**Curriculum Vitae Takanori Takebe M.D., Ph.D. December 9, 2021**

Endowed Chair of Organoid Medicine

Division of Gastroenterology, Hepatology and Nutrition

Division of Developmental Biology

Center for Stem Cell and Organoid Medicine (CuSTOM)

Cincinnati Children's Hospital Medical Center

3333 Burnet Avenue, R3.565 Cincinnati, Ohio 45229-3026

**Positions and Scientific Appointments**

2021-current Endowed Chair of Organoid Medicine, Division of Gastroenterology, Hepatology and Nutrition, Cincinnati Children's Hospital Medical Center

2021current Associate Professor, Division of Gastroenterology, Hepatology and Nutrition and Division of Developmental Biology, Cincinnati Children's Hospital Medical Center

2016-2020 Assistant Professor, Division of Gastroenterology, Hepatology and Nutrition and Division of Developmental Biology, Cincinnati Children's Hospital Medical Center

2017-current Director of Commercial Innovation, Center for Stem Cell and Organoid Medicine (CuSTOM), Cincinnati Children’s Hospital Medical Center, USA

2019 -current Adjunct professor & Director, Communication Design Center, Yokohama City University, Japan

2018 Professor & Founding Director, Communication Design Center, Advanced Medical Research Center, Yokohama City University, Japan

2018 -current Professor, Institute of Research, Tokyo Medical and Dental University, Japan

2013-2018 Associate Professor, Department of Regenerative Medicine, Yokohama City University, Japan

2011-2013 Research Associate, Department of Regenerative Medicine, Yokohama City University, Japan

**Licensing and certification**

Completed CITI Curriculum for Responsible Conduct of Research, Research Misconduct, Data Handling, 　Rules for Collaborative Research, Conflicts of Interest, Authorship, Plagiarism, Peer Review, Mentoring, 　Managing Public Research Funds, Animal Care and Use Using Laboratory Animals in a Research 　　　　Setting: Core Principles, Regulations, Oversight and Guidance (Report ID: 5471716 & 18219028)

