

Curriculum Vitae

Dr. med. univ. Alexandru-Cristian Tuca

Personal Information

Name: Dr. med. univ. Alexandru-Cristian Tuca

Date of Birth: 08 April 1989

Place of Birth: Bucharest, Romania

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Professional Experience

Since 01 Jan 2025

Board-Certified Plastic, Reconstructive and Aesthetic Surgeon

Self-employed specialist with private practices in Graz and Fürstenfeld, Austria

Since 03 Oct 2022

Research Associate & Consultant Plastic Surgeon

Division of Plastic, Aesthetic and Reconstructive Surgery, Department of Surgery, Medical University of Graz, Austria

01 Mar 2023 – 31 Dec 2024

Head of the Plastic Surgery Outpatient Clinic & Lead Attending Plastic Surgeon

Güssing Hospital, Austria

03 Oct 2022 – 31 Dec 2024

Consultant Surgeon

Department of Surgery, Güssing Hospital, Austria

03 Jul 2017 – 30 Sep 2022

Resident in Plastic, Aesthetic and Reconstructive Surgery

Department of Surgery, Medical University of Graz, Austria

01 Jan 2017 – 30 Jun 2017

Intern (Basic Medical Training)

Department of Surgery, Medical University of Graz, Austria

03 Oct 2016 – 31 Dec 2016

Intern (Basic Medical Training)

Department of Internal Medicine, Oberwart Hospital, Austria

11 Nov 2009 – 31 May 2016

Research Associate

Division of Endocrinology and Metabolism, Department of Internal Medicine, Medical University of Graz, Austria

Education

06/2022 Board Certification – Plastic, Reconstructive and Aesthetic Surgery

09/2016 Medical Degree (Dr. med. univ.), Medical University of Graz, Austria

Awards

2021 Research Award of the Austrian Society for Plastic, Aesthetic and Reconstructive Surgery (ÖGPÄRC) and the Sigmund Freud Private University Vienna (SFU)

2021 Poster Award of the Austrian Society for Plastic, Aesthetic and Reconstructive Surgery (ÖGPÄRC)

2017 “Suprathel Young Investigator Challenge 2016” – awarded by PMI

2016 Poster Award for “Safety and efficacy of a clinical decision support system for blood glucose management in patients with diabetes mellitus type 2 at a plastic-surgical ward” – 4th Graz Risk Day, “Patient Safety in Clinical Practice”

Scientific Publications

1. Berger, MF; Winter, R; Tuca, AC; Michelitsch, B; Schenkenfelder, B; Hartmann, R; Giretzlehner, M; Reishofer, G; Kamolz, LP; Lumenta, DB Workflow assessment of an augmented reality application for planning of perforator flaps in plastic reconstructive surgery: Game or game changer? Digit Health. 2023; 9: 20552076231173554 Doi: 10.1177/20552076231173554
2. Hasiba-Pappas, S; Kamolz, LP; Luze, H; Nischwitz, SP; Holzer-Geissler, JCJ; Tuca, AC; Rienmüller, T; Polz, M; Ziesel, D; Winter, R Does Electrical Stimulation through Nerve Conduits Improve Peripheral Nerve Regeneration?-A Systematic Review. J Pers Med. 2023; 13(3): Doi: 10.3390/jpm13030414
3. Sawetz, I; Hasiba-Pappas, S; Kamolz, LP; Holzer-Geissler, JCJ; Tuca, AC; Lumenta, DB; Wegscheider, T; Luze, H; Nischwitz, SP; Winter, R Introducing the "SIMline"-A Simulation Course in the Management of Severe Burns as a Tool in Undergraduate Medical Education. J Pers Med. 2023; 13(2): 338 Doi: 10.3390/jpm13020338
4. Winter, R; Hasiba-Pappas, S; Kamolz, LP; Tschauner, S; Bamer, O; Tuca, AC; Luze, H; Nischwitz, SP; Michelitsch, B; Friedl, H; Lumenta, DB; Girsch, W Radiological Influencing Factors in the Diagnosis of Painful Habitual Instability of the Thumb Basal Joint as a Precursor of Carpometacarpal Arthritis of the Thumb-A Retrospective Study. J Pers Med. 2023; 13(5): Doi: 10.3390/jpm13050704
5. Winter, R; Tuca, AC; Justich, I; Tschauner, S; Friedl, H; Girsch, W; Lebo, P; Zrim, R; Lumenta, DB; Kamolz, LP Minimal invasive treatment of trapeziometacarpal osteoarthritis: Results of a blinded, randomized controlled trial. Plast Reconstr Surg. 2023; Doi: 10.1097/PRS.0000000000010516

