

Kevin Christopher Staats, MD PhD BSc

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born: 17.12.1986 in Villach, Austria

Vienna, 25-04-2023

Education

Doctor for Applied Medical Sciences (PhD) Medical University of Vienna Thesis: „Antimicrobial Effect and Osteoblastic Cell Growth of Selenium/Hydroxyapatite-modified Titanium Surfaces”	2015 - 2022
Medical Doctor Medical University of Vienna	2009 – 2015
Bachelor of Science Studies of Nutritional Sciences University of Vienna	2007 – 2011

Working experience

Attending Surgeon Primary and Revision Total Hip/Knee Arthroplasty Medical University of Vienna	Since 10/2022
Head of the Bone and Joint Infections Board Bi-weekly multidisciplinary Board Medical University of Vienna	Since 08/2022
Specialty Training Department of Orthopedics and Trauma Surgery, Medical University of Vienna	2016 - 2022
Deputy Head Arthroplasty Research Cluster Medical University of Vienna	since 2020
Ines Mandl Research Fellowship (Arthroplasty Research Lab/Mathias Bostrom, MD) Hospital for Special Surgery/Weill Cornell University New York City, USA	2019
Research Associate Department of Orthopedics, Medical University of Vienna	2015 – 2016
Lecturer Anatomy and Dissection-course Department of systematic anatomy Vienna	2015 - 2018

Grants/Awards

Award for Basic Science in Arthroplasty Related Research German Arthroplasty Society (AE)	2022
Research Grant from Austrian Research Promotion Agency (FFG) Comet program §27 „Antimicrobial Effect and Osteoblastic Cell Growth of Selenium/Hydroxyapatite-modified Titanium Surfaces”	2020
Best Poster Award, German Arthroplasty Conference Berlin “Osseointegrative Potential of intermittent PTH in initial implant instability”	2020
John Charnley Award 2020, Meeting of the Hip Society “The antimicrobial potential of bacteriophage-derived lysin in a murine debridement, antibiotics, and implant retention model of prosthetic joint infection.”	2020
Bone and Joint Surgery Fellowship, Weill Cornell Seminar, Austrian American Foundation, Salzburg Award from „Excellent Case Presentation“	2017
Academic excellent scholarship Medical University of Vienna	2013

Additional Skills

Board Member of the Austrian Orthopedic Society Representative for Resident (2020-2022) Secretary (2022-2024)	since 2020
Management and Organization of the Educational Program Dept. of Orthopedic Surgery and Traumatology Medical University of Vienna	since 2018
Representative of the Orthopedic Residency Program Medical University of Vienna	2017 – 2019
GCP-Certificate approved by the Faculty of Pharmaceutical Medicine, Royal Colleges of Physicians United Kingdom	2016

Memberships in Scientific Societies

ÖGO (Austrian Orthopedic Society) ÖGOuT (Austrian Orthopedic and Traumatology Society) EBJIS (European Bone and Joint Infection Society)	since 2020
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Scientific presentations (excerpt)

Infections in Total Joint Replacement

Forum Endoprothetik, Vienna, 2022 (invited)

Prevention and Therapy of Periprosthetic Infections

ANISS/ASDI Meeting, Vienna 2022, (invited)

Failed-Two Stage Exchange – What's Next?

Master Course Hip, AE - German Arthroplasty Society, 2022, (invited)

Translational Sciences in Arthroplasty Related Research

Orthopedic Hospital Speising, 2022, (invited)

Does the Use of a Collar Have an Influence on the Outcome of Cementless Stems?