**Honors and Awards**

2021 Falk Transformational Award, IL, USA

2021 Elected member of American Society of Clinical Investigation (ASCI), Washington, USA

2021 Faculty Award (Basic Science Research Achievement Award), Cincinnati, USA

2020 NIH Director’s New Innovator Award, Bethesda, USA

2019 Nagase Prize (1st prize), Frontier Science Foundation, Tokyo

2019 Falk Medical Research Trust Catalyst Award, The Medical Foundation at Health Resources, MA

2019 Research Award in the Natural Sciences, The Mitsubishi Foundation, Tokyo

2019 Young Scientist Prize (1st prize), Japanese Association of Medical Sciences, Nagoya

2019 Japan Academy Medal, Japan Academy, Tokyo

2019 Research Award, Takeda Science Foundation, Tokyo

2018 JSPS Prize of the Japan Society for the Promotion of Science, Tokyo

2017 Young Scientist Prize, The Japan Agency for Medical Research and Development (AMED), Tokyo

2017 NISTEP Award, National Institute of Science and Technology Policy, Tokyo

2016 Robertson Investigator Award, New-York Stem Cell Foundation, NY

2016 WIRED Audi INNOVATION AWARD 2016, Tokyo

2016 Young Scientists’ Prize, Minister of Education, Culture, Sports, Science and Technology of Japan

2015 Baelz Prize, Boehringer Ingelheim, Tokyo

2015 BD Stem Cell Grant, BD, US

2015 Umehara Prize, Yokohama Medical Research Promotion Foundation, Yokohama

2014 Science AAAS, 10 breakthrough of the year, 2013

2014 Discover magazine, Top 5 science stories of 2013

2014 Research innovation award, The Japan Society of Organ Preservation and Medical Biology

2014 Yokohama Igakukai award, Yokohama Igakukai

2014 Research award, Kanae Foundation for the Promotion of Medical Science, Tokyo

2013 Travel Award, International Society for Stem Cell Research 11th annual meeting. Boston, MA

2012 Young Investigator Award, Japanese Society for Regenerative Medicine

2011 Best Oral Presentation Award, 12th Congress of the Asian Society of Transplantation, Korea

2011 Mirai Design Award 2030, Dentsu Inc. & Hakuhodo Inc., Tokyo, Japan

2011 Gold medal, Medical Dean’s Award of Yokohama City University, Japan

2010 Summa cum laude, Yokohama City University, Japan

2008 Presidential Award, Yokohama City University

**Education and Training**

2011 Medical Doctor, Yokohama City University School of Medicine

2018 **Doctor of Philosophy, Regenerative Medicine** Yokohama City University School of Medicine

**Community Leadership Appointments**

2021-current Elected Member, The American Society for Clinical Investigation (ASCI)

2021-current Board of Directors, Japanese Society for Regenerative Medicine (JSRM)

2021-current Editorial Board, Seminars in Liver Disease, IOP publishing

2020-current Advisory Board, Cell Stem Cell (Cell press)

2019-current Editorial Board, Stem Cell Reports (Cell press)

2019-current Editorial Board, Hepatology (AASLD)

2018-2020 Deputy to the Chairman, Japanese Society for Regenerative Medicine (JSRM)

2018-current Board of Directors, International Society for Stem Cell Research (ISSCR)

2018 Professor, Advanced Medical Research Center, Yokohama City University, Japan

2018-current Associate Editor, Stem Journal (IOS Press)

2017 Chief Editor, Special Issue “Organoids”, Experimental Medicine (Yodosha)

2016-current Abstract reviewer (annually) for ISSCR Meeting

2016-current Member, American Association for The Study of Liver Diseases (AASLD)

2014-current Councilor, Japan Society of Organ Preservation and Medical Biology

2014 Visiting Associate Professor, Department of Genetics, Stanford University, USA

2011-current Next-Gen Leader committee, International Society for Stem Cell Research (ISSCR)

2009-current Member, Japanese Society for Regenerative Medicine (JSRM)

Reviewer (most frequent journals listed): NEJM, Nature, Science, Cell Stem Cell, Science Translational Medicine, Stem Cell Reports, Hepatology, Gastroenterology

**Other Positions and Industry Appointments**

2021-current Scientific Founder, EVA Therapeutics, Inc., Osaka, Japan

2021-current Scientific Advisor, Organoid Farm, Inc., Yokohama, Japan

2021-current Advisory Board, Sysmex Corporation, Kobe, Japan

2020-current Co-Scientific Founder and Advisory Board, The Liver Company, Inc, CA, USA

2019-current External AI Ethics Advisory Board, FUJITSU, Inc, Tokyo, Japan

2018-current Co-scientific Founder, Organoid Neogenesis Laboratory, Inc., Yokohama, Japan

2018-current Scientific Founder, Shokuno-Okusuri Inc, Inc., Tokyo, Japan

2015-current Advisory Board, Healios, K.K., Tokyo, Japan

Consultation Merck & Co., Takeda Pharmaceuticals, Gilead Sciences, INSITRO and others.

**Interviews and Distinguished Features:**

2021 Interviewed in **Nature** highlighted in featured article, entitled *‘*[*The rise of the assembloid’*](https://www.nature.com/articles/d41586-021-02628-x).

