

ANNUAL REPORT 2021

ORL RESEARCH



Table of contents

Welcome	2
Organisation and employees (end 2021)	3
Collaboration and memberships	4
7 PhD projects	9
2 Completed PhD projects in 2021	10
Supervision – summary 2021	12
2 Master theses; Medical students	13
16 Master theses; Audiology	13
22 Bachelor projects; Audiology	15
Teaching	17
Teaching in 3 educations (bachelor and master)	17
Supervision	19
A list of the courses in which ORL participate	19
33 Publications	21
Impact factor (IF) and BFI 2017-2021	27
Scientific meetings	28
Benchmarking analysis with other institutes	28
Publications by research areas 2016-2021	29
Benchmarking on Field Weighted Citation Impact 2016-2021	30
Publications in top 10% journal percentiles	30
Development in nursing	31
Funding	32
Contact information	34

Welcome

The annual report from the Research Unit at the Department of ORL - Head & Neck Surgery and Audiology at University of Southern Denmark (SDU) and Odense University Hospital (OUH) provides a brief overview of research activities and perspectives such as projects, teaching, supervision, funding, publications, and scientific meetings.

Our research mainly focuses on head and neck cancer, vascular malformations, rhinology, laryngology and audiology. Our vision is:

By multidisciplinary research for and with patients, we aim to improve diagnosis, treatment and rehabilitation in the field of ORL Head & Neck Surgery and Audiology

In 2021, 1 new assistant professor in audiology and 1 postdoc was employed, 1 new PhD project was initiated, and 2 PhD projects were completed. We have published 33 peer-reviewed articles, including 1 high impact factor article in BMJ (impact factor 39.890). The result of the article got a lot of media coverage. The study found transportation noise to be associated with a higher risk of all cause dementia and dementia subtypes, especially Alzheimer's disease.

We have received funding of 4 million DKK (external funding of 1.8 million DKK and internal funding of 2.2 million DKK).

I would like to thank all researchers, employees and collaborators for their contributions, enthusiasm and commitment in our research unit providing a high standard and invaluable effort.

Enjoy the reading!



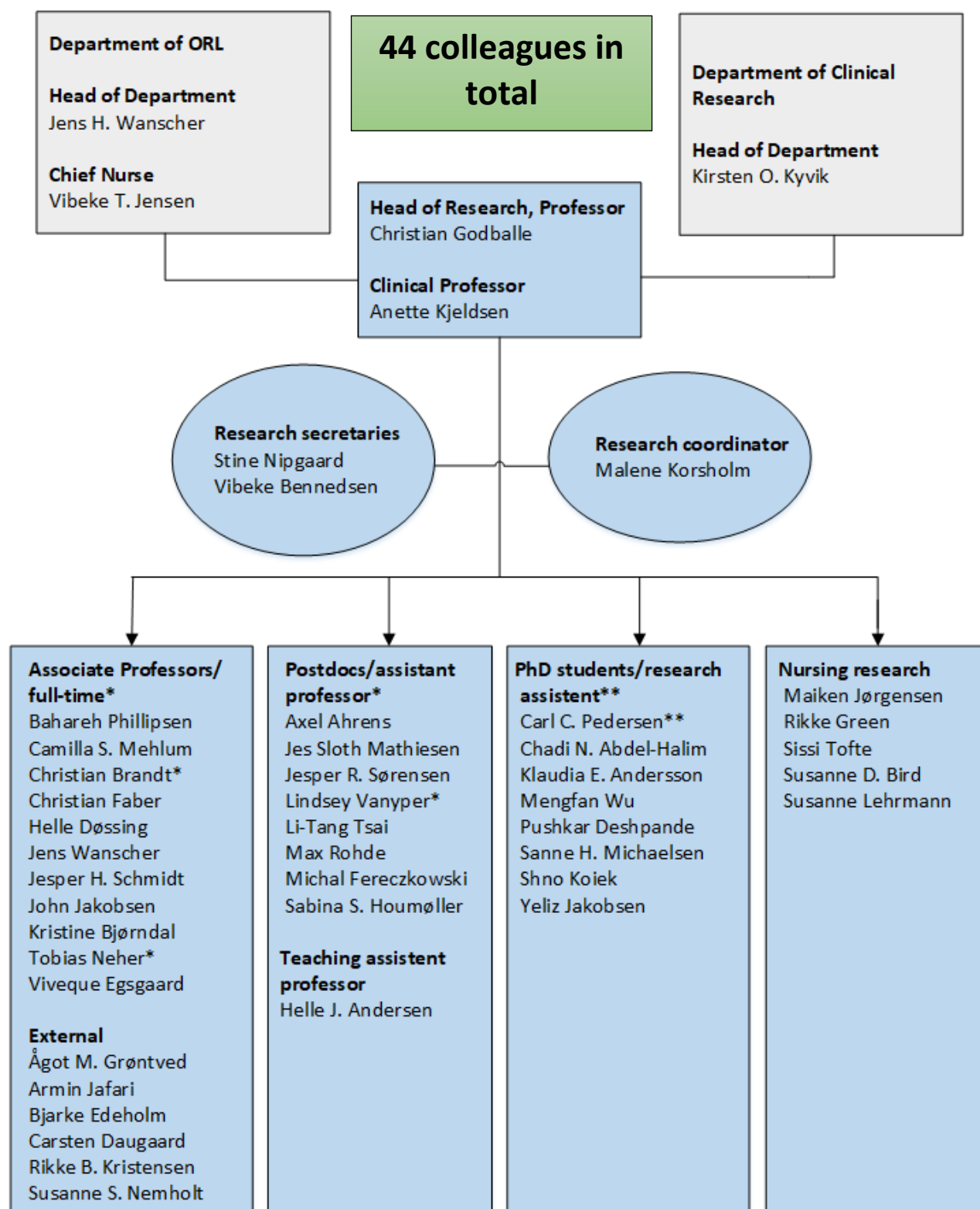
Professor & Head of Research and
Head of Graduate School,
Faculty of Health Sciences Research, SDU



Organisation and employees (end 2021)

Our research unit is a part of both Odense University Hospital – Svendborg Hospital (OUH) and the Department of Clinical Research, University of Southern Denmark (SDU) headed by Professor Christian Godballe.

The unit consisted in the end of 2021 of 44 dedicated employees and researchers as well as talented postdocs, PhD students, and undergraduate students.



Collaboration and memberships

The Research Unit at the Department of ORL—Head & Neck Surgery and Audiology acknowledges the great importance of local, regional, national, and international cooperation in research.

Our organizational structure, as a part of Odense University Hospital and the University of Southern Denmark, provides great opportunities for interdisciplinary collaborations with other departments and institutes. Moreover, we take part in several national research projects in which collaboration with departments at other hospitals is essential.

Our adjunct professor Hisham Mehanna PhD, BMedSc, MBChB, FRCS, FRCS (ORL-HNS) from Birmingham offers great opportunities for scientific collaboration within the field of head and neck cancer. A recent publication of the Odense – Birmingham model for definition of locally recurrent head and neck cancer confirms this collaboration.

Professor Anette D. Kjeldsen is the Danish chair of the participation in the ERN European Reference Network VASCERN. She participate in the Hereditary Haemorrhagic Telangiectasia (HHT-WG) – VASCERN and collaborate on clinical guidelines, research and education with the other VASCERN members and is member of Cure HHT Advisory Board. She also participate in the Editorial Board of the scientific journal Rhinology and collaborate, and has contributed to EPOS 2020: The European Position Paper on Rhinosinusitis and Nasal Polyps.

The Technical Audiology Section is currently collaborating with colleagues from Macquarie University, Sydney, Australia (Prof. Harvey Dillon), Oldenburg University, Oldenburg, Germany (Prof. Stefan Debener), Boston University, Boston, USA (Prof. Virginia Best), Technische Hochschule Lübeck, Lübeck, Germany (Prof. Tim Jürgens), and Deutsches Hörgeräte Institut, Lübeck, Germany (Dr. Hendrik Husstedt). The collaborations are in the context of ongoing PhD and post-doc projects in the fields of hearing diagnostics and hearing-aid treatment.

As part of the International Pheochromocytoma and Pregnancy Study Group, Jes Sloth Mathiesen (MD, PhD, Postdoc) contributed to the 2021 Lancet Diabetes Endocrinol paper on maternal and fetal outcome in pheochromocytoma and pregnancy. The study was conducted in collaboration with numerous centers around the world with the principal investigator being Dr. Irina Bancos from Mayo Clinic, USA, and Professor Hartmut Neumann from Freiburg, Germany.

We have a collaboration with Professor Vincent van der Poorten, Department of Otorhinolaryngology, Head and Neck Surgery at the University Hospitals Leuven, regarding salivary gland carcinoma. Kristine Bjørndal, Christian Godballe and Marie Westergaard-Nielsen have recently published the article “Prognostic scoring models in parotid gland carcinoma” in the journal Head and Neck (March 2021) where they tested a prognostic system developed by Professor van der Poorten.

Christian Godballe (MD, PhD, Professor)

- Board member of Danish Society for Otolaryngology, Head and Neck Surgery (DSOHH)
- Board member of the Danish Head and Neck Cancer Group (DAHANCA)
- Chairman of the The Danish Thyroid Cancer Study Group (DATHYRCA)
- Chairman in collaboration with Professor Steen J. Bonnema of the Danish Thyroid Surgery Quality Register (THYKIR)
- Member of Scandinavian Society for Head and Neck Cancer
- Member of Editorial Board in European Archives of Oto-Rhino-Laryngology (EAORL)
- Member of the Research Council, OUH

Anette Kjeldsen (MD, PhD, Professor)

- Member of the Editorial Board, Rhinology online
- Member of the HHT group in the Rare Vascular Diseases European Reference Network (VascERN)
- Member of the Cure HHT Scientific Board
- Member of the Danish steering group regarding the registration of biological treatment in patients with severe chronic rhinosinusitis
- Member of the Danish Society for Otolaryngology, Head and Neck Surgery (DSOHH)
- Member of the Danish Medical Council, Biological treatment of nasal polyposis

Bahareh Bakshaie Philipsen (MD, Associate professor)

- Deputy Chairman of the Danish Society for Dysphagia
- Member of the Organization of the Danish Medical Societies (LVS)
- Member of Danish Society for Otolaryngology, Head and Neck Surgery (DSOHH)
- Member of the Danish Society for Laryngology (DLS)

Bibi Lange (MD, PhD)

- Secretary of the Danish Society for Rhinology (DRS)
- Member of Danish Society for Otolaryngology, Head and Neck Surgery (DSOHH)
- Member of European Rhinologic Society (ERS)

Camilla Slot Mehlum (MD, PhD, Associate professor)

- Chairman of the Danish Laryngological Society for (DLS)
- Member of Danish Society for Otolaryngology, Head and Neck Surgery (DSOHH)
- Member of the European Laryngological Society (ELS)

Christian Brandt (Cand.scient., PhD, Associate professor)

