

Report April – June 2025; Smell & Taste

Peer-reviewed Original Publications

- Xu X, Flemming K, Mastinu M, Haehner A, Hummel T (2025) Oral somatosensory sensitivity in the clinical assessment of gustatory dysfunction. *Laryngoscope* (in press)
- Mastinu M, Schönherr MV, Hummel T (2025) The taste of trigeminal sensations: relation between taste, lingual tactile acuity, and spicy perception in patients with taste dysfunction. *Chem Senses* (in press)
- Hintschich CA, Resler K, Brückner C, Altundag A, Trautmann K, Hölig K, Kroschinsky F, Pieniak M, Hummel T (2025) Granulocyte Colony Stimulating Factor (G-CSF) and Olfactory Function – a Clinical Pilot Study. *Laryngoscope Invest Otolaryngol* (in press)
- Sabiniewicz A, Reichert A, Oleszkiewicz A, Haehner A, Hummel T (2025) Effects of physical exercise and olfactory training with pleasant and unpleasant odors on verbal fluency and depression. *Chem Senses* (in press)
- Mastinu M, Thaploo D, Warr J, Hummel T (2025) Cortical representation of food-related odors in gustatory areas differs according to their taste association: an fMRI study. *Brain Sci* 15(4):418
- Álvarez-Mercado AI, López Plaza B, Plaza-Diaz L, Arcos-Castellanos L, Ruiz-Ojeda F, Brandimonte-Hernández M, Feliú-Batlle J, Hummel T, Palma-Milla S, Gil A (2025) The Regular Consumption of a Food Supplement Containing Miraculin Can Contribute to Reducing Biomarkers of Inflammation and Cachexia in Malnourished Patients with Cancer and Taste Disorders. *Pharmaceuticals* (in press)
- Hernandez AK, Biguerdi S, Lantzsck K, Schindowski K, Gunder N, Sekine R, Mori E, Hummel T (2025) Intranasal pH and olfactory function among healthy adults. *Laryngoscope* (in press)
- Lechner M, Fjaeldstad A, Rehman U, Liu J, Boniface D, Kumaresan K, Boardman J, Boak D, Altundag A, Frasnelli J, Gane S, Holbrook E, Hsieh J, Huart C, Konstantinidis I, Landis BN, Lund VJ, Macchi A, Mori E, Mueller C, Mullol J, Negoias S, Patel ZM, Pinto JM, Poletti S, Ramakrishnan V, Rombaux P, Vodicka J, Welge-Luessen A, Whitcroft KL, Yan C, Philpott C, Hummel T (2025) The Development and Validation of the Smell-Qx Questionnaire, Based on a Systematic Review of the Literature and the COMET Initiative on the Development of Core Outcome Sets for Clinical Trials in Olfactory Disorders. *Int For Allerg Rhinol* (in press)
- Xu X, Ludányi KP, Juratli JH, Németh F, Nagy D, Kraxner H, Hummel T (2025) Real-world outcomes of 3-month olfactory training on post-COVID-19 parosmia. *ORL* (in press)
- Yoshino A, Murakami R, Komachi T, Kawaguchi Y, Okubo K, Mahmut MK, Hummel T (2025) Impact of Odor Familiarity on the effectiveness of Olfactory Training: A Study with a Japanese sample. *ORL* (in press)
- Chao YT, Liao YC, Hsu PS, Thaploo D (2025) Altered white matter architecture in patients with isolated congenital anosmia. *Brain Struct Funct* 230, 78.
- Gellrich J, Parisato L, Sabha M, Croy I, von der Hagen M, Hummel T, Schriever VA (2025) Sniffing Out Emotion: Basic Emotions Elicited by Odors in Children and Adolescents. *Int J Behav Dev* (in press)
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Other publications (Chapters, peer-reviewed reviews, letters)

- Whitcroft K, Hernandez AK, Andrews P, Altundag A, Benkhatat H, Bensafi M, Boex C, Calegari F, Coelho D, Costanzo R, Druet V, Esposito W, Fornos AP, Gane S, Hintschich C, Holbrook E, Hsieh J, Huart C, Kobayashi M, Konstantinidis I, Lacour S, Landis BN, Lipp C, Macchi A, Mignot

