



Pedro Tanaka

Clinical Professor, Anesthesiology, Perioperative and Pain Medicine

 Curriculum Vitae available Online

CLINICAL OFFICE (PRIMARY)

- **Stanford Anesthesia Department**

300 Pasteur Dr Rm H3577

MC 5640

Stanford, CA 94305

Tel (650) 724-4066 **Fax** (650) 725-8544

Bio

BIO

I am a Clinical Professor in the Department of Anesthesia, at Stanford University Medical School. I am Brazilian and completed medical school, anesthesia training, and my PhD in Brazil. I came to Stanford University for a sabbatical year in 2007. It was a great fit on both sides, and I decided on a long-term career at Stanford. I graduated from “The Master of Academic Medicine program” at the University of Southern California in 2014 and completed a doctoral program in education at the University of Illinois at Chicago in 2021. At Stanford, I have been involved with resident education not only through direct supervision, but also by initiating and working on several educational projects (Development and implementation of OSCEs, new lecture format “libero” assessing the Workplace Culture and Learning Climate, and use of Entrustable Professional Activities as a framework for assessment for learning). I currently serve as an Associate Designated Institutional Official for GME, Vice Chair for Diversity, Equity, and Inclusion, and Associate Residency Program Director. My clinical activity has focused on anesthesia for orthopedic surgery, particularly orthopedic total joint replacements. My areas of interest are: Developing, leading, and evaluating programs; Designing curricula and assessing learners and Designing, implementing, and studying innovations.

CLINICAL FOCUS

- Anesthesia

ACADEMIC APPOINTMENTS

- Clinical Professor, Anesthesiology, Perioperative and Pain Medicine

ADMINISTRATIVE APPOINTMENTS

- Department liaison to the Office of faculty development and diversity, Stanford University School of Medicine, Stanford, (2019- present)
- Associate Designated Institutional Official, Graduate Medical Education, Stanford University School of Medicine, (2020- present)
- Associate Program Director, Department of Anesthesiology, Pain and Perioperative Medicine, (2013- present)

HONORS AND AWARDS

- Honorarium Member, Paranaense Society of Anesthesiology (2008)
- Stanford Anesthesia Teaching Scholar, Anesthesia Department, Stanford University School of Medicine (2009)

- The H. B. Fairley, MBBS, Teaching excellence award, Department of Anesthesia, Stanford University School of Medicine (2009)
- Outstanding contribution and commitment, Indonesia Society of Obstetric Anesthesia and Indonesian Society of Regional Anesthesia (2010)

PROFESSIONAL EDUCATION

- Board Certification: Anesthesia, Brazilian Society of Anesthesiology (1992)
- Ph.D., University of Illinois at Chicago , Curriculum and Instruction (2021)
- Residency: Universidade Federal Do Parana (1994) Brazil
- Residency: Faculdade Evangelica De Parana (1992) Brazil
- Medical Education: Faculdade Evangelica De Parana (1988) Brazil
- PhD, Federal University of Parana , Anesthesia (1999)
- Master, Federal University of Parana , Anesthesia (1996)
- MD, Evangelica School of Medicine , Medicine (1988)

Research & Scholarship

CLINICAL TRIALS

- Noninvasive and Continuous Hemoglobin Monitoring for Surgical Blood Management, Not Recruiting

Teaching

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Anesthesia (Fellowship Program)
- Medicine (Masters Program)

Publications

PUBLICATIONS

- **Domains Influencing Faculty Decisions on the Level of Supervision Required for Anesthesiology EPAs with Analysis of Feedback Comments.** *Journal of surgical education*
Tanaka, P., Soo Park, Y., Chen, C. Y., Yumul, R., Macario, A.
2024
- **Indigenizing and co-producing the ACGME anesthesiology milestone in Taiwan: a Delphi study and subgroup analysis.** *BMC medical education*
Kang, E. Y., Chi, K. Y., Liao, F., Liu, C. C., Lin, C. P., Chen, T. L., Tanaka, P., Chen, C. Y.
2024; 24 (1): 154
- **Perioperative organ dysfunction: a burden to be countered.** *Brazilian journal of anesthesiology (Elsevier)*
Treml, R. E., Katayama, H. T., Caldonazo, T., Pereira, T. S., Malbouisson, L. M., Carmona, M. J., Tanaka, P., Silva, J. M.
2024: 844480
- **Development and Pilot Testing of a Programmatic System for Competency Assessment in US Anesthesiology Residency Training.** *Anesthesia and analgesia*
Woodworth, G. E., Goldstein, Z. T., Ambardekar, A. P., Arthur, M. E., Bailey, C. F., Booth, G. J., Carney, P. A., Chen, F., Duncan, M. J., Fromer, I. R., Hallman, M. R., Hoang, T., Isaak, et al
2023
- **Defining entrustable professional activities for first year anesthesiology residents: A Delphi study.** *Journal of clinical anesthesia*
Tanaka, P., Marty, A., Park, Y. S., Kakazu, C., Udani, A., Pardo, M., Sullivan, K., Sandhu, C., Turner, J., Mitchell, J., Macario, A.
2023; 88: 111116
- **Defining entrustable professional activities for first year anesthesiology residents: A Delphi study** *JOURNAL OF CLINICAL ANESTHESIA*
Tanaka, P., Marty, A., Park, Y., Kakazu, C., Udani, A., Pardo, M., Sullivan, K., Sandhu, C., Turner, J., Mitchell, J., Macario, A.

