

## Report April – June 2021; Smell & Taste

### Peer-reviewed Original Publications

- Morice A, Smith J, McGarvey L, Birring S, Parker S, Turner A, Hummel T, Gashaw I, Fels L, Klein S, Francke K, Friedrich C (2021) Eliapixant (BAY 1817080), a P2X3 receptor antagonist, in refractory chronic cough: a randomised, placebo-controlled, crossover phase 2a study. *Eur Resp J* (in press) doi: 10.1183/13993003.04240-2020
- Han P, Seo HS, Klockow M, Yan X, Hähner A, Hummel T (2021) Oral irritation in patients with chemosensory dysfunction. *Flavor Fragr J* (in press)
- Oleszkiewicz A, Bottesi L, Pieniak M, Fujita S, Krasteva N, Nelles G, Hummel T (2021) Olfactory training with Aromastics – olfactory and cognitive effects. A Randomized Clinical Trial. *Eur Arch ORI* (in press)
- Konstantinidis I, Tsakiropoulou E, Hähner A, de With K, Poulas K, Hummel T (2021) Olfactory dysfunction after Covid-19 vaccination. *Int Forum Allergy Rhinol* (in press)
- Oleszkiewicz A, Abriat A, Doelz G, Azema E, Hummel T (2021) Beyond olfaction: beneficial effects of olfactory training extend to aging-related cognitive decline. *Behav Neurosci* (in press)
- Han P, Musch M, Abolmaali N, Hummel T (2021) Improved odor identification ability and increased regional gray matter volume after olfactory training in patients with idiopathic olfactory loss. I-Perception (in press) DOI: 10.1177/20416695211005811
- Pieniak M, Oleszkiewicz A, Klockow M, Yoshino A, Haehner A, Hummel T (2021) Q-Powders – a quick test for screening retronasal olfactory disorders with tasteless powders. *Eur Arch ORI* (in press)
- Lötsch J, Ultsch A, Hähner A, Willgeroth V, Bensafi M, Zaliani A, Hummel T (2021) Data-science based analysis of perceptual spaces of odors in olfactory loss. *Sci reports* (in press)
- Bierling AL, Croy I, Hummel T, Gianarelio Cuniberti G, Croy A (2021) Olfactory Perception in Relation to the Physicochemical Odor Space. *Brain Sci* (in press)
- Drews T, Hummel T, Gewalt B, Hauswald B, Hähner A (2021) Acupuncture is associated with a positive effect on odour discrimination in patients with postinfectious smell loss – a controlled prospective study. *Eur Arch ORI* (in press)
- Sabiniewicz A, Wrage F, Hummel T (2021) The impact of cognitive and non-cognitive factors on odor discrimination performance. *J Sens Studies* (in press)
- Gellrich J, Breuer AS, Han P, Güdücü C, Hummel T, Schriever VA (2021) Central nervous processing of odors in infancy. *Chem Senses* (in press)
- Whitcroft KL, Noltus J, Andrews P, Hummel T (2021) Sinonasal Surgery Alters Brain Structure and Function: Neuroanatomical Correlates of Olfactory Dysfunction. *Neurosci* (in press)
- Drews T, Hummel T, Gewalt B, Hauswald B, Hähner A (2021) Acupuncture has a positive effect on odour discrimination in patients with postinfectious smell loss – a controlled prospective study. *Eur Arch ORI* (in press)
- Han P, Müller L, Hummel T (2021) Peri-threshold trigeminal stimulation with capsaicin increases taste sensitivity in humans. *Chemosens Percept* (in press)
- Joshi A, Thaploo D, Yan X, Zang Y, Warr J, Hummel T (2021) Habitual exposure to trigeminal stimuli and its effects on the processing of chemosensory stimuli. *Neuroscience* (in press)
- Thaploo D, Zelder S, Hummel T (2021) Olfactory modulation of the contingent negative variation to auditory stimuli. *Neuroscience* (in press)
- Khoury S, Gudziol V, Grégoire S, Cabaret S, Menzel S, Martine L, Mezière E, Soubeyre V, Thomas-Danguin T, Grosmaître X1, Bretillon L, Berdeaux O, Acar N, Hummel T, Le Bon AM (2021) Lipidomic profile of human olfactory mucosa and associations with circulating fatty acids and olfactory deficiency. *Sci Rep* (in press)

