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Biographical Sketch

Dr. Sung-Jan Lin is the Taiwan Bio-development Foundation (TBF) Chair in Biotechnology and Professor of Institute of Biomedical Engineering and the Deputy Director of Research Center for Developmental Biology and Regenerative Medicine at National Taiwan University. He is also a dermatologist in National Taiwan University Hospital. He received his MD and PhD from College of Medicine and College of Engineering in National Taiwan University. He takes hair follicles, a miniorgan with distinct structures and growth cycles, as a model to understand how a complex organ and its resident stem cells interact with the environment and respond to various insults to decipher the principles and machinery of tissue regeneration. His lab employs a multidisciplinary approach by combining the knowledge learned in biology and tissue engineering to mitigate organ damage and to enhance tissue regeneration. He has published ~140 journal papers in associated journals, including *Cell*, *Science*, *PNAS*, *Nature Communications*, *Biomaterials*, *Optics Letters*, etc. His work has been recognized by Award for Junior Research Investigators in Life Science of Academia Sinica, Physician Scientist Award of Taiwan National Health Research Institutes, Distinguished Research Award of Taiwan Ministry of Science and Technology and Outstanding Professor Award of Far Eastern Y.Z. Hsu Science and Technology Memorial Foundation. In 2014, he was elected as Taiwan Bio-development Foundation (TBF) Chair in Biotechnology.

Research interest

1. Regenerative biology and stem cell
2. Hair follicle
3. Tissue engineering
4. Pigment and melanocyte
5. Biomedical optics

Selected Publication

1. Shwartz Y[#], Gonzalez-Celeiro M[#], Chen CL[#], Pasolli HA, Sheu SH, Fan SMY, Shamsi F, Assad S, Lin ETY, Zhang B, Tsai PC, He M, Tseng YH, Lin SJ*, Hsu YC*. Cell types promoting goosebumps form a niche to regulate hair follicle stem cells. *Cell* 182: 578-593, 2020. ([#] equal contribution)
2. Fan SMY, Chang YT, Chen CL, Wang WH, Pan MK, Chen WP, Huang WY, Xu Z, Huang HE, Chen T, Plikus MV, Chen SK*, Lin SJ*. External light activates hair follicle stem cells through eyes via an ipRGC-SCN-sympathetic neural pathway. *Proceedings of the National Academy of Sciences of USA* 115:E6880-E6889, 2018.
3. Fan SMY, Tsai CF, Yen CM, Lin MH, Wang WH, Chan CC, Chen CL, Phua KKL, Pan SH, Plikus MV, Yu SL, Chen YJ*, Lin SJ*. Inducing hair follicle neogenesis with secreted

- proteins enriched in embryonic skin. *Biomaterials* 167:121-131, 2018.
4. Huang WY, Lai SF, Chiu HY, Chang M, Plikus MV, Chan CC, Chen YT, Tsao PN, Yang TL, Lee HS, Chi P, Lin SJ*. Mobilizing transit-amplifying cell-derived ectopic progenitors prevents hair loss from chemotherapy or radiation therapy. *Cancer Research* 77:6083-6096, 2017 (This paper was featured by New Scientist, BioWorld and ScienceTrends)
 5. Li YC, Lin MW, Yen MH, Fan SMY, Wu JT, Young TH, Cheng JY, Lin SJ*. Programmable laser-assisted surface microfabrication on a polyvinyl alcohol-coated glass chip with self-changing cell adhesivity for heterotypic cell patterning. *ACS Applied Materials & Interfaces* 7:22322-32, 2015.
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 12. Lin SJ, Hsiao WC, Jee SH, Tsai TF, Yu HS, Lai JY, Young TH. Study on the effect of nylon-chitosan blended membranes on the spheroid forming activity of human melanocytes. *Biomaterials* 27:5079-88, 2006.
 13. Lin SJ, Jee SH, Hsiao WC, Yu HS, Tsai TF, Chen JS, Hsu CJ, Young TH. Enhanced cell survival of melanocyte spheroids in serum starvation condition. *Biomaterials* 27: 1462-1469, 2006.
 14. Lin SJ, Jee SH, Hsiao WC, Lee SJ, Young TH. Formation of melanocyte spheroids on the chitosan-coated surface. *Biomaterials* 26:1413-1422, 2005.
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