- C, Mori E, Myuran T, Nishijima H, Patel Z, Philpott C, Podlesek D, Polanski W, Richardson R, Rombaux R, Senn P, Sipione R, Weise S, Hummel T (2025) Olfactory Implants: International Opinion Paper on Emerging Technologies and Clinical Applications. *Rhinology* (in press)
- Sekinger L, Hummel T (2025) Riechstörungen: Leben ohne Geruch. *J Culinaire* 40: 11-21
 - Chao YT, Shih CF, Chen CH, Hummel T (2025) Multidimensional effectiveness of olfactory training for chronic COVID-19-related olfactory dysfunction: a systematic review and meta-analysis. *Rhinology* (in press)
 - Hähner A, Hummel Th (2023) B 1 Riech- und Schmeckstörungen. In: Diener H-C et al. (Hrsg.) *Therapie und Verlauf neurologischer Erkrankungen*. 8. Auflage. S. 149–157.
 - Fjaeldstad AW, Hummel T (2025) Losing Your Sense of Smell: It can be worse than imagined. *Brain Sci* (in press)
 - Trnka F, Schmirlerova H, Schmirler M, Netuka D, Sichová K, Cerný M, Hummel T, Martin Majovský M (2025) Changes in Nasal Anatomy and Airflow After Endoscopic Resection of Pituitary Adenomas Using Computational Fluid Dynamics: A Pilot Study . *Cureus* 17(6): e85568. DOI: 10.7759/cureus.85568
 - Manan HA, de Jesus R, Thaploo D, Hummel T (2025) Mapping the Olfactory Brain: A Systematic Review of Structural and Functional MRI Changes Following Post-Viral Smell Loss. *Brain Sci* (in press)
 - (2025) Olfactory Impairment and Incident Cognitive Decline: A Systematic Review and Meta-Analysis. *Int Forum Allergy Rhinol* (in press)
 - Oleszkiewicz A, Croy I, Hummel T (2025) The Impact of Olfactory Loss on Quality of Life: A 2025 Review. *Chem Senses* (in press)
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Guests / Personnel / Visitors

- 3.4.2025: [Hitomi Sato](#), Ph.D., [Tokyo Dental College](#), starts here 1 year visit
- 3.4.2025: Dr. Maher Abou Nasr visits from the Department of Otorhinolaryngology, [Asklepios Klinik Altona](#)
- 15.4.2025: [Michał Dzieciot](#), Prof., visits from the Department of Veterinary Medicine at the Uniwersytet Przyrodniczy we Wrocławiu, Wrocław
- 30.4.2025: [Dr. Maria Steinke](#), Universitäts-HNO Klinik Würzburg
- 28.4.-2.5.2025: [Eishaan Kamta Bhargava](#), MD, Department of ORL, Sheffield Children's Hospital
- 8.5.2025: Mai Matsuda, medical student from Hamamatsu Medical School, Hamamatsu, Japan
- 8.5.2025: Prof. Mahmut Tayyar Kalcioğlu, Dept. of ORL, Istanbul Medeniyet University Medical Faculty, Istanbul
- 20.6.2025: [Prof. Reda Kamel](#) visits from Department of Otorhinolaryngology, Cairo University, Egypt.
- 27.6.2025: Wiktoria Jedryczka, Dept of Psychology, Univ. of Wrocław, starts her 2 months position
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Thesis

