

Annual report 2021

Prologue

The first year of the University Clinic continued in the shadows of more SARS-CoV-2 outbursts resulting in cancelling or postponement of national and international conferences topped with striking nurses. But - as in 2020, we focused on other matters and broke new records with 33 accepted publications plus another 16 submitted manuscripts representing all ENT subspecialties. Amazing - thanks for your contributions. At the national meeting in the Danish Society of Otorhinolaryngology Head and Neck Surgery in September, associate professor, PhD, Alexander Fjældstad and our new research year student Laura Marie Danielsen took the first and the second prizes for the best lectures, and we were involved in more of the poster prizes, e.g. Henrik Münch. We also welcomed four medical students in 2021 as clinical trainees - and what a positive experience ! They all produced some very interesting written assignments and one of them, Signe Bønløkke, presented her study of bilateral vestibulopathies at the annual meeting in the Danish Society of Vestibulology - she won the first prize for the best lecture ! Finally, professor Therese Ovesen received Klein's Prize in September at a ceremony in Domus Medica in Copenhagen. Congratulation to all of you !

Besides the research year student, we also had the pleasure of welcoming two more PhD students in 2021: Ali Abood and Niels Holm, as well as a research coordinator, Anne Mette Krintel Petersen. We hope that you will enjoy working with us ! You can read more about their research below.

The Department expands in more aspects. In 2021, we took over all responsibility for obstructive sleep disturbances at the Regional Hospital Gødstrup. We really owe to thank Jannik Buus Bertelsen and Anne Bystrup for their tremendous effort in order to prepare the Department to receive approximately 1,000 patients ! In line with the clinical expansion, we intend to establish in house sleep monitoring in the new research facilities in NIDO, Gødstrup, for research purposes. We have also initiated collaboration with engineers and maxilla-facial surgeons about mandibular advancement devices/surgery, hence the palette is full and ready for all kinds of clinical sleep research.

We reached an important milestone by the end of December: Anne Mette and Therese completed more than two years of legal work with a bunch of legal advisors from three different regions in Denmark about the tonsil database ! Now, the collaboration agreement has been signed by the ENT Departments in Aalborg, Holstebro, Vejle, and Esbjerg, and hopefully, Sønderborg will join us in January, 2022. It also means that Anne Mette and Therese will have the opportunity to focus on fundraising in the future.

Due to SARS-CoV-2 restrictions, we have not been able to celebrate neither the first anniversary of the University Clinic (October 1) nor the five years anniversary of the Flavour Clinic (December 20). We hope that we will be able to realize this in 2022. In the coming year, we will also receive at

least two more PhD students, and, indeed, we are looking forward to participating in the defense of the very first two PhD dissertations from our Department: Andreas Niklassen and Tina Lildal !

We wish you all a happy 2022 with lots of success at The Regional Hospital Gødstrup.

Cordially,

Therese Ovesen & Anne Louise Bach Christensen

On the following pages, we present the members of the research staff; status of ongoing projects; fundraising including a list of applications and grants; and a list of publications. Happy reading !

Research staff

Therese Ovesen, Professor, senior consultant, DMSc.

As head of research at the Department, I strive for being inspiring, motivating, and including - all staff members are welcome in our research environment anytime. I intend to be a good ambassador for the Department when acting with the surroundings and partners. I appreciate freedom of research, transparency, and openness about our ideas, projects, and outcomes. And of course, our research conduct must reflect propriety and honesty.

Infectious diseases and sensory disorders are main themes in my research activities throughout the past 30 years. Especially, infections of the middle ear and the pharynx have been focus areas as well as loss of smell and taste, hearing impairment, and vertigo. As a more novel field, I have engaged myself in sleep related research. Clinical and pre-clinical studies are parts of my research methodologies, but I have also solid experience with animal models and in vitro studies.

Together with my fabulous colleagues, I founded Flavour Institute in 2015 and Flavour Clinic in 2016

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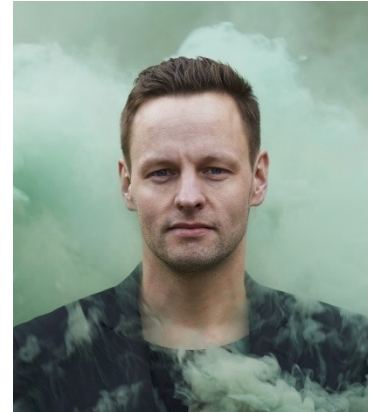
<https://orcid.org/0000-0003-0864-7987>



Alexander Wieck, Associate professor, MD, PhD.

I am a medical doctor and associate professor at Aarhus University. I co-founded the Flavour Clinic in Holstebro and Flavour Institute at Aarhus University. In my research, I work with both clinical and basic research within the fields of taste and smell.