6. Winter, R; Hasiba-Pappas, SK; Tuca, AC; Zrim, R; Nischwitz, S; Popp, D; Lumenta, DB; Girsch, W; Kamolz, LP Autologous Fat and Platelet-Rich Plasma Injections in Trapeziometacarpal Osteoarthritis: A Systematic Review and Meta-Analysis. *Plast Reconstr Surg.* 2023; 151(1):119-131 Doi: 10.1097/PRS.00000000000009789
7. Luze, H; Bernardelli, de, Mattos, I; Nischwitz, SP; Funk, M; Tuca, AC; Kamolz, LP The Impact of Antiseptic-Loaded Bacterial Nanocellulose on Different Biofilms-An Effective Treatment for Chronic Wounds? *J Clin Med.* 2022; 11(22): 6634 Doi: 10.3390/jcm11226634
8. Regittnig, W; Tschalkner, M; Tuca, AC; Simic, A; Feiel, J; Schaller-Ammann, R; Licht, AH; Jungklaus, M; Pieber, TR Insulin induces a progressive increase in the resistance of subcutaneous tissue to fluid flow: Implications for insulin pump therapy. *Diabetes Obes Metab.* 2022; 24(3):455-464 Doi: 10.1111/dom.14594
9. Tuca, AC; Bernardelli, de, Mattos, I; Funk, M; Winter, R; Palackic, A; Groeber-Becker, F; Kruse, D; Kukla, F; Lemarchand, T; Kamolz, LP Orchestrating the Dermal/Epidermal Tissue Ratio during Wound Healing by Controlling the Moisture Content. *Biomedicines.* 2022; 10(6): Doi: 10.3390/biomedicines10061286
10. Grohmann, M; Weiland, T; Tuca, AC; Wimbauer, JM Earlobe Correction of the Pierced Ear: A Systematic Review of the Literature and Principles for Surgical Reconstruction. *Facial Plast Surg Aesthet Med.* 2022; Doi: 10.1089/fpsam.2021.0269
11. Hasiba-Pappas, SK; Tuca, AC; Luze, H; Nischwitz, SP; Zrim, R; Geißler, JCJ; Lumenta, DB; Kamolz, LP; Winter, R Platelet-Rich Plasma in Plastic Surgery: A Systematic Review. *Transfus Med Hemother.* 2022; 49(3):129-142 Doi: 10.1159/000524353
12. Wolfsberger, CH; Maitz, E; Schmachtl, P; Winkler, S; Luschnig, D; Sigl, E; Heinzle, A; Gamerith, C; Tuca, AC; Schintler, MV Feasibility of collecting wound fluid during ongoing negative pressure wound therapy by the use of an additional container - A prospective observational study. *Int Wound J.* 2022; Doi: 10.1111/iwj.13709
13. Regittnig, W; Tschalkner, M; Tuca, AC; Simic, A; Feiel, J; Schaller-Ammann, R; Licht, AH; Jungklaus, M; Pieber, TR Insulin induces a progressive increase in the resistance of subcutaneous tissue to fluid flow: Implications for insulin pump therapy.
14. Nischwitz, SP; Luze, H; Schellnegger, M; Gatterer, SJ; Tuca, AC; Winter, R; Kamolz, LP Thermal, Hyperspectral, and Laser Doppler Imaging: Non-Invasive Tools for Detection of The Deep Inferior Epigastric Artery Perforators-A Prospective Comparison Study.
15. Nischwitz SP, Popp D, Sawetz I, Smolle C, Tuca A-C, Luze H, et al. Burns in pandemic times - The Graz way towards COVID-19 and back. *Burns.* 2021;47(1):234-9.
16. Lichtenegger KM, Aberer F, Tuca AC, Donsa K, Höll B, Schaupp L, et al. Safe and Sufficient Glycemic Control by Using a Digital Clinical Decision Support System for Patients With Type 2 Diabetes in a Routine Setting on General Hospital Wards. *J Diabetes Sci Technol.* 2021 Mar;15(2):231-5.
17. Tuca A-C, Münch J, Schwappach DLB, Borenich A, Banfi C, Mautner S, et al. Implementation status of morbidity and mortality conferences in Austrian hospitals-A cross-sectional national survey study. *PLoS One.* 2021;16(3):e0248692.