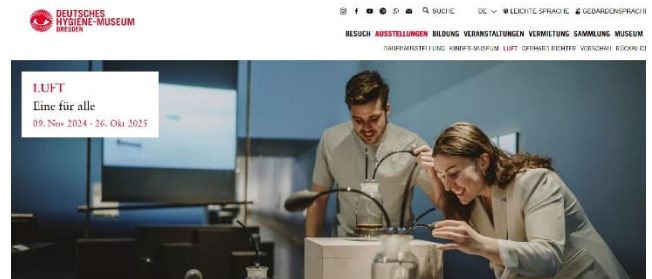
- 04.04.2025: Anna Kristina Hernandez, Ph.D., Investigating the intranasal trigeminal system and its interactions with olfaction and nasal airflow / obstruction based on psychophysical and objective airflow tests"
- 6.5.2025: Babette Schaab: Verteidigung Dr. med. „Verarbeitung gustatorisch evozierter Potenziale bei Patienten mit Schmeckstörung im Vergleich zu gesunden Probanden (Kontrollgruppe) mit Hilfe evozierter Potenziale"
- 6.5.2025: Tim Grahl: Verteidigung Dr. med. „Unterscheidung von Düften durch Kinder in verschiedenen Altersgruppen"
- 6.5.2025: Carl-Philipp Classen: Verteidigung Dr. med. „Die Auswirkung von angenehmen Düften auf den Effekt der progressiven Muskelrelaxation"
- 6.5.2025: elina Aurelia Vogel: Verteidigung Dr. med. „Untersuchung von olfaktorischen und visuellen Sinneseindrücken während der Strahlentherapie"
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Awards

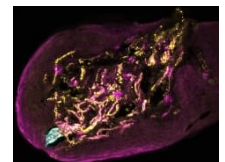
- Winner of the Award of the AG Olfactology/Gustology 2024: "Mucociliary Clearance" – Anna Kristina Hernandez
- Winner of the Award of the AG Olfactology/Gustology 2024: "Age-related habituation to odors" - Cindy Ma
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Conference / presentations:

- 10.4.2025: Dr. Susanne Weise presents at the Hygienemuseum Dresden on "odors in the air!"



- 9.4.-11.4.2025: [2nd FLAVOURsome Advanced Training School: Chemosensation! Taste!](#)
Part of the activities of the COST Action FLAVOURsome, supported by [COST \(European Cooperation in Science and Technology\)](#) with presentations from Mariano Mastinu, Coralie Mignot, Tin Hernandez, Susanne Weise, Yling Mai, Zetian Li, Kwangsu Kim, Thomas Hummel



- 24.4.2025: Michal Pieniak presents at the European Sensory Network Spring Meeting 2025 in Geneva (24-25.04.2025). on "Olfactory Training: from Basic Research to Real-World Applications".
- ACHEMS Conference in Bonita Springs, FL, USA: 23.-26.4.2025. Presentations by

- Mariano Mastinu: "Oral Trigeminal Perception Of Astringency, Capsaicin, And Stereognosis: Exploring Individual Variability And Impact Of Taste Dysfunction"
 - Thomas Hummel: "On The Ph Of The Human Olfactory Mucus"
 - Agnieszka Sorokowska: "Child Food Neophobia And Sympathetic Arousal In Response To Odor Exposure"
 - Ronja Hopf: "Molecular Mechanisms Of Olfactory Training In Dysosmic And Normosmic Individuals"
 - Antje Welge-Lüssen: "Normosmic Patients In A Smell And Taste Clinic"
- 9.5.2025: Thomas Hummel presents on "Clinical aspects of olfactory plasticity" at the Chinese Association of Chemical Senses (CACHe)
 - Online conference ODOFANT4, organized by Pengfei Ahn and Thomas Hummel, on 15./16.5.2025, with presentations from
 - Mai, Yiling: Smell over Pain
 - Maria Rommel: The olfactory fingerprint
 - Li Zetian: Sleep - effects of odors
 - Emely Kruschwitz: Olfactory training and olfactory receptors
 - Kwangsu Kim: Using AI to categorize olfactory event-related potentials in anosmia and normosmia
 - Hitomi Sato: Differences in time-intensity sensory evaluation of salty taste between young and older adults.
 - The [Wroclaw-Dresden CHEMOSENSATION! Meeting](#) at the Krazewski museum in Dresden, on June 13th, 2025.