As a result of COVID-19, the year 2020 has been filled with challenges for Flavour research, as many projects have been delayed due to restrictions while many knowledge gaps have emerged in the association between COVID-19 and taste- and smell loss. I was the primary investigator on the first study to confirm that COVID-19 can result in test-verified combined taste and smell loss. Subsequently, I have initiated a follow-up study on the duration of taste and smell loss following COVID-19, where the first paper has been published from the cohort highlighting that many patients suffer from prolonged chemosensory deficits. I am the Danish representative in the international collaboration Global Consortium for Chemosensory Research (<https://gcchemosensr.org>), where several studies on the matter are published and ongoing.



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Jannik Bertelsen, Associate professor, ENT specialist, PhD.

My current scientific activity involves obstructive sleep apnea and surgery methods for benign tonsillar diseases. Obstructive sleep apnea (OSA) is the most common sleep-related breathing disorder and is characterized by recurrent episodes of complete or partial obstruction of the upper airway leading to reduced or absent breathing during sleep. Surgical management of OSA is an alternative if first-line treatment with continuous positive airway pressure (CPAP) is not succeeded.



Drug induced sedation endoscopy (DISE) is a valuable diagnostic tool when deciding the proper surgical management of the upper airways.

The tonsil surgery register covers indications and choices of surgical methods for benign tonsillar diseases in our hospital and the ambition is to spread it to a national register. The results are used in a Nordic collaboration with Norway and Sweden to compare the results across countries and to compare outcomes of different clinical practice and to create a foundation for research collaborations.

In 2021, we initiate a multicenter study in the ENT departments in Aalborg, Vejle, Esbjerg and Holstebro to investigate the frequency of post-tonsillectomy bleeding in cold steel tonsillectomy versus impedance-dependent-tissue-sealing (BiZact) tonsillectomy in a randomized controlled trial.

<https://pure.au.dk/admin/workspace/personal/overview/>

Kasra Zainali-Gill, ENT specialist, PhD.

In collaboration with Jannik Bertelsen, I am focused on investigation and surgical treatment of obstructive sleep apnea. Prior to introduction of specific surgical modalities at the Department, we conducted a feasibility study and the article was submitted for review in 2020. The study addresses the possibility for novices to become familiar with evaluation of drug induced sleep endoscopy (DISE) by means of DISE videos. In 2020, we were fortunate to see that DISE was implemented in our clinical setup. As of March, the first patient was included in the DISE database, and 75 patients have been included by the end of the year. Furthermore, the first sleep surgeries were performed in 2020. All data is stored in the DISE database and patients will be followed for 12 months. Unfortunately, due to COVID-19 lockdown, courses in sleep surgery was postponed in 2020.



In 2020, I received a grant of 1.000.000Dkr from Pulje til styrkelse af sundhedsforskning i Region Midt allocated to investigate sleep surgery for the next two years.

The next step is a systemic review of sleep surgery according to DISE findings. The review will be our guideline how to approach the heterogenous group of patients suffering from obstructive sleep apnea.



Louise Devantier, MD, PhD.

I am holding a 20 % post.doc position while finishing my last year of specialist training at the Department of Oto-rhino-laryngology, Regional Hospital West Jutland, Holstebro.

I defended my PhD entitled; “Novel assessment and visualization of vestibular function” November 2019. In my PhD we were the first to use ¹⁸F-FDG PET to visualize central processing of physiological vestibular stimulation. The method proved advantageous when compared to the

methods previously used in this research area. All prior studies used non-physiological vestibular stimulation leading to confounding cortical activity. The results of our studies suggested the existence of a primary vestibular cortex located in the assumed primary auditory cortex. These findings are controversial. In collaboration with the Department of Nuclear Medicine & PET Centre, Aarhus University Hospital, and Comparative Medicine Lab, Aarhus University I am currently working on further exploring the hypothesis of this potentially new found primary vestibular cortex.

Beside my own research I am supervisor for PhD-student Casper Grønland, Department of Ear, Nose, Throat and Maxillofacial Surgery, Zealand University Hospital, Koege and PhD-student Helle Elisabeth Agger-Nielsen, Department of Ear, Nose, Throat, The Hospital of South West Jutland.

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Andreas Steenholt Niklassen, MD, PhD-student.

My research interests involve smell, taste and quality of life related to the senses.

Currently, I am investigating if treatment options for olfactory dysfunction can be improved, by improving olfactory training. At the same time, I am investigating the central plasticity in relation to the olfactory system by using structural and functional MRI in health and disease. The quality-of-life changes when losing or regaining the sense of smell, and this is extremely important to be able to measure, to quantify the effect of treatment. In my research, I am using modern psychometric methods to develop patient reported outcome measures. I will submit my dissertation October 15, 2022.

Research skills: Clinical studies, human neuroplasticity, functional and structural magnetic resonance imaging, modern and classical psychometrics, olfaction and gustation.

<http://au.dk/an@clin>



Tina Lildal, MD, PhD-student.