## Other publications (Chapters, peer-reviewed reviews, letters)

- Völter C, Thomas JP, Guthoff R, Maetzler W, Hummel T (2021) Funktionseinschränkungen der Sinne im Alter. Dt Ärzteblatt (in press)
- Völter C, Thomas JP, Wirth R, Guthoff R, Grunwald M, Hummel T (2021) Wie das Gehirn die Welt im Alter wahrnimmt. Z Geriatrie (in press)
- Pellegrino R, Mignot C, Georgiopoulos C, Haehner A, Hummel T (2021) Consequences of gaining olfactory function after life-long anosmia. Neurocase (in press)
- Melis M, Haehner A, Mastinu M, Hummel T, Tomassini Barbarossa I (2021) Molecular and genetic factors involved in olfactory and gustatory deficits in Parkinson's Disease. Int J Mol Sci (in press)
- Dörig P, Gunder N, Witt M, Welge-Lüssen A, Hummel T (2021) Zukunftsweisende Therapieansätze bei Riechstörungen: Elektrische Stimulation, Stammzelltherapie und Transplantation von Riechepithel – eine Übersicht (Future therapeutic strategies for olfactory disorders: electrical stimulation, stem cell therapy and transplantation of olfactory epithelium – an overview) HNO (in press) doi: 10.1007/s00106-021-01060-x.
- Zhu Y, Hummel T (2021) Assessment of Taste Function. In: The Pharmacology of Taste. Palmer K, Servant G (eds). Handbook of Experimental Pharmacology, Springer (in press)
- Seo HS, Pramudya RC, Singh A, Hummel T (2021) Recent evidence for the impacts of olfactory disorders on food enjoyment and ingestive behavior. Curr Opin Food Sci (in press)
- Völter C, Thomas JP, Maetzler W, Guthoff R, Grunwald M, Hummel T (2021) Dtsch Arztebl Int. 2021 Aug 23;(Forthcoming):arztebl.m2021.0212. doi: 10.3238/arztebl.m2021.0212.

## Abstracts

- S. Negoias, B. Meves, Y. Zang, A. Haehner, T. Hummel, Basel/Dresden (2021) Charakteristika von Riechstörungen mit und ohne subjektive Aromawahrnehmungsstörung. Deutscher HNO Kongress 2021, abstract 268
- D. T. Liu, R. Pellegrino, M. Sabha, A. Altundag, M. Damm, S. C. Poletti, I. Croy, A. Hähner, A. Oleszkiewicz, M. Cuevas, T. Hummel, Wien (AT)/Dresden/Knoxville (US)/ Istanbul (TR)/Köln/Wroclaw (PL) (2021) Einflussfaktoren für eine klinisch relevante Verbesserung des Riechvermögens nach Riechtraining: Eine Retrospektive Untersuchung an 601 Probanden. Deutscher HNO Kongress 2021, abstract 269
- J. Draf, K. Biswas, B. Wagner Mckenzie, C. Ballauf, R. G. Douglas, T. Hummel, Dresden/ Auckland (NZ) (2021) Der Verlust der bakteriellen Vielfalt in den Nebenhöhlen ist mit niedrigeren Werten für die Unterscheidung von Düften assoziiert. Deutscher HNO Kongress 2021, abstract 565

## Guests / Personnel

- Visit from Dr. med. Constantin Hintschich, Dept of ORI, Univ. of Regensburg, from April 1 to April 30, 2021.

