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Education:

1993: Bachelor in Molecular and Cellular Biology, University of Lyon / Ecole Normale Supérieure de Lyon
1994: Master in Molecular and Cellular Biology, University of Lyon / Ecole Normale Supérieure de Lyon
1994: Master in Microbiology, University of Nice - Sophia Antipolis / Institut Pasteur
1999: PhD in life sciences, University of Nice - Sophia Antipolis
2015: Habilitation to Direct Research, University of Strasbourg

Positions and Research Experience:

1993-1996, 1997-2000: Master then PhD at INSERM U470, University of Nice – Sophia Antipolis (Pr. F. Cuzin and Dr. M. Rassoulzadegan)
1996-1997: Military Service, Biology Department, Institut de Recherche Criminelle de la Gendarmerie Nationale, Rosny sous Bois (Forensic Sciences Institute of the French Gendarmerie)
2000-2003: Post-doctoral research fellow, Harvard University, Cambridge (MA), USA (Pr. Liz Robertson)
2003-2004: Temporary Teaching and Research Associate, UMR CNRS 5242 - INRA 1237 - Ecole Normale Supérieure, Lyon, CNRS (Pr. Brun)
2004-2009: chargé de recherche INSERM 2nd class 2004-2009, URA CNRS 2578, Institut Pasteur, Paris, (Pr. M. Buckingham)
2009-2010: chargé de recherche INSERM 1st class 2004-200, URA CNRS 2578, Institut Pasteur, Paris, (Pr. M. Buckingham)
2010-2016: chargé de recherche 1st class INSERM, IGBMC (INSERM U964 - CNRS UMR 7104), Illkirch-Graffenstaden (Pr. O. Pourquié)
2016-2017: chargé de recherche 1st class INSERM, IGBMC (INSERM U1268 - CNRS UMR 7104), Illkirch-Graffenstaden (Dr. L. Tora)
2017-2022: chargé de recherche classe normale INSERM, IGBMC (INSERM U1268 - CNRS UMR 7104), Illkirch-Graffenstaden (Dr. L. Tora)
Since 2022: chargé de recherche hors classe INSERM, IGBMC (INSERM U1268 - CNRS UMR 7104), Illkirch-Graffenstaden (Dr. L. Tora)

Awards

1995-1996/1997-1999: PhD fellowship “Allocataire Moniteur Normalien”
2000: French Association for Research against Cancer postdoctoral fellow
2001: Human Frontier Science Program postdoctoral research fellow (Long Term Fellowship)

Grants

2018: Centre Culturel Universitaire Franco Bavarois grant for a collaboration with the Helmholtz Zentrum (Munich) (3k€)
2020: PHENOMIN 2020 grant to generate a mouse model (20k€)
2021: FRM EQU202103012631 grant (with Laszlo Tora) (449 k€)

Research supervision activities

Thesis direction: 1 (University of Paris) and 2 (University of Strasbourg) in co-direction, 2 on-going as director (University of Strasbourg)

Scientific and ethical evaluation activities

- reviewer for Development, Human Molecular Genetics, Journal of Molecular Biology, PLoS One, Biotechnology and Applied Biochemistry, Seminars in Cell and Developmental Biology, Clinical Genetics
- grant reviewer: AFM (2008, 2013, 2014) and ANR (2010)
- AERES expert: INRA UR 1037 (2011) and UMR 7221 CNRS/MNHN (2013)
- 2012-2016: elected member rank B at the INSERM CSS3 committee
- 2017-2021: elected member rank B at the research commission of the University of Strasbourg
- Since 2014: member of the ethical committee for animal experimentation CEEA17

Academic societies

- Since 2012: member of the French Society for Developmental Biology (SFBD)
- 2007-2012: SFBD board member
- 2011-2012: SFBD deputy secretary

Organization of scientific meetings

- 2010: organizer of the 2nd Joint Meeting of the French and Japanese Societies for Developmental Biology, Paris, 2010 (300 participants)
- 2013-2017: organizer of the Journées Campus Illkirch, Illkirch-Graffenstaden (70 participants)

Teaching activities

- Practical course on the differentiation of mouse embryonic stem cells, Molecular Genetics of Development and Stem Cells Master (University of Strasbourg)
- Master Lectures: Cellular Biology and Development Master (University of Paris), Biomorphogenesis and Biomaterials Master and Molecular Genetics of Development and Stem Cells Master (University of Strasbourg)
- IMCBio Graduate School Lecture on CHIP