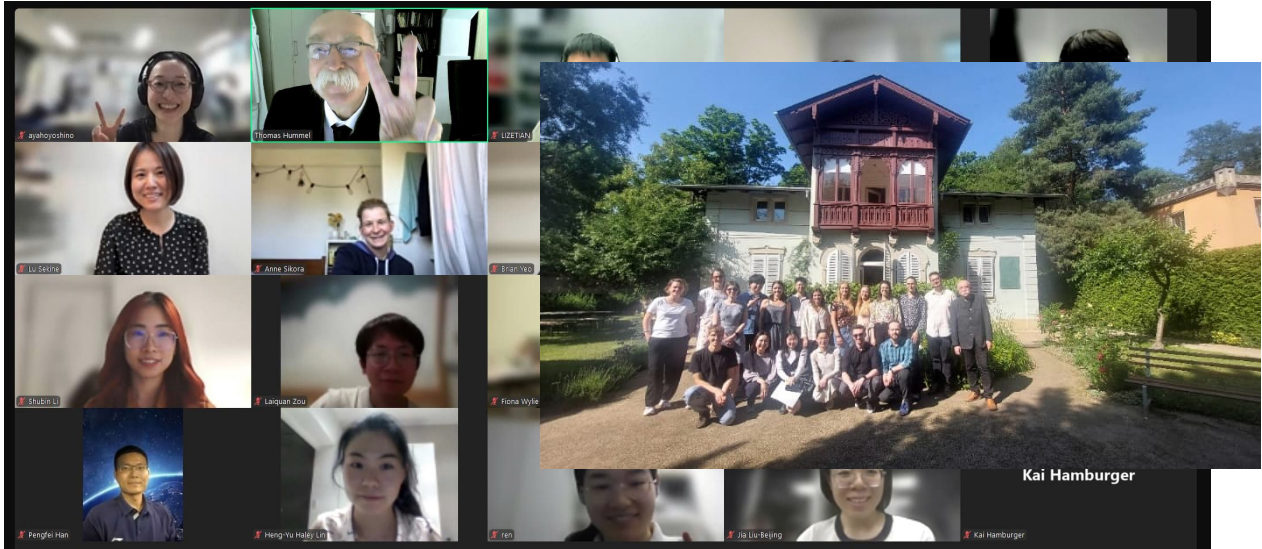
Le mot **O₁D₂O₁F₄A₁T₁**
n'est pas valide au
scrabble



the lab meeting at the Krazewsky-Museum (<https://krazewski-dresden.de/en>) - **Chemosensation!**

Nordstraße 28, 01099 Dresden 13th of June, 2025
[how to get there](#)

			begin 10:30
The nose and other issues			Chair: Thomas Hummel
Anna Kristina	Hernandez	On the pH of the olfactory mucus	11:00
Wiktoria	Jędryczka	Daily life sniffing frequency and the olfactory abilities	11:12
Yiling	Mai	Odor exposure and pain perception.	11:24
Maria	Rommel	Olfactory Fingerprint and COVID19	11:36
Antje	Hähner	Patients with Wilson's disease cannot smell sulfur	11:48
<i>break</i>			12:00-12:15
Exposure to odors			Chair: Yiling Mai
Michał	Pieniak	How does smell training change cortical responses to odors in healthy adults?	12:15
Barbara	Zyzelewicz	Olfactory training reliefs depressive symptoms in elderly people with subclinical depression	12:27
Marta	Rokosz	The effects of olfactory training on cognitive function in healthy adults	12:39
Lenja	Mayer	Effects of physical exercise and pleasantness of odors on olfactory function	12:51
<i>break</i>			13:03-13:45
Olfactory function and its modulators			Chair: Michał Pieniak
Shubin	Li	Assessment of the human electrobulbogram	13:45
Kwangsu	Kim	Recognition of emotions based on facial reactions	13:57
Daniel	Marek	Development of a tool to measure odor awareness in children aged 4 years and above	14:09
Aleksandra	Reichert	Human olfactory sensitivity varies across geographical locations	14:21
Anna	Oleszkiewicz	The olfactory world: demographic and geographical determinants of human olfactory perception	14:33
<i>break</i>			14:45-15:00
Change of olfactory function			Chair: Anna Oleszkiewicz
Janine	Gellrich	Odors in childhood	15:00
Agnieszka	Sorokowska	Food neophobia	15:12
Zetian	Li	Changes of olfactory function in patients with parosmia	15:24
Cornelius	Brückner	Impact of Chemotherapy and G-CSF on Human Olfactory and Gustatory Function	15:36
Susanne	Weise	Effects of auricular vagal stimulation on olfactory function	15:48
			finish 16.30