2021 Featured in **37 news media** including **The Economist**, **New York Times**, **Science** *associated with Okabe et al. MED, 2021.*

2021 Interviewed in **Drug Target Review,** *entitled ‘*[*Drug development in stem cell-derived liver organoid models*](https://www.drugtargetreview.com/article/93155/drug-development-in-stem-cell-derived-liver-organoid-models/)*’.*

2021 Featured in **Stephen Colbert show,** *associated with Okabe et al. MED, 2021.*

2021 Appeared in NHK science program “**Humanience**”: Nature, 2019 paper was highlighted as a main program

2021 Interviewed in *Boston University News Service,* entitled ‘[*Stem cells might be key to more sustainable animal agriculture, researchers say’*](https://bunewsservice.com/stem-cells-might-be-key-to-more-sustainable-animal-agriculture-researchers-say/)

2021 Interviewed in **Nature** highlighted in featured article, entitled ‘[*The mini lungs and other organoids helping to beat COVID*](https://www.nature.com/articles/d41586-021-01395-z)’.

2021 Interviewed in **Nature Biotechnology** highlighted in featured article, entitled ‘[*Voices of biotech research*](https://www.nature.com/articles/s41587-021-00847-1)’.

2020 Appeared in **NHK World Special Episode**: [*The Sky's the Limit! - Takanori Takebe and iPS Cell Research*](https://www3.nhk.or.jp/nhkworld/en/tv/scienceview/20210310/2015254/)

2019 Interviewed in **Nature Reviews Gastroenterology and Hepatology** highlighted in article by Hugh Thomas: [*Organoid modelling of NAFLD*](https://www.nature.com/articles/s41575-019-0181-3), doi.org/10.1038/s41575-019-0181-3

2019 Interviewed in **Nature Medicine** article, entitled ‘[*Creativity for a cure’*](https://www.nature.com/articles/s41591-019-0471-x).

2017 Interviewed in **Science** article, entitled ‘[*Mini-livers reveal fine details of organ development*](https://www.science.org/doi/full/10.1126/science.356.6343.1109)’

2017 Interviewed in **Cell Stem Cell** article, entitled ‘[*Advances in Organoid Technology: Hans Clevers, Madeline Lancaster, and Takanori Takebe*](https://www.sciencedirect.com/science/article/pii/S1934590917301790)’

2016 Interviewed in **Nature** article by Cassandra Willyard ‘[*The boom in mini stomachs, brains, breasts, kidneys and more- RISE OF THE ORGANOIDS*](https://www.nature.com/articles/523520a)*’*

2015 Commented in **Nature Methods** written by Nicole Rusk ‘[*Cell biology: Reproducibly generating organ buds in vitro*](https://www.nature.com/articles/nmeth.3470#:~:text=Coculture%20of%20three%20cell%20types,generation%20of%20functional%20organ%20buds.&text=They%20saw%20that%20MSCs%20contributed,that%20substrate%20stiffness%20influenced%20condensation.)’

2014 Interviewed to highlight the goals of **Solving Organ Shortage** and published in Methuselah Foundation

2013 Interviewed in **Nature** article by Monya Baker: [*Miniature human liver grown in mice*](https://www.nature.com/articles/nature.2013.13324), Nature doi:10.1038/nature.2013.13324, 3 July, 2013.

2013 Highlighted as **Science Breakthrough of the Year 2013**: [*Dishing Up Mini-Organs*](https://www.science.org/lookup/doi/10.1126/science.342.6165.1436-b), doi: 10.1126/science.342.6165.1436-b

2013 Interviewed in **The Economist**: Charlotte Howard: Stem-cell therapies Prometheus unbound

2013 Interviewed in **Nature Reviews Gastroenterology and Hepatology** highlighted in article by Katrina Ray: [*Functional miniature human liver generated from stem cells*](https://www.nature.com/articles/nrgastro.2013.128), doi:10.1038/nrgastro.2013.128

2012 Interviewed in **Nature** article by David Cyranoski: [*Rudimentary liver grown in vitro*](https://www.nature.com/articles/nature.2012.10848#:~:text=Japanese%20scientists%20coax%20pluripotent%20cells,like%20tissue%20in%20a%20dish.), doi:10.1038/nature.2012.10848, 20 Jun, 2012

2012 Research Highlight in **Newton** “*Future of iPS cells*”

**Research & Scholarly activities**:

Brief description of Research & Scholarly activities:

The long-term vision of Takebe Lab is to move medicine into a new dimension, so-called “My Medicine”, that provides highly personalized solution to direct people towards a better life. By integrating innovation in multiple research directions, with stem cell and organoids play pivotal roles, we are dedicated to continued evolving, alleviating and treating humankind, today and in the future.