2023; 88

- **US versus UK Anesthesiology Training - a sprint versus a marathon?** *Journal of clinical anesthesia*
Taylor, J., Solomon, S., Tanaka, P., Macario, A.
2022; 83: 110983
- **Evaluation of the Stanford Anesthesiology Faculty Teaching Scholars Program Using the Context, Input, Process, and Product Framework.** *The journal of education in perioperative medicine : JEPM*
Chen, M. C., Macario, A., Tanaka, P.
2022; 24 (4): E693
- **Competency-based anesthesiology teaching: comparison of programs in Brazil, Canada and the United States.** *Brazilian journal of anesthesiology (Elsevier)*
Vinagre, R., Tanaka, P., Tardelli, M. A.
2021
- **Development and Pilot Testing of Entrustable Professional Activities for US Anesthesiology Residency Training.** *Anesthesia and analgesia*
Woodworth, G. E., Marty, A. P., Tanaka, P. P., Ambardekar, A. P., Chen, F. n., Duncan, M. J., Fromer, I. R., Hallman, M. R., Klesius, L. L., Ladlie, B. L., Mitchell, S. A., Miller Juve, A. K., McGrath, et al
2021
- **Milestone Learning Trajectories of Residents at Five Anesthesiology Residency Programs.** *Teaching and learning in medicine*
Tanaka, P., Park, Y. S., Roby, J., Ahn, K., Kakazu, C., Udani, A., Macario, A.
2020; 1–10
- **Red Flags, Geography, Exam Scores, and Other Factors Used by Program Directors in Determining Which Applicants Are Offered an Interview for Anesthesiology Residency.** *Cureus*
Vinagre, R., Tanaka, P., Park, Y. S., Macario, A.
2020; 12 (11): e11550
- **Red Flags, Geography, Exam Scores, and Other Factors Used by Program Directors in Determining Which Applicants Are Offered an Interview for Anesthesiology Residency** *CUREUS*
Vinagre, R., Tanaka, P., Park, Y., Macario, A.
2020; 12 (11)
- **Medical education in the COVID-19 era: Impact on anesthesiology trainees.** *Journal of clinical anesthesia*
Anwar, A., Seger, C., Tollefson, A., Diachun, C. A., Tanaka, P., Umar, S.
2020; 66: 109949
- **Defining Entrustable Professional Activities for United States Anesthesiology Residency Training**
Maniker, R., Woodworth, G., Marty, A., Tanaka, P. P., Ambardekar, A., Chen, F., Fromer, I., Hallman, M. R., Klesius, L., Ladlie, B., McGrath, B., Juve, A., Mitchell, et al
LIPPINCOTT WILLIAMS & WILKINS.2020: 304–6
- **Barriers and aidsto routine neuromuscular monitoring and consistent reversal practice -a qualitative study.** *Acta anaesthesiologica Scandinavica*
Thomsen, J. L., Marty, A. P., Wakatsuki, S., Macario, A., Tanaka, P., Gatke, M., Ostergaard, D.
2020
- **Assessment Scores of a Mock Objective Structured Clinical Examination Administered to 99 Anesthesiology Residents at 8 Institutions.** *Anesthesia and analgesia*
Tanaka, P., Park, Y. S., Liu, L., Varner, C., Kumar, A. H., Sandhu, C., Yumul, R., McCartney, K. T., Spilka, J., Macario, A.
2020
- **Optimal Management of Endometriosis and Pain.** *Obstetrics and gynecology*
Nezhat, C., Vang, N., Tanaka, P. P., Nezhat, C.
2019
- **Predictors of post-anaesthesiology residency research productivity: preliminary report.** *British journal of anaesthesia*
Haight, E. S., Chen, F., Tanaka, P., Brock-Utne, J. G., Macario, A., Sun, E. C., Tawfik, V. L.
2019
- **Assessing the Workplace Culture and Learning Climate in the Inpatient Operating Room Suite at an Academic Medical Center** *JOURNAL OF SURGICAL EDUCATION*

