

Hironobu Fujiwara, Ph.D.

RIKEN Center for Biosystems Dynamics Research (BDR)
2-2-3 Minatojima-minamimachi, Chuo-ku, Kobe 650-0047, Japan
Tel: +81 (0) 78 306 3170
E-mail: hironobu.fujiwara@riken.jp
Date of preparation: 21 August 2023



Research Experience

- 2018–present **Principal Investigator (Team Leader, tenured in 2021)**
RIKEN Center for Biosystems Dynamics Research (BDR), Kobe, Japan
- 2023–present **Transformative Research Area (A) ‘Multimodal ECM’, Program Head, Principal Investigator**
MEXT, Japan
- 2019–present **CREST Research Program ‘Multi-cell’, Principal Investigator**
Japan Science and Technology Agency (JST), Japan
- 2022–present **Adjunct Professor**
Graduate School of Science, Kyoto University, Japan
- 2014–present **Adjunct Professor**
Graduate School of Medicine, Osaka University, Japan
- 2023–present **Adjunct Professor**
Graduate School of Science and Technology, Kwansai Gakuin University, Japan
- 2014–present **Adjunct Associate Professor**
Graduate School of Life Science, University of Hyogo, Japan
- 2016–2022 **Adjunct Associate Professor**
Graduate School of Science and Technology, Kwansai Gakuin University, Japan
- 2012–2018 **Principal Investigator (Team Leader)**
RIKEN Center for Developmental Biology (CDB), Kobe, Japan
- 2013 – 2014 **Adjunct Associate Professor**
Graduate School of Medicine, Osaka University, Japan
- 2007 - 2012 **Post-doctoral Researcher**
Cancer Research UK Cambridge Research Institute, Cambridge, UK (Fiona Watt’s Lab)
Project: Role of the extracellular matrix in regulating mammalian skin development and homeostasis.
- 2003 - 2007 **Post-doctoral Researcher**
Sekiguchi Biomatrix Signaling Project, ERATO, Japan Science and Technology Agency, Aichi (2003-2006), and Institute for Protein Research, Osaka University, Japan (2007) (Kiyotoshi Sekiguchi’s Lab)
Project: Role of the basement membrane in mouse gastrulation and ES cell differentiation

Education:

- 2000 - 2003 **Osaka University, Japan**
 Ph.D. awarded 30 September, 2003.
 Thesis title: Purification and Characterization of Human Laminin-8
 Supervisor: Prof. Kiyotoshi Sekiguchi (Institute for Protein Research, Osaka University)
- 1998 - 2000 **Osaka University, Japan**
 MSc in Bioscience.
 Project: Production of monoclonal antibodies to human laminin α 4 chain and purification of human laminin-8.
 Supervisor: Prof. Kiyotoshi Sekiguchi (Institute for Protein Research, Osaka University)
- 1994 - 1998 **Kyoto Pharmaceutical University, Japan**
 BSc in Pharmacy, Japanese License to practice pharmacy (Licence number: 335425, date: 29 July, 1998).

Teaching:**Supervision:**

- PhD students: x3
- Master course students: x3
- Undergraduate students: x2
- Visiting students: x3

Lectures:

- Histology lecture (skin), Kobe University Medical School, Japan (1h lecture and 2.5h practical work) (2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023)
- Lecture for undergraduate and graduate students, Graduate School of Science, Hyogo Prefectural University (1.5h lecture) (2015, 2017, 2019, 2021, 2023)
- Lecture for undergraduate and graduate students, Graduate School of Life Science, Tohoku University (1.5h lecture) (2022)
- Lecture for RIKEN joint graduate programme, RIKEN Kobe (1.5h lecture) (2013, 2016, 2019)
- Lecture for undergraduate students, Kwansai Gakuin University (1.5h lecture) (2015, 2017)
- Lecture for graduate students, Kobe University Graduate School of Medicine (1.5h lectures) (4 October 2016)
- Lecture series for graduate students, Kwansai Gakuin University (5 different 1.5h lectures) (29-30 October 2016)
- Seminar for EPFL (Ecole Polytechnique Federale de Lausanne) visiting students (1h lecture) (11th July, 2014)
- PI talk for the Retreat of the IGER program, Nagoya University (30 min lecture) (23 January, 2014)
- Internship lecture, RIKEN CDB (30 min lecture) (8 August, 2013)
- Special Lecture Tokuron 2012, Nagoya University School of Medicine (1.5h lecture) (16 January, 2013) Design principles of skin architecture: Involvement of hair follicle stem cell-niche interactions

Internship:

- CDB internship for summer students; our lab hosts 2–3 undergraduate students for one week (2013, 2014, 2015, 2016, 2017, 2018)

Other activities:

Organization of scientific societies:

- CDB Stem Cell Club (Role: founder and organizer. 2013-): Organize monthly journal club meetings and occasional invited seminars
- Japan Skin Research Club (Role: co-founder and co-organizer. 2013-): Organize annual research meetings for basic skin biology

Meeting Organization:

1. International Symposium on Skin Stem Cell Dynamics, University of Tokyo, Japan (organizers: Hironobu Fujiwara, Emi Nishimura, Aiko Sada) (14–15 May 2023)
2. 1st Multimodal ECM consortium meeting, RIKEN BDR, Kobe (25–26 April 2023)
3. New Perspective in Adhesion Phenomena Underlying Multicellular Systems, The 74th Annual Meeting of the Japan Society for Cell Biology, Tokyo, Japan (organizers: Hironobu Fujiwara, Erina Kuranaga) (28–30 June 2022)
4. Track: Tissue Stem Cells and Regeneration, Principles of Tissue and Organ Regeneration, International Symposium for Stem Cell Research (ISSCR) 2022, San Francisco (organizers: Hironobu Fujiwara, Leanne Jones) (15–18 June 2022)
5. Symposium “Dynamics of the extracellular microenvironment in multicellular systems”. The 94th Annual Meeting of The Japanese Biochemical Society, virtual (organizers: Hironobu Fujiwara, Shinji Takada) (3–5 November 2021)
6. JST CREST rising star webinar (25 October 2021)
7. Japan-Singapore Skin Webinar Series 2021, (four seminar sessions, one of 12 organizers), <https://www.skinsoc.org.sg/jpsgwebinarseries.html>
8. Symposium on Basic Medical Sciences, 44th Japanese Society for Investigative Dermatology, Aomori (organizers: Hironobu Fujiwara, Sayuri Yamazaki) (8–10 November 2019)
9. Japan-Singapore International Skin Conference, Singapore (organizers: Oliver Dreesen, Daisuke Nanba, Hironobu Fujiwara, Kenji Kabashima, Birgit Lane, Paola Florez de Sessions) (10–12 April, 2019)
10. Symposium “Mechanisms responsible for the homeostasis and regeneration of the body surface”. 39th annual meeting of the Japanese Society of Inflammation and Regeneration, Organizers: Hironobu Fujiwara and Akiharu Kubo. Tokyo, Japan (11–12 July, 2018) 第39回日本炎症・再生医学会 シンポジウム「体表の恒常性維持と再生を担う機構」(オーガナイザー: 久保亮治、藤原裕展) 東京 (11–12 July 2018)
11. CDB Symposium 2018 “Dynamic Homeostasis: From Development to Aging”, Kobe (organizers: Hironobu Fujiwara, Ichiro Hiratani, Fumio Matsuzaki, Mitsuru Morimoto, Ben Simons, Sa Kan Yoo, Shosei Yoshida) (26–28 March, 2018)
12. 27th CDB Meeting “Body surface tactics: cellular crosstalk for the generation of super-biointerfaces”, Kobe (organizers: Hironobu Fujiwara, Emi Nishimura, Akiharu Kubo, Daisuke Nanba) (14–15 November, 2016)
13. Symposium “Regulatory mechanisms of stem cell maintenance and differentiation”, 68th Annual Meeting of the Japanese Society of Cell Biology, Kyoto (organizers: Atsuko Sehara, Hironobu Fujiwara) (15 June 2016)
14. CDB Retreat (2015, 2016)
15. Symposium “Cell adhesion: integrating cells into organs” 67th Annual meeting of Japan Society for Cell Biology, Tokyo, Japan (organizers: Hironobu Fujiwara and Akiharu Kubo) (30 June 2015). 第67回日本細胞生物学会 「細胞から器官へ: 細胞接着システムによる器官構築の制御」(オーガナイザー: 久保亮治、藤原裕展) 東京 (30 June 2015)
16. 48th Annual Meeting of the Japanese Society of Developmental Biologists “cell-cell interaction in tissue stem cell regulation” Tsukuba, Japan (Organizers: Hideki Enomoto, Hironobu Fujiwara) (5 June 2015)
17. 86th Annual Meeting of the Japanese Biochemical Society “ECM Biology in stem cell organogenesis and epithelial formation” (Gen Yamada & Hironobu Fujiwara) Yokohama (13 Sep 2013)