Obstructive sleep apnoea (OSA) is common among children (1-3%), but obtaining accurate diagnostics is challenging. Polysomnography, an extensive sleep study conducted in a sleep lab, is the gold



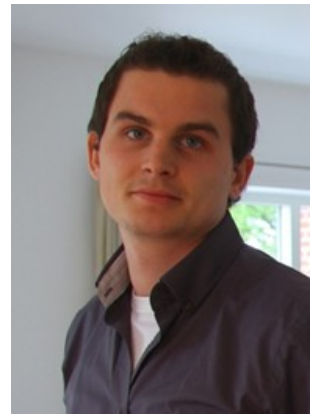
standard for diagnostics, but due to high cost and low accessibility in Denmark, the diagnosis is currently based solely on clinical examination. Home sleep apnea test (HSAT) is a simplified version of polysomnography used for diagnosing OSA in adults.

In my PhD project, we investigate the validity of HSAT for diagnosing OSA in children. Additionally, we evaluate the use of OSA specific questionnaires and urinary biomarkers for assessing severity of morbid conditions associated with childhood OSA. Ultimately, this could lead to better selection of candidates for surgical treatment. I submit my dissertation March 20, 2022.

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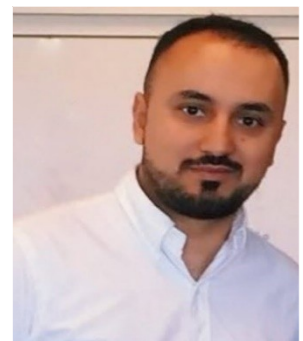
Niels Holm, ENT specialist, PhD student.

I completed my training as ENT Specialist by May 31th 2021. In 2020, I published a systematic review on acute otitis media and antibiotics in children in Danish Medical Journal. My PhD protocol about Eustachian tube dysfunction has been approved by the Graduate School, Aarhus University, and the PhD project began June, 2021. The PhD study involves use of the new acquisition: the Cone Beam-CT (CBCT). Fusion between CBCT and 3 T MRI data is included as well. In addition, I participate in research studies and publications about stapedotomies, and the need for Eustachian tube dilation after myringoplasty.



Ali Abood, ENT specialist, PhD student.

As a surgeon in the Head & Neck division, my research mainly targets thyroid surgery. October 2021, I was enrolled as a PhD-student at Aarhus University with the protocol "*Prevention of postoperative hypoparathyroidism following thyroid surgery by using intraoperative autofluorescence*". The PhD-study aims to improve outcome of thyroid surgery by modifying the surgical technique. More specifically, it aims to reduce the rate of postoperative hypoparathyroidism- a frequent complication on a global scale.



Hypoparathyroidism following thyroid surgery occurs due to intraoperative parathyroid damage or inadvertent excision. This is in part due to the challenging process of intraoperative parathyroid identification. By using near-infrared autofluorescence (NIRAF) intraoperatively, correct

parathyroid identification might be facilitated. So far, no one has been able to show that application of NIRAF in thyroid surgery can reduce the rate of permanent hypoparathyroidism. However, a complete evaluation of the clinical impact is still needed. Especially, an evaluation in low-volume, non-parathyroid centers, which is the main scope of this PhD.

AU Pure link: [Ali Abdul-Hussein Abood - Forskning - Aarhus Universitet \(au.dk\)](https://pure.au.dk/portal/da/persons/ali-abdul-hussein-abood-forskning-aarhus-universitet-au.dk)

Anne Mette Krintel Petersen, Research coordinator, physiotherapist, MSc Health Science, PhD.

Since January 2021, I have a part-time position as research coordinator at the ENT Department. In 2008 I received my PhD degree in Medicine, demonstrated by the thesis entitled "Rehabilitation outcome after total hip replacement; prospective randomized studies evaluating two different postoperative regimes and two different types of implant". The focus of my research hereafter has been development, pilot-testing and evaluation of effectiveness and cost-effectiveness of complex multidisciplinary interventions within the field of disease management, physical exercise training and testing of physical capacity, and muscle strength. I have also expertise in reliability and validity studies testing measurement properties. As a research coordinator I support the ENT research group in relation to: Applications for funding, preparation of clinical investigation plans, registration of research in accordance with Good Clinical Practice, and Contractual Clauses in relation to The General Data Protection Regulations.



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Laura Marie Aalkjær Danielsen, Research Year Student

My research focuses on the nasal microbiome and its importance in various ENT diseases, but in particular with regards to the sense of smell.

With the latest emergence of microbiome research, and the many correlations found between microbiome and a wide variety of human conditions in other specialties, it seems important to begin investigation in the ENT department as well.

In 2021 I began investigating the relationship between the nasal microbiome and COVID-19. I'm currently investigating the change in both microbiome and sense of smell in patients undergoing

sino- and/or nasal surgery, as well as looking into the loss of sense of smell in children infected with COVID-19.

Dorthe Rasmussen, Laboratory Technician.