The mission of our laboratories is to utilize our basic research and discovery platforms to frame next-gen medicine with three major areas of interests:

(1) model and manipulate humanity in model systems  
(2) understand variations and deviations of humanity    
(3) prevent, alleviate and treat diseases of humanity

Some of our fundamental capabilities includes:

* human stem cell and organoid culture
* animal model system
* chemical and forward-genetic screening
* gene editing and single cell genomics
* intravital 4D imaging
* robotics and automation
* design and art

**Grants and Contracts:**

Publications

**Peer reviewed original articles (\*Corresponding author):**

1. Lansing F, Mukhametzyanova L, Rojo-Romanos T, Iwasawa K, Kimura M, Paszkowski-Rogacz M, Karpinski J, Grass T, Sonntag J, Schneider P, Güneş C, Hoersten J, Schmitt L, Rodriguez-Muela N, Knöfler R,**Takebe T**, Buchholz F: Correction of a Factor VIII genomic inversion with designer-recombinases. ***Nature Communications***,in press.
2. Dunn A, Cai Y, Iwasawa K, Kimura M, **Takebe T**\*: Synthesis and Application of POLYseq for Sample Pooling in Single-Cell RNAseq. ***STAR Protocols*,** *in press*.
3. Naraoka Y, Mabuchi Y, Yoneyama Y, Suto E.G, Hisamatsu D, Ikeda M, Ito R, Nakamura T, **Takebe T**, Akazawa C. Isolation and Characterization of Tissue Resident CD29-Positive Progenitor Cells in Livestock to Generate a Three-Dimensional Meat Bud. ***Cells****, in press*.
4. Okabe R, Chen-Yoshikawa T-Y, Yoneyama Y, Yokoyama Y, Tanaka S, Yoshizawa A, Thompson W-L, Kannan G, Kobayashi E, Date H, **Takebe T**\*. Mammalian Enteral Ventilation Ameliorates Respiratory Failure, ***MED***, 2(6):773-783, 2021.
   * Highlighted in [*NYTimes*](https://www.nytimes.com/2021/05/14/science/rectum-breathing-oxygen.html)*,* [*Economist*](https://www.economist.com/science-and-technology/2021/05/20/anal-oxygen-administration-may-save-lives)*,* [*Science*](https://www.sciencemag.org/news/2021/05/mammals-can-breathe-through-their-intestines)*,* [*Smithsonian Magazine*](https://www.smithsonianmag.com/smart-news/bottoms-anally-delivered-oxygen-keeps-pigs-and-mice-alive-180977767/)*,* [*NYPost*](https://nypost.com/2021/05/15/japanese-scientists-say-breathing-through-rectums-saved-mice/)*,* [*National Geographic*](https://www.nationalgeographic.com.es/ciencia/algunos-mamiferos-son-capaces-respirar-por-ano_16927)*,* [*TrontoStar*](https://www.parrysound.com/news-story/10487345-researchers-have-developed-a-treatment-that-could-potentially-save-lives-in-the-next-pandemic-breathing-through-your-butt/), and the others. Selected as **Cover Article**.
5. Dunn A, Cai Y, Iwasawa K, Kimura M, **Takebe T**\*: POLYseq: A poly (ß-amino ester)-based vector for multifunctional cellular barcoding. ***Stem Cell Reports*,** 16(9), 2149-2158, 2021.
6. Koike H, Iwasawa K, Ouchi R, Maezawa M, Kimura M, Kodaka A, Thompson W-L, **Takebe T**\*, Engineering human hepato-biliary-pancreatic organoids from pluripotent stem cells, ***Nature Protocols***, **16**, 919–936, 2021.