Official roles in the affiliated institutions:

- Chair of the Safety Committee for DNA Recombination Experiments in RIKEN Kobe Institute (遺

伝子組換え実験安全委員会) (2023–present)

- Committee member of the working group for BDR Library (2023–present)
- Committee member of the working group for shared-use equipment (2022–present)
- Committee member of the Safety Committee for DNA Recombination Experiments in RIKEN Kobe Institute (遺伝子組換え実験安全委員会) (2016–present)
- Manager of the CDB multi-photon microscope facility (2016–2017)
- Committee member of the CDB Educational Programme Committee (2013–2017)
- Committee member of the CDB Lecture Series (2014–2016)
- Committee member of the CDB Scientific Meeting Committee (2015–2016)
- Committee member of the CDB PI Search Committee (2015–2016)
- Organizer of the CDB PI Scientific Exchange Seminar Series (2015–2016)
- Steering Committee member of the RIKEN Single Cell Project (2015–2017)

Scientific society memberships:

- Japanese Society for Investigative Dermatology (2012–): Executive Board member (2018–2023), Future Plan Review Committee member (2020–2023), Scientific Committee member (2020–2023)
- Society for Hair Science Research (2016–): Executive Board member (2017–)
- Japan Skin Research Club (Role: co-founder and co-organizer. 2013–): Organize annual research meetings for basic skin biology
- Japanese Society of Developmental Biologists (2012–)
- American Society for Matrix Biology (2011–)
- Japan Society for Cell Biology (2014–)
- Japan Matrix Club (2013–)
- International Society for Stem Cell Research (2013–)

Journal Editor:

- *Cell Structure and Function* (Associate Editor: 2017–present)
- *Journal of Dermatological Science* (Section Editor: 2021–present, Editorial Board Member: 2018–present)
- *Matrix Biology* (2022–present)
- *Matrix Biology Plus* (2022–present)

Public Engagement:

- TV appearance: NHK Humanience ‘Membrane’ (April 2022)

Funding and Awards:

Grants:

External Competitive Grants

1. MEXT Grant-in-Aid for Transformative Research Areas (A) “Organization of the consortium Muultimodal ECM” (PI) (2023–2027): 52,650,000 JPY
2. MEXT Grant-in-Aid for Transformative Research Areas (A) “Morphogenesis driven by basement membrane dynamics” (PI) (2023–2027): 157,170,000 JPY
3. JSPS Grants-in-Aid for Challenging Research (Exploratory) “Analysis of vasculature matrix in tumor microenvironment” (CoI) (2022–2025): JPY
4. JST CREST C3 (PI) (2020–2022): 4,500,000 JPY
5. JSPS Grants-in-Aid for Scientific Research (B) (PI) (2020–2023): 13,600,000 JPY
6. JST CREST (PI) (2019–2024): 159,800,000 JPY
7. AMED PRIME (PI) (2019–2022): 40,000,000 JPY (declined due to the acceptance of CREST project)
8. JSPS Grants-in-Aid for Challenging Research (Exploratory) (PI) (2019–2020): 5,000,000 JPY
9. JSPS Grants-in-Aid for Exploratory Research (PI) (2017–2018): 5,000,000 JPY
10. AMED Platform for Drug Discovery, Informatics, and Structural Life Science: Single cell RNA-seq

- service (PI) (576 single cell RNA library prep and RNA-seq)
11. JSPS Grants-in-Aid for Exploratory Research (PI) (2014–2015): 3,640,000 JPY
 12. JSPS Grants-in-Aid for Scientific Research on Innovative Areas “Cellular and Molecular Basis for Neuro-vascular Wiring” (PI) (2013–2014): 10,920,000 JPY
 13. Uehara Memorial Foundation (PI) (2013): 5,000,000 JPY
 14. Cosmetology Research Foundation (PI) (2013): 1,000,000 JPY
 15. Takeda Science Foundation (PI) (2013): 2,000,000 JPY

Fellowships:

- RIKEN-NSC Taiwan Fellowship (2013–2014): Paid one post-doc’s salary
- Postdoctoral Fellowship: Uehara Memorial Foundation, Japan (2007)
 - Paid my salary for one year.
- Research Fellowship: Japan Society for the Promotion of Science (JSPS) (2001–2003)
 - Paid my salary for two years, with lab consumables.

Awards:

- RIKEN Eiho Award, RIKEN (2022), Ritsuko Morita, Hironobu Fujiwara
- Terumo Travel Award, Institute for Protein Research Seminar, Osaka University, Japan (2011)
- Poster Prize (First-place winner; sponsored by the EMBO Report), EMBO Conference Advances in Stem Cell Research, Paris, France (2011)
- Poster Prize (Sole winner; sponsored by the EMBO Journal), European Workshop on Skin Stem Cells, Cambridge, UK (2010)
- Young Scientist Award for Oral Presentation, 62nd Annual Meeting of Japan Society for Cell Biology, Osaka, Japan (2010)

Invited Conference Presentations:

1. Fujiwara H
Multicellular and ECM dynamics underlying skin morphogenesis
Gordon Research Conference on Collagen, New England, USA (9–14 July, 2023)
2. Fujiwara H
Multicellular and ECM dynamics underlying skin morphogenesis
Annual Meeting of the Molecular Biology Society of Japan 2022, Makuhari, Japan (30 Nov–2 Dec 2022)
3. Fujiwara H
Keynote Speaker: Tracing the developmental origin of hair follicle stem cells
World Congress for Hair Research 2022, Melbourne, Australia (18–21 Nov 2022)
4. Fujiwara H
Tracing the developmental origin of hair follicle stem cells
3rd Franco-Japanese Developmental Biology Meeting, Strasbourg, France (7–10 Nov 2022)
5. 藤原裕展
Tsurumai Dermatology Web Conference, Nagoya University
毛包幹細胞の発生起源、virtual (2 Oct 2022)
6. 藤原裕展
メインシンポジウム：毛包幹細胞の発生起源
第64回歯科基礎医学学会学術大会、徳島市 (17–19 Sep 2022)
7. Fujiwara H
Multicellular and ECM dynamics underlying skin morphogenesis
The 74th Annual Meeting of the Japan Society for Cell Biology, Tokyo, Japan (28–30 June 2022)
8. 藤原裕展
皮膚の形態形成を支える多細胞集団と基底膜のダイナミクス
第54回日本結合組織学会学術大会、枚方市 (25–26 June 2022)
9. Fujiwara H
Tracing the developmental origin of hair follicle stem cells