Publications

* corresponding author

co-first or co-last author

1. L. Tora and **S.D. Vincent***, What defines the maternal transcriptome, **Biochemical Society Transactions**, **49**, 2051-2062
2. F. Wang, F. El-Saafin, T. Ye, M. Stierle, L. Negroni, M. Durik, V. Fischer, D. Devys, **S.D. Vincent** and L. Tora, Histone H2Bub1 deubiquitylation is essential for mouse development, but does not regulate global RNA polymerase II transcription (2021), **Cell Death & Differentiation**, **28**, 2385-2403
3. C. Yu, N. Cvetesic, V. Hisler, K. Gupta, T. Ye, E. Gazdag, L. Negroni, I. Berger, P. Hajkova, B. Lenhard, F. Müller, **S.D. Vincent#,***, and L. Tora^{#,*}, TBPL2/TFIIA complex overhauls oocyte transcriptome during oocyte growth (2020), **Nature Communications**, **11**, 6439 (featured on the [Editors' Highlights of recent research on Genomes and Epigenomes](#))
4. Mayeuf-Louchart, S. Lancel, Y. Sebti, B. Pourcet, A. Loyens, S. Delhaye, C. Duhem, J. Beauchamp, L. Ferri, Q. Thorel, A. Boulinguez, M. Zecchin, J. Dubois-Chevalier, J. Eeckhoutte, Vaughn L.T., Roach P., C. Dani, Perderson B.A., **S.D. Vincent**, B. Staels and H. Duez, Glycogen dynamics drives lipid droplet formation during brown adipocyte differentiation (2019), **Cell Reports**, **29**, 1410-1418
5. Kamenova, P. Mukherjee, S. Conic, F. Mueller, F. El-Saafin, P. Bardot, J.-M. Garnier, D. Dembele, S. Capponi, H.T.M. Timmers, **S.D. Vincent** and L. Tora, Co-translation drives the assembly of mammalian nuclear multisubunit complexes (2019), **Nature Communications**, **10**, 1740
6. P. Bardot[#], **S.D. Vincent#,***, M. Fournier, A. Hubaud, M. Joint, L. Tora and O. Pourquié, The TAF10-containing TFIID and SGA transcriptional complexes are dispensable for early somitogenesis in the mouse embryo (2017), **Development**, **144**, 3808-3818

7. Mayeuf-Louchart, D. Montarras, C. Bodin, T. Kume, **S.D. Vincent** and M. Buckingham, Endothelial cell specification in the somite is compromised in Pax3-positive progenitors of *Foxc1/2* conditional mutants, with loss of forelimb myogenesis (2016), **Development**, 143, 872-879
8. J. Chal, M. Oginuma, Z. Al Tanoury, B. Gobert, O. Sumara, A. Hick, F. Bousson, Y. Zidouni, C. Mursch, P. Moncuquet, O. Tassy, **S.D. Vincent**, A. Miyanari, A. Bera, J.-M. Garnier, G. Guevara, M. Hestin, L. Kennedy, S. Hayashi, B. Drayton, T. Cherrier, B. Gayraud-Morel, E. Gussoni, F. Relaix, S. Tajbakhsh and O. Pourquié, Differentiating embryonic stem cells to muscle fibers to model Duchenne Muscular Dystrophy (2015), **Nature Biotechnology**, 33, 962-969
9. J. Bonnet, C.-Y. Wang, T. Baptista, **S.D. Vincent**, W.-C. Hsiao, M. Stierle, C.-F. Kao, L. Tora and D. Devys, The SAGA coactivator complex acts on the whole transcribed genome and is required for RNA polymerase I transcription (2014) **Genes & Development**, 28, 1999-2012
10. Mayeuf, M. Lagha, A. Danckaert, D. Rocancourt, F. Relaix, **S.D. Vincent** and M. Buckingham, Notch regulation of myogenic versus endothelial fates of cells that migrate from the somite to the limb (2014), **Proc Natl Acad Sci USA**, 111, 8844-8849
11. **S.D. Vincent***, A. Mayeuf, Y. Watanabe, J.A. Brzezinski, S. Miyagawa-Tomita, R.G. Kelly and M. Buckingham, Prdm1 functions in the mesoderm of the second heart field, where it interacts genetically with Tbx1, during outflow tract morphogenesis in the mouse embryo (2014) **Hum Mol Genet**, 23, 5087-5101 ([F1000 Prime recommendation](#): Horsley V and Roberts N)
12. E. Bard-Chapeau, D. Szumska, B. Jacob, B. Chua, G.C. Chatterjee, Y. Zhang, J.M. Ward, F. Urun, E. Kinameri, **S.D. Vincent**, A. Sayadi, S. Bhattacharya, O. Motomi, A. Perkins, A.W. Moore, N. Jenkins and N. Copeland, Mice carrying a hypomorphic Evi1 allele are embryonic viable but exhibit severe congenital heart defects (2014), **PLoS One**, 9, e89397
13. **S.D. Vincent***, A. Mayeuf, C. Niro, M. Saitou and M. Buckingham, Non conservation of function for the evolutionarily conserved Prdm1 protein in the control of the slow twitch myogenic program in the mouse embryo (2012) **Mol Biol Evol**, 29, 3181-3191
14. **S.D. Vincent** and M. Buckingham, How to make a heart: the origin and regulation of cardiac progenitor cells (2010) **Curr Topic Dev Biol**, 90, 1-41
15. Y. Watanabe, S. Miyagawa-Tomita, **S.D. Vincent**, R. Kelly, A. Moon and M. Buckingham, Role of mesodermal FGF8 and FGF10 overlaps in the development of the arterial pole of the heart and pharyngeal arch arteries (2010) **Circulation Research**, 106, 495-503
16. Niro, J. Demignon, **S.D. Vincent**, Y. Liu, J. Giordani, N. Sgarioto, M. Favier, I. Guillet-Deniau, A. Blais and P. Maire (2010) *Six1* and *Six4* gene expression is necessary to activate the fast-type muscle gene program in the mouse primary myotome, **Developmental Biology**, 338, 168-182
17. M. Buckingham and **S.D. Vincent** (2009) Distinct and dynamic myogenic populations in the vertebrate embryo, **Current Op in Genetics and Development**, 19, 444-453
18. N. Fossat, C. Le Greneur, F. Béby, **S.D. Vincent**, G. Chatelain and T. Lamonerie (2007) A new GFP-tagged line reveals unexpected Otx2 protein localization in retinal photoreceptors, **BMC Dev Biol**, 7, 122
19. T.H. Chang[#], **S.D. Vincent[#]**, M.E. Buckingham and P.S. Zammit (2007), The A17 enhancer directs expression of *Myf5* to satellite cells but *Mrf4* to myonuclei, **Developmental Dynamics**, 236, 3419-3426
20. M. Rassoulzadegan, V. Grandjean, P. Gounon, **S.D. Vincent**, I. Gillot and F. Cuzin (2006), RNA-mediated non-Mendelian inheritance of an epigenetic change in the mouse, **Nature**, 441, 469-474
21. **S.D. Vincent**, N.R. Dunn, R. Sciammas, M. Shapiro-Shalef, M.M. Davis, K. Calame, E.K. Bikoff and E.J. Robertson (2005), The zinc finger transcriptional repressor Blimp-1/Prdm1 is dispensable for early axis formation but is required for specification of primordial germ cell in the mouse, **Development**, 132, 1315-1325
22. **S.D. Vincent***, D.P. Norris, J.A. Le Good, D.B. Constam and E.J. Robertson (2004), Asymmetric *Nodal* expression in the mouse is governed by the combinatorial activities of two distinct regulatory elements, **Mechanisms of Development**, 121, 1403-1415
23. **S.D. Vincent*** and E.J. Robertson (2004), Targeted insertion of an *IRES Cre* into the *Hnf4a* locus: Cre-mediated recombination in the liver, kidney and gut epithelium, **Genesis**, 39, 206-211
24. N.R. Dunn, **S.D. Vincent**, L. Oxburgh, E.J. Robertson and E.K. Bikoff (2004), Combinatorial activities of Smad2 and Smad3 regulate mesoderm formation and patterning of the mouse embryo. **Development**, 131, 1717-1728
25. **S.D. Vincent*** and E.J. Robertson (2003), Highly efficient transgene independent recombination directed by a maternally derived *Sox2Cre* transgene, **Genesis**, 37, 54-56