- Member of the Auditory Processing Disorder Group
- Member of the Danish Technical Audiological Society (DTAS)

Helle Døssing (MD, PhD, Associate professor)

- Deputy chairman of the Danish Society for Otolaryngology, Head and Neck Surgery (DSOHH)

Jens H. Wanscher (MD, Associate professor)

- Member of the Danish Society for Vestibulology
- Member of Danish Society for Otolaryngology, Head and Neck Surgery (DSOHH)
- Member of Danish Otosurgical Society
- Chairman of H.C. Andersens hospital of pediatric surgery, OUH

Jes Sloth Mathiesen (MD, PhD, Postdoc)

- National Treatment Guideline on Multiple Endocrine Neoplasia under the Danish Endocrine Society
- Member of the Danish Society for Otolaryngology, Head and Neck Surgery (DSOHH)
- Member of the Danish Society for Head and Neck Surgery (DHHKS)
- Member of the Danish Endocrinological Society (DES)

Jesper H. Schmidt (MD, PhD, Associate professor)

- Member of the Danish Medical Audiological Society
- Member of the Danish Society for Vestibulology

- Member of the Danish Society for Otolaryngology, Head and Neck Surgery (DSOHH)
- Member of the Danish Acoustic Society
- Member of association for Research in Otolaryngology (ARO)

Kristine Bjørndal (MD, PhD, Associate professor)

- Board member of the Danish Society for Head and Neck Surgery (DHHKS)
- Board member of the Scandinavian Society for Head and Neck Oncology (SSHNO)
- Member of the Danish Society for Head and Neck Oncology (DSHHO)
- Member of Danish Society for Otolaryngology, Head and Neck Surgery (DSOHH)
- Member of the Danish Head and Neck Cancer Group (DAHANCA)

Marie Westergaard-Nielsen (MD, PhD)

- Member of the Danish Society for Head and Neck Oncology (DSHHO)

Max Rohde (MD, PhD, Postdoc)

- Member of the Danish Society for Head and Neck Surgery (DHHKS)
- Member of the Scandinavian Society for Head and Neck Oncology (SSHNO)
- Member of Danish Society for Otolaryngology, Head and Neck Surgery (DSOHH)

Tobias Neher (PhD, Associate professor)

- Member of the Danish Technical Audiological Society (DTAS)
- Member of the German Audiological Society (DGA)
- Member of the DGA technical committee 'Hearing aid technology and fitting'
- Danish representative in the European Federation of Audiology Societies (EFAS)
- Member of the EFAS working group 'Audiology Education'
- Member of the Association for Research in Otolaryngology (ARO)
- Technical co-chair for the 2022 International Hearing Aid Research Conference (IHCON),
Lake Tahoe, USA
- Member of the Editorial Board for 'Audiology Research'
- Guest Section Editor for 'Ear & Hearing'

Viveque Egsgaard (MD, PhD, Associate professor)

- Member of the Danish Society for Head and Neck Surgery (DHHKS)

- Member of the Danish Society for Otolaryngology, Head and Neck Surgery (DSOHH)
- Member of the Danish Society for Laryngology (DLS)
- Member of the Danish Endocrinological Society (DES)

Ågot Møller Grøntved (MD, PhD, Associate professor,)

- Honorary member of the Danish Society for Laryngology (DLS)
- Member of the Working Group for Future Hearing Rehabilitation

7 PhD projects

Investigating speech-in-noise outcome in older hearing-aid users using auditory profiling"

Mengfan Wu, MA Linguistics, PhD student

Main supervisor: Tobias Neher

Hearing disorder in children with a history of middle-ear diseases: Diagnosis, prevalence, persistence and hearing-aid treatment

Shno Koiek, Audiologist, PhD student

Main supervisor: Tobias Neher

The Diagnostic Value of ¹⁸F-FDG-PET/MRI in Regional Head and Neck Squamous Cell Carcinoma

Chadi Nimeh Abdel-Halim, MD, PhD student

Main supervisor: Christian Godballe

Cortical reorganization in novice hearing aid and cochlear implant users: Cross-sectional comparison and longitudinal changes

Pushkar Deshpande, BSc Audiology and Speech Language Pathology, MSc Biomedical Engineering

Principal supervisor: Tobias Neher

Hearing-health behavior and real-world hearing-aid outcome in children and adults Klaudia E.

Andersson, MSc Audiology, PhD student

Main supervisor: Tobias Neher

Benefits from bimodal fittings with cochlear implants and hearing aids vs bilateral hearing aids in patients with asymmetric speech identification scores: a randomized controlled trial

Yeliz Jakobsen, MD, PhD student

Main supervisor: Jesper Hvass Schmidt

Surgeon performed imaging of the parathyroid glands in a pre- and perioperative setting

Sanne H. Michaelsen, MD, PhD student (start 01.10.21)

Main supervisor: Christian Godballe

2 Completed PhD projects in 2021

1. Salivary gland carcinoma in Denmark 1990-2015: A national study with focus on diagnostic imaging, surgical treatment of the neck and prognosis

Marie Westergaard-Nielsen, MD

Main supervisor: Associate professor Kristine Bjørndal

Committee of Examiners:

MD, PhD, Postdocoral fellow Johanna Sjövall,
Department of Otorhinolaryngology, Head and Neck Cancer Research Group,
Lund University Hospital, Lund, Sweden

MD, PhD Anita Birgitte Gothelf,
Department of Oncology, Copenhagen University Hospital, Copenhagen, Denmark

MD, PhD, Associate Professor Peter Schousboe, (chairman)
Department of Otorhinolaryngology, Sygehus Lillebælt, Vejle, Denmark

Defence: March 12th 2021



2. Self-reported hearing aid effectiveness in patients with age-related hearing loss

Sabina S. Houmøller, Audiologist

Main supervisor: Associate Professor Jesper H. Schmidt

Committee of Examiners:

Associate Professor AuD, PhD Jani Annette Johnsson

School of Communication Science and Disorders, The University of Memphis

Associate Professor, PhD Jonas Brännström

Logopedics, Phoniatrics, Audiology, Lund University

Associate Professor, M.D. Knud Larsen, Oto-rhino-laryngology (chairman)

Sydvestjysk Sygehus Esbjerg, SDU

Defence: June 22th 2021



Supervision – summary 2021

Master thesis; Medical students: 3/*3 (2)

Master thesis; Audiology: 16/*20 (12)

Bachelor projects; Audiology: 22/*26 (13)

No. of projects in 2021/*no. of students (no. of projects in 2020)

	Supervision	Administrative tasks/ Preparation e.g.
	Hours	Hours
Medicine	20	116
Audiology	176	300
Audiologopedics	26	0
In total	222	416

2 Master theses; Medical students

Degree of implementation of the European Reference Network for Rare Vascular Diseases' recommendation on iron deficiency monitoring in patients with Hereditary Hemorrhagic Telangiectasia

- Student: Troels Graunbøl Hvelplund (Research profile)
- Supervisor: Anette D. Kjeldsen

(Publication at "Orphanet Journal of Rare Diseases" January 2022)

Squamous cell carcinoma in the nasal vestibule: A single centre quality study?

- Student: Mads Skou Tiddy (Clinic profile)
- Supervisor: Peter Darling and Christian Godballe

Incidence of infections after rhinoplastic/septum- or sinus surgery

- Student: Madeleine Mæland (Clinic profile)
- Supervisor: Anette D. Kjeldsen

16 Master theses; Audiology

Health-based learning material to prevent tinnitus for children and youth in 6th to 9th grade

- Student: Rikke Bjerregaard
- Supervisor: Gitte Rasmussen

Word recognition compared to conversation understanding in relation to visual benefit and working memory for normal hearing

- Student: Simon Blanco Lon With
- Supervisor: Tobias Neher

Hearing aid user satisfaction with their treatment within the Region of Southern Denmark

- Student: Lisette Precht Rahbek & Sofie Wedel Bay
- Supervisor: Carsten Daugaard

Speech-evoked cortical responses in normal hearing listeners and experienced hearing-aid users

- Student: Louise Plougheld & Vivi Tran
- Supervisor: Tobias Neher

User operated audiometry in Danish hearing clinics - for or against?

- Student: Louise Thygesen Smidt
- Supervisor: Jesper Schmidt

Evaluation of DANLYT: A self-learning tool for professionals using sound scoring in speech audiometry

- Student: Mathies Hartmann
- Supervisor: Ellen Raben Pedersen

Further development of a Danish test material for assessing speech-in-noise reception in school-age children

- Student: Signe Hjorth Fogh
- Supervisor: Tobias Neher

The way through CI-treatment

- Student: Tanja Eilsø Sørensen
- Supervisor: Gitte Rasmussen

Tolerable environments and mapping to EMA rating scales

- Student: Azra Bajric & Vithusha Yogagananam
- Supervisor: Carsten Daugaard

An insight into life with Sudden Deafness. A qualitative study of the psychosocial aspects in Sudden Idiopathic Sensorineural Hearing Loss (ISSNHL)

- Student: Celine Rose Beck
- Supervisor: Gitte Rasmussen

Objective measures at University of Southern Denmark to clarify the acoustics in classrooms

- Student: Emma From Sørensen
- Supervisor: Christian Brandt

Evaluation of an indirect and a direct method for comparing two hearing-aid programs in daily life

- Student: Nicoline Gotholt Madsen
- Supervisor: Tobias Neher

Autist's perception of sound and remedying their hearing loss

- Student: Fatme Abdul-Hadi Osman
- Supervisor: Carsten Daugaard

Real Ear Measurement: does it make a difference for the hearing aid users listening experience?

- Student: Pernille Edel Guldbrandine Bayley
- Supervisor: Carsten Daugaard

Comparing Pure-tone Audiometry with Auditory Steady State Response using NB CE-Chirp on awake adults

- Student: Hani Abdullahi Warsame & Soraya Abdi Muse Shil
- Supervisor: Carsten Daugaard

Working Memory Size and Speech Perception in Noise: A Comparative Study in Adults with Autism Spectrum Disorder

- Student: René Gyldenlund Pedersen
- Supervisor: Christian Brandt/Ellen Raben Pedersen

22 Bachelor projects; Audiology

A study of the relationship between sound pressure and EMA score in normal hearing

- Student: Tobias Holm Krab
- Supervisor: Tobias Neher

Active and Passive Attenuation in Headphones

- Student: Alexander Wædeled
- Supervisor: Carsten Daugaard

Adolescents' usage of loud music through headphones, as well as the potential damage it can cause, is being examined

- Student: Sowmeya Vasantharasa
- Supervisor: Bjarke Edholm

Auditory neuropathy spectrum disorder and the effect of CI

- Student: Kenneth Meilstrup Jacobsen
- Supervisor: Bjarke Edholm

Auditory Processing Disorder in adults

- Student: Assia Abdul El-Jomaa
- Supervisor: Sabina Storbjerg Houmøller

Binaural speech comprehension in noise in school-children and young adults

- Student: Lamies Ahmed Abdalla
- Supervisor: Tobias Neher

Cochlear implant users perception of musical sound quality - A systematic review

- Student: Sebastian Greis Andersen
- Supervisor: Carsten Daugaard

Direction determination with normal and deformed outer ears

- Students: Katja Jensen & Thu Hien Pham
- Supervisor: Christian Brandt

Hearing loss caused by meningitis and the outcome of CI as a treatment option

- Students: Dienussha Thevarajah & Sujaany Pathmanathan
- Supervisor: Bjarke Edholm

Hyperacusis

- Student: Özlem Ziyank
- Supervisor: Christian Brandt

Literature review and the Danish translation of the hyperacusis questionnaire

- Student: Hafsa Adan
- Supervisor: Christian Brandt

Measurable and audible differences between programs in a hearing aid

- Student: Martin Christiansen
- Supervisor: Carsten Daugaard

Motivation for hearing aid treatment

- Student: Emma Clemmensen
- Supervisor: Carsten Daugaard

Noise and how it affects kindergarden/preschool-children

- Student: Jenni Jeyakumar
- Supervisor: Carsten Daugaard

Noise in Danish Police Force

- Student: Christina Cramer
- Supervisor: Bjarke Edholm

Research study of the correlation between heart rate and subjective assessments to sound in everyday life

- Student: Line Louise Aaberg Nielsen
- Supervisor: Tobias Neher

Speech recognition at high levels in normal hearing listeners: Evidence for roll-over effect?

