



Pedro Tanaka

Clinical Professor, Anesthesiology, Perioperative and Pain Medicine

 Curriculum Vitae available Online

CLINICAL OFFICE (PRIMARY)

- **Stanford Anesthesia Department**

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Bio

BIO

Pedro Tanaka is a Clinical Professor in the Department of Anesthesia at Stanford University Medical School. He is Brazilian and completed medical school, anesthesiology training, and his PhD in clinical investigation in Brazil. He 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, he has been involved with resident education as an Associate Program Director and served as the inaugural Vice-Chair for Diversity, Equity, and Inclusion in the Department of Anesthesiology. He currently serves as an Associate Designated Institutional Official for Graduate Medical Education and Associate Dean for Academic Affairs. He is also thrilled to be an Assistant Director with COACHME. Leveraging a rich foundation in Medicine, Education, Leadership, and Executive Coaching, He offers a unique blend of methodologies designed to empower faculty members on their journey of self-discovery within the academic environment. His approach is tailored to assist clinician-educators in mastering the challenges of their roles, enhancing their educational impact, and advancing their careers in academic medicine.

CLINICAL FOCUS

- Anesthesia

ACADEMIC APPOINTMENTS

- Clinical Professor, Anesthesiology, Perioperative and Pain Medicine

ADMINISTRATIVE APPOINTMENTS

- Assistant Director of Coach Me, Office of Academic Affairs, Stanford University School of Medicine, (2024- present)
- Associate Fellowship Program Director, Health Care Leadership and Management, Stanford University School of Medicine, (2024- present)
- Associate Dean for Academic Affairs,, Office of Academic Affairs, Stanford University School of Medicine, (2023- present)
- Associate Designated Institutional Official, Graduate Medical Education, Stanford University School of Medicine, (2020- 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

- Master in Academic Medicine., Keck School of Medicine, University of Southern California, CA, USA , Medical Education (2014)
- Executive Coach, The Columbia Coaching Certification Program, Columbia Business School and Teachers College Columbia University , Coaching (2024)
- 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

- Preoperative Fasting vs. Not Fasting in Critically Ill Patients, Recruiting
- 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

- **Effect of preoperative intranasal insulin on postoperative delirium in adult surgical patients: a systematic review, meta-analysis, and trial sequential analysis.** *Perioperative medicine (London, England)*
Velasco, E. M., Lima, V. S., Caldonazo, T., Passos, F. S., Lins, P. R., Grillo, I. T., Tanaka, P., Macario, A., Zivkovic, A. R., da ManoelSilva, J. J., Ehler, J., Esper Treml, R.
2026
- **National Study of Milestone Evaluation Differences by Gender and Race in Anesthesiology Residency Training.** *Anesthesia and analgesia*
Sun, T., Park, Y. S., Chen, F., Wilkinson, N., Tanaka, P.
2026
- **Reliability and utility of anesthesiology entrustable professional activities assessed with a mobile web application.** *Journal of clinical anesthesia*
Tanaka, P., Park, Y. S., Chen, J., Macario, A.
2025; 106: 111922
- **Factors Identified by Faculty That Contribute to Straight-Line Scoring in End-of-Rotation Evaluations of Anesthesiology Residents.** *A&A practice*
Tanaka, P., Goldmacher, J., Park, Y. S., Vinagre, R., Macario, A.

2025; 19 (4): e01947

- **Advancing the Exploration and Impact of ACGME Milestones on Outcomes.** *Academic medicine : journal of the Association of American Medical Colleges*
Trembl, R. E., Sun, T., Tanaka, P.
2025
- **Perioperative lung expansion and pulmonary outcomes after open abdominal surgery versus usual care in the USA (PRIME-AIR): a multicentre, randomised, controlled, phase 3 trial.** *The Lancet. Respiratory medicine*
Fernandez-Bustamante, A., Parker, R. A., Frenzl, G., Lee, J. W., Nagrebetsky, A., Grecu, L., Amar, D., Tanaka, P., Sprung, J., Gupta, R. A., Subramanian, B., Giquel, J., Eikermann, et al
2025
- **Longitudinal Reliability of Milestones Learning Trajectories during Anesthesiology Residency.** *Anesthesiology*
Sun, T., Park, Y. S., Chen, F., Hogan, S. O., Tanaka, P.
2025
- **Implementing Holistic Applicant Review and Addressing Biases in Anesthesiology Residency Committee Deliberations.** *A&A practice*
Tanaka, P., Chen, M. C., Beck, T., Carbonar, M., Park, Y. S., Macario, A.
2024; 18 (12): e01873
- **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)*
Trembl, 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., Berekyei 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., Bereknyci 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.
edited by 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