

Curriculum Vitae

フリガナ Your name in Katakana	ルイ フィオナ		性 別 Sex	female		
氏 名 Name	LOUIS FIONA					
生 年 月 日 Date of birth	1988 / 5 / 16 (year) / (month) / (day)	履歴書作成日 現在満年齢 Age	29	(2) 国 籍 Nationality		FRENCH
住 所 Address	〒 5 6 5 0 8 7 1 OSAKA UNIVERSITY Joint Research Laboratory (TOPPAN) for Advanced Cell Regulatory Chemistry Graduate School of Engineering 2-1 Yamadaoka, Suita, Osaka, Japan					
電話番号 Phone	(自 宅) Home		(携 帯) Mobe le			
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高等専門学校 大学 短大 高等専門学校 専門学校等 Educational Background	年 year	月 month	年 year	月 month	学校等名称(学校、学部、学科、コース) Name of Institution (school, faculty, department, course), Country	修学年数Years required	修了区分Final status	
	2003	9	~	2006	7	Rennes Chateaubriand Sciences High School, Rennes (France)	3 years	graduated
	2006	9	~	2008	7	Rennes Chateaubriand Preparatory courses for Engineer Schools admissions (Biology/Chemistry/ Physic/Mathematical courses), Rennes (France)	2 years	graduated

大 学 院 Educational Background (Graduate School)	年 year	月 month	年 year	月 month	学校等名称(学校、研究科、専攻、課程) Name of Institution (University, Department, Major, Course/Program), Country	修学年数Ye ars required	修了区分Fin al status	
	2008	9	~	2011	7	Master's course, Biological Engineer School Polytech'Clermont-Ferrand ,Clermont-Ferrand (France)	2 years	completed
	2011	10	~	2014	9	Doctoral course, Sciences-Engineering-Health, Jean Monnet University, part of the University of Lyon, Lyon (France)	3 years	completed

学 位 Academic Degree	年 year	月 mm	日 d	学位区分 Type of Degree	専攻分野 Major Field	取得学校名 Issuing University
	2011	7	12	Master of Science in Engineering	Bio-Engineering : Bioprocess for Pharmaceutical Industry	Biological Engineer School Polytech' Clermont-Ferrand
	2014	9	25	Ph.D	Cellular and Molecular Biology	University of Lyon

免 許 試 験 資 格 等 License, Examination, Qualification	年 year	月 mm	日 d	名称 Title/Name
	2012	7	13	Inter-University Diploma on Conventional and Transgenic Animals Models for Biological and Medical Experimentation and Research
	2012	3	1	Autoclave conducting formation
	2010	9	9	TOEIC 910/990

その他の期間(職歴等) Other (Work Experience etc.)

年 year	月 month	~	年 year	月 month	所属組織(部・課・研究室名) Organization/Affiliation	職名 Job Title	職務・研究従事内容 Job/Research Description	雇用形態 Employment Status
2009	7	~	2009	8	Boiron Laboratory, Homeopathy Pharmaceutical Company (France)	Production Technician	Preparation and packaging of homeopathic globules and granules ; Picking, checking and packing.	Trainee
2010	5	~	2010	8	Laboratory of Life Sciences and Environment in Matsue – Shimane University (Japan) - Supervisor: Pr. Kazushige Yokota	Research engineer	Engaged in research activities against obesity and diabetes.	Trainee
2011	2	~	2011	7	Grenoble CEA in the Chemistry and Biology Metals Laboratory (LCBM, UMR CEA-CNRS-UJF) (France) - Supervisor: Dr. Jean-Marc Moulis	Research engineer	Engaged in research activities on the development of an intracellular iron regulation computer modelling.	Trainee
2011	10	~	2014	9	INSERM U1059 – Bone Biology Laboratory, Saint-Etienne (France) - funded by Servier Laboratory (France) and by the European Space Agency (ESA) - Director: Dr. Alain Guignandon	Academic and industrial research fellow PhD Candidate	Engaged in research activities on the analysis of a medicine effects acting against osteoporosis in microgravity.	full-time
2012	9	~	2014	6	Faculty of Science and Technology - Lyon University, Saint-Etienne (France)	Faculty Biology Teacher	Performed in addition to my PhD : Supervision of Biology Bachelor degree exams, writing courses, exams correction and practical biology courses.	additional 64 hours/year
2014	10	~	2016	3	CELENYS – Biotechnology Company, Rouen (France)	Biology Research and Development Project Manager	Provided new proofs of concept - Research, development, testing, and optimization of products and protocols.	full-time
2016	5	~	2016	11	Laboratoires Théa, Ophtalmic Pharmaceutical Company, Clermont-Ferrand (France) (expected to leave on the 2016/11/20)	Scientific Support and Development Project Manager	Engaged in the scientific support and the management of the development of a medical device for clinical trials use.	full-time
2017	1	~	current job		OSAKA UNIVERSITY Joint Research Laboratory (TOPPAN) for Advanced Cell Regulatory Chemistry Graduate School of Engineering	Specially Appointed Assistant Professor	Postdoctoral fellowship. Development of new tissue engineerings models on adipose tissue and 3 layers skin.	full-time

