Devo), Lyon, France.

2015 *Keynote Speaker, Podcast Science, Freestyle 14* (Research and Antarctica), Paris, France

2014 – 2019: *Lecturer* onboard Expeditions Ships (Genetics, Ecology and Evo-Devo of Polar fauna; ~ 100 conferences).

Academic presentations (2011-present):

2020 *Session speaker, Physics of Living Matter PLM15, Centuri Marseille*, France

Session speaker, Genomics Conference, NYU Abu Dhabi, UAE

Session speaker, Evolutionary Biology conferences, Welcome Genomics Center, Cambridge, UK

2019 *Session speaker, "10 years of the ATIP-Avenir"*, **Collège de France**, France.

Session speaker, "Biodiversity, Epigenetics and Evolution" symposium, Collège de France, France

External Seminar series, Department of Zoology, Basel University, Switzerland

2018 *Session speaker, 10th Avian Model System conference, Pasteur Institute*, Paris, France.

Session speaker, "Morphogens on the move" symposium, Collège de France, Paris, France.

2017 *External Seminar series, Oceanographic observatory*, Banuyls-sur-Mer, France.

2016 *Session speaker, Journées ATIP/Avenir, Gif-sur-Yvette*, France.

Session speaker, School of Life and Env. Science, Deakin University, Australia.

External Seminar series, Department of Zoology, Basel University, Switzerland.

2015 *External Seminar Series, Department of Developmental Biology, Jussieu University*, France.

Session speaker, "Mechanisms of Evolutionary Changes" Meeting, Les Treilles, France.

External Seminar series, Department of Ecology, Paul Sabatier University, Toulouse, France.

2014 *External Seminar series, Department of Zoology, Oxford University*, UK.

External seminar series, Paris Museum of Natural History (MNHN), France.

External Seminar series, Australian Regenerative Medicine Institute, Melbourne, Australia.

Session speaker, Evolution and Development Club, Jacques Monod Institute, Paris, France

Session speaker, Journées PSL, Ecole Normale Supérieure, Paris, France.

2013 *Session speaker, Journées du CIRB, Collège de France*, Paris, France.

2012 *External Seminar series, Institute of Developmental Biology, Marseille University*, France.

Internal Seminar series, Collège de France, Paris, France.

External Seminar series, Jacques Monod Institute, Paris, France.

External Seminar series, Institute of Functional Genomics of Lyon (IGFL), France.

External seminar series, The Rockefeller University, New York, USA.

2011 *External Seminar series, Jacques Monod Institute*, Paris, France.

External Seminar series, Pasteur Institute, Paris, France.

External Seminar series, Max Planck Institute (Mol. Cell Biol. and Gen.), Dresden, Germany.

External Seminar series, Max Planck Institute (Dev. Biology), Tuebingen, Germany.

External Seminar series, Max Planck Institute (Mol. Genetics), Berlin, Germany.

Publications

- Haupaix, N., Curantz, C. and **Manceau, M.** The embryonic origin of periodic colour patterns. 2020. *Comptes Rendus Biologies*, 343(2), 143-153 (in french).
- Bailleul, R., **Manceau, M.**, and Touboul, J. A "numerical evo-devo" synthesis for the identification of pattern-forming factors. 2020. *Cells*, 9, 1840.
- Haupaix, N and **Manceau, M.** The embryonic origin of periodic color patterns. *Developmental Biology*, doi: 10.1016/j.ydbio.2019.08.003
- Bailleul, R., Desmarquet-Trin-Dinh, C., Hidalgo, M., Curantz, C., Touboul, J., and **Manceau, M.** Symmetry breaking in the embryonic skin triggers a directional and sequential front of competence during plumage patterning. *PLoS Biology*, doi.org/10.1371/journal.pbio.3000448
- Haupaix, N., Curantz, C., Bailleul, R., Beck, S., Robic, A. and **Manceau, M.** The periodic coloration in birds forms through a prepattern of somite origin. *Science* 361, 6408 (2018).
- Neguer, J. and **Manceau, M.** Embryonic Patterning of the Vertebrate Skin. *Reviews in Cell Biol. and Mol. Medicine* 3; 1 (2017).
- R. Mallarino, H.E. Hoekstra and **M. Manceau**. 2016. Developmental genetics in emerging rodent models: case studies and perspectives. *Current Opinions in Genetics and Development*, 331:182-186.
- R. Mallarino, C. Henegar, M. Mirasierra, **M. Manceau**, C. Shradin, M. Vallejo, S. Beronja, G. S. Barsh, and H. E. Hoekstra. 2016. *Ahx3* regulates the spatial differences in hair pigment underlying stripe patterns in rodents. *Nature*, 539:518-523.
- F. Friocourt, A.G., Lafont, B. Pain, **M. Manceau**, S. Dufour and A. Chedotal. Recurrent Dcc gene losses during bird evolution. 2017. *Scientific Reports*, 37569.
- **M. Manceau**, V. Domingues, R. Mallarino and H.E. Hoekstra. 2011. The developmental role of *Agouti* in the evolution of color pattern. *Science*, 331:1062-5.
- H.C. Metz, **M. Manceau**, H.E. Hoekstra. 2011. Turing patterns: how the fish got its spots. *Pig. Cell. Mel. Research*, 24(1):12-4.
- **M. Manceau**, V. Domingues, C.R. Linnen, E.B. Rosenblum and H.E. Hoekstra. 2010. Convergence in pigmentation at multiple levels: mutations, genes and function. *Philosophical Transactions of the Royal Society B*, 365:2439-50.
- E.P. Kingsley, **M. Manceau**, C.D. Wiley and H.E. Hoekstra. 2009. Melanism in *Peromyscus* is caused by independent mutations in *Agouti*. *PLoS One*, 4:e6435.
- M. Lagha, J.D. Kormish, D. Rocancourt, **M. Manceau**, J.A. Epstein, K.S. Zaret, F. Relaix and M.E. Buckingham. 2008. Pax3

regulation of FGF signaling affects the progression of embryonic progenitor cells into the myogenic program. *Genes and Development*, 22(13):1828-37.

- **M. Manceau**, J. Gros, K. Savage, V. Thomé, A. McPherron, B. Paterson and C. Marcelle. 2008. Myostatin promotes the terminal differentiation of embryonic muscle progenitors. *Genes and Development*, 22(5):668-81.
- J. Gros, **M. Manceau**, V. Thomé and C. Marcelle. 2005. A common somitic origin for embryonic muscle progenitors and satellite cells. *Nature*, 435(7044):954-8.
- **M. Manceau**, C. Marcelle and J. Gros. 2005. A common somitic origin for embryonic muscle progenitors. *Med. Sciences*, 21(11):915-7.