26. **S.D. Vincent**, N.R. Dunn, S. Hayashi, D.P. Norris and E.J. Robertson (2003), Cell fate decisions within the mouse organizer are governed by graded Nodal signals, **Genes & Development**, 17, 1646-1662
27. **S.D. Vincent** (2003). Intervention d'une nouvelle équipe de gènes dans le jeu de la mise en place de l'asymétrie droite-gauche: la voie de signalisation *Notch* en amont de l'expression du gène-clé *Nodal* dans le nœud embryonnaire, **Médecine/Sciences**, n°12, 1188-1190
28. **S.D. Vincent***, J.M. Vian and M.P. Carlotti (2000). Partial Sequencing of the Cytochrome Oxidase b Subunit Gene I: a Tool for the Identification of European Species of Blow Flies for Postmortem Interval Estimation, **Journal of Forensic Sciences**, 45, 808-811
29. **S.D. Vincent**, D. Segretain, S. Nishikawa, S.-I. Nishikawa, J. Sage, F. Cuzin and M. Rassoulzadegan (1998). Stage-specific expression of the Kit receptor and its ligand (KL) during male gametogenesis in the mouse: a Kit-KL interaction critical for meiosis, **Development**, 125, 4585-4593
30. V. Grandjean, **S.D. Vincent**, M. Rassoulzadegan and F. Cuzin (1997). Antimicrobial protection of the testis: synthesis of defensins of the cryptdin family, **Biology of the Reproduction**, 57, 1115-1122

Other Publications

Book:

1. Boujard D, Leclerc V, **Vincent SD** (2016) Biologie du Développement. Dunod, Paris, 304 pages, collection Sciences Sup

Publications for the general public:

1. Interview for the [INSERM le magazine n°49](#), p9
2. TFIID, un facteur général de la transcription pas si « général » que ça..., [Actualités scientifiques du CNRS](#), January 2021
3. V. Vincent, **S.D. Vincent** and O. Pourquié, Morphogenèse vertébrale et malformations (2012) **La Lettre du Rhumatologue**, 3811, 18-22
4. **S.D. Vincent** and O. Pourquié, Contrôle de l'expression génique au cours du développement (2011) **Biofutur**, 321, 46-49