Thursday, 15th of May		https://tu-dresden.zoom-x.de/j/6948020500?omn=67573191286		
Dresden	Chongqing	chair: Pengfei Han		
10:10	16:10	Mai, Yiling	Smell over Pain	
10:20	16:20	Maria Rommel	The olfactory fingerprint	
10:30	16:30	Ben Chen	Sex Differences in Olfactory Networks and Their Association with pTau217 in Mild Cognitive Impairment: A Neuroimaging-Transcriptomic Study	
10:40	16:40	Yun-Ting Chao	Cross-Modal Neural Plasticity Induced by Multisensory Olfactory Training	
10:50	16:50	Lina Ren	the validation of ThreeT retronasal olfactory test in Chinese population	
break				
11:10	17:10	Devesh Rawat	Olfactory thresholds in India and Germany	
11:20	17:20	Prem Wungcharoun	Normative Data for the 16-Item Thai Smell Identification Test in Geriatric Populations.	
11:30	17:30	Kohei Taniguchi	Retronasal olfactory tests	
11:40	17:40	Sithatcha Wongkom	The development of odor identification test for Thai children	
break				
		chair: Kristina Hernandez		
12:20	18:20	Kazuhiro Funabashi	A case: unilateral spontaneous phantosmia + nausea + headache with soft tissue density shading in the olfactory cleft	
12:30	18:30	Yunpeng Zang	Decoding the Neural Basis of olfactory dysfunction: a Multimodal MRI study in Chronic rhinosinusitis with olfactory dysfunction	
12:40	18:40	Pengbo Gao	Radiomics Study of Olfactory-Related Brain Regions in Alzheimer's Disease.	
break				
13:10	19:00	Gina Yin-Chun Liao	Reward Network Plasticity in Acquired Anosmia: A Preliminary fMRI Study	
13:20	19:10	Schwarz, Mira	The human sense of smell in spatial orientation	
13:30	19:20	Jia Liu	Olfactory Performance Assessed for Children by the Combined Testing	
13:40	19:30	Pauline Breidel	The smell of amniotic fluid	
Friday, 16th of May		https://tu-dresden.zoom-x.de/j/6948020500?omn=69467923541		
Dresden	Chongqing	chair: Thomas Hummel		
10:10	16:10	Fiona Wylie	Scents of Attraction: How Olfactory Ability and Disgust Relate to Romantic Relationships	
10:20	16:20	Li Zetian	Sleep - effects of odors	
10:30	16:30	Emely Kruschwitz	Olfactory training and olfactory receptors	
10:40	16:40	Shubin Li	Electrobulbogram	
break				
21	11:00	17:00	Juthamard Vongsuteera	Smell Training Can Improve Olfactory Function in Smoking Cessation Patients: A Prospective Randomized Controlled Trial
23	11:10	17:10	Darong Chen	Perceptual Load Modulates Odor Intensity and Affective Habituation: A Comparative Study of Positive and Negative-Valence Odors
24	11:20	17:20	Antonie Bierling	One molecule, a thousand noses - investigating variability in smell perception
22	11:30	17:30	Oster, Christoph	Predictive value of olfactory function in glioblastoma
break				
		chair: Ayaho Yoshino		
12:00	18:00	Isabelle Burke	Mind Your Nose: Olfactory memory training in older adults with subjective cognitive decline	
12:10	18:10	Fei Peng	Atypical Olfactory Identification, Memory, and Meta-cognition in Children with Autism Spectrum Disorder	
12:20	18:20	Yeo Sheng Yep, Brian	Olfactory impairment and Cognitive Decline	
12:30	18:30	Charn Tze Choong	Olfactory impairment and frailty	
break				
12:50	18:50	Kwansu Kim	Using AI to categorize olfactory event-related potentials in anosmia and normosmia	
13:00	19:00	Zhuofeng Li	Neural Mechanisms of Encoding, Maintenance, and Retrieval in Olfactory Working Memory	
13:10	19:10	Haley Heng-Yu Lin	Unilateral gustatory dysfunction is associated with facial paralysis after skull base surgery	
13:20	19:20	Hitomi Sato	Differences in time-intensity sensory evaluation of salty taste between young and older adults.	

