



## Tey Hong Liang

Clinical Director, Centre for Medtech and Innovations, NHG  
Associate Professor and co-Director of Skin Research Programme,  
Lee Kong Chian Medicine, NTU  
Senior Consultant, NSC

### Research Interests:

- Neuro-dermatology (Itch & Sweat Disorders)
- RNA Therapeutics
- Dermatologic Formulations & Delivery (esp. Dissolving Microneedles)

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## Biography

Associate Professor Tey Hong Liang is the Clinical Director at the Centre for Medtech and Innovations, National Healthcare Group, the co-Director of Skin Research Programme at Lee Kong Chian Medicine, Nanyang Technological University, a Senior Clinician Scientist with the National Medical Research Council, and a senior consultant at the National Skin Centre, Singapore.

A/Prof Tey is a clinician, scientist, innovator and entrepreneur who has created healthcare, economic and technological impact through his Research-Innovation-Enterprise work in Dermatology. Among the world's top 2% most-cited researchers (2020-2024), his works include uncovering the pathogenesis and curative treatment for a disease, institution of 3 new clinical services and 5 patent-filed treatments in Singapore, 12 patent (family) filings, >235 international publications, and 21 products, which are currently available in 16 countries. Most recently, he was honoured as the Exemplary Innovator at Singapore Public Sector Transformation Award 2024.

## Selected Publications

- Lim DZJ, Chun YY, Tan FNSY, Monteiro AY, Cheng HM, Lee JY, Tan Y, Tan TTY, Tey HL. **Silencing siRNA microneedle patches versus silicone sheets in reducing post-surgical scars: a randomized single-blinded intra-individually controlled clinical trial.** *British Journal of Dermatology*. 2024 Dec 23;192(1):19-26.
- Tan Y, Zhang Y, Li JLY, Chia HY, Tan MWP, Ebel G, Leong KWK, Qi ELY, Ling KCK, Lee BTK, Ng LG, Tey HL. **Visualising cancer in 3D: 3-Dimensional Tissue Imaging for management of cutaneous basal cell carcinoma.** *Experimental Dermatology*. 2024 Jun;33(6):e15097.
- Liang K, Leong C, Loh JM, Chan N, Lim L, Lam YI, Dawson TL, Tey HL. **A 3D-printed trans-epidermal microprojection array for human skin microbiome sampling.** *Proceedings of the National Academy of Sciences*. 2022 Jul 26;119(30):e2203556119.

- Tan Y, Zhang YN, Yu X, Lee BTK, Ng LG, Tey HL. **Three-dimensional neuroanatomy of the intra-epidermal nervous system.** *British Journal of Dermatology.* 2020; 183(1):174-176.
- Chan MMH, Lim GH, Zhao X, Tey HL. **Isolated hypohidrosis – pathogenesis and treatment.** *European Journal of Dermatology.* 2020; 30(6):680-7.
- Tan CW, Tan WD, Srivastava R, Yow AP, Wong DWK, Tey HL. **Dissolving Triamcinolone-Embedded Microneedles for the Treatment of Keloids: A Single-Blinded Intra-Individual Controlled Clinical Trial.** *Dermatology and Therapy.* 2019; 9(3):601-11.
- Tan Y, Ng WJ, Lee SZX, Lee B, Natkemper LA, Yosipovitch G, Ng LG, Tey HL. **Three-dimensional optical clearing and imaging of pruritic atopic dermatitis and psoriasis skin reveals downregulation of epidermal innervation.** *Journal of Investigative Dermatology.* 2019; 139(5):1201-4.

### Notable Research Awards & Grants from Past 5 Years

Name of Awards & Grants	Year Obtained
Singapore Health and Biomedical Congress Singapore Clinician Investigator Award (Gold)	2017
IJDVL International Award for Best Letter to Editor	2017 & 2018
National Healthcare Group Outstanding Citizenship Award	2018
National Healthcare Group Innovator of the Year Award	2020
National Medical Research Council Clinician Scientist Awards	2018 & 2021
Singapore Public Sector Transformation Award, Exemplary Innovator	2024
National Medical Research Council Senior Clinician Scientist Award	2025

### Translating Research/Innovation Into Healthcare

- Silencing RNA-embedded dissolving microneedles for scar reduction, 22 Aug 2023
  - 《南洋商报》, Malaysia, [狮城研发 RNA 贴片 可缩小术后疤痕超过八成 \(enanyang.my\)](http://enanyang.my)
  - [Firm with scar-reducing patch among 7 start-ups at new biomedtech incubator in Novena | The Straits Times](https://www.straitstimes.com/singapore/health/skin-specialist-goes-the-extra-mile-to-ease-his-patients-woes)
  - [本地研发 RNA 贴片 可缩小术后疤痕超过八成 | 早报 \(zaobao.com.sg\)](http://zaobao.com.sg)
- The Star, Malaysia, [Soothing Dry, Itchy Skin | The Star](https://www.thestar.com.my/health/skin-specialist-goes-the-extra-mile-to-ease-his-patients-woes), on 6 Jan 2021
- Skin Specialist goes the extra mile to ease his patients' woes. *The Straits Times.* Published 25 June 2018 <https://www.straitstimes.com/singapore/health/skin-specialist-goes-the-extra-mile-to-ease-his-patients-woes>
- Sweat pays off as skin doctor wins top healthcare award. *The Straits Times.* Published 12 May 2018 <https://www.straitstimes.com/singapore/sweat-pays-off-as-skin-doctor-wins-top-healthcare-award>

- Singaporean researchers invent the world's first microneedles treatment. *Lian He Zao Bao*. Published 6 October 2018. <https://www.zaobao.com.sg/znews/singapore/story20181006-896776>
- National Skin Centre unveils patch treatment for keloid scars. *Channel News Asia*. Published 5 October 2018 <https://www.channelnewsasia.com/news/singapore/national-skin-centre-painless-treatment-patch-keloid-scars-10794630>
- The made-for-Asia itch-relieving cream that's spreading around world, and the Singapore doctor behind it. *South China Morning Post*. Published 4 Dec 2016. <https://www.scmp.com/lifestyle/health-beauty/article/2051189/made-asia-itch-relieving-cream-thats-spreading-around-world>
- National Skin Centre invented new treatments to help patients sweat. *Lian He Zao Bao*. Published 13 October 2017 <https://www.zaobao.com.sg/news/singapore/story20171013-802513>
- Barney, Kung Fu Panda help kids get warts off. *Reuters Health*. Published 22 June 2012 <https://www.reuters.com/article/us-barney-panda-warts-idUSBRE85K1NT20120621>