- Tanaka, P., Hasan, N., Tseng, A., Tran, C., Macario, A., Harris, I.
2019; 76 (3): 644–51
- **Assessing the Workplace Culture and Learning Climate in the Inpatient Operating Room Suite at an Academic Medical Center.** *Journal of surgical education*
Tanaka, P., Hasan, N., Tseng, A., Tran, C., Macario, A., Harris, I.
2019
 - **Incidence, risk factors, and consequences of residual neuromuscular block in the United States: The prospective, observational, multicenter RECITE-US study.** *Journal of clinical anesthesia*
Saager, L., Maiese, E. M., Bash, L. D., Meyer, T. A., Minkowitz, H., Groudine, S., Philip, B. K., Tanaka, P., Gan, T. J., Rodriguez-Blanco, Y., Soto, R., Heisel, O.
2018; 55: 33–41
 - **Analysis of Milestone-based End-of-rotation Evaluations for Ten Residents Completing a Three-year Anesthesiology Residency.** *Cureus*
Chemtob, C. M., Tanaka, P., Keil, M., Macario, A.
2018; 10 (8): e3200
 - **Struggling Medical Learners: A Competency-Based Approach to Improving Performance.** *MedEdPORTAL : the journal of teaching and learning resources*
Ridinger, H., Cvengros, J., Gunn, J., Tanaka, P., Rencic, J., Tekian, A., Park, Y. S.
2018; 14: 10739
 - **What Makes for Good Anesthesia Teaching by Faculty in the Operating Room? The Perspective of Anesthesiology Residents.** *Cureus*
Wakatsuki, S., Tanaka, P., Vinagre, R., Marty, A., Thomsen, J. L., Macario, A.
2018; 10 (5): e2563
 - **Development of an Objective Structured Clinical Examination Using the American Board of Anesthesiology Content Outline for the Objective Structured Clinical Examination Component of the APPLIED Certification Examination.** *A&A practice*
Tanaka, P., Adriano, A., Ngai, L., Park, Y. S., Marty, A., Wakatsuki, S., Brun, C., Harrison, K., Bushell, E., Thomsen, J. L., Wen, L., Painter, C., Chen, et al
2018
 - **Fluid management concepts for severe neurological illness: an overview.** *Current opinion in anaesthesiology*
Heifets, B. D., Tanaka, P. n., Burbridge, M. A.
2018
 - **The effect of desflurane versus propofol anesthesia on postoperative delirium in elderly obese patients undergoing total knee replacement: A randomized, controlled, double-blinded clinical trial.** *Journal of clinical anesthesia*
Tanaka, P., Goodman, S., Sommer, B. R., Maloney, W., Huddleston, J., Lemmens, H. J.
2017; 39: 17-22
 - **Comparing Anesthesiology Residency Training Structure and Requirements in Seven Different Countries on Three Continents.** *Cureus*
Yamamoto, S., Tanaka, P., Madsen, M. V., Macario, A.
2017; 9 (2)
 - **Implementation of a Needs-Based, Online Feedback Tool for Anesthesia Residents With Subsequent Mapping of the Feedback to the ACGME Milestones** *ANESTHESIA AND ANALGESIA*
Tanaka, P., Merrell, S. B., Walker, K., Zocca, J., Scotto, L., Bogetz, A. L., Macario, A.
2017; 124 (2): 627-635
 - **Occupational Radiation Exposure of Anesthesia Providers.** *Seminars in cardiothoracic and vascular anesthesia*
Wang, R. R., Kumar, A. H., Tanaka, P., Macario, A.
2017: 1089253217692110-?
 - **Implementation of a Needs-Based, Online Feedback Tool for Anesthesia Residents With Subsequent Mapping of the Feedback to the ACGME Milestones.** *Anesthesia and analgesia*
Tanaka, P., Bereksnyi Merrell, S., Walker, K., Zocca, J., Scotto, L., Bogetz, A. L., Macario, A.
2017; 124 (2): 627-635
 - **Does Faculty Follow the Recommended Structure for a New Classroom-based, Daily Formal Teaching Session for Anesthesia Residents?** *Cureus*
Anwar, A., Tanaka, P., Madsen, M. V., Macario, A.
2016; 8 (10)