- Student: Benedikte Degn Mikkelsen
- Supervisor: Tobias Neher

Speech recognition in simulated spatialized noise: Comparison between normal of hearing adults with an Autism Spectrum Disorder and a control group

- Student: Anna Hae Jin Jessen
- Supervisor: Christian Brandt

The wants of Danish hearing device users regarding future research and development in the hearing care system - A questionnaire

- Student: Ann Schøler Raadahl Hermansen & Sofie Høegh Hindsgaul
- Supervisor: Christian Brandt

Tinnitus and Quality of Life

- Student: Hanin El-Habet & Somayeh Safar
- Supervisor: Christian Faber

Treatment measures for otitis media

- Student: Simon Woo Trane Eriksen
- Supervisor: Bjarke Edholm

Unwanted sound from a bone conduction transducer

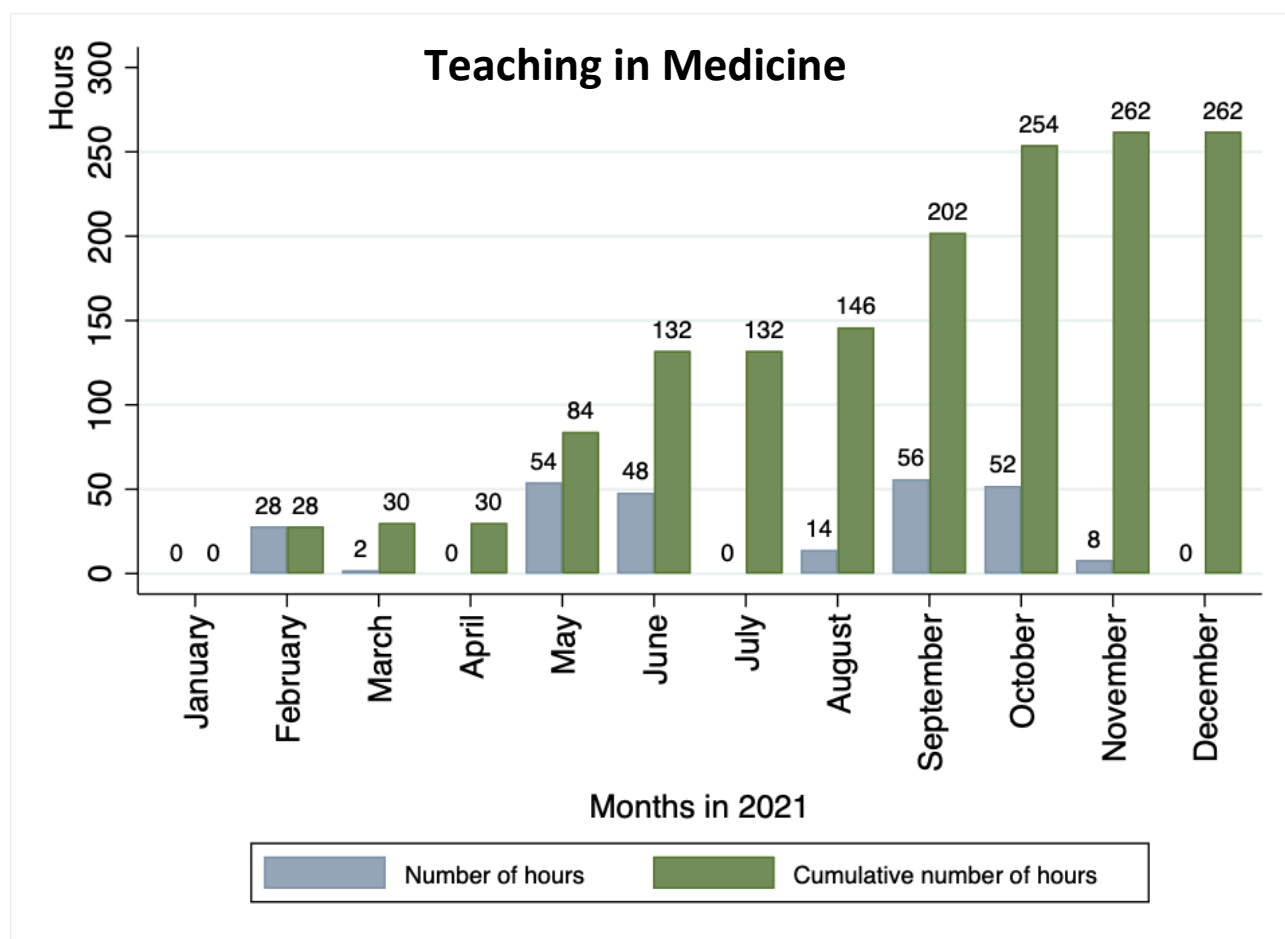
- Student: Melanie Højholdt Christensen
- Supervisor: Christian Brandt

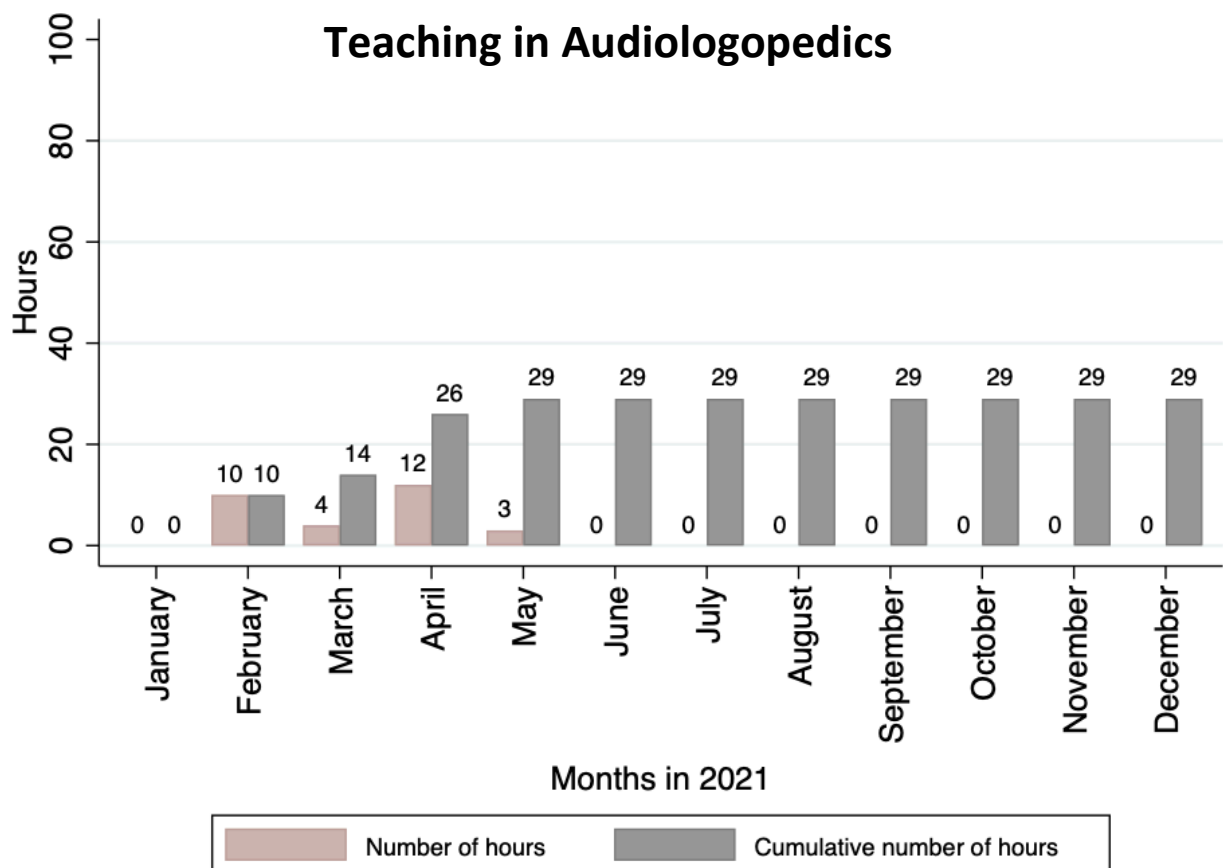
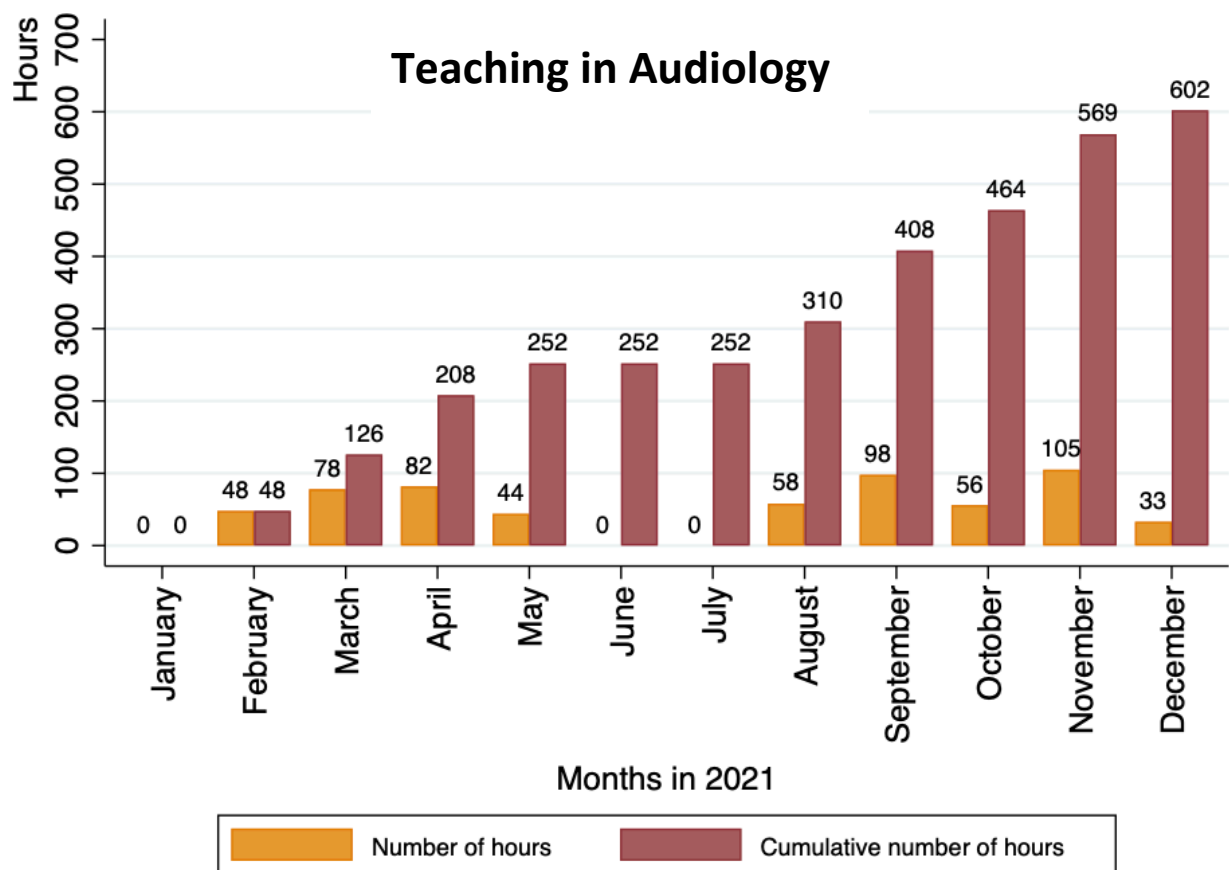
Teaching