- Deutscher HNO Kongress in Frankfurt, 29.-31.5.2025 - Vorträge, Kurse
 - Schmecken und trigeminale Wahrnehmung – Beziehung zwischen Schmeckfunktion, linguale Mechanosensorik und Schärfe-wahrnehmung - M.-V. Schönherr, M. Mastinu, T. Hummel
 - Causes of olfactory loss in cystic fibrosis S. Weise



- Mucociliary Clearance A. K. Hernandez
- Innovation bei der Therapie von Riechstörungen – Substitution olfaktorischer Stimuli durch die Reizung des trigeminalen Systems beim Menschen S. Weise, H. B. Stanley, C. Lipp C. Mignot, K. Garefis, M. Fieux, E. Tsakiropoulou, S. Genetzaki, R. Dubreuil, P. Hanslik, C. Ferdenzi, M. Carulli, A. Bertsch J. Brugger, T. Hummel, I. Konstantinidis, M. Bensafi
- Riechen in Abhängigkeit vom intranasalen pH - A. K. T. Hernandez, S. Biguerdi, K. Lantzsch, T. Hummel
- Kurs: Riechen und Schmecken - T. Hummel, A. Welge-Lüssen, V. Gudziol, M. Damm
- Conference of the European Rhinological Society in Budapest, June 22-25, 2025 with presentations by
 - 24.6.2025: Thomas Hummel - How should we measure olfaction in clinical practice and in clinical trials?
 - 23.6.2025: Thomas Hummel - Advancing the Senses: Breakthroughs in Clinical Olfactory Testing
 - 23.6.2025: Anna Kristina Hernandez - How to manage a patient with endonasal trigeminal dysfunction
 - 22.6.2025: Susanne Weise: Olfactory disorders - emerging treatment options beyond training
 - 23.6.2025: Susanne Weise: Development of an olfactory implant - from idea to pre-prototype
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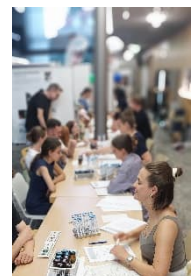


Presentations in the lab:

- [Prof. Rona Graham](#), Gibsons's medical Clinic, University of Sherbrooke, presents on the 15th of April at 15:00h, on *Arterial diameter changes in the brain and improvement of olfactory and cognitive functions post olfactory therapy in Mild Cognitive Impairment*
- 16.4.2025: Mariano Mastinu, Ph.D., presents on "taste and trigeminal function"
- 19.5.2025: [Eishaan Kamta Bhargava](#), MD, Department of ORL, Sheffield Children's Hospital, presented on his research

What else:

- 20.6.2025: Long Night of Science – presentation of olfactory tests, nasal endoscopy etc.: Sero Biguerdi, Aya Ajaj, Selin Bayindir, Pauline Hanslik, Laetitia Bleul, Karoline Lantzsch, Sophia Frieling, Alicia Jatzek, Henrik Berning, Thomas Hummel
- 14.6.2025: The Dresden Museum Night - presentation of olfactory tests, nasal endoscopy etc.: Lisa Höhnel, Raphael Seeger, Annika Sachs, Sarah Elsner, Alissa Boberg, Lenja Mayer, Jannick Porschberg, Susanne Weise, Thomas Hummel



media:

- 6.5.2025: Thomas Hummel Interview mit Stephan Schön, Sächsische Zeitung : „Was riecht im Wald?“
- 33.5.2025: Thomas Hummel Interview mit Sabine Meuter von der Apotheken Umschau zum Thema "Salziger Geschmack im Mund: Was tun?"
- 1.5.2025: Thomas Hummel and Anna Oleszkiewicz provide interview with David Robson for the New Scientist (24th of may 2005, pages 30-34), on "Your super sense"
- 25.6.2025: Thomas Hummel Interview with Annika Inampundi for Science Magazine on ["Mountain-dwelling animals may have a worse sense of smell"](#)
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