- **Noradrenaline and dobutamine effects on the volume expansion with normal saline in rabbits subjected to hemorrhage** *ACTA CIRURGICA BRASILEIRA*
Ramalho, G., Vane, M., Lima, L., Vane, L., Amorim, R., Domingues, M., Soares de Moraes, J., de Carvalho, L., Tanaka, P., Vane, L.
2016; 31 (9): 621–28
- **Mapping of Primary Instructional Methods and Teaching Techniques for Regularly Scheduled, Formal Teaching Sessions in an Anesthesia Residency Program. A & A case reports**
Vested Madsen, M., Macario, A., Yamamoto, S., Tanaka, P.
2016; 6 (11): 343-347
- **Analysis of Resident Case Logs in an Anesthesiology Residency Program. A & A case reports**
Yamamoto, S., Tanaka, P., Madsen, M. V., Macario, A.
2016; 6 (8): 257-262
- **Comparative-Effectiveness of Simulation-Based Deliberate Practice Versus Self-Guided Practice on Resident Anesthesiologists' Acquisition of Ultrasound-Guided Regional Anesthesia Skills. Regional anesthesia and pain medicine**
Udani, A. D., Harrison, T. K., Mariano, E. R., Derby, R., Kan, J., Ganaway, T., Shum, C., Gaba, D. M., Tanaka, P., Kou, A., Howard, S. K.
2016; 41 (2): 151-157
- **Response from author to the editor. Journal of clinical monitoring and computing**
Tanaka, P.
2016; 30 (1): 127-128
- **Impact of an Innovative Classroom-Based Lecture Series on Residents' Evaluations of an Anesthesiology Rotation. Anesthesiology research and practice**
Tanaka, P., Yanez, D., Lemmens, H., Djurdjulov, A., Scotto, L., Borg, L., Walker, K., Berekyei Merrell, S., Macario, A.
2016; 2016: 8543809-?
- **What is missing for difficult airway management in the 21st century** *REVISTA BRASILEIRA DE ANESTESIOLOGIA*
Tanaka, P., Pessoa, R., Fernandes, R., Brodsky, J.
2015; 65 (3): 235–36
- **Detection of respiratory compromise by acoustic monitoring, capnography, and brain function monitoring during monitored anesthesia care** *JOURNAL OF CLINICAL MONITORING AND COMPUTING*
Tanaka, P. P., Tanaka, M., Drover, D. R.
2014; 28 (6): 561-566
- **[What is missing for difficult airway management in the 21st century]. Revista brasileira de anestesiologia**
Tanaka, P. P., Pessoa, R., Fernandes, R., Brodsky, J.
2014; 65 (3): 235-6
- **Simulation-based mastery learning with deliberate practice improves clinical performance in spinal anesthesia. Anesthesiology research and practice**
Udani, A. D., Macario, A., Nandagopal, K., Tanaka, M. A., Tanaka, P. P.
2014; 2014: 659160-?
- **The stanford anesthesia faculty teaching scholars program: summary of faculty development, projects, and outcomes. Journal of graduate medical education**
Macario, A., Tanaka, P. P., Landy, J. S., Clark, S. M., Pearl, R. G.
2013; 5 (2): 294-298
- **Anesthesia NEZHAT'S VIDEO-ASSISTED AND ROBOTIC-ASSISTED LAPAROSCOPY AND HYSTEROSCOPY, 4TH EDITION**
Tanaka, P. P., Desai, A., Nguyen, J. H., Nezhat, C., Nezhat, F., Nezhat, C.
2013: 37–40
- **Use of Tablet (iPad (R)) as a Tool for Teaching Anesthesiology in an Orthopedic Rotation** *REVISTA BRASILEIRA DE ANESTESIOLOGIA*
Tanaka, P. P., Hawrylyshyn, K. A., Macario, A.
2012; 62 (2): 214-222
- **Analysis of the Acute Cytotoxic Potential of Bupivacaine and 50% Enantiomeric Excess Bupivacaine (S75-R25) Incorporated into Microspheres in Rat Sciatic Nerves** *REVISTA BRASILEIRA DE ANESTESIOLOGIA*
Tanaka, P., Torres, M., Tenorio, S.
2012; 62 (2): 223–34