Teaching in 3 educations (bachelor and master)

- Medicine
- Audiology
- Audiologopedics

Hours used for examinations and assignment corrections are not included in the following figures





Supervision

- Bachelor, master, PhD (3 educations)

A list of the courses in which ORL participate

Medical training

- Module B7
- Module K1
- Module K3
- Module K10

Audiology

Audiology

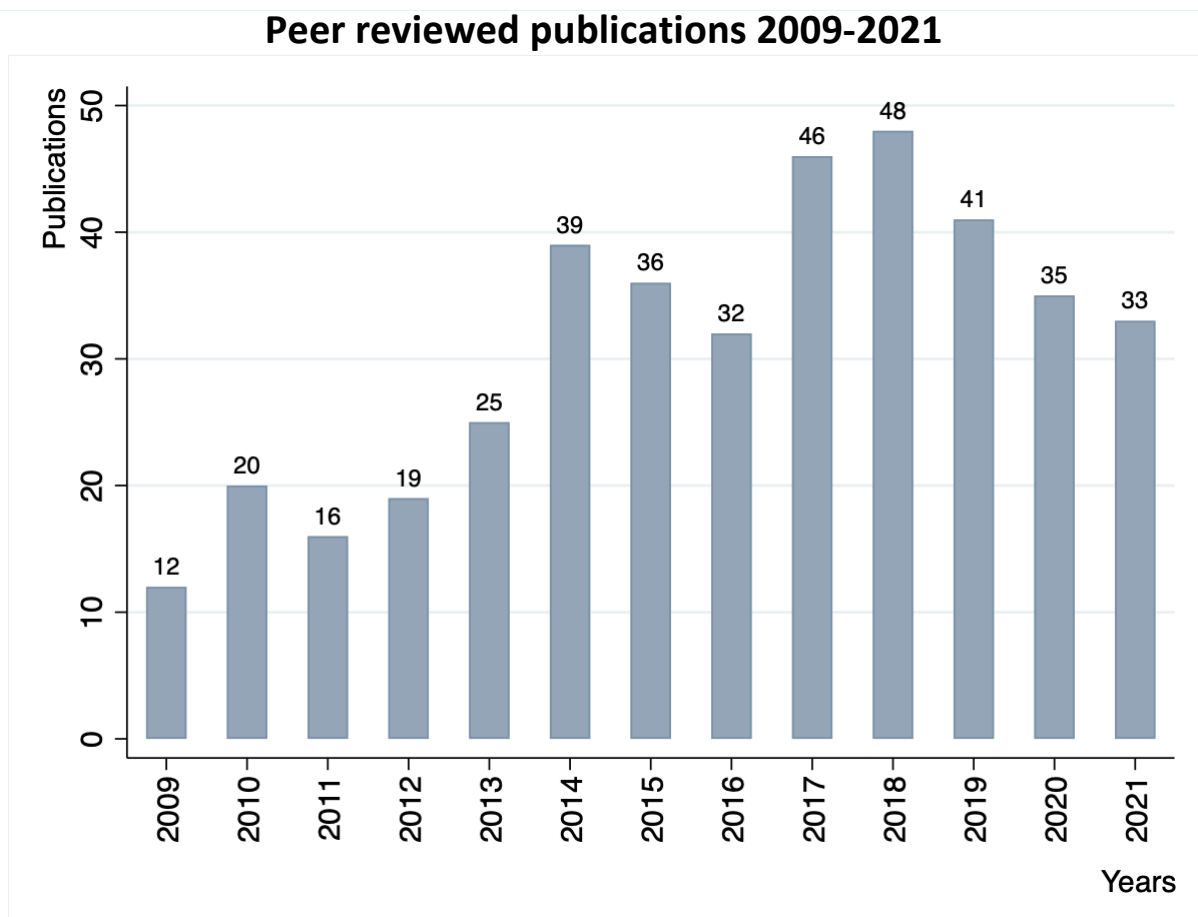
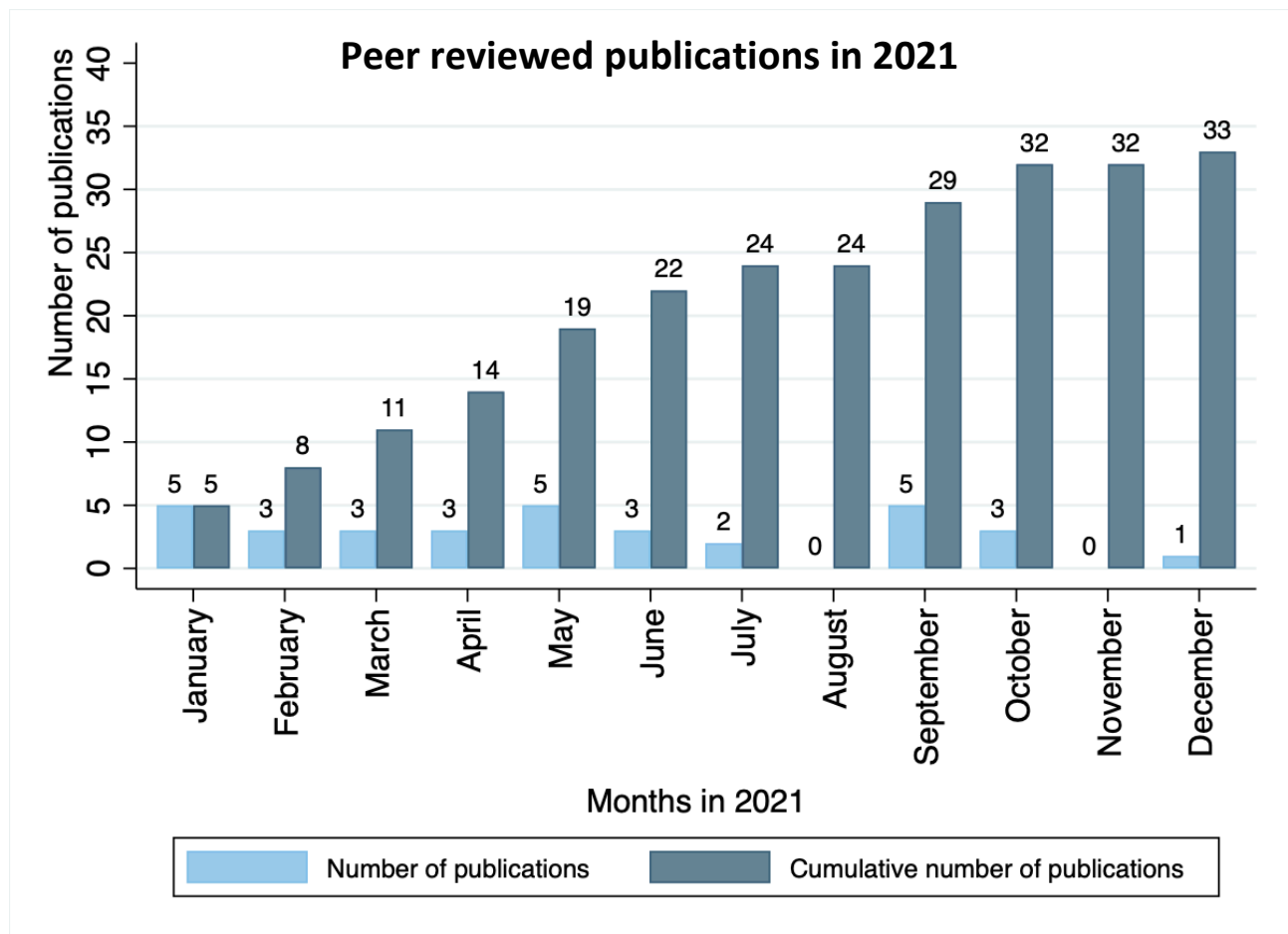
- Introduction to Audiologists
- Mathematics for Audiologists
- Anatomy and Physiology I-II
- Medical Audiology I-III
- Audiological Measurements I and Hearing Aid Treatment I
- Hearing Aid Treatment II-III
- Project-oriented course I-II
- Clinical Practice
- Otomicroscopy and Videotoscopy in Clinical Practice
- Psychoacoustics
- Cochlear Implant
- Pediatric Audiology
- Prophylactic Audiology
- Advanced Audiological Measurement Methods
- Advanced Hearing Aid Technology

- Tinnitus and hyperacusis
- Current Topics in Hearing Aid Research
- Clinical Audiological Practice
- Patient Contact in Audiology Clinic
- Project-oriented course

Audiologopedics

- Anatomy and Physiology I-II
- Medical Audiology
- Voice Disorders
- Tinnitus and hyperacusis

33 Publications



1. Associations between objectively measured physical activity, sedentary behaviour and time in bed among 75+ community-dwelling Danish older adults

Li-Tang Tsai, Eleanor Boyle, Jan C Brønd, Gry Kock, Mathias Skjødt, Lars G Hvid, Paolo Caserotti
BMC Geriatrics (Impact factor 3.020), January 14, 2021. BFI 1

2. Towards Auditory Profile-Based Hearing-Aid Fitting: Fitting Rationale and Pilot Evaluation

Raul Sanchez-Lopez, Michal Fereczkowski, Sébastien Santurette, Torsten Dau, Tobias Neher
Audiology Research (Impact factor 1.000), January 16, 2021.