SICOT 2022, Kuala Lumpur, Malaysia

OT Kongress Graz 2022

Ultra-Long term follow-up of the Zweymueller Rectangular Stem with a Minimum Follow-Up of 30 Years

OT Kongress Graz 2022

Approaches to Better Understand Arthroplasty Complications – From Bench to Bed

OMI/HSS Bone and Joint Seminar, Salzburg, 01.03.2022

Long-term survival analysis of cemented vs. cementless distal femur replacement reveals different outcomes between oncological and non-oncological patients

Annual Meeting of International Limb Salvage Society 2019, Oral Presentation

Positive MSIS Minor-criteria have an impact on the outcome of THA and TKA revisions: a matched-pair analysis

Annual Meeting European Bone and Joint Infection Society 2016, Oral Presentation

Annual Conference of the Austrian Orthopedic Society 2016, Oral Presentation

Deutscher Endoprothetikkongress, 2017, Oral Presentation

World Arthroplasty Congress 2018, Oral Presentation

The influence of antibiotic-loaded cement spacers on the risk of reinfection after septic two-stage hip revision surgery

Annual Conference of the Austrian Orthopedic Society 2016 Villach, Oral Presentation

Deutscher Endoprothetikkongress, 2017, Poster Presentation

Failed Two-Stage Exchange: Factors Leading to Unachievable Endoprosthetic Reconstruction After Multiple Revision Surgeries

Annual Conference of the Austrian Orthopedic Society 2017, Oral Presentation

Deutscher Endoprothetikkongress 2018, Poster Presentation

The occult periprosthetic infection – new achievements in diagnostics and therapy

Viennese Hip Symposium 2018, Oral Presentation (invited)

Publications List

Antimicrobial Potential and Osteoblastic Cell Growth on Electrochemically Modified Titanium Surfaces with Nanotubes and Selenium or Silver Incorporation

Staats K., Pilz M., Sun J., Boiadjieva-Scherzer T., Kronberger H., Tobudic S., Windhager R., Holinka J., (2022). Scientific Reports, 18;12(1):8298, IF: 4.99 (19/74)

Intermittent parathyroid hormone increases stability and improves osseointegration of initially unstable implants.

Staats, K., Sosa, B. R., Kuyl, E. V., Niu, Y., Suhardi, V., Turajane, K., Windhager, R., Greenblatt, M. B., Ivashkiv, L., Bostrom, M., & Yang, X. (2022). Bone & joint research, 11(5), 260–269. IF: 4.4 (13/86)

25-Year experience with adult polytraumatized patients in a European level 1 trauma center: polytrauma between 1995 and 2019. What has changed? A retrospective cohort study.

Weihs, V., Frenzel, S., Dedeyan, M., Hruska, F., **Staats, K.**, Hajdu, S., Negrin, L. L., & Aldrian, S. (2022). Archives of orthopaedic and trauma surgery, 10.1007/s00402-022-04433-1 IF: 2.92 (33/86)

Long Term Results of a Rotating Hinge Total Knee Prosthesis With Carbon-Fiber Reinforced Poly-Ether-Ether-Ketone (CFR-PEEK) as Bearing Material

Vertesich K., **Staats K.**, Böhler C., Koza R., Lass R., Giurea A. (2022), Frontiers in bioengineering and biotechnology, 10, 845859. IF: 6.06 (16/74)

Proximal femoral reconstruction with modular megaprotheses in non-oncological patients

Döring, K., Vertesich, K., Martelanz, L., **Staats, K.**, Böhler, C., Hipfl, C., Windhager, R., & Puchner, S. (2021). *International orthopaedics*, 45(10), 2531–2542. IF: 3.479 (25/86)

Patient-Specific Implants for Pelvic Tumor Resections

Döring, K., **Staats, K.**, Puchner, S., & Windhager, R. (2021). Journal of personalized medicine, 11(8), 683. IF: 3.50 (42/109)

Inferior performance of established and novel serum inflammatory markers in diagnosing periprosthetic joint infections.