18. Vonbrunn E, Mueller M, Pichlsberger M, Sundl M, Helmer A, Wallner SA, et al. Electrospun PCL/PLA Scaffolds Are More Suitable Carriers of Placental Mesenchymal Stromal Cells Than Collagen/Elastin Scaffolds and Prevent Wound Contraction in a Mouse Model of Wound Healing. *Front Bioeng Biotechnol* . 2020;8:604123.
19. Bernardelli de Mattos I, Nischwitz SP, Tuca A-C, Groeber-Becker F, Funk M, Birngruber T, et al. Delivery of antiseptic solutions by a bacterial cellulose wound dressing: Uptake, release and antibacterial efficacy of octenidine and povidone-iodine. *Burns* . 2020;46(4):918–27.
20. Benedikt S, Tuca A-C, Palackic A, Wurzer P, Popp D, Tapking C, et al. Re-evaluation of websites from burn centers in Austria, Germany and Switzerland. *Burns* . 2019;45(1):220–7.
21. Rappl T, Wurzer P, May S, Tuca AC, Cambiaso-Daniel J, Parvizi D, et al. Three-Dimensional Evaluation of Static and Dynamic Effects of Botulinum Toxin A on Glabellar Frown Lines. *Aesthetic Plast Surg* . 2019;43(1):206–12.
22. Winter R, Reischies FMJ, Tuca A, Wurzer P, Schubert C, Wolfsberger CH, et al. BMI and specimen weight: impact on personalized risk profiling for optimized informed consent in breast reduction surgery? *Sci Rep* . 2019;9(1):12690.
23. de Mattos IB, Holzer JCJ, Tuca A-C, Groeber-Becker F, Funk M, Popp D, et al. Uptake of PHMB in a bacterial nanocellulose-based wound dressing: A feasible clinical procedure. *Burns* . 2019;45(4):898–904.
24. Ertl J, Pichlsberger M, Tuca A-C, Wurzer P, Fuchs J, Geyer SH, et al. Comparative study of regenerative effects of mesenchymal stem cells derived from placental amnion, chorion and umbilical cord on dermal wounds. *Placenta* . 2018;65:37–46.
25. Winter R, Haug I, Lebo P, Grohmann M, Reischies FMJ, Cambiaso-Daniel J, et al. Standardizing the complication rate after breast reduction using the Clavien-Dindo classification. *Surgery* . 2017;161(5):1430–5.
26. Reischies FMJ, Krause R, Holzer J, Tiefenbacher F, Winter R, Eylert G, et al. What can we learn from sonication results of breast implants? *PLoS One* . 2017;12(8):e0182267.
27. Smolle C, Tuca A, Wurzer P, Spindel SM, Forbes AA, Spindel S, et al. Complications in tissue expansion: A logistic regression analysis for risk factors. *Burns* . 2017 Sep;43(6):1195–202.
28. Parvizi D, Vasilyeva A, Wurzer P, Tuca A, Lebo P, Winter R, et al. Anatomy of the Vascularized Lateral Femoral Condyle Flap. *Plast Reconstr Surg* . 2016 Jun;137(6):1024e-1032e.
29. Tuca A-C, Ertl J, Hingerl K, Pichlsberger M, Fuchs J, Wurzer P, et al. Comparison of Matrigel and Matriderm as a carrier for human amnion-derived mesenchymal stem cells in wound healing. *Placenta* . 2016;48:99–103.
30. Parvizi D, Giretzlehner M, Wurzer P, Klein LD, Shoham Y, Bohanon FJ, et al. BurnCase 3D software validation study: Burn size measurement accuracy and inter-rater reliability. *Burns* . 2016 Mar;42(2):329–35.
31. Wurzer P, Parvizi D, Lumenta DB, Giretzlehner M, Branski LK, Finnerty CC, et al. Smartphone applications in burns. *Burns* . 2015 Aug;41(5):977–89.
32. Parvizi D, Friedl H, Wurzer P, Kamolz L, Lebo P, Tuca A, et al. A Multiple Regression Analysis of Postoperative Complications After Body-Contouring Surgery: a

- Retrospective Analysis of 205 Patients : Regression Analysis of Complications. *Obes Surg* . 2015 Aug;25(8):1482–90.
33. Parvizi D, Haas F, Peintinger F, Hubmer M, Rappl T, Koch H, et al. First experience using contrast-enhanced ultrasound to evaluate vascularisation of acellular dermal matrices after implant-based breast reconstruction. *Breast J* . 2014;20(5):461–7
 34. Wurzer P, Spindel S, Kamolz LP, Parvizi D, Tuca A, Rappl T. [Is there a psychological and physiological difference between DIEP- and free TRAM-flap? A retrospective patient survey]. *Handchir Mikrochir Plast Chir* . 2014 Aug;46(4):256–62.