7. Dobrindt K, Hoagland DA, Seah C, Kassim B, O'Shea CP, Iskhakova M, Fernando MB, Deans PJM, Powell SK, Javidfar B, Murphy A, Peter C, Møeller R, Garcia MF, Kimura M, Iwasawa K, Crary J, Kotton DN, **Takebe T**, Huckins LM, tenOever BR, Akbarian S, Brennand KJ. Common genetic variation in humans impacts in vitro susceptibility to SARS-CoV-2 infection. ***Stem Cell Reports*** 6(3):505-518, 2021. PMCID: PMC7523109 doi: https://doi.org/10.1101/2020.09.20.300574
8. Hayashi H, Osaka S, Sakabe K, Fukami A, Kishimoto E, Aihara E, Sabu Y, Mizutani A, Kusuhara H, Naritaka N, Zhang W, Huppert S-S, Sakabe M, Nakamura T, Hu Y-C, Mayhew C, Setchell K, **Takebe T**, Asai A, Modeling Human Bile Acid Transport and Synthesis in Stem Cell-Derived Hepatocytes with a Patient-Specific Mutation. ***Stem Cell Reports*,** 16(2), 309-323, 2021.
9. Fang H, Geng S, Hao M, Chen Q, Liu M, Liu C, Tian Z, Wang C, **Takebe T**, Guan J, Chen Y, Guo Z, He W, Diao J. Simultaneous Zn 2+ tracking in multiple organelles using super-resolution morphology-correlated organelle identification in living cells. ***Nature Communications***, 12 (1) 1-14, 2021
10. Shinozawa T, Kimura M, Yuqi C, Saiki N, Yoneyama Y, Ouchi R, Koike H, Koido M, Zhang R-R, Dunn A, Ferguson A, Togo S, Lewis K, Thompson W,Asai A, **Takebe T\***: High-Fidelity Drug Induced Liver Injury Screen Using Human iPSC Liver Organoids. ***Gastroenterology***,160, 3, 831-846.e10, 2021.
11. Sekine K, Ogawa S, Tsuzuki S, Kobayashi T, Ikeda K, Nakanishi N, Takeuchi K, Kanai E, Otake Y, Okamoto S, Kobayashi T, **Takebe T**, Taniguchi H. Generation of human induced pluripotent stem cell-derived liver buds with chemically defined and animal origin-free media. ***Scientific reports***. 10(1), 1-13, 2020
12. Koido M, Kawakami E, Fukumura J, Noguchi Y, Ohori M, Nio Y, Nicoletti P, Aithal G, Daly, A, Watkins P, Anayama H, Dragan Y, Shinozawa T and **Takebe T\***. Polygenic architecture informs potential vulnerability to drug-induced liver injury. ***Nature Medicine***, 26, 1541–1548, 2020. PMID: 32895570
    * Featured at [*BioWorld*](https://www.bioworld.com/articles/497559-organoids-enable-due-diligence-on-liver-toxicity?v=preview)and[*Genetic Engineering & Biotechnology News (GEN)*](https://www.genengnews.com/news/polygenic-risk-score-predicts-drug-induced-liver-injury/).
13. Wendy T and **Takebe T\***: Generation of multi-cellular human liver organoids from pluripotent stem cells. ***Methods in Cell Biology***.159:47-68, 2020. PMID: 32586449
14. Han L, Koike H, Chaturvedi P, Kishimoto K, Iwasawa K, Giesbrecht K, Witcher P, Eicher A, Nasr T, Haines L, Shannon J, Morimoto M, Wells J, **Takebe T,** Zorn A: Single cell transcriptomics reveals a signaling roadmap coordinating endoderm and mesoderm lineage diversification during foregut organogenesis, ***Nature Communications***, **1,**4158 (2020). https://doi.org/10.1038/s41467-020-17968-x PMID: 32855417
