

## Elevating Periodontal Regeneration: Integrating Micro-Surgical Concept and Advanced Flap Design



**Bryan Po-Jan Kuo**

This presentation explores the microscopic evolution of periodontal regeneration. It focuses on: the partial-full thickness tunnel to preserve gingival integrity, and the supra-crestal sling suture to stabilize connective tissue grafts and ensure primary healing. Enhanced visualization allows for precise debridement and tissue protection, leading to highly predictable regenerative and esthetic outcomes.

### ACADEMIC APPOINTMENTS

2024-present Director, The Taiwan Academy of Aesthetic Dentistry (TAAD)

2023-present Zeiss micro-dentistry Speaker, local, Taiwan

2023-present Microscope course instructor and management, Zimmer Orange institution

2022-present Director, Taiwan Academy of Periodontology (TAP)

2020-present Instructor and training course management, BEYOND VISION institution

2018-present Assistant professor, School of Dentistry, National Defense Medical Center, Taipei, Taiwan

### EDUCATION

2014-2018 Degree- Doctor of Philosophy in Medical Sciences Graduate Institute of Medical Sciences National Defense Medical Center Taipei, Taiwan

2009-2012 Degree- Master of Science in Periodontology Certificate in Periodontics & Master of Dental Science National Defense Medical Center Taipei, Taiwan

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2003-2009 Degree- Doctor of Dental Surgery  
Kaohsiung Medical University, School of Dentistry  
Kaohsiung, Taiwan

#### MEMBERSHIP IN PROFESSIONAL SOCIETIES

The Academy of Osseointegration (AO)

The Taiwan Academy of Periodontology (TAP)

The Taiwan Academy of Aesthetic Dentistry (TAAD)

The International Member of the European Federation of Periodontology (EFP)

The International Member of the American Academy of Periodontology (AAP)

The International Team for Implantology (ITI)

#### KRY RESEARCH & PUBLICATIONS

##### **【SCI Articles】**

1. Po-Jan Kuo, Jonathan H Do, Tsung-Hsun Wu, Hao-Tien Cheng, Shayan Barootchi, Lorenzo Tavelli

Tunneled Coronally Advanced Flap with Dual-Site Connective Tissue Grafts for Adjacent RT2 and RT3 Recessions with Isolated Papillary Deficiency: Two Case Reports  
Int J Periodontics Restorative Dent. 2026 Online ahead of print.

2. Lorenzo Tavelli, Birtan Yilmaz, Lara Steiner Back, François Vigouroux, Po-Jan Kuo, Edward Tseng, Shayan Barootchi

Tracing the Evolution of Root Coverage: Clinical Milestones Leading to a Minimally Invasive Era.  
Journal of Periodontology. 2026, Online ahead of print

3. Po-Jan Kuo, Bor-Jian Chen, Tsung-Hsun Wu, Nancy Nie-Shiuh Chang, Jonathan H. Do  
Partial-Full-Thickness Tunnel Technique for Periodontal Regeneration: Technical Description and Report of Two Cases

Type: Periodontal Surgery

Int J Periodontics Restorative Dent. 2025 Online ahead of print.

4. Po-Jan Kuo, Bor-Jian Chen, Giulio Rasperini, Yi-Wen Tsai, Tsung-Hsun Wu, Jonathan H. Do

Papilla Reconstruction and Root Coverage in the Esthetic Zone Using a Novel Partial-Full-Thickness Tunnel Approach with Palatal Vertical Incisions and Supra-Crestal Sling

Sutures: A Technical Case Report

Int J Periodontics Restorative Dent. 2025 Online ahead of print.

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5. Po-Jan Kuo, Yi-Wen Tsai, Bor-Jian Chen, Tsung-Hsun Wu, Jonathan H Do  
Partial-Full-Thickness Tunnel Technique and Connective Tissue Graft Stabilization with  
Supra-Crestal Sling Suture for the Treatment of Multiple Adjacent RT2 and RT3  
Gingival Recessions in Mandibular Posterior Teeth: A Retrospective Case Series.  
Int J Periodontics Restorative Dent. 2025 May 30;0(0):1-24. doi: 10.11607/  
prd.7584. Online ahead of print.

6. Po-Jan Kuo, Sung-Chih Hsieh, Tien-Chun Kuo, Wan-Chun Wen, Tsung-Hsun Wu, Jonathan HDo  
A Dual-Layer Flap Preparation Approach Utilizing External Coronally Advanced Flap  
and Internal Trapdoor Periosteal Flap for Endodontic Microsurgery in the Esthetic Zone:  
Technique and Case Report.  
Int J Periodontics Restorative Dent. 2025 Apr 11;0(0):1-19. doi: 10.11607/  
prd.7648. Online ahead of print.

7. Po-Jan Kuo, Yudai Ogawa, Jonathan H. Do, Tsung-Hsun Wu, Nancy Nie-Shiuh Chang,  
Lorenzo Tavelli  
Tunneled Coronally Advanced Flap and Connective Tissue Graft Wall for the Treatment  
of Isolated Infrabony Defect Associated with Gingival Recession: Technical Report with  
Cases.  
Int J Periodontics Restorative Dent. 2025 Jan 7;0(0):1-30. doi: 10.11607/  
prd.7479. Online ahead of print.

8. Po-Jan Kuo, Yi-Wen Tsai, Tsung-Hsun Wu, Nancy Nie-Shiuh Chang, Jonathan H Do  
Partial-Full-Thickness Tunnel Technique and Supra-Crestal Sling Suture for Treatment  
of RT2 and RT3 Gingival Recessions: Technical Report with Two Cases.  
Int J Periodontics Restorative Dent. 2024 Oct 25;0(0):1-27. Ahead of Print.

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