Sigmund, I. K., Holinka, J., **Staats, K.**, Sevelde, F., Lass, R., Kubista, B., Giurea, A., & Windhager, R. (2021). *International orthopaedics*, 45(4), 837–846. IF: 3.479 (25/86)

Electrochemical investigation for understanding the bactericidal effect of Cu₂Se and Ag₂Se for biomedical applications

Sun J, Hämmerle A, Faflek G, Boiadjieva-Scherzer T, **Staats K**, Pilz M, Holinka J, Windhager R, Kronberger H, J Appl Electrochem (2021). IF: 2.93 (22/30)

Surface Modification of Ti6Al4V alloy for implants by anodization and electrodeposition

Sun J, Boiadjeva-Scherzer T, Kronberger H, Staats K, Holinka J, Windhager R; Aims Materials Science, 2019, 6(5): 713-729. doi: 10.3934/mat.2019.5.713

Hand X-ray examination in two planes is not required for radiographic assessment of hand osteoarthritis. Therapeutic advances in musculoskeletal disease

Staats, K., Sunk, I. G., Weidekamm, C., Kerschbaumer, A., Bécède, M., Supp, G., Stamm, T., Windhager, R., Smolen, J. S., & Bobacz, K. (2020)., *Therapeutic advances in musculoskeletal disease*, 12, 1759720X20934934.

IF: 3.625 (21/34)

Does a Competing Risk Analysis Show Differences in the Cumulative Incidence of Revision Surgery Between Patients with Oncologic and Non-oncologic Conditions After Distal Femur Replacement?

Staats K, Vertesich K, Sigmund IK, Sosa B, Kaider A, Funovics PT, Windhager R. Clin Orthop Relat Res. 2020 May;478(5):1062-1073.

IF: 4.84 (9/86)

2020 John Charnley Award: The antimicrobial potential of bacteriophage-derived lysin in a murine debridement, antibiotics, and implant retention model of prosthetic joint infection.

Sosa, B. R., Niu, Y., Turajane, K., **Staats, K.**, Suhardi, V., Carli, A., Fischetti, V., Bostrom, M., & Yang, X. (2020). The bone & joint journal, 102-B(7_Supple_B), 3–10.

IF: 5.36 (7/86)

Distal femoral reconstruction following failed total knee arthroplasty is accompanied with risk for complication and reduced joint function

Vertesich, K., Puchner, S. E., **Staats, K.**, Schreiner, M., Hipfl, C., Kubista, B., Holinka, J., & Windhager, R. (2019). *BMC musculoskeletal disorders*, 20(1), 47.

IF: 2.56 (44/86)

Challenges in Primary Total Hip Arthroplasty

Staats K, Kubista B, Windhager R.

Z Orthop Unfall. 2019 Aug;157(4):445-460. doi: 10.1055/a-0736-3649. Epub 2019 Aug 17

Modern cemented total knee arthroplasty design shows a higher incidence of radiolucent lines compared to its predecessor.

Staats K, Wannmacher T, Weihs V, Koller U, Kubista B, Windhager R.

Knee Surg Sports Traumatol Arthrosc. 2018 Sep 22. doi: 10.1007/s00167-018-5130-0.

IF: 4.11 (17/86)

The influence of antibiotic-loaded cement spacers on the risk of reinfection after septic hip revision surgery

Staats K, Sevelde F, Kaider A, Böhler C, Puchner SE, Windhager R, Holinka J

Infection. 2017 Dec;45(6):885-891

IF: 7.46 (21/95)

Computer navigation-assisted surgery for musculoskeletal tumors: a closer look into the learning curve.

Staats K, Panotopoulos J, Tiefenboeck TM, Windhager R, Funovics PT.
Eur J Orthop Surg Traumatol. 2017 Aug;27(6):851-858. doi: 10.1007/s00590-017-2004-y.
Impact factor: 0.18

Failed two-stage exchange: Factors Leading to Unachievable Endoprosthetic Reconstruction After Multiple Revision Surgeries

Staats K, Frenzel S, Sigmund IK, Böhler C, Puchner SE, Holinka J, Windhager R
Journal of Arthroplasty. 2018 Jan;33(1):195-199
IF: 4.44 (12/86)

Is the revision of a primary TKA really as easy and safe as the revision of a primary UKA?