3. Three auditory brainstem response (ABR) methods tested and compared in two anuran species

Tanya B Lauridsen, Christian Brandt, Jakob Christensen-Dalsgaard
Journal of Experimental Biology (Impact factor 3.014), January 19, 2021. BFI 2

4. Diagnostic accuracy of imaging modalities in detection of histopathological extranodal extension: A systematic review and meta-analysis

Chadi Nimeh Abdel-Halim, Tine Rosenberg, Anne-Kirstine Dyrvig, Poul Flemming Høilund-Carlsen, Jens Ahm Sørensen, Max Rohde, Christian Godballe
Oral Oncology (Impact factor 3.979), January 22, 2021. BFI 1

5. Confidence Limits of Word Identification Scores Derived Using Nonlinear Quantile Regression

Vijaya K Narne, Sören Möller, Anne Wolff, Sabina S Houmøller, Gérard Loquet, Dorte Hammershøi, Jesper H. Schmidt
Trends in Hearing (Impact factor 3.293), January 25, 2021. BFI 1

6. Microbiology of parapharyngeal abscesses in adults: in search of the significant pathogens

Tejs Ehlers Klug, Thomas Greve, Camilla Andersen, Pernille Hahn, Christian Danstrup, Niels Krintel Petersen, Mirjana Ninn-Pedersen, Sophie Mikkelsen, Søren Pauli, Simon Fuglsang, Helle Døssing, Anne-Louise Christensen, Maria Rusan, Anette Kjeldsen
European Journal of Clinical Microbiology & Infectious Diseases (Impact factor 2.837), February 1, 2021. BFI 1

7. Incidence and survival of salivary gland cancer in children and young adults in Denmark: A nation-wide study for the period 1990-2015

Jakob Schmidt Jensen, Christian Grønhøj, Martin Garset-Zamani, Marie Westergaard-Nielsen, Kristine Bjørndal, Katalin Kiss, Birgitte Charabi, Christian von Buchwald, Thomas Hjuler
International Journal of Pediatric Otorhinolaryngology (Impact factor 1.241), February 1, 2021. BFI 1

8. Sinonasal cancer in Denmark 2008-2015: a population-based phase-4 cohort study from DAHANCA

Mads V Filtenborg, Jacob K Lilja-Fischer, Maja B Sharma, Hanne Primdahl, Julie Kjems, Christina C Plaschke, Irene Wessel, Claus A Kristensen, Maria Andersen, Elo Andersen, **Christian Godballe**, Jørgen Johansen, Jens Overgaard, Kristian B Petersen

Acta Oncologica (Impact factor 3.298), February 5, 2021. BFI 1

9. Risk-stratification of thyroid nodules examined by ¹⁸ FDG-PET/CT while ensuring congruity between imaging and histopathological localization

Peter Bakkegaard, Stefano Christian Londero, Steen Joop Bonnema, **Viveque Egsgaard Nielsen**, Marie Louise Jespersen, Kristine Zøylner Swan

European Archives of Oto-Rhino-Laryngology (Impact factor 1.809), March 13, 2021. BFI 1

10. Prognostic scoring models in parotid gland carcinoma

Marie Westergaard-Nielsen, Sören Möller, **Christian Godballe**, Jesper Grau Eriksen, Stine Rosenkilde Larsen, Katalin Kiss, Tina Agander, Benedicte Parm Ulhøi, Birgitte Charabi, Tejs Ehlers Klug, Henrik Jacobsen, Jørgen Johansen, Claus Andrup Kristensen, Elo Andersen, Maria Andersen, **Kristine Bjørndal**.

Head & Neck (Impact factor 3.147), March 18, 2021. BFI 2

11. Surgical treatment of the neck in patients with salivary gland carcinoma

Marie Westergaard-Nielsen, **Christian Godballe**, Jesper Grau Eriksen, Stine Rosenkilde Larsen, Katalin Kiss, Tina Agander, Benedicte Parm Ulhøi, Birgitte Wittenborg Charabi, Tejs Ehlers Klug, Henrik Jacobsen, Jørgen Johansen, Claus Andrup Kristensen, Elo Andersen, Maria Andersen, **Kristine Bjørndal**

Head & Neck (Impact factor 3.147), March 18, 2021. BFI 2

12. Multiple endocrine neoplasia type 2: A review

Jes Sloth Mathiesen, Grigoris Effraimidis, Maria Rossing, Åse Krogh Rasmussen, Lise Hoejberg, Lars Bastholt, **Christian Godballe**, Peter Oturai, Ulla Feldt-Rasmussen

Seminars in Cancer Biology (Impact factor 11.090), April 1, 2021. BFI 2

13. Comparison of Behavioral and Physiological Measures of the Status of the Cochlear Nonlinearity

Michal Fereczkowski, Torsten Dau, Ewen N MacDonald

Trends in Hearing (Impact factor 3.293), April 20, 2021. BFI 1

14. Epithelial ovarian cancer and the use of circulating tumor DNA: A systematic review

Christine Fribert Thusgaard, **Malene Korsholm**, Kristina Magaard Koldby, Torben A Kruse, Mads Thomassen, Kirsten Marie Jochumsen

Gynecologic Oncology (Impact factor 4.623), April 21, 2021. BFI 1

15. Screening for cerebrale arteriovenøse malformationer ved mb. Osler

Simon Kjær Simonsen, Troels Halfeld Nielsen, Rikke Beese Dalby, Annette Dam Fialla, **Bibi Lange**, Pernille Mathiesen Tørring, Anabel Diaz, **Anette Drøhse Kjeldsen**
Ugeskrift for Læger (Impact factor 1.22), May 17, 2021. BFI 1

16. Effects of Noise and Second Language on Conversational Dynamics in Task Dialogue

Josefine Munch Sørensen, **Michal Fereczkowski**, Ewen N. MacDonald
Trends in Hearing (Impact factor 3.293), May 22, 2021. BFI 1

17. Successful treatment of massive haemoptysis in a young woman with anastomosis of right internal mammary artery to right superior pulmonary vein fistula

Thor Bechsgaard, Annette Midtgaard, Erik Jakobsen, **Anette Drøhse Kjeldsen**
BMJ Case Reports (Impact factor 0.48), May 25, 2021. BFI 1

18. Normative Voice Range Profile of the Young Female Voice

Henriette Sune Andersen, Mia Hungeberg Egsgaard, Helena Rask Ringsted, **Ågot Møller Grøntved**, **Christian Godballe**, **Trine Printz**
Journal of Voice (Impact factor 1.903), May 25, 2021. BFI 1

19. Prediction of successful hearing aid treatment in first-time and experienced hearing aid users: Using the International Outcome Inventory for Hearing Aids

Sabina S Houmøller, A Wolff, S Möller, Vijaya K Narne, S K Narayanan, **Christian Godballe**, D D Hougaard, G Loquet, M Gaihede, D Hammershøj, **Jesper H Schmidt**
International Journal of Audiology (Impact factor 1.832), May 25, 2021. BFI 2

20. Contribution of Ionotropic Glutamatergic Receptors to Excitability and Attentional Signals in Macaque Frontal Eye Field

Miguel Dasilva, **Christian Brandt**, Marc Alwin Gieselmann, Claudia Distler, Alexander Thiele
Cerebral Cortex (Impact factor 5.043), June 10, 2021. BFI 2

21. Reply to Letter to the Editor regarding “Elective neck dissection and its extent in Salivary gland cancers: A Dilemma”

Marie Westergaard-Nielsen, **Christian Godballe**, Jesper Grau Eriksen, Stine Rosenkilde Larsen, Katalin Kiss, Tina Agander, Benedicte Parm Ulhøj, Birgitte Wittenborg Charabi, Tejs Ehlers Klug, Henrik Jacobsen, Jørgen Johansen, Claus Andrup Kristensen, Elo Andersen, Maria Andersen, **Kristine Bjørndal**
Head & Neck (Impact factor 3.147), June 18, 2021. BFI 2

22. Influence of Three Auditory Profiles on Aided Speech Perception in Different Noise Scenarios

Mengfan Wu, Oscar M Cañete, **Jesper Hvass Schmidt**, **Michal Fereczkowski**, **Tobias Neher**
Trends in Hearing (Impact factor 3.293), June 29, 2021. BFI 1

23. Clinical evaluation of antibiotic regimens in patients with surgically verified parapharyngeal abscess: a prospective observational study

Tejs Ehlers Klug, Camilla Andersen, Pernille Hahn, Christian Sander Danstrup, Niels Krintel Petersen, Sophie Mikkelsen, **Helle Døssing**, Anne-Louise Christensen, Maria Rusan, **Anette Kjeldsen**, Thomas Greve

European Archives of Oto-Rhino-Laryngology (Impact factor 1.809), July 1, 2021. BFI 1

24. Post robotic investment: Cost consequences and impact on length of stay for obese women with endometrial cancer

Malene Korsholm, Dorte Gyrd-Hansen, Ole Mogensen, Sören Möller, Siv L Jørgensen, Pernille T Jensen

Acta Obstetricia et Gynecologica Scandinavica (Impact factor 3.636), July 29, 2021. BFI 1

25. Dynamics of circulating dendritic cells and cytokines after kidney transplantation – no effect of remote ischaemic conditioning

Marie B. Nielsen, Kristian Ravlo, Marco Eijken, Nicoline V. Krogstrup, Morten Bue Svendsen, **Chadi Abdel-Halim**, Mikkel Steen Petersen, Henrik Birn, Mihai Oltean, Bente Jespersen, Bjarne K. Møller

Clinical and Experimental Immunology (Impact factor 4.330), September 2, 2021. BFI 1

26. Kronisk sinuitis maxillaris med en odontogen baggrund

Sodaba Ghawsi, Bahareh B. Philipsen, Anette D. Kjeldsen

Tandlaegebladet, September 6, 2021. BFI 1

27. Health-Related Quality of Life, Dysphagia, Voice Problems, Depression, and Anxiety After Total Laryngectomy

Nille B Wulff, Susanne O Dalton, Irene Wessel, Beatriz Arenaz Búa, Helena Löfhede, Eva Hammerlid, Trille K Kjaer, **Christian Godballe**, Thomas Kjaergaard, Preben Homøe

The Laryngoscope (Impact factor 3.325), September 7, 2021. BFI 1

28. Residential exposure to transportation noise in Denmark and incidence of dementia: national cohort study

Manuella Lech Cantuaria, Frans Boch Waldorff, Lene Wermuth, Ellen Raben Pedersen, Aslak Harbo Poulsen, Jesse Daniel Thacher, Ole Raaschou-Nielsen, Matthias Ketzel, Jibran Khan, Victor H Valencia, **Jesper Hvass Schmidt**, Mette Sørensen