Publications List

Fiona LOUIS

Publications

1. D. Su, C. L. Teoh, S.-J. Park, J.-J. Kim, A. samanta, R. Bi, U. S. Dinish, M. Olivo, M. Piantino, F. Louis, M. Matsusaki, S. S. Kim, Y.-T. Chang, Seeing Elastin: A Near-infrared Zwitterionic Fluorescent Probe for In Vivo Elastin Imaging, *Chem* 4, 1128-1138 (2018).
2. E. Pourcelot, M. Lénon, P. Charbonnier, F. Louis, P. Mossuz, JM.Moulis. The Iron Regulatory Proteins are defective in repressing translation via exogenous 5' Iron Responsive Elements despite their relative abundance in leukemic cellular models. *Metallomics*, 10, 639-649 (2018).
3. F. Louis, P. Pannetier, Z. Souguir, D. Le Cerf, P. Valet, JP. Vannier, G. Vidal, E. Demange. A biomimetic hydrogel functionalized with adipose ECM components as a microenvironment for the 3D culture of human and murine adipocytes. *Biotechnology and Bioengineering* 114:8, 1813-1824 (2017).
4. F. Louis, W. Bouleftour, A. Rattner, MT Linossier, L. Vico and A. Guignandon : RhoGTPase stimulation is associated with strontium chloride treatment to counter simulated microgravity-induced changes in multipotent cell commitment, *Nature publishing journal Microgravity* 3:7 (2017).

Review

1. F. Louis, C. Deroanne, B. Nusgens, L. Vico and A. Guignandon : RhoGTPases as Key Players in Mammalian Cell Adaptation to Microgravity, *BioMed Research International*, Volume 2015 Jan 29, Article ID 747693, 17 pp, doi: 10.1155/2015/747693.

Book chapters

1. C. Delattre, F. Louis, M. Akashi, M. Matsusaki, P. Michaud, G. Pierre. Fabrication methods of sustainable hydrogels

In book: Sustainable Polymer Composites and Nanocomposites
Publisher: Springer (May 2018)
2. E. Pourcelot, N. Mobilia, A. Donzé, F. Louis, O. Maler, P. Mossuz, E. Fanchon, J.M. Moulis : Cellular iron regulation in animals: need and use of suitable models. *NUTZEN-RISIKO-BEWERTUNG VON MINERALSTOFFEN &*

SPURENELEMENTEN, Biochemische, physiologische und toxikologische Aspekte, KIT Scientific Publishing , ISBN: 978-3-7315-0079-7 (2014).

Patents

1. Z. Souguir, G. Vidal, F. Louis, E. Demange : Method for producing hydrogel from modified hyaluronic acid and type 1 collagen. Europe WO/2016/166479, published on 2016, October, 20 (CELENYS Company, BR2572FR).

Oral communications

1. F. Louis, S. Kitano and M. Matsusaki. Development of an artificial skin model for alternative to cosmetic animal experimentation. Kansai French Researchers Conference, June 2018, Kyoto (Japan).
2. F. Louis, S. Kitano and M. Matsusaki. Using 3D collagen microfibers tissues to induce and maintain the functionality of adipocytes in long term cultures. NRF-JSPS Research workshop, February 2018, Seoul (Korea).

Proceeding and posters

1. F. Louis, S. Kitano, S. Irie and M. Matsusaki. Long term maintenance of primary mature adipocytes in 3D collagen microfibers tissues. International Biomaterials Symposium, April 2018, Clemson (USA).
2. F. Louis, S. Kitano, S. Irie and M. Matsusaki. Long term maintenance of primary mature adipocytes in 3D collagen microfibers tissues. Society for Biomaterials, April 2018, Atlanta (USA).
3. F. Louis, S. Kitano, S. Irie and M. Matsusaki. Development of three-dimensional fat tissues as a hypodermis layer. Japanese Society for Biomaterials, November 2017, Tokyo (Japan).
4. P. Pannetier, F. Louis, Z. Souguir, JP Vannier, D. Le Cerf, S. Gerbal-Chaloin, G. Vidal and E. Demange : BIOMIMESYS®Hepatocyte, a 3D cell culture model for maintaining and promoting hepatocytes functions for metabolism and toxicity studies, Estiv Conference October 2016, Juans-les-Pins (France).
5. P. Pannetier, F. Louis, Z. Souguir, JP Vannier, A. Devaux, D. Le Cerf, G. Vidal and E. Demange : Reproducible spheroid formation using functionalized hyaluronan 3D scaffolds, AACR Annual Meeting, April 2016, New Orleans (USA).

Also published in *Cancer Research* 76 (14 Supplement):4266-4266 · July 2016, doi: 10.1158/1538-7445.AM2016-4266.