## Thesis

- Tobias **Springer**, Dr. med. dent.: Untersuchung der trigeminalen Sensitivität bei Patienten mit nasaler Obstruktion; Promotionsverteidigung am 13.4.2021
- Catharina **Weber**, Dr. med.: Hirnaktivität nach Darbietung von Düften, die an Aminrezeptoren binden - eine fMRT-Studie; Promotionsverteidigung am 13.4.2021
- Gudrun **Winter**, Dr. med.: Riech- und Schmeckstörungen bei akuter Rhinitis; Promotionsverteidigung am 13.4.2021

- Nadine **Gunder**, Dr. med.: Der Einfluss von intranasal appliziertem Natrium-Citratpuffer auf die quantitative und qualitative olfaktorische Funktion bei Patienten mit einer postinfektiösen Riechstörung; Promotionsverteidigung am 4.5.2021

### Courses, Presentations etc.:

- 18.5.2021: Dt. HNO Kongress - Kurs 08: Riechen und Schmecken: A. Welge-Lüssen, T. Hummel, M. Damm, V. Gudziol
- 17.4.2021: Antje Hähner: Vortrag „SARS-CoV2-Riech- und Schmeckstörungen“ beim 5. Dresdner HNO-Forum.
- **ACHEMS 2021: Clinical symposium**  
**Title: “The cure for olfactory loss”**; Chair: Thomas Hummel, Dresden, Germany  
 Caroline Huart, Brussels, Belgium – [caroline.huart@uclouvain.be](mailto:caroline.huart@uclouvain.be) “The use of steroids in patients with olfactory dysfunction”  
 Andrew Lane, Baltimore, MD, USA [alane3@jhmi.edu](mailto:alane3@jhmi.edu) – “Inflammation and olfactory function”  
 Vijay Ramakrishnan, Denver, CO, USA – [VIJAY.RAMAKRISHNAN@CUANSCHUTZ.EDU](mailto:VIJAY.RAMAKRISHNAN@CUANSCHUTZ.EDU) “The sinonasal microbiome and the sense of smell”  
 Moustafa Bensafi, Lyon, France [moustafa.bensafi@cnrs.fr](mailto:moustafa.bensafi@cnrs.fr) – “Restoring olfaction: from current paradigms to olfactory”
- 9.6.2021: Thomas Hummel with presentation on “Smell loss: meaning, diagnosis and treatment” at the Department of Otolaryngology — Head and Neck Surgery at the University of Cincinnati, Grand Rounds
- 23.6.2021: Thomas Hummel – Vortrag beim Sensorischen Netzwerk Österreich: COVID-19 assoziierte Riechstörungen.

### Conferences in Dresden

- The [international Lab Meeting - Spring 2021](#)



**Friday, May 7, 14:00-17:00 h, and Saturday, May 8, 13:00-16:00 h (Berlin/Paris time)**

#### Presentations from Dresden:

Coralie Mignot	Olfactory and trigeminal Event-Related Potentials in migraineurs with or without aura
Pengfei Han	Habitual spicy food intake is related to alteration of oral trigeminal and gustatory perception in healthy young females
Tanja Drews	Smell disorders after fractures of the nose
Divesh Thaploo	Tractography in Olfaction
Hanani Abdul Manan	grey matter and white matter changes in congenital and acquired anosmia; a systematic review
Xiaoguang Yan	Unusual Structural Patt
Michał Pieniak	Q-Powders – a quick test for screening retronasal olfactory disorders with tasteless powders
Cagdas Guducu	Electrophysiological tools for the evaluation of olfactory function
Andreas Steenholt Niklassen	Validation of a Retronasal Olfactory Powder Test and development of a Quick Retronasal Olfactory Test
Anna Oleszkiewicz	Human olfactory ecology appears to improve the sense of smell in patients and healthy controls
Han-Seok Seo	Effects of auditory cues on gustatory perception and event-related potentials
Birthe Sturm	Olfactory sensory neurons: How odor exposure influences targeting and regeneration

## What else:

- April 7, 2021: Thomas Hummel: interview with Julie Levy, Science Line: "[Questions linger around COVID-19 and restoring smell](#)"
- 6.4.2021: Thomas Hummel mit Interview Herrn Pyritz in der Sprechstunde im Deutschlandfunk, 10:30-12:00h, zum Thema : [Riechstörungen](#)
- 2.5.2021: Thomas Hummel Interview mit NZZ format „Von der Nase verführt!“

**SCIENCELINE**

**Deutschlandfunk**



- 11.5.2021, 8:00h: Thomas Hummel – Interview on n-tv news on “Covid19 associated olfactory loss”
- 11.5.2021: Pressekonferenz – deutsche HNO Gesellschaft zum Thema „COVID19 und Riechstörung“