Mainly, I participate in Research Year studies and PhD projects at the ENT Department as well as in our laboratory facilities, Department of Clinical Medicine, Aarhus University. My research competences include all kinds of lab techniques, such as cell cultures, biochemical analyzes and immunohistochemistry. I produce the taste drop test, which is developed by Alexander Fjældstad, and conduct all smell and taste tests among both adults and children. Currently, I perform smell and taste tests in children with diabetes. I am also involved in COVID-19-related projects as we test smell and taste in patients referred from the post-COVID-clinics in Skejby and Herning.



Tascha Hovmøller Sørensen, Research Secretary.

I take care of administrative assistance for Therese Ovesen. It means that I provide updates on the research homepage including all ongoing projects, list of publications and funding. Together with Therese Ovesen, I prepare the annual reports. Furthermore, I ensure communication with the Department of Clinical Medicine at Aarhus University; I have knowledge of PURE; the financial management program Indfak; and AURUS (travel settlement at Aarhus University), hereunder travel arrangement for PhD assessors, guests from abroad, and conferences participation. I also assist researchers at the Department with regard to application formulas, synopsis and protocol schemes. I coordinate the journal clubs and research workshops at the Department, and I link to various partners and colleagues. Finally, I constantly upgrade my qualifications by participation in relevant courses/fora, e.g. at the Department of Clinical Medicine.



Project status

1. Otology/vestibulology (including *Balance*)

Title	First author	Aim	Status
MRI and vestibular cortex	Louise Devantier	Doctoral thesis	Started 01.04.2021
Eustachian tube dysfunction	Niels Holm	PhD thesis	Started 01.12.2021

Sudden deafness: intratympanic dexamethasone as salvage treatment	Louise Devantier	Systematic review	Submitted
Bedside test for evaluation of balance in adolescents	Mathias Hald	Original article	Submitted
Hearing after stapedotomy	Charlotte Wedel	Original article	Article in preparation
Hearing after cholesteatoma surgery	Anne Mette Ryom	Original article	Article in preparation
Patients hospitalized with OE	Frida Jacobsen	Original article	Data collection
Balance in children with hearing aids	Hanne Owen	Original article	Data collection
Validation of DHI	Signe Bønløkke	Original article	Data collection
Agreement between DW MRI and clinical assessment of cholesteatomas	Mette Ørndrup	Original article	Data collection
Dehiscence of the internal carotid artery	Niels Holm	Original article	Data collection

2. Rhinology (including *Flavour*)

Title	First author	Aim	Status
Taste from tongue to brain	Alexander Fjældstad	Doctoral thesis	Three years left
Smell rehabilitation	Andreas Niklassen	PhD thesis	½ years left
Olfactory impairment associated with nasosinusal surgery	Laura Danielsen	Research year	Started 01.09.21
Olfaction and the microbiome	Laura Danielsen	MD-PhD thesis	Protocol accepted by the Ethical Committee
Smell and taste among	Annegrete Danielsen	Original article	Submitted

patients with chronic kidney disease			
Smell and taste in COVID-19	Dovile Stancevice	Original article	Submitted
Retronasal olfaction	Andreas Niklassen	Original article	Article in preparation
Long-term post-COVID-19 smell- and taste disorders: Effect of olfactory training	Thomas Ovesen	Original article	Article in preparation
Children with COVID-19 related smell and taste disorders	Laura Danielsen	Original article	Data collection
Immune deficiencies in chronic rhino-sinusitis	Anita Garcia	Original article	Data collection
Chronic rhinosinusitis and astma	Lotte Nøhr	Original article	Data collection

3. Head and neck (including Sleep)

Title	First author	Aim	Status
OSAS in children	Tina Lildal	PhD thesis	Submission 20.03. 22
Fluorescence during thyroid surgery	Ali Abood	PhD thesis	Started 01.12.21
Tonsil surgery in Denmark	Line Nissen	PhD thesis	Start: 01.04.22
DISE: learning curves	Jannik Bertelsen/Kasra Zainali-Gill	Original article	Submitted
DISE and sleep surgery	Kasra Zainali-Gill/Jannik Bertelsen	Systematic review	Submitted
Dysphagia	Nichlas Udholm	Original article	Article in preparation
DISE in children	Rasmus Siggaard	Systematic review	Article in preparation
Efficacy of adenoidectomy	Christine Kroer Nielsen	Systematic review	Article collection
Accuracy of UL guided fine needle aspiration	Lars Hansen	Original article	Article in preparation

Biopsy of the temporal artery	Søren Knudsen	State of the art	Data collection
EEG activity during DISE	Chr. Emil Rex	Original article	Data collection

4. Audiology

Title	First author	Aim	Status
OAE screening in general practice	Sophie Mikkelsen	Original article	Article in preparation
Long term growth of vestibular schwannomas	Bartosz Torzynski	Original article	Article in preparation
Validation of Tinnitus Functional Index	Rasmus Dreyer/Mine Onat	Original article	Article in preparation
Consequences of vestibular schwannomas	Christian Mirian	Six original articles	Articles in preparation
Tinnitus: Adherence to guidelines	Magnus Madsen	State of the art	Article in preparation
Effects of tinnitus treatment	Magnus Madsen	Original article	Article in preparation
Traumatic brain injury and hearing loss	Christian Mirian	National register study	Data analysis
Proprioceptive belt stimulation in bilateral vestibulopathy	Hanne Owen	Multi-center international RCT	Protocol in preparation

