

CV – Steven Andersen

1. Contact data

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2. Education

Dr.med., University of Copenhagen, Denmark. 15 Dec/23
PhD in Clinical Research, University of Copenhagen, Denmark. 5 Jul/16
 o Research attachment (1 mo.) at Center for Surgical Simulation & Innovation, St. Michael's Hospital, University of Toronto, Canada.
Medical Doctor (MD), University of Copenhagen, Denmark. 28 Jun/12
 o Clinical elective (1 mo.) at Dept. of Otolaryngology, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, USA.
Bachelor of Science in Medicine (BSc), University of Copenhagen, Denmark. 10 Jul/09

3. Positions

Post-graduate research positions

Clinical research associate professor Jan/25–[current]
Dept. of Clinical Medicine, University of Copenhagen, Denmark.
Senior researcher (part-time) Oct/22–Dec/24
Head of the Otopathology Lab, research group leader “Temporal Bone Imaging and Simulation”, Copenhagen Hearing and Balance Center, Dept. of Otorhinolaryngology, Rigshospitalet, Copenhagen, Denmark.
External lecturer (part-time) Jun/21–Jun/22
CAMES and Institute for Clinical Medicine, Faculty of Health and Medical Sciences, University of Copenhagen.
International postdoctoral research fellow Jan/19–Dec/20
Outgoing phase: Dept. of Otolaryngology, Nationwide Children's Hospital, the Ohio State University, Columbus, Ohio, USA (15 mo.); return phase: Dept. of Otorhinolaryngology, Rigshospitalet, Denmark (9 mo.).
Postdoctoral research fellow Oct/16–Jan/17; Aug/17–Sep/17
Copenhagen Academy for Medical Education and Simulation (CAMES), Center for HR, Region H.
PhD research fellow Apr/13–Mar/16
Dept. of Otorhinolaryngology, Rigshospitalet.

Post-graduate clinical experience

Specialist (afdelingslæge) Jan/25–[current]
Dept. of Otorhinolaryngology, Rigshospitalet.
Resident/specialist registrar (hoveduddannelse) Jan/21–Dec/24
Dept. of Otorhinolaryngology, North Zealand Hospital, Hillerød (Jan/21–Sep/21); Center for Hearing and Balance, Rigshospitalet (Oct/21–Mar/22); Speciallæge Jesper Micheelsen, Birkerød (Apr/22–Sep/22); Dept. of Otorhinolaryngology, Rigshospitalet (Oct/22–Sep/22); Dept. of Otorhinolaryngology, Zealand University Hospital, Køge (Oct/23–Dec/24).
1st year residency (introduktionsstilling) Oct/17–Dec/18
Dept. of Otorhinolaryngology, Rigshospitalet.
Internship (klinisk basis uddannelse, KBU) Apr/16–Sep/16; Feb/17–Jul/17
Dept. of Orthopaedic Surgery, Hvidovre Hospital; General practice, AmagerCentrets Læger, Copenhagen.
Pre-internship (præ-KBU) Jul/12–Mar/13
Dept. of Haematology, Rigshospitalet (4 mo.); Dept. of Otorhinolaryngology, Rigshospitalet (5 mo.).

4. Other scientific qualifications

Publications: I have contributed to 80 peer-reviewed papers hereof 32 as first author and 38 as last author. I have also contributed to five commentaries, one editorial, three book chapters, three dissection manuals, and free educational resources and software including the Visible Ear Simulator. See the full publication list for details.

Presentations: >15 presentations at international conferences and scientific meetings, >25 presentations and invited talks at national/regional scientific meetings on topics such as patient-specific simulation, evidence-based training, assessment of temporal bone surgery and clinical imaging for example:

- o “The Evolving Role of Cone-Beam CT Imaging in the Head & Neck”. Danish ENT Academy, CAMES, Denmark; 17 Nov/23.
- o “Virtual reality simulation of temporal bone surgery – training and patient-specific simulation”. Klinik und Poliklinik für Hals-Nasen-Ohrenheilkunde “Otto Körner”, Rostock, Germany; 2 May/22.
- o “Evidence-based virtual reality simulation training of temporal bone surgery”. Dept. Otorhinolaryngologie, Hôpitaux Universitaires de Genève, Geneva, Switzerland; 23 Sep/21.
- o “VR temporal bone simulation for training and patient-specific pre-surgical rehearsal”. Nationwide Children's Hospitals symposium on Pediatric Otolaryngology, Columbus, OH, USA, 17 Jan/20.

- “Evidence for VR simulation training of mastoidectomy - and considerations for organization of training”. European Academy of Otolaryngology & Neuro-otology. 9th Instructional Workshop & Consensus on Auditory Implants, Copenhagen, 21 Jun/18.