BMJ (Impact factor 39.890), September 8, 2021. BFI 3

29. Reply to Letter to the Editor regarding "In reference to Surgical treatment of the neck in patients with salivary gland carcinoma"

Marie Westergaard-Nielsen, Christian Godballe, Jesper Grau Eriksen, Stine Rosenkilde Larsen, Katalin Kiss, Tina Agander, Benedicte Parm Ulhøj, Birgitte Wittenborg Charabi, Tejs Ehlers Klug, Henrik Jacobsen, Jørgen Johansen, Claus Andrup Kristensen, Elo Andersen, Maria Andersen, **Kristine Bjørndal**

Head & Neck (Impact factor 3.147), September 8, 2021. BFI 2

30. Trakealstenose som komplikation i forbindelse med dilatationstrakeotomi/Tracheal stenosis as a complication to dilatational tracheotomy

Cille Cederholm Knage, Camilla Slot Mehlum, Bahareh Bakhshaie Philipsen

Ugeskrift for Læger (Impact factor 1.22), October 4, 2021. BFI 1

31. The European rare disease network for HHT frameworks for management of hereditary haemorrhagic telangiectasia in general and speciality care

C C.L. Shovlin, E. Buscarini, C. Sabbà, H.J. Mager, **A.D. Kjeldsen**, F. Pagella, U. Sure, S. Ugolini, P.M. Toerring, P. Suppressa, C. Rennie, M.C. Post, M.C. Patel, T.H. Nielsen, G. Manfredi, G.M. Lenato, D. Lefroy, U. Kariholu, B. Jones, A.D. Fialla, O.F. Eker, O. Dupuis, F. Droege, N. Coote, E. Boccardi, A. Alsafi, S. Alicante, S. Dupuis-Girod

European Journal of Medical Genetics (Impact factor 2.708), October 26, 2021. BFI 1

32. User-Operated Audiometry Project (UAud) - Introducing an Automated User-Operated System for Audiometric Testing Into Everyday Clinic Practice

Christos Sidiras, Raul Sanchez-Lopez, Ellen Raben Pedersen, Chris Bang Sørensen, Jacob Nielsen, **Jesper Hvass Schmidt**

Frontiers in Digital Health, October 7, 2021.

33. Monaural and binaural phase sensitivity in school-age children with early-childhood otitis media

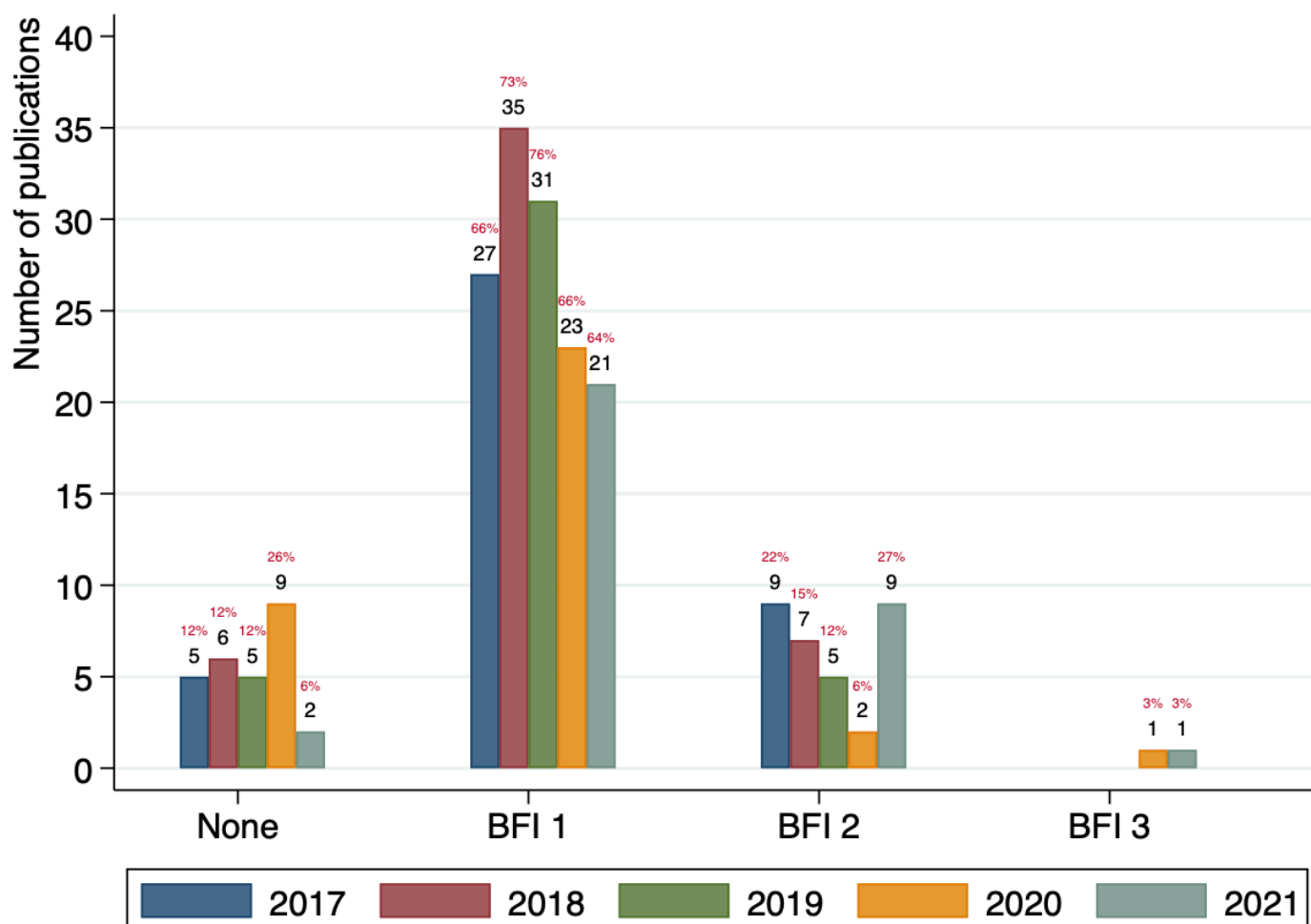
Shno Koiek, Christian Brandt, Jesper Hvass Schmidt, Tobias Neher

International Journal of Audiology (Impact factor 2.117), December 9, 2021. BFI 2

Impact factor (IF) and BFI 2017-2021

	2017	2018	2019	2020	2021
Publications with IF	37 (*9)	41 (*7)	37 (*4)	34 (*1)	31 (*2)
Total IF	117,9	108,1	114,5	142,8	128,3
Range	1,1-7,7	1,1-7,4	1,1-24,5	0,9-33,8	1,2-39,9
Median	2,5	2,4	2,4	2,3	3,1

*Publications without Impact Factor



Scientific meetings

Due to the Covid-19 situation the scientific meetings have been minimized.

In 2021 The Research Unit at the Department of ORL—Head and Neck Surgery and Audiology has been represented at the following scientific meetings:

National meetings:

DHHKS (Dansk Hoved Hals Kirurgisk Selskab) annual meeting
DSOHH (Dansk Selskab for Otolaryngologi - Hoved & Halskirurgi) annual meeting
DLS (Dansk Laryngologisk Selskab) annual meeting
DSD (Dansk Selskab For Dysfagi) annual meeting
DMAS (Dansk Medicinsk Akupunktur Selskab- et lægefagligt selskab) annual meeting
Meeting in DCCC (Danish Comprehensive Cancer Center)
Meeting in DANGLOT

International meetings:

- VASCERN days, October, Paris (Anette D. Kjeldsen)
- Surgery Techniques in laryngology, November, Hamburg (Camilla S. Mehlum)
- The Nordic Audiological Society annual meeting, September, Oslo (Rikke Schnack-Petersen)