- International Society for Stem Cell Research (ISSCR) 2022, San Francisco, USA (15–18 June 2022)
10. Fujiwara H
Multicellular and basement membrane dynamics underlying skin morphogenesis
Engineering mechanics of cell and tissue morphogenesis, Kanazawa, Japan (4 June 2022)
11. Fujiwara H
Multicellular and basement membrane dynamics underlying skin morphogenesis
55th Annual Meeting of the Japanese Society of Developmental Biologists, Kanazawa, Japan (31 May–3 June 2022)
12. Fujiwara H
Tracing the origin of hair follicle stem cells
International Society for Stem Cell Research (ISSCR): Understanding Stem Cells & Cellular Processes through Imaging, virtual (15 March 2022)
13. Fujiwara H
Tracing the origin of hair follicle stem cells
46th Japanese Society for Investigative Dermatology, virtual (3–5 December 2021)
14. Fujiwara H
毛包幹細胞の発生起源を探る：イメージングとオミクスの複合的アプローチ
バイオ DX の最前線：バイオ DX キックオフシンポジウム, virtual (21–22 November 2021)
15. Fujiwara H
Telescope model of hair follicle development
The 94th Annual Meeting of The Japanese Biochemical Society, virtual (3–5 November 2021)
16. Fujiwara H
Tracing the origin of hair follicle stem cells
RIKEN IMS Joint Human and Mouse Cell Atlas Meeting, virtual (29 October 2021)
17. Fujiwara H
特別講演：Tracing the origin of hair follicle stem cells 毛包幹細胞の発生起源
第 6 回極みプロジェクトシンポジウム、神戸大学百年記念館、神戸 (14 October 2021)
18. Fujiwara H.
特別講演：Tracing the origin of hair follicle stem cells 毛包幹細胞の発生起源を探る
日本薬学会東北支部 第 19 回生物化学若手研究者セミナー、online (16 October 2021)
19. Fujiwara H.
Tracing the origin of hair follicle stem cells 毛包幹細胞の発生起源の解明
特別講演：第 16 回中国研究皮膚科学セミナー、岡山 (2 October 2021)
20. Fujiwara H.
Tracing the origin of hair follicle stem cells
94th Annual Meeting of the Japanese Biochemical Society, Yokohama, Japan (3–5 November 2021).
21. Fujiwara H.
Tracing the origin of hair follicle stem cells
European Hair Research Society Webinar Series, virtual (16 July 2021).
22. Fujiwara H.
Origin and induction process of hair follicle stem cells
Korean Hair Research Society Meeting, virtual (30 May 2021).
23. Fujiwara H.
Dynamic epithelial-mesenchymal interactions in the emergence of integumentary diversity
JST CREST “Multicellular interaction” annual meeting (closed), Virtual (20 January, 2021) (CREST 多細胞領域会議)
24. Fujiwara H.
Origin and induction process of hair follicle stem cells
RIKEN BDR-CuSTOM Joint Symposium Virtual (4–6 November, 2020)
25. Fujiwara H.
Special Lecture for Young Investigators: Let’s cross the border
52th Annual meeting of the Japanese Society for Matrix Biology and Medicine, web meeting, 19–20 September, 2020
若手セミナー招待講演「若者よ、越境しよう」
第 52 回日本結合組織学会学術大会, Web 開催, 19–20 September, 2020

26. Fujiwara H.
Tailored ECMs for organoids
RIKEN Organoid project, online meeting (closed) (7 June, 2020)
27. Fujiwara H.
Origin and induction process of hair follicle stem cells
Korean Hair Research Society Meeting, Seoul, Korea (30 May 2020; cancelled due to COVID-19).
28. Fujiwara H.
Dynamic epithelial-mesenchymal interactions in the emergence of integumentary diversity
JST CREST “Multicellular interaction” annual meeting (closed), Tokyo, Japan (13 January, 2020)
(CREST 多細胞領域会議)
29. Fujiwara H.
A new model for coordinated hair follicle morphogenesis and stem cell induction.
18th Surugadai International Symposium, Tokyo Medical and Dental University, Tokyo, Japan (18 November 2019)
30. Fujiwara H.
A new model for coordinated hair follicle morphogenesis and stem cell induction.
44th Japanese Society for Investigative Dermatology, Hotel Aomori, Aomori, Japan (8–10 November 2019)
31. Fujiwara H. 藤原裕展
A new model for coordinated hair follicle morphogenesis and stem cell induction.
The interface between skin biology and mathematical science. Research Institute for Electronic Science, Hokkaido University, Sapporo (3–4 October 2019).
毛包発生と幹細胞誘導の新モデル. 皮膚科学と数理科学の接点 北海道大学電子科学研究所、札幌 (3–4 October 2019)
32. Fujiwara H.
Developmental origin and induction processes of hair follicle stem cells.
Japan-Singapore International Skin Conference, Clinical Sciences Building, Novena Campus, Singapore (10–12 April 2019)
33. Fujiwara H.
Developmental origin and induction processes of hair follicle stem cells.
1st Crick-Bedington Developmental Biology Symposium, The Francis Crick Institute, London, UK (4–5 February 2019)
34. Fujiwara H. 藤原裕展
Intelligent glue: diversity of extracellular matrix mediates the connections between different tissues.
BDR-Hyogo Children’s Hospital Joint symposium, Hyogo Children’s Hospital (12 January 2019).
「Intelligent glue」異なる組織をつなぐ細胞外マトリックスの多様性
理研 BDR-兵庫県立こども病院ジョイントシンポジウム 兵庫県立こども病院、神戸 (12 January 2019)
35. Fujiwara H. 藤原裕展
Special Lecture “Single cell multi-omics analysis of developing hair follicle”. 26th Annual Meeting of the Society for Hair Research, Tokyo (8 December 2018)
特別講演：毛包発生 of 1 細胞マルチオミクス解析
第 26 回毛髪科学研究会、大手町サンケイプラザ、東京 (8 December 2018)
36. Fujiwara H.
Developmental origin and induction processes of hair follicle stem cells.
41st Annual Meeting of the Molecular Biology Society of Japan, Symposium “Tissue stem cell systems in homeostasis and regeneration”, Pacifico Yokohama, Japan (28-30 November 2018)
37. Fujiwara H. 藤原裕展
Epithelial-mesenchymal interactions in the skin, 69th Annual Meeting of the Central Division of Japanese Dermatological Association, Osaka (27–28 October 2018)
皮膚の上皮—間充織相互作用
第 69 回日本皮膚科学会中部支部学術大会 シンポジウム「基礎研究の最新の話—皮膚研究は拓く、皮膚科の未来」大阪国際会議場 (27–28 October 2018)
38. Fujiwara H. 藤原裕展

Intelligent glue: diversity of extracellular matrix mediates the connections between different tissues.
91th Annual Meeting of Japanese Biochemical Society, Kyoto (24–26 September 2018)

「Intelligent Glue」異なる組織をつなぐ細胞外マトリックスの多様性

第 91 回日本生化学会 シンポジウム「組織の構築と修復を統御する微小環境の分子実体：細胞外マトリックス再発見」京都国際会議場 (24–26 September 2018)

39. Fujiwara H. 藤原裕展

Developmental origin and induction processes of hair follicle stem cells.