Funding/grants: *Current grants* (>6 mio DKR) from A.P. Møller Fonden (Fonden til Lægevidenskabens Fremme), Independent Research Fund Denmark (DFF), Novo Nordisk Foundation, Jascha Fonden, Alfred Benzon Foundation – Program for Clinical Research. *Past grants* (>3.5 mio DKR) from Independent Research Fund Denmark (DFF), Ohio State University, Toyota-Foundation Denmark, Teaching Quality Development Fund (HEALTH, Uni. Copenhagen), Oticon Foundation.

Reviewer: *Grant application* review for the Medical Research Council, United Kingdom (Sep/21); KU Leuven (Mar/23; Mar/24), Research and Innovation Foundation, Cyprus (Apr/23). *Scientific conference content* reviewer for the Association for Medical Education in Europe (AMEE) and International Meeting for Simulation in Healthcare (IMSH) conferences (2018–22); >100 *peer reviews* for clinical and medical/surgical education peer-reviewed journals incl. Otolaryngology & Neurotology, the Laryngoscope, Medical Education, and Journal of Surgical Education.

Editorial board member: Journal of Educational Evaluation for Health Professions (2016–18; 2020–) and BMC Medical Education (2023–2024).

5. Academic awards and honors

- **Danish Otolaryngological Society Travel Award 2023.** Danish Otolaryngological Society.
- **Schuknecht and Merchant Travel Award 2019.** The International Otopathology Society Boston.
- **Poul Traun-Pedersens Memorial Prize 2017.** Danish Society for Otorhinolaryngology, Head & Neck Surgery.

6. Management experience (in selection)

Oct 2023– Head of the Otopathology Lab, Copenhagen Hearing and Balance Center, Dept. of ORL, Rigshospitalet.
 2017–2018 Vice-chair, The Danish Society for Medical Education.
 2017–2017 Head of committee for revision of the regional medical internship program, Eastern Denmark Medical Educational Council.
 2015–2018 Member of the educational board, Danish Junior Doctors' Association.
 2015–2017 Board member, webmaster, Danish Society for Medical Education.
 2014–2018 Secretary for the national training courses in otorhinolaryngology, Danish National Board of Health.
 2013–2017 Board of representatives, Danish Junior Doctors' Association.
 2013–2017 Vice-chair, Danish Junior Doctors' Association (regional division).
 2013–2016 Committee member, Graduate Programme in Clinical Research, the PhD School, Faculty of Health & Medical Sciences, University of Copenhagen.

Research project management during my PhD and postdoc fellowships including obtaining funding and supervising research semester medical students and PhD students; now as a research group leader.

Course work: *Research Management and Leadership* (University of Copenhagen, 2013).

7. Scientific focus areas

My research integrates clinical otology/temporal bone surgery, surgical simulation/medical education, and clinical imaging/image processing with the ultimate goal of developing clinical applications for individualized surgical treatment and improved patient outcomes. Key words include virtual reality simulation training of temporal bone surgery, surgical technical skills training and assessment, medical educational learning theory, surgical outcome of otologic surgery, cone-beam CT imaging, 3D-printing, and patient-specific simulation based on clinical imaging.

I head the “Temporal Bone Imaging and Simulation” research group at the Copenhagen Hearing and Balance Center, Dept. of Otorhinolaryngology, Rigshospitalet. Website: <https://www.rigshospitalet.dk/temporal-bone-imaging-and-simulation-research-group>. My research team consists of two postdocs (part-time), four PhD students, one biomedical engineering student, one lab technician, and one 3D-printing technician as well as a number of research students/medical doctors.

8. International relations

International collaboration with Dept. of Otolaryngology, Nationwide Children’s Hospital; Dept. of Otolaryngology, Dept. of Biomedical Informatics, the Ohio State University, Columbus, OH, USA; MCI - Internationale Hochschule, Innsbruck, Austria; Dept. of Otorhinolaryngology, Hôpitaux Universitaires de Genève (HUG), Switzerland. Dept. of Otorhinolaryngology, Head and Neck Surgery, Faculty of Medicine, Carl Gustav Carus, Technische Universität Dresden.

9. Academic supervision

Formal pedagogical/didactic training. Completed the “*Teaching and Learning in Higher Education Programme*” at University of Copenhagen, Denmark (2016–17) and additional courses including “*Supervision of PhD Students*” (2017) and “*Supervision of BSc and MSc students.*” (2017)

Teaching experience includes *undergraduate* teaching in clinical otorhinolaryngology and emergency medicine; *postgraduate/PhD* teaching in “Basic Statistics for Health Researchers”, “How to get clinical research published” and “Applied medical statistics using SPSS” at the PhD School, Faculty of Health and Medical Sciences, Uni. of Copenhagen; *Continuing medical education and specialist training* for national and international trainees in temporal bone surgery.

Supervision. A total of 8 PhD students (6 as daily supervisor): 5 ongoing and 3 completed; a total of 16 research year/Master’s students, 2 Bachelor students, and post-graduate research training of 5 MDs; mentoring of 4 postdocs. See teaching portfolio.