15. Kobayashi N, Togo S, Matsuzaki T, Hashiseko K, Kawamura R, Suganuma M, Nakabayashi S, Yoneyama Y, Ouchi R, **Takebe T**, Yoshikawa H-Y. Stiffness distribution analysis in indentation depth direction reveals clear mechanical features of cells and organoids by using AFM. ***Applied Physics Express***, 2020.
16. Okabe R, Yoshikawa T, Yoshizawa A , Hirashima T, Saito M, Date H , **Takebe T\*** : Orthotopic Foetal Lung Tissue Direct Injection Into Lung Showed a Preventive Effect Against Paraquat-Induced Acute Lung Injury in Mice, ***European Journal of Cardio-Thoracic Surgery***, 58(3):638-645, 2020. PMID: 32259837
17. Liu T, Zhou L, Yang K, Iwasawa K, Kadekaro AL, **Takebe T**, Andl T, Zhang Y. The beta-catenin/YAP signaling axis is a key regulator of melanoma-associated fibroblasts. ***Signal Transduct Target Therapy***, 4:63, 2019. PMCID: PMC6928146
18. Fang H, Yao S, Chen Q, Liu C, Cai Y, Geng S, Bai Y, Tian Z, Zacharias AL, **Takebe T**, Chen Y, Guo Z, He W, Diao J. De Novo-Designed Near-Infrared Nanoaggregates for Super-Resolution Monitoring of Lysosomes in Cells, in Whole Organoids, and in Vivo. ***ACS Nano*** 2019. PMCID: PMC - In Process
19. Koike H, Iwasawa K, Ouchi R, Maezawa M, Giesbrecht K, Saiki N, R-R, Ferguson A, Kimura M , Wendy T, Wells J, Zorn A, and **Takebe T\***: Modeling human hepato-biliary-pancreatic organogenesis from the foregut-midgut boundary. ***Nature***, 574(7776):112-116, 2019. (\***Corresponding author**)
    * [*Highlighted as 5 Most Significant Discoveries of FY2020 from Cincinnati Children's*](https://www.prnewswire.com/news-releases/5-most-significant-discoveries-of-fy2020-from-cincinnati-childrens-301250937.html)*, Highlighted in* [*News Medical*](https://www.news-medical.net/news/20190927/Functional-three-organoid-stem-cell-system-could-lead-to-unprecedented-advances-for-precision-medicine.aspx) *and* [*WVXU*](https://www.wvxu.org/local-news/2018-06-11/miniature-human-organs-are-being-made-in-a-lab-at-cincinnati-childrens) *radio.*
20. Ouchi R, Togo S, Kimura M, Shinozawa T, Koido M, Koike H, Thompson W, Karns R, Mayhew C, McGrath PS, McCauley HA, Zhang RR, Lewis K, Hakozaki S, Ferguson A, Saiki N, Yoneyama Y, Takeuchi I, Mabuchi Y, Akazawa C, Yoshikawa HY, Wells JM, **Takebe T\***: Modeling Steatohepatitis in Humans with Pluripotent Stem Cell-Derived Organoids. ***Cell Metabolism***, 30(2):374-384, 2019 (\*Correspondence) PMID: 31155493
    * [*Highlighted on NIH Director’s Blog*](https://directorsblog.nih.gov/?s=Takeb)*, Highlighted at* [*BioTechniques*](https://www.biotechniques.com/cell-and-tissue-biology/miniaturizing-models-of-liver-disease/)*.*
21. Matsuzaki T, Matsumoto S, Kasai T, Yoshizawa E, Okamoto S, Yoshikawa H-Y., Taniguchi H and **Takebe T\***. Defining lineage-specific membrane fluidity signatures that regulate adhesion kinetics. ***Stem Cell Reports***, 11 (4), 852-860, 2018. (**\*Corresponding author & Lead contact**) PMID: 30197117