39th Japanese Society of Inflammation and Regeneration, Tokyo (11–12 July 2018)

毛包表皮幹細胞の発生起源と誘導機構

第 39 回日本炎症・再生医学会 シンポジウム「体表の恒常性維持と再生を担う機構」慶応プラザホテル、東京 (11–12 July 2018)

40. Fujiwara H.

Developmental origin, induction processes and unconventional functions of heterogeneous hair follicle stem cells.

CDB Symposium 2018, Dynamic Homeostasis: from Development to Aging, Kobe, Japan (26-28 March 2018)

41. Fujiwara H.

Reciprocal interactions between epidermal stem cells and their environment

Japanese Society for Investigative Dermatology 2017, Kochi, Japan (15-17 December 2017)

42. Fujiwara H. 藤原裕展

Intelligent glue: diversity of extracellular matrix mediates the connections between different tissues.

RIKEN Symposium, RIKEN/iCONM/NIMS network, iCOMN, Kawasaki, Japan (12 December 2017)

「Intelligent Glue」異なる組織をつなぐ細胞外マトリックスの多様性

理研シンポジウム：理研/iCONM/物材機構医工学ネットワーク, iCOMN, Kawasaki, Japan (12 December 2017)

43. Fujiwara H.

Plenary Lecture: Reciprocal interactions between epidermal stem cells and their environment.

World Congress for Hair Research 2017, Kyoto, Japan (31 October – 3 November 2017)

44. Fujiwara H.

Origin and induction processes of hair follicle stem cells.

Human Cell Atlas Asia Meeting, OIST, Okinawa, Japan (30 Nov – 1 Dec 2017)

45. Fujiwara H. 藤原裕展

Bidirectional signalling between epidermal stem cells and their environments. 3rd Stem Cell Research Meeting, RIKEN Yokohama Campus, Japan (29th November 2017)

表皮幹細胞と周囲環境とのシグナルの双方向性

第 3 回幹細胞研究会, RIKEN Yokohama Campus, Japan (29th November 2017)

46. Fujiwara H.

Plenary Lecture: Reciprocal interactions between epidermal stem cells and their environment.

World Congress for Hair Research 2017, Kyoto, Japan (31 October – 3 November 2017)

47. Fujiwara H.

Deciphering the molecular and cellular basis of the induction and maintenance of hair follicle stem cells

RIKEN single cell workshop, RIKEN Yokohama Campus, Japan (23 March 2017)

48. Fujiwara H. 藤原裕展

Intelligent glue: ECM heterogeneity and organ formation. RIKEN-Kobe university Joint Symposium, Kobe University (26 December 2016)

理研—神戸大学 ジョイントシンポジウム, 神戸大学 (26 December 2016)

49. Fujiwara H.

Hair follicle stem cells define a niche for tactile sensation

27th CDB Meeting “Body surface tactics: Cellular crosstalk for the generation of super-biointerfaces”, Kobe, Japan (14-15 November 2016)

50. Fujiwara H. 藤原裕展

Hair follicle stem cells define a niche for tactile sensation via secretion of a specialized ECM. Rokko Igaku Kenkyukai, Awaji, Hyogo (28-29 October 2016)

六甲医学研究会, 淡路島, 兵庫 (28-29 October 2016)

51. Fujiwara H.
Hair follicle stem cells define a niche for tactile sensation via secretion of a specialized ECM
68th Annual Meeting of Japanese Society for Cell Biology, Kyoto, Japan (19 June 2016)
52. Fujiwara H.
Hair follicle stem cell-derived ECM defines a niche for tactile sensation
Japan Skin Research Club, Awaji, Japan (5 March, 2016)
53. Fujiwara H.
Deciphering the molecular and cellular basis of the induction and maintenance of hair follicle stem cells at single cell resolution
RIKEN Single Cell Project Workshop, Osaka, Japan (24-25 January 2016)
54. Fujiwara H.
ECM heterogeneity mediates the reciprocal interaction between different cell types in the hair follicle
BMB 2015: Annual Meeting of Biochemistry and Molecular Biology Society, Kobe, Japan (1-3 December 2015)
55. Fujiwara H.
The novel ECM structure in the hair follicle underpins follicle mechanosensory function
IPR Retreat (Institute for Protein Research, Osaka University), OB/OG talk, Awaji, Hyogo, Japan (24-25 November 2015)
56. Fujiwara H.
Microenvironmental regulation of hair follicle morphogenesis and regeneration
Seminar “Cell and tissue communications in organogenesis: cutting edge approaches” Foundation Des Treilles. Tourtour, France (21-26 September 2015)
57. Fujiwara H.
The role of extracellular matrix heterogeneity in integrating cells into organs.
67th Annual Meeting for the Japan Society for Cell Biology (30 June-2 July 2015)
58. Fujiwara H.
The role of extracellular matrix heterogeneity in regulating hair follicle stem cell-niche interactions.
48th Annual Meeting for the Japanese Society of Developmental Biologists, Tsukuba, Japan (2-5 June 2015)
59. Fujiwara H.
The epidermal stem cell niche instructs the creation and positioning of mesenchymal features.
13th Stem Cell Research Symposium, Tokyo, Japan (29-30 May 2015)
60. Fujiwara H.
Crosstalk between hair follicle stem cells and their niche.
The 120th Annual Meeting of The Japanese Association of Anatomists and the 92nd Annual Meeting of The Physiological Society of Japan, Kobe, Japan (21-23 March 2015)
61. Fujiwara H.
Toward understanding the hair follicle stem cell-niche interactions at single-cell resolution
RIKEN Single Cell Workshop 2015, Yokohama, Japan (16-17 February 2015)
62. Fujiwara H.
The role of extracellular matrix heterogeneity in regulating hair follicle stem cell-niche interactions
International symposium on neurovascular wiring, Kyoto, Japan (28-29 January 2015)
63. Fujiwara H.
Epidermal stem cells provide a static and dynamic environments to mesenchymal cells. 37th Annual Meeting of the Molecular Biology Society of Japan, Yokohama, Japan (25-27 November 2014)
表皮幹細胞が間充織細胞に静的・動的環境を提供する仕組み 37th Annual Meeting of the Molecular Biology Society of Japan 日本分子生物学会, Yokohama, Japan (25-27 November 2014)
64. Fujiwara H.
Crosstalk between hair follicle stem cells and their niche.
JSPS China-Japan Scientific Cooperation Program, China-Japan-Korea Joint Symposium on Developmental Biology (20-22 October 2014)
65. Fujiwara H 藤原裕展
Crosstalk between hair follicle stem cells and their niche. 14th Annual Meeting of Japanese Society of Anti-Aging Medicine, Osaka International Conference Center (8th June 2014)
毛包幹細胞—ニッチ間のクロストークを支える分子基盤. 第14会日本抗加齢医学会総会, 大阪国際会議場 (8th June 2014)