Fundraising

Year	Amount applied for (DKK)	Amount granted (DKK)	Granted/ Applied (%)	Number of grants/number of applications
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2016	11.217.774	4.101.987	37	10/18
2017	15,019,585	2,734,130	18	12/29
2018	14,631,600	3,390,750	23	9/17
2019	7,038,700	1,799,850	26	10/13
2020	15,181,006	5,648,691	37	16/30
2021	19,794,792	1,200,000	6	8/22

Publications

Year	Peer review	Non-peer review	Books/book chapters	Total	Research year thesis + PhD thesis (defended)
2016	5	0	1	6	0
2017	14	2	0	16	0+1
2018	10	1	2	13	1+0
2019	15	0	4	19	1+1
2020	24	1	3	28	0
2021	31*	2	0	33	0

*: plus 16 submitted.

List of publications:

Peer review

1. Galilli J, Ovesen T. Outcome of treatment for severe epistaxis: nasal packing and endoscopic sphenopalatine artery ligation. *Rhinology*. 2021;
2. Klug TE et al. Parapharyngeal abscesses. *European Journal of Clinical Microbiology and Infectious Diseases*. 2021; 40:1461-1470.
3. Schwab J, Jensen CD, Fjaeldstad AW. Sustained Chemosensory Dysfunction During the COVID-19 Pandemic. *ORL*. 2021. Mar 31:1-10. doi: 10.1159/000515132.

4. Huart C, Philpott CM, Altundag A, Fjaeldstad AW et al. Systemic corticosteroids in COVID-19 related smell dysfunction: an international view. *International Forum of Allergy & Rhinology*. 2021. Mar 16. doi: 10.1002/alr.22788.
5. Larsen CM et al. Metrics of pN-staging in oral squamous cell carcinoma: an analysis of 1,905 patients. *Eur J Cancer* 2021; 150:33-41.
6. Stankevici D, Fjaeldstad AW, Ovesen T. Isolated taste disorders in patients referred to a flavour clinic with taste and smell loss. *Brain and Behavior*. 2021. doi: 10.1002/brb3.2071
7. Stankovic J, Thomsen PH AW, Ovesen T. Food preferences, food neophobia and chemosensation among adolescents with ADHD. *Acta Paediatrica*. 2021; 110: 2187-2199.
8. Fjaeldstad AW, Stiller-Stut F, Gleesborg C, Kringelbach ML, Hummel T & Fernandes HM. Validation of olfactory network based on brain structural connectivity and its association with olfactory test scores. *Frontiers in Systems Neuroscience*. 2021;15: 638053. doi: 10.3389/fnsys.2021.638053. eCollection 2021.
9. Cassiano L, Leite FRM, Lopez R, Fjaeldstad AW & Nascimento G. The association between halitosis and chemosensory disorders: a systematic review” *Oral Diseases*. 2021. doi: 10.1111/odi.13823.
10. Addison A, Wong B, ... Fjaeldstad AW, ..., Hummel T & Philpott CM. Clinical Olfactory Working Group Consensus Statement on the Treatment of Post Infectious Olfactory Dysfunction. *The Journal of Allergy and Clinical Immunology*. 2021;S0091-6749(21)00004-X. doi: 10.1016/j.jaci.2020.12.641.
11. Nørgaard HJ, Fjaeldstad AW. Differences in correlation between subjective and measured olfactory and gustatory dysfunction after initial ENT evaluation. *International Archives of Otorhinolaryngology*. 2021. doi: 10.1055/s-0040-1722249.
12. Lildal T, Bertelsen JB, Ovesen T. Feasibility of conducting Type III Home Sleep Apnoea Test in Children. *Acta Otolaryngol*, 2021; 141: 707-713.
13. Wang QJ, Fernandes HM & Fjaeldstad AW. Is perceptual learning generalisable in the chemical senses? A longitudinal pilot study based on a naturalistic blind wine tasting training scenario. *Chem. Percept*. 2021. <https://doi.org/10.1007/s12078-020-09284-x>.
14. Andreas Steenholt Niklassen, Julia Draf, Caroline Huart, Constantin Hintschich, Simone Bocksberger, Eleonora Maria Consiglia Trecca, Ludger Klimek, Serge D. Le Bon, Aytug Altundag, Thomas Hummel. COVID-19: Recovery from chemosensory dysfunction. A multicentre study on smell and taste. *Laryngoscope*. 2021; 131: 1095-1100. doi: 10.1002/lary.29383.
15. Casper Grønlund¹, Louise Devantier^{2,3}, Henriette Edemann Callesen⁴, Dan Dupont Hougaard⁵, Mina Nicole Händel^{4,6}, Jesper Hvass Schmidt^{7,8}, Frank Liviu-Adelin Guldred⁹, Bjarki Ditlev Djurhuus¹. 1) Department of Ear, Nose, Throat and Maxillofacial Surgery, Zealand University Hospital, Koege, Denmark. 2) Department of Oto-Rhino-Laryngology, Regional Hospital West Jutland, Holstebro, Denmark. 3) Department of Clinical Medicine, Aarhus University, Aarhus, Denmark. 4) The Danish Health Authority, Copenhagen,