22. Nie YZ, Zheng YW, Miyakawa K, Murata S, Zhang RR, Sekine K, Ueno Y, **Takebe T**, Wakita T, Ryo A, Taniguchi H. Recapitulation of hepatitis B virus-host interactions in liver organoids from human induced pluripotent stem cells. ***EBioMedicine***. pii: S2352-3964(18)30300-1, 2018. PMID: 30120080
23. Ayabe H, Anada T, Kaomoya T, Sato T, Kimura M, Yoshizawa E, Kikuchi S, Ueno Y, Sekine K, Camp J-G, Treutlein T, Ferguson A, Suzuki O, **Takebe T\*** and Taniguchi. Oxygen-Dependent Intercellular TGFB Signaling Regulates Human iPSC-Derived Liver Bud Differentiation. ***Stem Cell Reports***, 11(2), 306-316, 2018. (**\*Corresponding author & Lead contact**) PMID: 30033085
24. Kimura M, Azuma M, Zhang R-R, Thompson W, Mayhew C, **Takebe T\***: Digitalized human organoid for wireless phenotyping. ***iScience***, 4, 294–301, 2018(**\*Corresponding author & Lead contact**). PMID: 30240748
    * Featured at [*PhysicsWorld*](https://physicsworld.com/a/human-organoids-go-digital/) and [*WVXU*](https://www.wvxu.org/local-news/2018-06-11/miniature-human-organs-are-being-made-in-a-lab-at-cincinnati-childrens) radio
25. Takahashi Y, **Takebe T**, Taniguchi H. Methods for Generating Vascularized Islet-Like Organoids Via Self-Condensation. ***Curr Protoc Stem Cell Biol***. 45(1): e49. 2018.PMID: 30040240
26. Rao MS, Pei Y, Garcia TY, Chew S, Kasai T, Hisai T, Taniguchi H, **Takebe T**, Lamba DA, Zeng X. Illustrating the potency of current Good Manufacturing Practice-compliant induced pluripotent stem cell lines as a source of multiple cell lineages using standardized protocols. ***Cytotherapy***. 20(6):861-872, 2018. PMID: 29793831.
27. Takahashi Y, Sekine K, Kin T, **Takebe T\***, Taniguchi H: Self-Condensation Culture Enables Vascularization of Tissue Fragments for Efficient Therapeutic Transplantation. ***Cell Reports***, 23(6):1620-1629, 2018. Selected for Cover (**\*Corresponding author & Lead contact**). PMID: 29742420
    * Selected as Cover Work of *Cell Reports and highlighted at* [*TechnologyNetworks*](https://www.technologynetworks.com/cell-science/news/tissue-engineered-human-pancreas-cells-successfully-treat-diabetic-mice-301635) *and* [*Genetic Engineering and Biotechnology News (GEN)*](file:////Users/takanoritakebe/Takebe%20Lab%20Dropbox/Takebe%20Takanori/Drop%20Desktop/Bibliography/CV%20and%20Biosketch/Latest/CCHMC%20CV/Genetic%20Engineering%20and%20Biotechnology%20News%20.%20Transplanted%20Human%20Islets%20Grow%20Blood%20Vessels%20and%20Secrete%20...%20.%20...%20of%20which%20there%20are%2079,000%20new%20diagnoses%20per%20year,)*.*
28. Zhang R-R, Koido M, Tadokoro T, Ouchi R, Matsuno T, Ueno Y, Sekine K, **Takebe T\***, Taniguchi H: Human iPSC-Derived Posterior Gut Progenitors Are Expandable and Capable of Forming Gut and Liver Organoids. ***Stem Cell Reports***, 10 (3), 780-793, 2018. (**\*Corresponding author & Lead contact**) PMID: 29429958
    * Selected as Best of *Stem Cell Reports* 2018