66. Fujiwara H.
Bidirectional interactions between epidermal stem cells and their niche
47th Annual Meeting for the Japanese Society of Developmental Biologists, Nagoya, Japan (28-30 May 2014)
67. Fujiwara H.
Crosstalk between hair follicle stem cells and their niche
8th World Congress for Hair Research, Jeju, Korea (14-17 May 2014)
68. Fujiwara H. 藤原裕展
Crosstalk between hair follicle stem cells and their niche. 13th Annual Meeting of Japanese Society for Regenerative Medicine, Kyoto International Conference Center (4th March 2014)
毛包幹細胞とそのニッチのクロストーク. 第13回日本再生医療学会, 京都国際会議場 (4th March 2014)
69. Fujiwara H.
Crosstalk between hair follicle stem cells and their niche
36th Annual Meeting of the Molecular Biology Society of Japan, Kobe, Japan (3rd December 2013)
70. Fujiwara H. 藤原裕展
細胞外環境から皮膚構造の設計原理を探る 第86回日本生化学会, パシフィコ横浜 (13th September 2013).
71. Fujiwara H. 藤原裕展
皮膚構造の設計原理を探る: 毛包幹細胞—ニッチ間クロストークの関与 (29 August 2013).
72. Fujiwara H.
Crosstalk between hair follicle stem cells and their niche.
3rd McGill-RIKEN Workshop, McGill University, Montreal, Canada (20-21 June 2013)
73. Fujiwara H.
Exploring the design principles of skin architecture.
Taiwanese Society for Investigative Dermatology, Symposium on Stem Cell, Development and Regeneration, Taipei, Taiwan (8 June 2013).
74. Fujiwara H.
Crosstalk between hair follicle stem cells and their niche.
RIKEN-Barcelona Joint Meeting, Centre for Genomic Regulation (CRG), Barcelona, Spain (12th April 2013)
75. Fujiwara H.
Spatiotemporal interactions between epidermal stem cells and their niche. The 85th Annual Meeting of the Japanese Biochemical Society, Fukuoka, Japan (14-16 December 2012).
76. Fujiwara H.
Crosstalk between hair follicle stem cells and their niche cells through the basement membrane.
Institute for Protein Research Seminar “Stem cell regulation by the extracellular microenvironment”, Osaka, Japan (December 2011)
77. Fujiwara H.
The role of basement membrane heterogeneity in the hair follicle stem cell niche.
Cambridge Stem Cell Club (Organizer: Austin Smith), Cambridge, UK (November 2011)
78. Fujiwara H. (replacing Fiona Watt)
The basement membrane of hair follicle stem cells is a muscle cell niche.
WNT2010 meeting, Karolinska Institute, Stockholm, Sweden (October 2010)
79. Fujiwara H. (replacing Fiona Watt)
The basement membrane of hair follicle stem cells is a muscle cell niche: Wnt-dependent nephronectin deposition.
Plenary lecture, 22nd meeting of the Federation of European Connective Tissue Societies (FECTS), Davos, Switzerland (July 2010)
80. Fujiwara H, Ferreira M, Donati G, Marciano DK, Linton JM, Sato Y, Sekiguchi K, Reichardt LF, and Watt FM.
Hair follicle stem cells create the niche for dermal cells through specialization of the basement membrane.
Mini-symposium and Young Investigators Awards, 62nd Annual Meeting of Japan Society for Cell Biology, Osaka, Japan (May 2010).

Selected Conference Presentations:

1. Fujiwara H.
A new model for orchestrated hair follicle morphogenesis and stem cell induction
Gordon Research Conference on epithelial differentiation & keratinization, Jordan Hotel at Sunday River, ME, USA (7-12 July 2019)
2. Fujiwara H.
Hair follicle epidermal stem cells define a niche for tactile sensation
Cell and Developmental Biology Meeting 2018, Tokyo, Japan (5–8 June, 2018)
3. Fujiwara H.
Hair follicle epidermal stem cells define a niche for tactile sensation
Gordon Research Conference on epithelial differentiation & keratinization, Renaissance Tuscan II Ciocco, Lucca, Italy (7-12 May 2017)
4. Cheng CC, Tsutsui K, Taguchi T, Sanzen N, Kakiguchi K, Yonemura S, Kuraku S, Watt FM, Fujiwara H.
Hair follicle stem cells define a niche for tactile sensation via secretion of a specialized ECM
41th Japanese Society for Investigative Dermatology Meeting, Sendai, Japan (9-11 December 2016)
5. Fujiwara H.
Hair follicle stem cells define a niche for tactile sensation via secretion of a specialized ECM
Montagna Symposium on the Biology of Skin, Portland, USA (20-24 October 2016)
6. Cheng CC, Watt FM, Fujiwara H
Localized EGFL6 regulates the architecture and location of sensory terminals in the hair follicle.
39th Japanese Society for Investigative Dermatology Meeting, Osaka, Japan (12-14 December 2014)
7. Fujiwara H and Watt FM.
The basement membrane of hair follicle stem cells is specialized with EGFL6, which interacts with a unique sensory nerve complex, the piloneural complex.
Join Annual Meeting of the Japan Matrix Club and the Japanese Society for Connective Tissue Research, Wakayama, Japan (29-30th June 2013).
8. Donati G, Fujiwara H, Procerpio V, Natsuga K, Collins C, Watt FM
Epidermal Wnt/b-catenin signaling promotes dermal adipocyte differentiation during hair follicle morphogenesis and regeneration.
The 46th Annual Meeting for the Japanese Society of Developmental Biologists, Matsue, Japan (28-31 May 2013)
9. Donati G, Fujiwara H, Procerpio V, Natsuga K, Collins C, Watt FM
Epidermal Wnt/b-catenin signaling promotes dermal adipocyte differentiation during hair follicle morphogenesis and regeneration.
37th Japanese Society for Investigative Dermatology Meeting, Okinawa, Japan (7-9 December 2012)
10. Fujiwara H.
Hair follicle stem cells create the arrector pili muscle niche through Wnt-regulated deposition of nephronectin.
Selected short talk, Symposium on Basement Membranes in Tissue Development and Regeneration, Vanderbilt University, Nashville, TN, USA (July 2010)
11. Fujiwara H, Hayashi Y, Weber C, Emoto T, Futaki S, Murray P, Edgar D, Sekiguchi K.
Basement membrane prevents epithelial-mesenchymal transition of mouse embryonic stem cells.
Proceedings of the 38th annual meeting of the Japanese Society of Developmental Biologists, Sendai, Japan (2005).
12. Fujiwara H, Hayashi Y, Emoto T, Futaki S, Edgar D, Sekiguchi K.
Analysis of the molecular mechanism of cell function/fate determination by the basement membrane using cDNA microarray technology.
The 77th annual meeting of the Japan Biochemical Society, Yokohama, Japan (2004).

Seminars:

1. Fujiwara H
Multicellular and ECM dynamics underlying skin morphogenesis
Wellcome Centre Cell-Matrix Research, University of Manchester, UK (13 June 2023)

