

@Name: CAO, Tong

Appointment:

PI, [Stem Cell Lab, NUCOHS, NUHS](#); and [Faculty of Dentistry, NUS](#)
Supervisor (2009-), [NUS Graduate School for Integrative Sciences and Engineering](#)
Director of Oral Sciences Discipline (2011-2020), Vice Dean of Research (2010-2019), [NUCOHS, NUHS](#); and [Faculty of Dentistry, NUS](#)
Editor-in-Chief (2015-2021), [World Journal of Stem Cells](#) (IF 4.376, CS: 3.55)



Contact Information

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Web Information

- [iHuman](#)
- [IADR](#)
- [Publons](#)
- [LinkedIn](#)
- [Web of Science, Clarivate](#)
- [Scopus](#)
- [ResearcherID, Clarivate](#)
- [Scholar](#)
- [ORCID](#)
- [NGS Research Projects](#)
- [NUHS & NUS](#)
- [NGS](#)



Research Areas:

- **iHuman+** (new): **Agelessly** renew, **upgrade** iHuman organ-system; **iHuman-AI**: Integration of iHuman brain-organ-system with AI; iHuman data technology, intelligence and blockchain
- Developing **iHuman (in-vitro & in-vivo Human Platform)** of **vascularized, innervated**, functional, standard and live Tissue-Organ-**Organchain**-System from hPSC as ethical and unlimited source **to improve clinical service** (regenerative medicine, transplantation, precision medicine, etc.) **and as efficient platform to upgrade human evaluation in health and medical studies**
- Clinical and biological design and R&D of the highly macro-porous structure of systemic and oral implant and scaffold for tissue, organ repair and reconstruction with **additive manufacturing** or 3D printing

Patent:

- Organotypic Skin Model, **Awarded and Published** 17 Mar 2016 [WO/2016/039687](#)
- Vascularized Tissue, Skin or Mucosa Equivalent, **Awarded and Published** 29 Dec 2016, [WO/2016/209166](#). **National phases:** [US20180187162](#), [EP3310903](#), [JP2018518970A](#), [CN107849530](#), [CA2990590](#), [GB201510913D0](#), [WO2016209166A1](#)
- Collagen-Based Bioink For Generation of Vascularized Tissue Constructs, filed **10202005647Q** 16 Jun, **10202011363P** 16 Nov 2020

Teaching Areas:

Oral Biology, Oral Physiology, Oral & Maxillofacial Surgery, Graduate Research Methodology, Stem Cell, Regeneration

Academic/Professional Qualifications:

- DDS, Zhejiang University, Hangzhou, PRC
- PhD, Showa University, Tokyo, JPN
- Cert Adv Oral Surg, Showa University, Tokyo, JPN
- Cert Adv Maxillofac Surg, Showa University, Tokyo, JPN

Career History:

- Assistant Lecturer; Lecturer; Assistant Professor; Associate Professor, Zhejiang University Teaching Hospital
- Fellow; Senior Fellow; Visiting Lecturer; Adjunct Assistant Professor, School of Dentistry, Showa University
- Assistant Professor; Associate Professor, Tenure, Faculty of Dentistry, NUHS & NUS
- Supervisor, NGS, NUS
- Lead Principal Investigator, Cranio-Maxillofacial Group, NUSTEP, NUS

Administrative Leadership:

- Deputy Head, Dental Department, Zhejiang University Teaching Hospital (1993-2000)
- Vice-Dean (Research), Faculty of Dentistry, NUS / NUHS (2010 - 2019)
- Director of Oral Science Disciplines, Faculty of Dentistry, NUS / NUHS (2011 – 2020)

Professional/Consulting Activities:

- Serve as International Reviewer for
 - Times Higher Education, World University Rankings, Elsevier
 - Clarivate Analytics, Global Institutional Profiles Project
 - The Wellcome Trust, UK
 - Medical Research Council, UK
 - Cancer Research UK
 - European Science Foundation, EU
 - The Netherlands Organisation for Scientific Research, Netherlands
 - The Austrian Science Fund, Austria
 - Ministry of Science, Israel
 - National Dental Research Foundation, New Zealand
 - Czech Science Foundation
 - Research Grant Council, Hong Kong
 - Massachusetts Institute of Technology - Singapore Alliance for Research and Technology, US & SG
- Serve as Editor-in-Chief for [World Journal of Stem Cells](#) (JCR IF: 4.376, CS: 3.55); Advisory Editorial Board, Editorial Advisory Board, Editorial Board for **10 international peer review journals**, including [Journal of Molecular Medicine-JMM](#) (IF 5.192) and [Bio-Design and Manufacturing](#) (IF 4.095)
- Invited as reviewer for >100 international peer-review scientific journals and books, including [Nature Protocols](#) (5Y-IF 15.269), [Cell Death and Differentiation](#) (IF 10.714), [Biomaterials](#) (IF 10.314), and [Journal of Materials Chemistry B](#) (IF 9.038)

Publications:

- Published >**170** full papers in international peer reviewed journals and books, cited by >**6503** international publications, h-Index **44**, i10-index **103**
- Delivered >**61** invited and sponsored talks at academic and scientific conferences and scholarly meetings

Updated on 6 Mar 2021