- Denmark. 5) Department of Otolaryngology, Head & Neck Surgery and Audiology, Aalborg University Hospital, Aalborg, Denmark. 6) The Parker Institute, Copenhagen University Hospital, Bispebjerg and Frederiksberg, Copenhagen, Denmark. 7) Department of ORL, Head and Neck Surgery and Audiology, Odense University Hospital, Odense C, Denmark. 8) Department of Clinical Research, Faculty of Health Sciences, University of Southern Denmark, Odense, Denmark. 9) Ear, Nose and Throat Clinic, Faxe, Denmark. *“Vertiginous episodes in Ménière’s disease following transmyringal ventilation tube insertion: a systematic review on the current state of evidence”*. Int Arch Otorhinolaryngol; 2021; 25: doi: 10.1055/s-0040-1714131
16. Casper Grønlund¹, Louise Devantier^{2,3}, Mikael Karlberg⁴, Bjarki Ditlev Djurhuus¹, 1) Department of Ear, Nose, Throat and Maxillofacial Surgery, Zealand University Hospital, Koege, Denmark 2) Department of Clinical Medicine, Aarhus University, Palle Juul-Jensens Boulevard 99, 8200 Aarhus N, Denmark. 3) Department of Oto-Rhino-Laryngology, Regional Hospital West Jutland, Lægaardvej 12, 7500 Holstebro, Denmark. 4) Department of Oto-Rhino-Laryngology, Lund University Hospital, Lasarettsgatan 21, SE-221 85 Lund, Sweden. *“Superior buegang dehiscens syndrome”*. Ugeskr Laeger. 2021;183(4):V04200218.
17. Rusan M, Ovesen TOK, Fuursted K, Ovesen T. Næsen kan være fokus for behandling af og profylakse mod COVID-19. Ugeskrift for Læger, 2021; 183:V05210442
18. Niklassen AS, Sakthivel S, Fjældstad AW, Ovesen. Danish validation of a Retronasal Olfactory Powder Test, and development of a Quick Retronasal Olfactory Test. International Archives of Otorhinolaryngology. 2021;
19. Niklassen, AS, Langelund JR, Fjældstad, A. Olfactory groove meningioma with a 10-year history of smell loss and olfactory recovery after surgery. BMJ Case Reports CP 2021;14:e244145. <http://dx.doi.org/10.1136/bcr-2021-244145>.
20. Louise Devantier^(a,b), Allan K. Hansen^(c), Jens-Jacob Mølby-Henriksen^(b), Michael Pedersen^(a,d), Per Borghammer^(c), Therese Ovesen^(a,b), Måns Magnusson^(e).a) Department of Clinical Medicine, Aarhus University, Palle Juul-Jensens Boulevard 99, 8200 Aarhus N, Denmark^{b)} Department of Oto-Rhino-Laryngology, Regional Hospital West Jutland, Lægaardvej 12, 7500 Holstebro, Denmark.^{c)} Department of Nuclear Medicine & PET Centre, Aarhus University Hospital, Palle Juul-Jensens Boulevard 99, 8200 Aarhus N, Denmark^{d)} Comparative Medicine Lab, Aarhus University, Palle Juul-Jensens Boulevard 82, 8200 Aarhus N. ^{e)} Department of Oto-Rhino-Laryngology, Lund University Hospital, Lasarettsgatan 21, SE-221 85 Lund, Sweden. *Cortical activity during an attack of Menière’s disease*. Front Neurol. 2021 Jul 22;12:669390. doi: 10.3389/fneur.2021.669390.
21. 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. Clinical evaluation of antibiotic regimens in patients with surgically verified parapharyngeal abscess: a prospective observational study. Eur Arch Oto-Rhino-Laryngol, 2021: doi:10.1007/s00405-021-06962-8.