**Online-Presskonferenz anlässlich der 92. & 91. Jahresversammlung der DGHNO-KHC**

Organisator: Heinke Schöffmann | Moderator: Heinke Schöffmann

- 12.5.2021: dpa Meldung zu Riechstörungen nach COVID19



- 12.5.2021: Thomas Hummel – online talk at Procter and Gamble (Cincinnati) on “Postviral olfactory loss”

- 12.5.2021: Thomas Hummel – online talk at the symposium “MANAGEMENT OF OLFACTORY PATHOLOGIES IN COVID19 AND OTHER PATHOLOGIES” (organized by Drs. Adelaida Bock and Patricia Portiollo Mazal

SYMPOSIUM WORKSHOP - FIRST WEEK OF SMELL AND TASTE IN PARAGUAY  
SYMPOSIUM: MANAGEMENT OF OLFACTORY PATHOLOGIES IN COVID -19 AND OTHER PATHOLOGIES  
COORDINATOR: DR. ADELAIDA BOCK

- 19.5.2021: Thomas Hummel – [interview](#) mit Paula Schneider von Focus Online

- 27.5.2021: Thomas Hummel – interview mit DLF zum Thema „Riechstörungen nach COVID19“

Jeder 2. Covid-Patient hat Geruchsstörung:  
HNO-Arzt erklärt Riech-Training für zuhause



- 27.5.201: Akshita Joshi is elected for the 7-member-doctoral counsel of the Graduate Academy to represent the Medical Faculty: [https://tu-dresden.de/ga/die-einrichtung/doktorandenkonvent/ziele-und-aufgaben/wahlen?set\\_language=en](https://tu-dresden.de/ga/die-einrichtung/doktorandenkonvent/ziele-und-aufgaben/wahlen?set_language=en)

Akshita Joshi



*What did you study and since when have you been doing your doctorate at TU Dresden?*

I have a Master's degree in "Cognitive Neuroscience" from my home university (University of Rajasthan). I started my doctorate in "Human medicine" from TU Dresden in October 2019.

*Why do you want to run for the DDocs PhD Council?*

*Council?*

I embrace my journey in Germany, which has given me a lot of confidence, experience and I would like to share it with my fellow mates. It would be a great honor if my learning can help others in any possible way. I feel being a part of DDocs will not only help me to be a team player but also enhance my project management skills. I promise to work on my duties and responsibilities with full will and dedication. I strongly believe that "Knowledge is power. Knowledge shared is power multiplied - Robert Boyce".

*What do you think are the biggest problems for doctoral students at TU Dresden?*

A lot of universities give an opportunity to their doctoral students to gain experience in teaching. I believe especially for students who want to have their career in academics it is really important. Also, I hope to see in the future more career fairs where students get an opportunity to make career connections. Lastly, field-oriented courses in English for international students.

*What would you change at TU Dresden if you could?*

TU Dresden is one of the most reputed universities in the world. It offers a lot for its students. However, I would focus more on interdepartmental communications and possible collaboration opportunities, which lacks for now.

- 7.6.2021: Thomas Hummel – interview mit Jutta Heinze, Ärztenachrichtendienst zum Thema „Riechtraining“
- 8.6.2021: Thomas Hummel – interview mit my Life (Apothekenzeitung) [Band 11, 2021, Seite 62-63] zum Thema „Wenn der Geruchssinn nachlässt“
- 4.6.2021: Thomas Hummel – interview mit Dr. Fleck von medscape zum Thema „[Geruchsverlust durch COVID-19: Jeder 2. ist betroffen – was man bisher dazu weiß und was sich dagegen tun lässt](#)“
- 20.6.2021: Thomas Hummel – interview mit Viol Kiel von Spiegel zum Thema: „[Geruchsstörung nach Covid-19: Wenn der Kaffee plötzlich wie Benzin riecht](#)“
- 23.6.2021: Thomas Hummel – interview mit der Apothekenzeitung (August 2021, S. 18-19) „Wenn die Nase streikt“

**änd**  
Ärztlich-nachrichtendienst

**my life**

**Medscape**

**SPIEGEL Wissenschaft**