29. **Takebe T\***, Sekine K, Kimura M, Yoshizawa E, Funayama S, Nakanishi N, Hisai T, Kobayashi T, Mori A, Ayano S, Ejiri Y, Amimoto N, Yamazaki Y, Ogawa S, Ishikawa M, Kiyota Y, Ueno Y, Taniguchi H: Massive and Reproducible Production of Liver Buds Entirely from Human Pluripotent Stem Cells. ***Cell Reports***, 21(10):2661-2670, 2017. (**\*Corresponding author& Lead contact**) PMID: 29212014
30. Camp JG, Sekine K, Gerber T, Loeffler-Wirth H, Binder H, Gac M, Kanton S, Kageyama J, Damm G, Seehofer D, Belicova L, Bickle M, Barsacchi R, Okuda R, Yoshizawa E, Kimura M, Ayabe H, Taniguchi H, **Takebe T\***, Treutlein B\*: Multilineage communication regulates human liver bud self-organization from pluripotency. ***Nature***, 546, 533–534, 2017. (**\*Joint corresponding authors**) PMID: 28614297
    * Preview articles published at[*Science*](https://www.science.org/doi/abs/10.1126/science.356.6343.1109) *and* [*Cell Systems*](https://www.cell.com/cell-systems/fulltext/S2405-4712(17)30293-4)*.*
31. Koike H, Zhang R-R, Sekine K, Ueno Y, Zheng Y-W, **Takebe T\***, Taniguchi H\*: Nutritional modulation of mouse and human liver bud growth through a branched-amino acid metabolism. ***Developmen***t, 15;144(6):1018-102, 2017. PMID: 28219950
32. Sekine K, **Takebe T**, Taniguchi H: Liver Regeneration Using Cultured Liver Bud. ***Methods Mol Biol***. 1597:207-216, 2017. PMID: 28361320
33. Asai A, Aihara E, Mizuochi T, Phelan K, Mayhew C, Shivakumar P, **Takebe T**, Wells J, Bezerra J: Paracrine signals regulate human liver organoid maturation from induced pluripotent stem cells. ***Development***, 15;144(6):1056-1064, 2017. PMID: 28275009
34. Ito K, Sakuma S, Kimura M, **Takebe T**, Kaneko M, Arai F. Temporal Transition of Mechanical Characteristics of HUVEC/MSC Spheroids Using a Microfluidic Chip with Force Sensor Probes. ***Micro machines***, 7(12), 221, 2016. PMID N/A (robotics journal)
35. Kagimoto S, **Takebe T\***, Kobayashi S, Yabuki Y, Hori A, Hirotomi K, Mikami T, Uemura T, Maegawa J, Taniguchi H: Auto transplantation of monkey ear perichondrium-derived progenitor cells for cartilage reconstruction. ***Cell transplantation***. 2016;25(5):951-962. (**\*Joint corresponding authors**) PMID: 26884211
36. **Takebe T\***, Enomura M, Yoshizawa E, Kimura M, Koike H, Ueno Y, Matsuzaki T, Yamazaki T, Toyohara T, Osafune K, Nakauchi H, Yoshikawa H-Y, Taniguchi H: Vascularized and Complex Organ Buds from Diverse Tissues Via Mesenchymal Cell-Driven Condensation. ***Cell Stem Cell***, 16(5): 556-565, 2015. (\***Corresponding author**) PMID: 25891906
    * Best of Cell Stem Cell 2015, Selected as Cover work for *Cell Stem Cell,* Preview article published at[*Cell Stem Cell*](https://www.cell.com/cell-stem-cell/fulltext/S1934-5909(15)00176-9?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS1934590915001769%3Fshowall%3Dtrue)*,* [*Nature Methods*](https://www.nature.com/articles/nmeth.3470#:~:text=Coculture%20of%20three%20cell%20types,generation%20of%20functional%20organ%20buds.&text=They%20saw%20that%20MSCs%20contributed,that%20substrate%20stiffness%20influenced%20condensation.)*.*
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