2. Fujiwara H
Multicellular and ECM dynamics underlying skin morphogenesis
Blizard Institute, Queen Mary University of London, UK (12 June 2023)
3. Fujiwara H
Multicellular and ECM dynamics underlying skin morphogenesis
MBI Weekly Seminar, Mechanobiology Institute, National University of Singapore, virtual (26 May 2023)
4. Fujiwara H
毛包幹細胞の発生起源を探る：新たな形態形成モデル「テレスコープモデル」
第3回 SAMURAI 研究会、住友ファーマ株式会社東京本社 (18 March 2023)
5. Fujiwara H
毛包発生のテレスコープモデルと幹細胞の発生起源
第6回熊本横浜神戸基礎生物学交流会、online (1 March 2023)
6. Fujiwara H
毛包発生のテレスコープモデルと幹細胞の発生起源
第15回大阪大学ニコイメーキングセンターシリーズセミナー、大阪大学 (27 January 2023)
7. Fujiwara H
Invited lecture: Tracing the origin of hair follicle stem cells
ASHBi Retreat 2022, Kyoto University, virtual (28 January 2022)
8. Fujiwara H
Tracing the origin of hair follicle stem cells 毛包幹細胞の発生起源
東京理科大学 医理工学際連携コースゼミ、online (18 September 2021)
9. Fujiwara H
Coordination of morphogenesis and stem cell induction in mammalian skin
National Institute for Basic Biology, Okazaki, Aichi, Japan (24 March 2020; cancelled due to COVID-19) (Invitation from Shinji Takada)
10. Fujiwara H
A new model for the induction of hair follicles and their stem cells 毛包発生と幹細胞誘導の新しいモデル
Osaka University Graduate School of Medicine 再生誘導医学研究室（玉井克人教授）、大阪大学大学院医学系研究科 (6 December 2019)
11. Fujiwara H
Role of cellular microenvironment in skin morphogenesis 皮膚器官形成における細胞外環境の役割
TRI Kobe 第8回動物実験代替法検討会、TRI 医療イノベーション推進センター、神戸 (18 October 2019)
12. Fujiwara H
Developmental origin and induction mechanisms of epidermal stem cells 表皮幹細胞の発生起源と誘導機構
University of Hyogo 兵庫県立大学公開セミナー、兵庫県立大学 (22 June 2019)
13. Fujiwara H
Single cell multi-omics analysis of skin development 皮膚発生の1細胞マルチオミクス解析
FujiFilm 富士フイルム、富士フイルム先進研究所、小田原 (19 July 2019)
14. Fujiwara H
Single-cell multi-omics analysis of hair follicle development.
Molecular Biotechnology Centre, University of Turin, Italy (1 February 2019)
15. Fujiwara H
Cell-microenvironment interactions in skin development and regeneration
BDR Scientific Exchange, RIKEN BDR, Osaka, Japan (7 December, 2018)
16. Fujiwara H
Introduction of the Research Field D of BDR (as a representative of the research field D)
BDR Retreat, Awaji, Japan (20–21 November 2018)
17. Fujiwara H
Crosstalk between skin stem cells and their niche 皮膚の幹細胞と周囲細胞とのクロストーク
KAN Research Institute カン研究所セミナー、カン研究所、兵庫県 (2 September 2018)

18. Fujiwara H
Skin organogenesis regulated by cellular microenvironments 細胞外環境から読み解く皮膚形成のしくみ
Otsuka Pharmaceutical Co., Ltd.大塚製薬研究セミナー、赤穂研究所、兵庫県 (19 January 2018)
19. Fujiwara H
A new role for tissue stem cells 組織幹細胞の新たな役割
兵庫県立大学公開セミナー、University of Hyogo 兵庫県立大学 (19 June 2017)
20. Fujiwara H
Reciprocal interactions between epidermal stem cells and their environments
RIKEN CDB Colloquium, RIKEN Center for Developmental Biology, Kobe, Japan (18 May 2017)
21. Fujiwara H
Cell society underpinning skin development and regeneration 皮膚の発生と再生を支える細胞社会
POLA Chemical Industries ポーラ化成工業株式会社 リンクルショットメディカルセラム承認記念講演会 ポーラ化成工業株式会社、Yokohama 横浜研究所 (5 April 2017)
22. Fujiwara H
Crosstalk between epidermal stem cells and their niche 表皮幹細胞と微小環境との相互作用
Kyoto University Graduate School of Medicine 京都大学大学院医学研究科 腎臓内科学 (Invited by Motoko Yanagita) (2 February 2017)
23. Fujiwara H
Microenvironmental regulation of hair follicle formation 細胞外微小環境による毛包形成の制御,
Nara Medical University 奈良県立医科大学 (Invited by Yukiteru Oji) (29 June 2016)
24. Fujiwara H
Bi-directional interactions between epidermal stem cells and their niche
Center for iPS Cell Research and Application (CiRA), Kyoto University, Japan (18 April 2016)
25. Fujiwara H
Hair follicle stem cell-derived ECM defines a niche for tactile sensation
RIKEN Brain Science Institute (BSI), Wako, Japan (1 March, 2016)
26. Fujiwara H
Inter-tissue interaction for skin development and regeneration 皮膚の発生と再生を可能にする異種細胞間コミュニケーション
H27 年度 2nd Kobe Seminar for Regenerative Medicine 神戸再生医療勉強会 (第2回) (27 Aug 2015)
27. Fujiwara H
Cellular microenvironment for skin organogenesis 細胞外環境から皮膚構造の成り立ちを考える
FujiFilm 富士フイルム講演会、富士フイルム先進研究所、小田原 (13 Feb 2015)
28. Fujiwara H
Exploring the design principles of skin architecture.
Ehime University Graduate School of Medicine (12 December 2013. Invited by Drs. Shigeki Higashiyama and Daisuke Nanba)
29. Fujiwara H
Innovative cell biology meeting, University of Tokyo, Japan (21 October 2013).
30. Fujiwara H
Crosstalk between hair follicle stem cells and their niche. CDB retreat, Awaji, Hyogo, Japan (7 September 2013).
31. Fujiwara H
Exploring the design principles of skin architecture: Involvement of hair follicle stem cell-niche interactions.
Department of Dermatology, Hokkaido University School of Medicine, Japan (24 July, 2013. Invited by Drs. Hiroshi Shimizu and Ken Natsuga)
32. Fujiwara H
Design principles of skin architecture: Involvement of hair follicle stem cell-niche interactions.
Department of Dermatology, Kyoto University School of Medicine, Japan (1st April 2013. Invited by Dr. Kenji Kabashima)
33. Fujiwara H

- The social network: stem cells and their niche.
1st Annual Meeting of the Japan Skin Club (16 March, 2013).
34. Fujiwara H
Design principles of skin architecture: Involvement of hair follicle stem cell-niche interactions.
Aichi Medical University Institute for Molecular Science of Medicine, Aichi, Japan (16th January 2013.
Invited by Dr. Hideto Watanabe)
35. Fujiwara H
The hair follicle stem cell niche is giving me goosebumps.
Developmental Biology and Genetics, Institut Curie, Paris (29th March 2012. Invited by Dr. Edith Heard)
36. Fujiwara H
The stem cell niche is giving me goosebumps, and more.
RIKEN Center for Developmental Biology, Kobe, Japan (10th February 2012. Invited by Dr. Shigeo Hayashi)
37. Fujiwara H
Regulation of the stem cell niche system by the basement membrane.
Research Institute, Osaka Medical Center for Maternal and Child Health, Japan (December, 2011.
Invited by Dr. Isao Matsuo)
38. Fujiwara H
Selected talk: The basement membrane of hair follicle stem cells is a muscle cell niche.
Cancer Research UK Cambridge Research Institute Retreat, UK (October, 2011)
39. Fujiwara H
The role of the basement membrane in the stem cell niche.
Wellcome Trust Centre for Cell-Matrix Research, University of Manchester, UK (September, 2011.
Invited by Dr. Charles Streuli)
40. Fujiwara H
The basement membrane of hair follicle stem cells is a muscle cell niche.
MRC Centre for Regenerative Medicine, Edinburgh, UK (June, 2011. Invited by Dr. Charles ffrench-Constant)
41. Fujiwara H
The basement membrane of hair follicle stem cells is a muscle cell niche.
MRC National Institute for Medical Research, London, UK (May, 2011. Invited by Dr. Jim Smith)
42. Fujiwara H
The basement membrane of hair follicle stem cells is a muscle cell niche.
Lunch Time Seminar, Cancer Research UK Cambridge Research Institute, Cambridge, UK (23 February, 2011)
43. Fujiwara H
Basement membrane-mediated epidermal-dermal interaction in hair follicle stem cells.
Institute for Protein Research, Osaka University, Osaka, Japan (December, 2009. Invited by Dr. Kiyotoshi Sekiguchi).
44. Fujiwara H
The search for Extracellular Matrix Proteins that Regulate Epidermal Stem Cell Behaviour.
Lunch Time Seminar, Cancer Research UK Cambridge Research Institute, Cambridge, UK (16 May, 2008)
45. Fujiwara H
Regulation of mesodermal differentiation of mouse embryonic stem cells by basement membranes.
University of Liverpool, Liverpool, UK (October, 2007. Invited by Dr. David Edgar)