Staats K, Merle C, Schmidt-Bräkling T, Boettner F, Windhager R, Waldstein W
Ann Transl Med. 2016 Dec;4(24):532. doi: 10.21037/atm.2016.11.01
IF: 3.62 (85/139)

Outcome of Total Hip and Total Knee Revision Arthroplasty with minor infection criteria: a retrospective matched-pair analysis

Staats K, Kolbitsch P, Sigmund IK, Hobusch GM, Holinka J, Windhager R
Journal of Arthroplasty. 2017 Apr;32(4):1266-1271.
IF: 4.44 (12/86)

Preoperative MRI is helpful but not sufficient to detect comorbidities in patients with chronic ankle instability

Staats K, Sabeti-Aschraf M, Platzgummer H, Puchner SE, Apprich S, Windhager R, Schuh R, Knee Surg Sports Traumatol Arthrosc. 2018 Jul;26(7):2103-2109.
IF: 4.11 (17/86)

Performance of automated multiplex polymerase chain reaction (mPCR) using synovial fluid in the diagnosis of native joint septic arthritis in adults.

Sigmund IK, Holinka J, Sevelde F, **Staats K**, Heisinger S, Kubista B, McNally MA, Windhager R.
Bone Joint J. 2019 Mar;101-B(3):288-296.
IF: 5.36 (7/86)

Distal femoral reconstruction following failed total knee arthroplasty is accompanied with risk for complication and reduced joint function.

Vertesich K, Puchner SE, **Staats K**, Schreiner M, Hipfl C, Kubista B, Holinka J, Windhager R., BMC Musculoskelet Disord. 2019 Jan 31;20(1):47.
IF: 2.56 (44/86)

A comparative study of intraoperative frozen section and alpha defensin lateral flow test in the diagnosis of periprosthetic joint infection.

Sigmund IK, Holinka J, Lang S, Stenicka S, **Staats K**, Hobusch G, Kubista B, Windhager R. Acta Orthop. 2019 Apr;90(2):105-110.
IF: 3.93 (19/86)

Zirconium Nitride Coating Reduced Staphylococcus epidermidis Biofilm Formation on Orthopaedic Implant Surfaces: An In Vitro Study.

Pilz M, **Staats K**, Tobudic S, Assadian O, Presterl E, Windhager R, Holinka J.
Clin Orthop Relat Res. 2018 Nov 8
IF: 4.84 (9/86)

Multiplex PCR Unyvero i60 ITI application improves detection of low-virulent microorganisms in periprosthetic joint infections.

Sigmund IK, Windhager R, Sevelde F, **Staats K**, Puchner SE, Stenicka S, Thalhammer F, Holinka J.; Int Orthop. 2018 Sep 6.
IF: 3.479 (25/86)

Comparison of Plantar Pressure Distribution and Functional Outcome after Scarf and Austin Osteotomy.

Puchner SE, Trnka HJ, Willegger M, **Staats K**, Holinka J, Windhager R, Schuh R.
Orthop Surg. 2018 Aug;10(3):255-263.
IF: 2.27 (51/86)

Megaprosthesis in the treatment of periprosthetic fractures of the knee joint: Indication, technique and review of literature

Windhager R, Schreiner M., **Staats K**, Apprich S
Int Orthop. 2016 May;40(5):935-43.
IF: 3.479 (25/86)

Surgical treatment of shoulder infections: a comparison between arthroscopy and arthrotomy

Boehler C, Pock A, **Staats K**, Koller U, Puchner SE, Holinka J, Windhager R
J Shoulder Elbow Surg. 2017 Nov;26(11):1915-1921.
IF: 3.507 (24/86)

Sonication Cultures Improve The Microbiological Diagnostic In Low-Grade Infection Of Modular Megaprotheses

Puchner SE, **Staats K**, Doehring K, Lass R, Böhler C., Presterl E., Hirschl AM., Windhager R., Holinka J., J Orthop Res. 2017 Jul;35(7):1383-1387.
IF: 3.10 (31/86)

Qualitative α -Defensin test for assessment of PJI in total joint replacement

Sigmund IK, **Staats K**, Gamper J, Kubista B, Boehler C, Holinka J, Windhager R
Bone Joint J. 2017 Jan;99-B(1):66-72.
IF: 5.36 (7/86)