Benchmarking analysis with other institutes

Head & Neck Surgery and Audiology, Odense University Hospital

Researchers: 28

Scholarly Output: 159

Citations per Publication 11.1

Field-Weighted Citation Impact 1.96

Klinik für Hals-, Nasen-, Ohrenheilkunde, Kopf- und Halschirurgie, Kiel Germany

Researchers: 20

Scholarly Output: 78

Citations per Publication 16.2

Field-Weighted Citation Impact 1.2

Massachusetts Eye and Ear Infirmary, Boston, USA

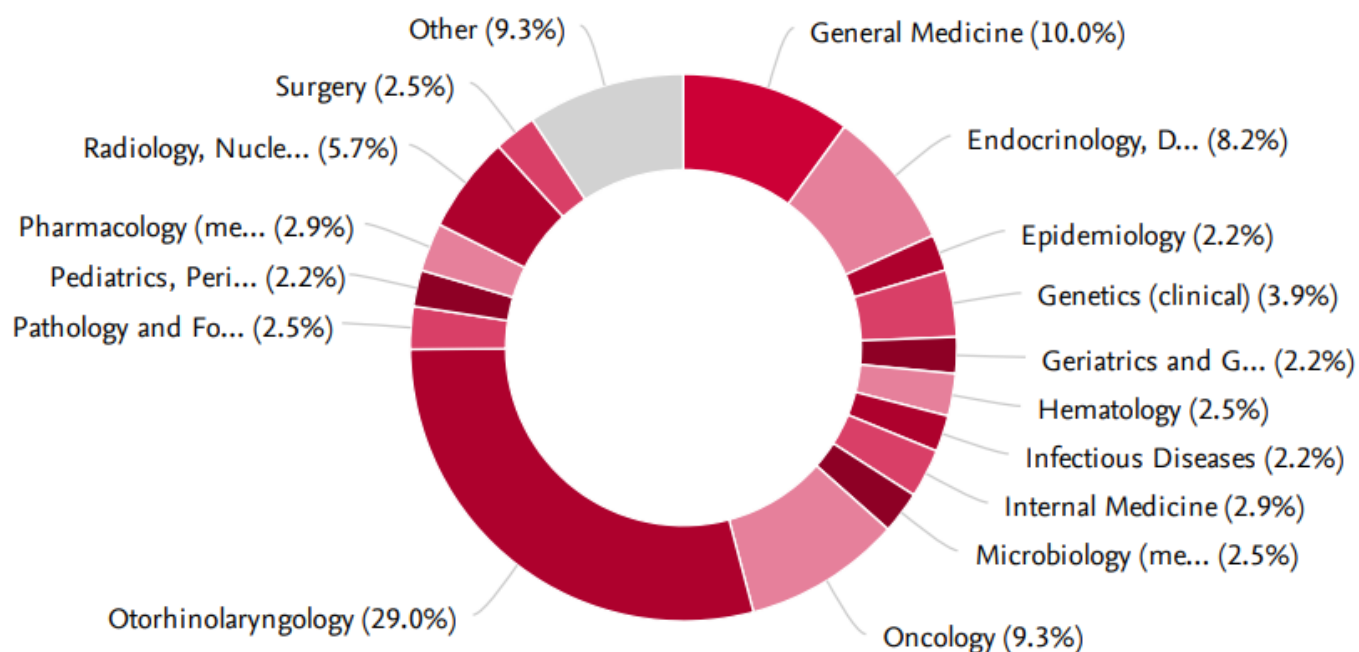
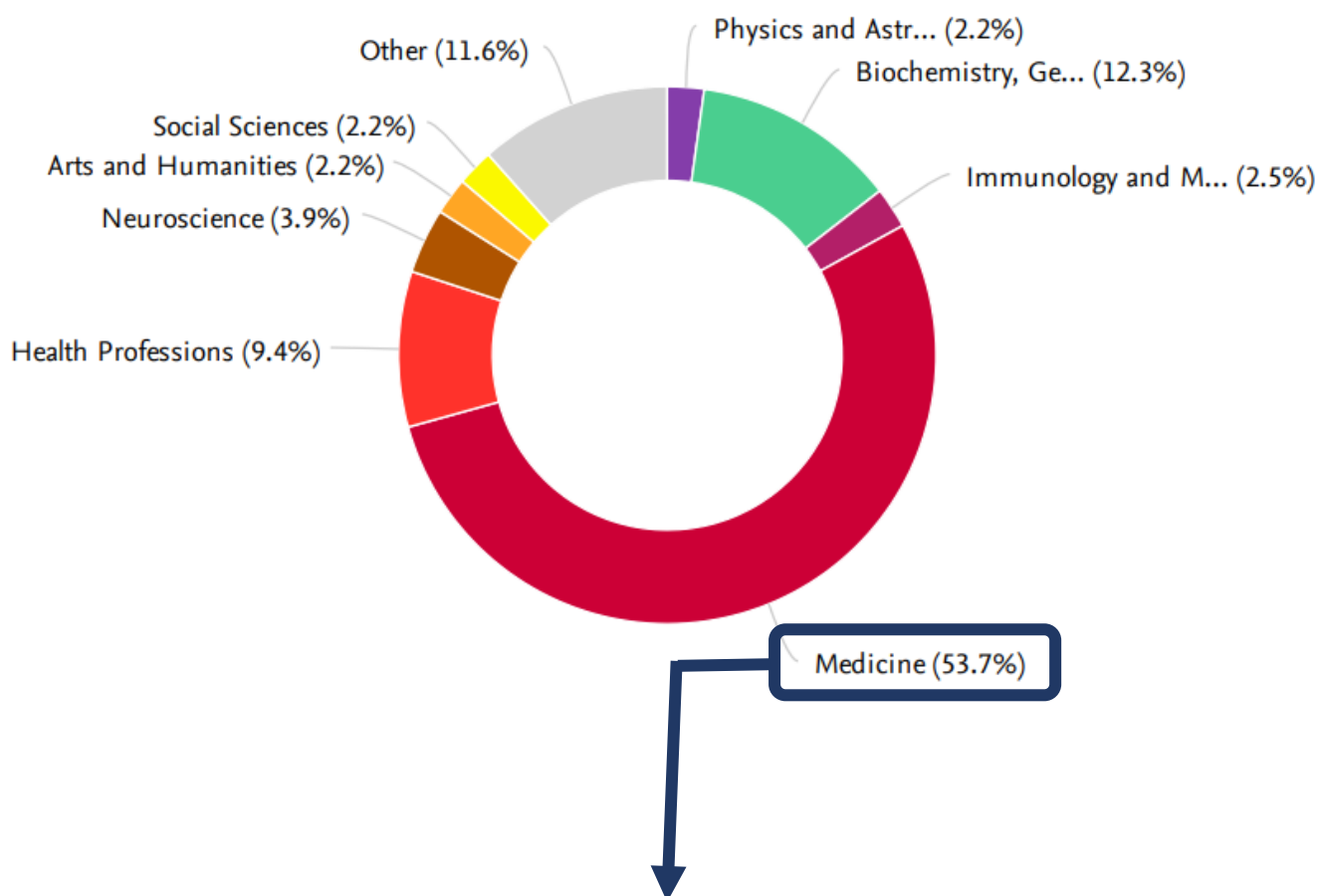
Researchers: 195

Scholarly Output: 4489 (Citation Count 55,374)

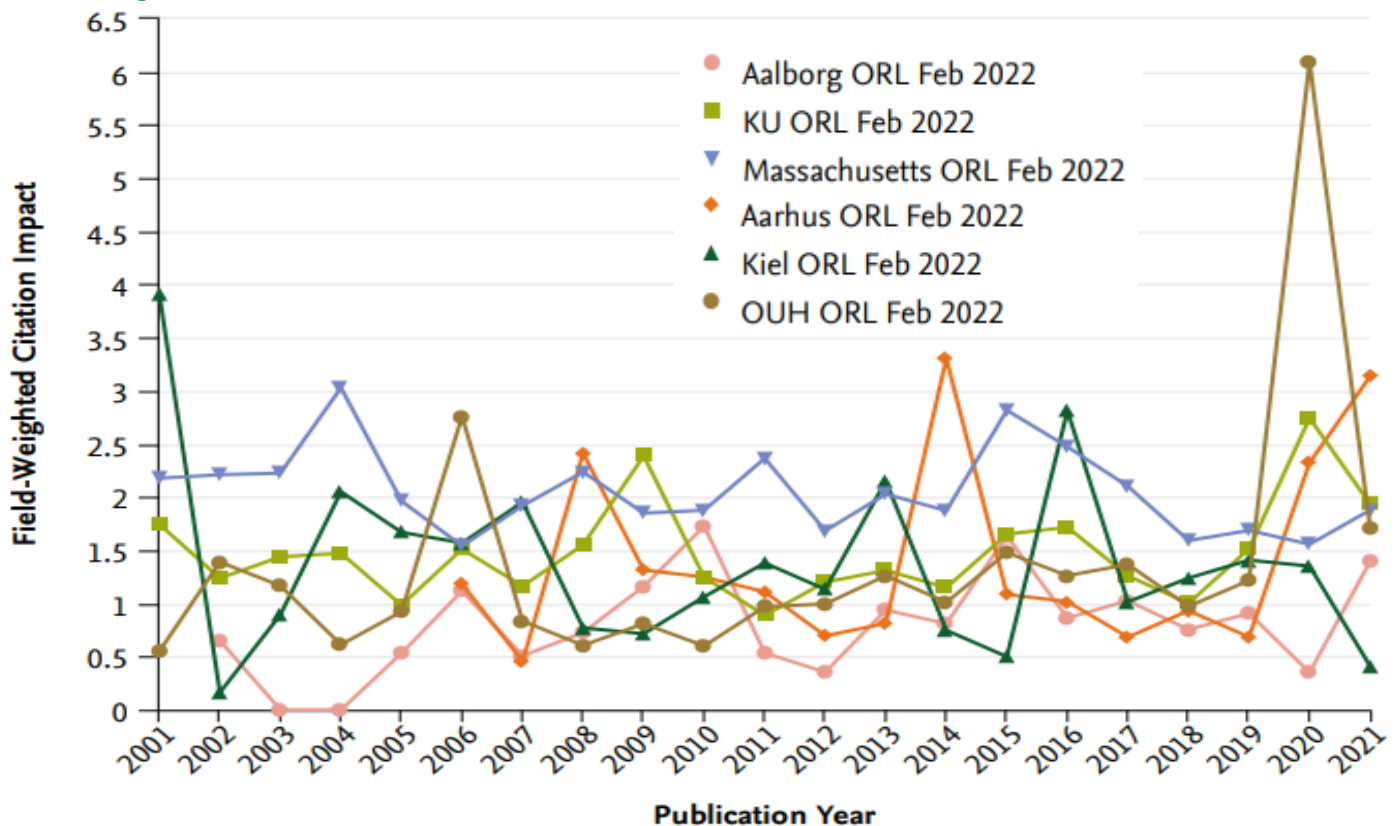
Citations per Publication 15.7

Field-Weighted Citation Impact 1.86

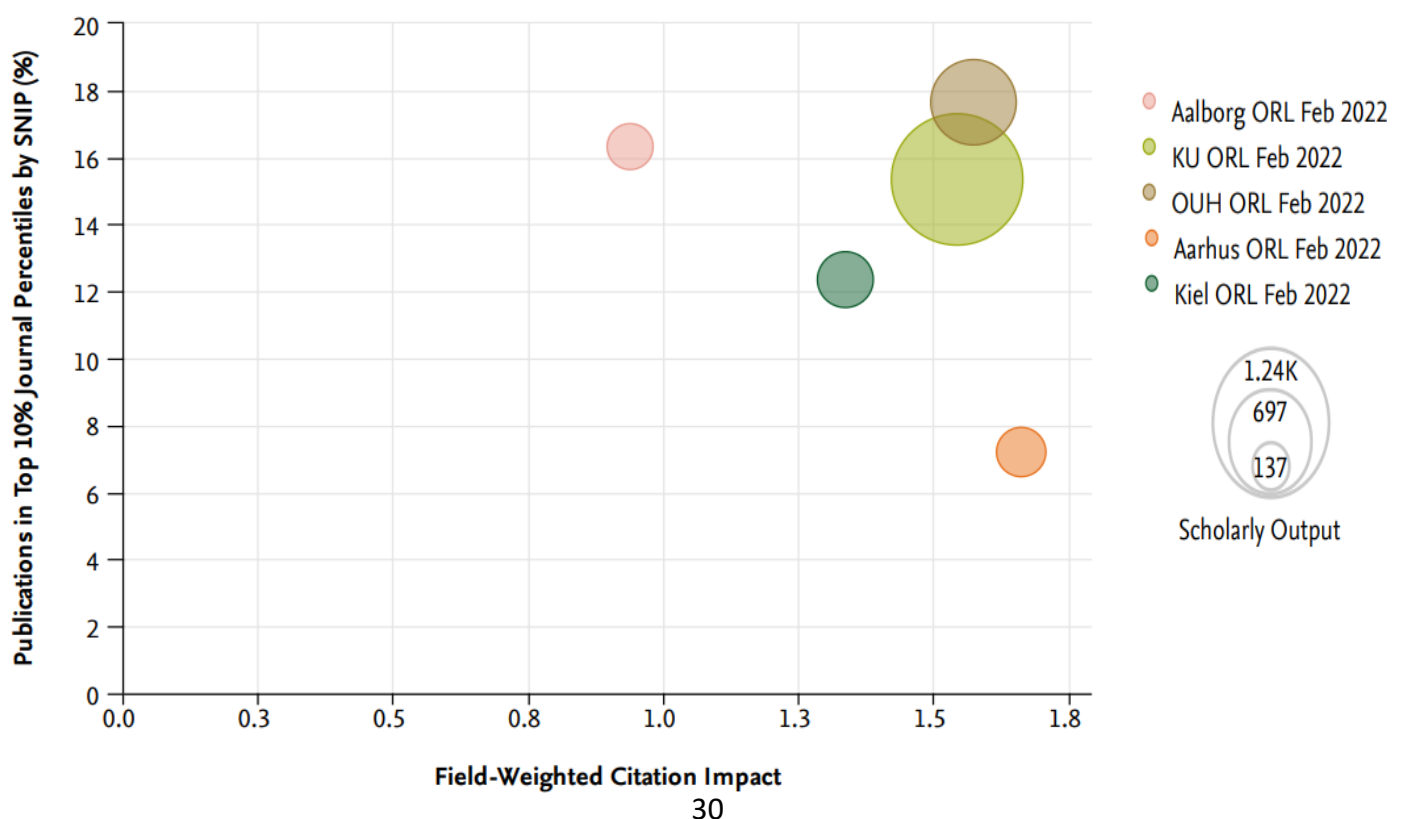
Publications by research areas 2016-2021



Benchmarking on Field Weighted Citation Impact 2016-2021



Publications in top 10% journal percentiles



Development in nursing

Development plan for 2021 includes the following:

Shared decision making

Teaching staff in Shared decision making and appointing two decision-helpers for patients with a Cochlear Implant.