Publication List:

*: corresponding author

- Morita R*, **Fujiwara H*** (2022)
Tracing the developmental origin of tissue stem cells
Development Growth & Differentiation, 2022 Oct 10. doi: 10.1111/dgd.12816. Online ahead of print.
(Review)
- Morita R, Sanzen N, Sasaki H, Hayashi T, Umeda M, Yoshimura M, Yamamoto T, Shibata T, Abe T,

- Kiyonari H, Furuta Y, Nikaido I, **Fujiwara H*** (2021)
Tracing the origin of hair follicle stem cells.
Nature, 594, 547–552. <https://doi.org/10.1038/s41586-021-03638-5>
* Featured in
1) NEWS AND VIEWS: “A 4D road map for the formation of hair follicles”. Saxena N & Rendl M, *Nature* 594, 500-501 (2021).
3. Tsutsui K, Machida H, Nakagawa A, Ahn K, Morita R, Sekiguchi K, Miner JH, **Fujiwara H*** (2021)
Mapping the molecular and structural specialization of the skin basement membrane for inter-tissue interactions.
Nature Communications, 12, 2577. <https://doi.org/10.1038/s41467-021-22881-y>
 4. Ichijo R, Kabata M, Kidoya H, Muramatsu F, Ishibashi R, Abe K, Tsutsui K, Kubo H, Iizuka Y, Kitano S, Miyachi H, Kubota Y, **Fujiwara H**, Sada A, Yamamoto T, Toyoshima F* (2021)
Vasculature-driven stem cell population coordinates tissue scaling in dynamic organs.
Science Advances. 7(7):eabd2575. doi: 10.1126/sciadv.abd2575.
 5. Ahn K*, **Fujiwara H*** (2019)
Subpopulation identification for single-cell RNA-sequencing data using functional data analysis
bioRxiv, doi: <https://doi.org/10.1101/760413>
 6. Cheng CC, Tsutsui K, Taguchi T, Sanzen N, Nakagawa A, Kakiguchi K, Yonemura S, Tanegashima C, Keeley SD, Kiyonari H, Furuta Y, Tomono Y, Watt FM, **Fujiwara H*** (2018)
Hair follicle epidermal stem cells define a niche for tactile sensation.
eLife. 7, e38883
 7. **Fujiwara H***, Tsutsui K, Morita R (2018)
Multi-tasking epidermal stem cells: Beyond epidermal maintenance.
Development, Growth & Differentiation, 60: 531-541 (Review)
 8. Donati G, Proserpio V, Lichtenberger BM, Natsuga K, Sinclair R, **Fujiwara H***, Watt FM* (*joint-corresponding authors) (2014)
Epidermal Wnt/ β -catenin signaling regulates adipocyte differentiation via secretion of adipogenic factors.
Proc Natl Acad Sci U S A. 111 (15): E1501-1509
 9. **Fujiwara H***. (2014)
Cutaneous Extracellular Matrix (audio visual presentation)
Henry Stewart Talks The Biomedical & Life Science Collection (Series: Skin Biology)
 10. **Fujiwara H**, Ferreira M, Donati G, Marciano DK, Linton JM, Sato Y, Hartner A, Sekiguchi K, Reichardt LF, Watt FM*. (2011)
The basement membrane of hair follicle stem cells is a muscle cell niche.
Cell. 144(4): 577-589.
* Featured in
1) PaperClip in *Cell*. (2011) “How Do Goosebumps Form?”
2) *Nature News & Views*: Morgan BA (2011) “Developmental Biology: A hair-raising tale” *Nature*. 471: 586-587
3) Editors’ Picks in *J Invest Dermatol* (2011) 131, 1591. “Beneath the goosebumps”
4) Minireview: Jahoda CAB and Christiano AM. (2011) Niche crosstalk: Intercellular signals at the hair follicle. *Cell*. 146: 678-681.
 11. Watt FM*, **Fujiwara H**. (2011)
Cell-extracellular matrix interactions in normal and diseased skin.
Cold Spring Harb Perspect Biol. Apr 1;3(4)

12. Ferreira M, **Fujiwara H**, Morita K, Watt FM*. (2009)
An activating $\beta 1$ integrin mutation increases the conversion of benign to malignant skin tumors.
Cancer Res. 69(4):1334-1342.
* Featured in *Nature Reviews Cancer* 9, 233 (2009): "Metastasis: A malignant mutation"
13. **Fujiwara H**, Hayashi Y, Sanzen N, Weber C, Emoto T, Futaki S, Niwa H, Murray P, Edgar D, Sekiguchi K*. (2007)
Regulation of mesodermal differentiation of mouse embryonic stem cells by basement membranes.
J Biol Chem. 282(40):29701-29711.
14. McDearmon E, Combs A, Sekiguchi K, **Fujiwara H**, Ervasti J*. (2006)
Brain α -dystroglycan displays unique glycoepitopes and preferential binding to laminin-10/11.
FEBS Lett. 580(14):3381-3385.
15. Hayashi Y, Weber CN, Emoto T, **Fujiwara H**, Sanzen N, Futaki S, Sekiguchi K* (2005)
A novel large-scale production system for modified basement membrane matrices using gene-swapped parietal endoderm cells.
Matrix Biol. 25(2):85-88.
16. Nagato S, Nakagawa K, Harada H, Kohno S, **Fujiwara H**, Sekiguchi K, Ohue S, Iwata S, Ohnishi T*. (2005)
Downregulation of laminin $\alpha 4$ chain expression inhibits glioma invasion in vitro and in vivo.
Int J Cancer. 117(1):41-50.
17. **Fujiwara H**, Gu J, Sekiguchi K*. (2004)
Rac regulates integrin-mediated endothelial cell adhesion and migration on laminin-8.
Exp Cell Res. 292(1):67-77.
18. Nishiuchi R, Murayama O, **Fujiwara H**, Gu J, Kawakami T, Aimoto S, Wada Y, Sekiguchi K*. (2003)
Characterization of the ligand-binding specificities of integrin $\alpha 3\beta 1$ and $\alpha 6\beta 1$ using a panel of purified laminin isoforms containing distinct α chains.
J Biochem (Tokyo). 134(4):497-504.
19. Khazenzon NM, Ljubimov AV, Lakhter AJ, Fujita M, **Fujiwara H**, Sekiguchi K, Sorokin LM, Petajaniemi N, Virtanen I, Black KL, Ljubimova JY*. (2003)
Antisense inhibition of laminin-8 expression reduces invasion of human gliomas in vitro.
Mol Cancer Ther. 2(10):985-994.
20. Hattori K, Mabuchi R, **Fujiwara H**, Sanzen N, Sekiguchi K, Kawai K, Akaza H*. (2003)
Laminin expression patterns in human ureteral tissue.
J Urol. 170(5):2040-2043.
21. Hayashi Y, Kim KH, **Fujiwara H**, Shimono C, Yamashita M, Sanzen N, Futaki S, Sekiguchi K*. (2002)
Identification and recombinant production of human laminin $\alpha 4$ subunit splice variants.
Biochem Biophys Res Commun. 299(3):498-504.
22. Petajaniemi N, Korhonen M, Kortessmaa J, Tryggvason K, Sekiguchi K, **Fujiwara H**, Sorokin L, Thornell LE, Wondimu Z, Assefa D, Patarroyo M, Virtanen I*. (2002)
Localization of laminin $\alpha 4$ -chain in developing and adult human tissues.
J Histochem Cytochem. 50(8):1113-1130.
23. **Fujiwara H**, Kikkawa Y, Sanzen N, Sekiguchi K*. (2001)
Purification and characterization of human laminin-8. Laminin-8 stimulates cell adhesion and migration through $\alpha 3\beta 1$ and $\alpha 6\beta 1$ integrins.
J Biol Chem. 276(20):17550-17558.