22. Lorentzen KL, Nørgaard HJ, Thrane JF, Fjaeldstad AW. Effects of acoustic fMRI-noise on taste identification, liking, and intensity. *Current Research in Behavioral Sciences*. 2021; Accepted for publication.
23. Gerkin RC, Ohla K, Veldhuizen M, ..., Fjaeldstad A, ..., Parma V. Recent smell loss is the best predictor of COVID-19 among individuals with recent respiratory symptoms. 2021; 46:bjaa081. doi: 10.1093/chemse/bja081.
24. Jens Faunø Thrane, Anders Faarup Britze, Alexander Wieck Fjaeldstad. Incidence and duration of self-reported hearing loss and tinnitus in a cohort of COVID-19 patients. *European Annals of Otorhinolaryngology, Head and Neck diseases*. 2021; 30: S1879-7296(21)00224-6. doi: 10.1016/j.anorl.2021.07.012.
25. Casper Grønlund¹, Maurice Lembeck², Louise Devantier³, Mette Lindelof⁴ & Bjarki Ditlev Djurhuus¹) Øre-, Næse-, Hals- og Kæbekirurgisk Afdeling, Sjællands Universitetshospital, Køge, 2) Medicinsk Afdeling, Nykøbing Falster Sygehus, 3) Audiologisk Klinik, Øre-, Næse-, Halskirurgisk Afdeling, Aarhus Universitetshospital, 4) Neurologisk Afdeling, Sjællands Universitetshospital, Roskilde "Den episodisk svimle patient" *Ugeskr Læger* 2021;183:V10200757
26. Khan KS^{1,2}, Pop-Busui R⁶, Devantier L³, Kristensen AG,^{2,4} Tankisi H^{2,4}, Dalgas U⁵, Overgaard K⁵, Andersen H^{1,2}. ¹Department of Neurology, Aarhus University Hospital, Aarhus, DENMARK. ² International Diabetic Neuropathy Consortium, Department of Clinical Medicine, Faculty of Health, Aarhus University, Aarhus, Denmark. ³ Department of Oto-Rhino-Laryngology, Regional Hospital West Jutland, DENMARK ⁴ Department of Clinical Neurophysiology, Aarhus University, Aarhus, Denmark ⁵Section for Sport Science, Department of Public Health, Aarhus University, Aarhus, DENMARK ⁶ Division of Metabolism, Endocrinology and Diabetes, Department of Internal Medicine, University of Michigan, Ann Arbor, MI. Falls in patients with type 2 diabetes – A cross-sectional study on the impact of motor dysfunction, postural instability and peripheral neuropathy. *Diabet Med* 2021 Sep; 38(9):e14470. doi: 10.1111/dme.14470.
27. Cost-Effectiveness of Neonatal Hearing Screening Programs: A Micro-Simulation Modeling Analysis. EUSCREEN Study Consortium (member: Ovesen T)
28. Niels Højvang Holm, november 2021 indskrevet som PhD-studerende. PhD-protokol uploadet til Clinical Trials.
29. Ali Abdul-Hussein Abood, oktober 2021 indskrevet som PhD-studerende, Aarhus Universitet, med protokollen "Prevention of postoperative hypoparathyroidism following thyroid surgery by using intraoperative autofluorescence" Protokol uploadet til ClinicalTrials.gov.
30. Hald, M, Hald, MO, Stankovic, J, Niklassen, AS, Ovesen, T. Positive association between bitter taste threshold and preference of vegetables among adolescents. *Acta Paediatr*. 2021; 110: 875– 880. <https://doi.org/10.1111/apa.15483>

31. Fjaeldstad AW, Ovesen T, Dalby RB. ORL. 2021. Accepted. "Cortical atrophy, white matter lesions, and bulb configuration in patients with idiopathic olfactory loss and other causes of olfactory loss" ORL J. 2021; 8:1-9.

Non-peer

1. Fjaeldstad AW. "Tab af lugte- og smagssans som følge af COVID-19" iPRAKSIS. Feb 2021:11-15.
2. Report: EUSCREEN final dissemination meeting in Zaandam on monday, June 28th and Tuesday 29th. Jan Kirk, Huibert Jan Simonsz, and for the EUSCREEN Study Consortium (member: Ovesen T)

Submitted

1. Kasra Zainali-Gill, Jannik Buus Bertelsen, Christian von Buchwald, Therese Ovesen, Eva Kiaer Kierkegaard. Learning curve in interpreting drug induced sedation endoscopy
Sleep and Breathing
2. Madsen A, Danielsen LM, Steenholt Niklassen AS, Hald M, Fjaeldstad AW, Noergaard Bech J, Ovesen T. Chemosensory function and food preferences among haemodialysis patients deviate from controls
3. Andreas Steenholt Niklassen, Antje Haehner, Mandy Cuevas, Yunmeng Zhu, Thomas Hummel. Questions for screening of gustatory dysfunction can be used for parageusia and phantogeusia but not for hypogeusia. International Archives of Otorhinolaryngology (IAO)
4. Khan KS^{1,2}, Overgaard K⁵, Tankisi H^{2,4}, Devantier L³, Gregersen S⁷, Pop-Busui R⁶, Dalgas U⁵, Andersen H^{1,2}. ¹Department of Neurology, Aarhus University Hospital, Aarhus, DENMARK ² International Diabetic Neuropathy Consortium, Department of Clinical Medicine, Faculty of Health, Aarhus University, Aarhus, Denmark. ³ Department of Oto-Rhino-Laryngology, Regional Hospital West Jutland, DENMARK ⁴ Department of Clinical Neurophysiology, Aarhus University, Aarhus, Denmark ⁵Section for Sport Science, Department of Public Health, Aarhus University, Aarhus, DENMARK ⁶ Division of Metabolism, Endocrinology and Diabetes, Department of Internal Medicine, University of Michigan, Ann Arbor, MI. *"Effects of progressive resistance training in patients with type 2 diabetic polyneuropathy: A randomized single-blinded controlled trial"* SUBMITTET 2021, Diabetologia.
5. Louise Devantier^{1,2, 3*}, Henriette Edemann Callesen⁴, Lasse Rehné³, Christian Mirian³, Therese Ovesen³. 1) Department of Clinical Medicine, Aarhus University, Aarhus, Denmark. 2) Department of Audiology, Aarhus University Hospital, Aarhus, Denmark. 3) Department of Oto-Rhino-Laryngology, Regional Hospital West Jutland, Holstebro, Denmark 4) Freelance Methodologist at Metodekonsulent Callesen, Denmark. *"Intratympanic corticosteroid as salvage therapy in treatment of idiopathic sudden sensorineural hearing loss: a systematic review and meta-analysis"* SUBMITTED, Heylion