6. P. Pannetier, Z. Souguir, F. Louis, JP Vannier, D. Le Cerf, G. Vidal and E. Demange : BIOMIMESYS® a range of Hyaluronic Acid based scaffolds for 3D Cell Culture, AACR Annual Meeting, April 2016, New Orleans (USA).
7. F. Louis, Z. Souguir, P. Pannetier, J-P. Vannier, D. Le Cerf, C. Cambouris, P. Valet, G. Vidal and E. Demange :BIOMIMESYS®Adipocyte, a relevant in vitro adipocyte 3D model, 42nd Annual Adipose Tissue Discussion Group, December 2015, Manchester (UK).
8. P. Pannetier, F. Louis, Z. Souguir, D. Le Cerf, J-P. Vannier, S. Gerbal-Chalouin, A. Devaux, G. Vidal and E. Demange : BIOMIMESYS®Hepatocyte, a relevant in vitro 3D model for hepatotoxicity assays, IVTS Annual Meeting, November 2015, Birmingham (UK).
9. F. Louis, G. Vidal, Z. Souguir, D. Le Cerf, J-P. Vannier, A. Devaux and E. Demange : Adipocytes 3D cell culture Biomimesys®, 22nd European Congress on Obesity, May 2015, Prague (Czech Republic).
10. G. Vidal, F. Louis, Z. Souguir, D. Le Cerf, J-P. Vannier, A. Devaux and E. Demange : Biomimesys®, a hyaluronic acid scaffold for 3D cell culture, FORUM LABO & BIOTECH, May 2015, Paris (France).
11. F. Louis, M-T. Linossier, S. Peyroche, L. Vico and A. Guignandon : Regulation of Adipo- & Osteo-genesis of Multipotent Cells by Strontium through stimulation of small RhoGTPases: A 3D bioreactor study, ECTS 2014, May 2014, Prague (Czech Republic).
12. F. Louis, C. Fournier, S. Peyroche, L. Vico and A. Guignandon : Limitation of osteoporosis thanks to an antioxidant acting on stem cells cytoskeleton dynamics. PhD students Research Day, June 2014, Saint-Etienne (France).
13. F. Louis, S. Peyroche, M-T. Linossier, L. Vico and A. Guignandon : Signaling by matrix-bound VEGF controls the lineage commitment of multipotent mesenchymal progenitors. French Days of Mineralized Tissue Biology JFBTM May 2014, Limoges (France).
14. E. Pourcelot, N. Mobilia, A. Donze, F. Louis, O. Maler, P. Mossuz, E. Fanchon, and J.M. Moulis : Cellular iron homeostasis in Leukemia: Experimental and modeling approaches, American Journal of Hematology International Workshop 2013, 88(5): E65-E65, December 2013, Washington (USA).
15. F. Louis, M-T. Linossier, L. Vico and A. Guignandon : Which metabolic action for Ranelate Strontium ? Ifresis Research day, November 2013, Saint-Etienne (France).

16. F. Louis, L. Vico and A. Guignandon : Optimizing dynamic 3D co-cultures in bioreactors. French Days of Mineralized Tissue Biology JFBTM, May 2013, Poitiers (France).
17. F. Louis, L. Vico and A. Guignandon : How to counter the effects of microgravity on bone? PhD students Research Day, June 2013, Saint-Etienne (France).
18. F. Louis, M. Himmad, L. Vico, P. Tracqui and A. Guignandon : The apatite microcrystals modulate the mechanotransduction of bone stem cells. Ifresis Research day, November 2012, Saint-Etienne (France).
19. E. Pourcelot, N. Mobilia, A. Donzé, F. Louis, O. Maler, P. Mossuz, E. Fanchon and J-M. Moulis. Cellular Iron Regulation in Animals: Need and Use of Suitable Models., Karlsruhe Institute of Technology, 2012.

Others (awards, news)

Commercial Movie :

Playing actor in the commercial movie " Cell culture in 3D by Biomimesys®" for the CELENYS company in June 2015 : <https://youtu.be/dMVzIlqPrMM>.

Poster awards :

2014: Signaling by matrix-bound VEGF controls the lineage commitment of multipotent mesenchymal progenitors. French Days of Mineralized Tissue Biology JFBTM 2014, Limoges (France) – **1st Prize Poster**.

2014: Limitation of osteoporosis thanks to an antioxidant acting on stem cells cytoskeleton dynamics. Research Day 2014, Saint-Etienne (France) – **1st Prize Poster**.

2013: Optimizing dynamic 3D co-cultures in bioreactors. French Days of Mineralized Tissue Biology JFBTM 2013, Poitiers (France) – **1st Prize Poster**.

2013: How to counter the effects of microgravity on bone? Research Day 2013, Saint-Etienne (France) – **1st Prize Poster**.

Fellowships :

2011: PhD Fellowship from the Servier Laboratories and the European Space Agency.