24. Kikkawa Y, Sanzen N, **Fujiwara H**, Sonnenberg A, Sekiguchi K*. (2000)
Integrin binding specificity of laminin-10/11: laminin-10/11 are recognized by $\alpha 3\beta 1$, $\alpha 6\beta 1$ and $\alpha 6\beta 4$ integrins.
J Cell Sci. 113 (Pt 5):869-876.

Reviews in Japanese:

1. 森田梨津子、藤原裕展 (2022)
仮説と戦略「組織幹細胞の起源の探索」
生体の科学 73(2): 179–184, 15 April 2022
2. 森田梨津子、藤原裕展 (2021)
毛包幹細胞の発生起源の解明
実験医学 39(16): 2585–2589
3. 筒井 仰、藤原裕展 (2021)
多様な異種組織間の相互作用を仲介する毛包基底膜の構造と機能
バイオサイエンスとインダストリー 79 (6): 467-471
4. 藤原裕展 (2020)
表皮幹細胞がニッチとして機能する (Epidermal stem cells act as a niche)
再生医療 19(1): 13–27 (Regenerative Medicine 19(1): 13–27)
5. 筒井仰、藤原裕展 (2019)
皮膚が触覚センサとして機能するしくみ (How the skin functions as a tactile sensor)
自動車技術 超の世界 73(10): 100–101 (Journal of Society of Automotive Engineers of Japan,
73(10): 100–101)
6. 藤原裕展 (2018)
皮膚再生における幹細胞と微小環境の双方向性シグナリング (Reciprocal signalling between stem cells and their microenvironment in skin regeneration)
コスメティックステージ 12 (3): 1-7 (Cosmetic Stage, 12 (3): 1-7)
7. **Fujiwara H**. (2013)
毛包幹細胞とそのニッチのクロストーク: 新展開へ (Crosstalk between hair follicle stem cells and their niche: toward new horizons).
Cell Technology (細胞工学; Japanese). 32 (10): 1031-1037
8. **Fujiwara H**, Watt FM. (2011)
毛包幹細胞の基底膜は筋細胞ニッチである (The basement membrane of hair follicle stem cells is a muscle cell niche).
Cell Technology (細胞工学; Japanese). 30 (6): 644-645
9. **Fujiwara H**, Sekiguchi K. (2008)
細胞外マトリックスによる EMT の制御 (Regulation of EMT by extracellular matrix).
Cell Technology (細胞工学; Japanese). 27 (4): 321-325
10. **Fujiwara H**, Sekiguchi K. (2008)
初期胚細胞分化における基底膜の役割 (Role of basement membranes in cell lineage specification in the early mouse embryonic development).
生体の科学 (Japanese). 59 (2): 111-117

Book Chapters:

1. 筒井仰、待田大輝、藤原裕展 (2019)
細胞外マトリックスの多様性が支える毛包の異種組織間相互作用 (Heterogeneous extracellular matrix mediates inter-tissue interactions in hair follicles)
毛髪科学の新展開. 39–47 (New development of hair science, 39–47)
2. 筒井仰、藤原裕展 (2018)
感覚器としての毛・毛包
わかりやすい感覚器疾患. 日本医師会. S76-77
3. **Fujiwara H.** (2013)
皮膚の幹細胞と再生医療 (Skin stem cells and regenerative medicine)
The Frontiers in Life Science: 幹細胞研究と再生医療 編集: 中内啓光. P213-222
(Stem Cell Research and Regenerative Medicine: Edited by Hiromitsu Nakauchi)

Public engagement:

In the papers:

1. 産経新聞 理研 CDB が語る「想定外の発見が生まれるとき...細胞のささやきに耳を傾ける」藤原裕展. 2015年11月3日

On TV:

1. NHK ヒューマニエンス「“膜”それは生命の真理」. 2022年4月5日

Other channels:

1. テルモ生命科学振興財団 今注目の最先端研究「毛髪をつくり出す幹細胞の発生起源を解明」

Media coverage:

1. RIKEN Research Highlight A telescopic model of the development of hair follicles 2021/10/06
2. 公益財団法人テルモ生命科学振興財団いま注目の最先端研究・技術探検！第52回「毛髪をつくり出す幹細胞の発生起源を解明」2021/08/04
3. RIKEN Research Highlight Basement membrane underpins tissue interactions in the skin 2021/07/20
4. 読売新聞 2021年07月08日 夕刊 5面 1段 1枚 写毛髪作る器官形成を解明 2021/07/08
5. The Asahi Shimbun Cell-formation study may lead to measure to counter baldness 2021/07/01
6. Science Portal 体毛を生やす「毛包幹細胞」の起源を解明 理研グループ 2021/06/11
7. マイナビニュース毛包幹細胞は従来の仕組みとは別の仕組みで誘導されることを理研などが解明 2021/06/11
8. しんぶん赤旗内容不明 2021/06/10
9. 朝日新聞 (大阪) 2021年06月10日 夕刊 10面 3段 1枚 鬚毛を生やす細胞いずこから? 2021/06/10
10. 朝日新聞 2021年06月10日 夕刊 8面 3段 1枚 鬚毛を生やす細胞いずこから? 理化学研、仕組みを解明 2021/06/10
11. 時事ドットコム毛髪生む幹細胞、形成過程解明 再生医療研究など進展期待—理研 2021/06/10
12. 朝日新聞デジタル毛を生やす細胞の起源を解明 理研チーム、定説覆す発見 2021/06/10
13. 兵庫 Web News 毛を作る器官の仕組み マウスの細胞解析で解明 理化学研究所 2021/06/10
14. NHK 関西 Web News 理化学研究所 毛包ができる仕組みを解明 2021/06/10
15. NHK News web 毛を作り出す器官の形成 マウスの細胞解析で解明 理化学研究所 2021/06/10

16. NHK おはようニッポン毛を作り出す器官の形成 マウスの細胞解析で解明 理化学研究所 2021/06/10
17. JST 毛包幹細胞の発生起源を解明 一筒状の区画に幹細胞を誘導する「テレスコープモデル」の提唱ー 2021/06/10
18. 理化学研究所毛包幹細胞の発生起源を解明 一筒状の区画に幹細胞を誘導する「テレスコープモデル」の提唱ー 2021/06/10
19. Nature News and Views: A 4D road map for the formation of hair follicles 2021/06/10
20. 日刊工業新聞異なる細胞同士接続 理研など、たんぱく質の特性解明 2021/05/11
21. 理化学研究所異種組織を一体化する細胞外環境の特性を解明 2021/05/10