6. Stalfors, J et al. Comparison of Clinical Practice of Tonsil Surgery from Quality Register data from Sweden and Norway and one clinic in Denmark, BMJ
7. Riis C, Bertelsen JB, Ovesen T. Risk of complications among patients with obstructive sleep apnea undergoing ENT-surgery.
8. Gill KZ, Ovesen T, Bertelsen JB: Systematisk review, søvnkirurgi
9. Fjaeldstad AW, Ovesen T. Forstyrrelse af lugtesansen ved COVID-19 – udredning og behandlingsmuligheder. *Aktuel Nordisk Odontologi*
10. Fjaeldstad AW, Konieczny DT, Fernandes HM, Gaini LM, Vejlø M & Sandberg K. The relationship between individual significance of olfaction and measured olfactory function
11. Bertelsen JB, Ovesen T, Zainali-Gill K. Systematic review of the effect of upper airway surgery based on DISE findings in adults with obstructive sleep apnea. *Systematic Reviews. submitted August 2021*
12. Mathias Hald¹, Louise Devantier¹ and Therese Ovesen¹ Affiliations: Department of Clinical Medicine, Aarhus University Hospital, Aarhus and Department of otorhinolaryngology, Region Hospital West Jutland, DK-7500 Holstebro, Denmark. "Motion sickness and postural control among Danish adolescents", SUBMITTED, *International Journal of Pediatric Otorhinolaryngology*, 2021.
13. Karen Juelsgaard Christiansen¹, Louise Devantier^{2,3}, Thomas Pasgaard⁴, Thea Emily Benson⁵, Michael Pedersen⁶, Thomas Kjærgaard⁷, 1. Anaesthesiology and Intensive Care, Aarhus University Hospital, Aarhus, Denmark, 2. Department of Clinical Medicine, Aarhus University, Aarhus, Denmark 3. Department of otorhinolaryngology, Region Hospital West Jutland, Denmark 4. Intensive Care, Aarhus University Hospital, Aarhus, Denmark 5. Department of Public Health, Aarhus University, Aarhus, Denmark 6. Comparative Medicine Laboratory, Department of Clinical Medicine, Aarhus University, Aarhus, Denmark 7. Otorhinolaryngology, Head and Neck Surgery, Aarhus University Hospital, Aarhus, Denmark. "Factors influencing tracheostomy healing time after decannulation" SUBMITTED *Respir Care*, 2021.
14. Kasra Zainali-Gill; Jannik Buus Bertelsen; Christian von Buchwald; Therese Ovesen; Eva Kirkegaard Kiaer. *The Egyptian Journal of Otolaryngology* Inter-observer and intra-observer agreement in drug induced sedation endoscopy – a systematic approach.
15. Signe Bønløkke Andersen¹, Hanne Owen¹, Therese Ovesen^{1,2}, Louise Devantier^{1,2} 1. Department of Otorhinolaryngology, Head and Neck Surgery, University Clinic for Flavour, Balance and Sleep, Region Hospital West Jutland, Department of Clinical Medicine, Aarhus University, Aarhus, Denmark. "Correlation between self-reported complaints and objective measures among patients with bilateral vestibulopathy". SUBMITTED, *ACTA*, 2021.
16. Ina Ejning Hunnerup Jørgensen³, BSc.med, Louise Devantier¹, Ph.d., Hatice Tankisi², Professor, Henning Andersen³, Professor, Karolina Snopek Khan³, Ph.d. 1. Department of Oto-Rhino-Laryngology, Regional Hospital West Jutland, Denmark, 2. Department of Clinical Neurophysiology, Aarhus University, Aarhus, Denmark, 3. Department of Neurology,

Aarhus University Hospital, Aarhus, Denmark. "The impact of vestibular dysfunction on falls and postural instability in individuals with type 2 diabetes with and without diabetic polyneuropathy." SUBMITTED, *Otology & Neurotology*, 2021.