Introductory program

An introductory program for newly employed nurses:

- Two days of optional simulation teaching in the treatment and care within the ENT area
- New employed nurses are assigned a mentor
- Nurses will have the opportunity to visit other sections within the ENT (Ear-Nose-Throat) department

Cooperation between sectors

Cooperation with municipalities and hospitals in the region due to insecurity among tracheostomy patients and community nurses after discharge. This increases continuity in the care of these patients resulting in better treatment quality.

We are now testing:

- Video meetings before discharge between ENT nurses, community nurses, the patient and their relatives.
- Two E-learning programs concerning care of the tracheostomy for community nurses and nurses at the hospital
- Hotline, where community nurses can call the ENT department day and night to get advice through video
- Simulation training for community nurses and nurses at the hospital
- A joint guideline on care and suction in connection to tracheostomy for all hospitals in the region
- Instruction videos on how to care for a tracheostomy on “Mit Sygehus” aimed for community nurses, patients and relatives

Written information to patients

We have started to give relevant patients written information on “Mit Sygehus” instead of a paper leaflets.

“Mit Sygehus” is being expanded to several new patient groups.

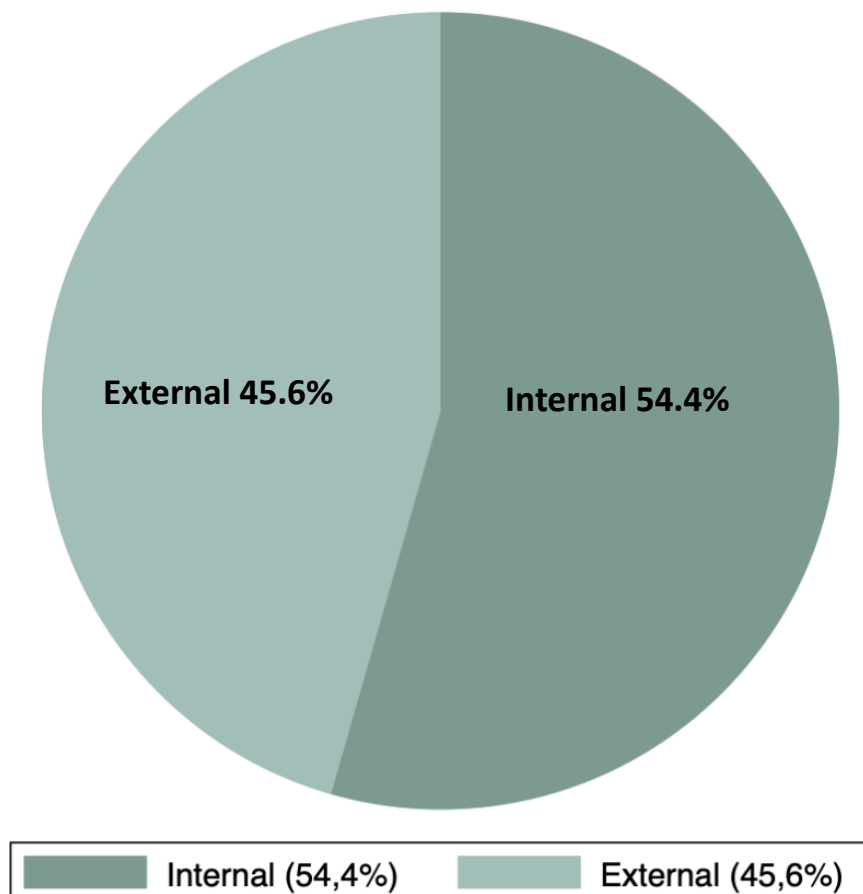
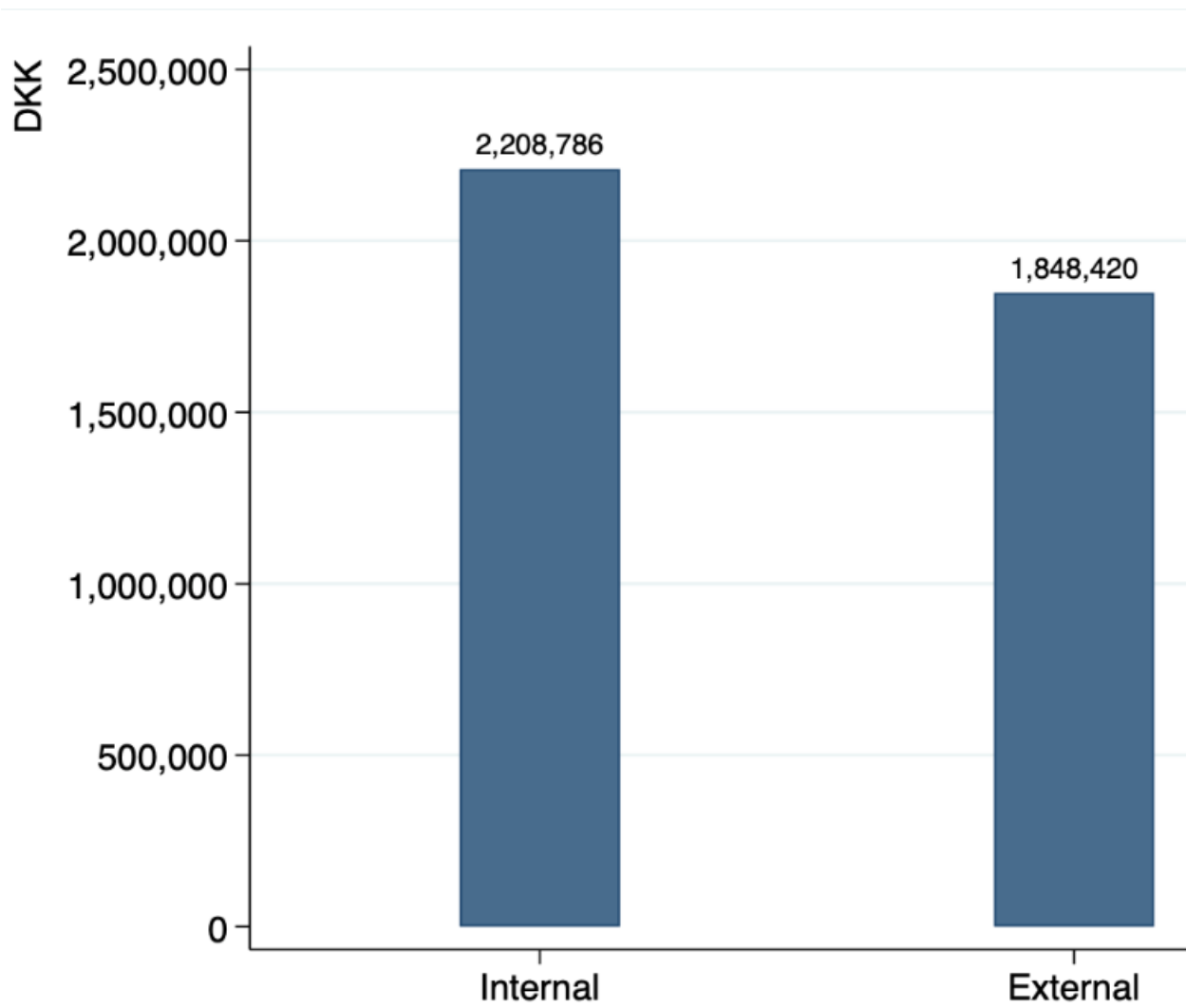
Video consultations

We will offer video-consultations to relevant patients.

All staff are introduced how to make video consultations on “Mit Sygehus” and use the video solution (VDX) to guide colleagues, patients or relatives on the phone through a videolink.

Funding

Funding 2021	Internal	External	Salary/running costs	Name
OUIHs overlægeråds forskningsfond	20.730		Running costs	Sanne H. Michaelsen
OUIHs overlægeråds forskningsfond	30.000		Running costs	Jesper R. Sørensen
A.P. Møller Fonden		65.000	Running costs	Sanne H. Michaelsen
OUIH PhD Fund	578.000		Salary	Sanne H. Michaelsen
Traun-Pedersens mindelegat		5.000	Running costs	Jesper R. Sørensen
Danish Comprehensive Cancer Center (DCCC)		200.000	Salary	Bahareh B. Philipsen
Brødrene Hartmanns Fond		38.168	Running costs	Sanne H. Michaelsen
Interfond		300.000	Salary + running costs	Shno Koiek
Interfond		740.300	Salary + running costs	Li-Tang Tsai
Kræftens Bekæmpelse		120.000	Salary	Ida Grunske Schmidt
Region Syddanmarks Ph.d.-pulje 2021	584.000		Salary	Lilian B. Olsen
Fakultetsstipendium, SDU	500.000		Salary	Sanne H. Michaelsen
Fælles forskningspulje mellem RH og OUIH	195.200		Salary + running costs	Christian Godballe
Axel Muusfeldts Fond		148.512	Salary	Sanne H. Michaelsen
OUIH Internationaliseringspuljen	60.000		Running costs	Chadi N. Abdel-Halim
Department of Clinical research, SDU	55.656		Running costs	Chadi N. Abdel-Halim
Forskningspulje mellem RH og OUIH	185.200		Running costs	Christian Godballe
Læge Sofus Carl Emil og hustru Olga Boris Friis' legat		141.440	Running costs	Sanne H. Michaelsen
Familien Hede Nielsens Fond		15.000	Running costs	Bahareh B. Philipsen
Lundbeckfonden		75.000	Running costs	Kristine Bjørndal
In total: 4.057.206 DKK	2.208.786 (54.4%)	1.848.420 (45.6%)		



Contact information

Research Unit for ORL – Head & Neck Surgery and Audiology,
Odense University Hospital, Odense, Denmark;
J.B. Winsløws Vej 4, Entrance 84, 1.
5000 Odense C

Professor Christian Godballe
Head of Research and Head of Graduate School, Faculty of Health Sciences
Christian.Godballe@rsyd.dk
Phone: +45 6541 2800

Malene Korsholm, Research coordinator, MsPH, PhD
Research Unit for ORL – Head & Neck Surgery and Audiology,
malene.korsholm@rsyd.dk
Phone: +45 2139 5569

