

## Report July – September 2019; Smell & Taste

### Peer-reviewed Original Publications

- Hilz MJ, Wang R, Liu M, Muresanu D, Flanagan S, Winder K, Hösl K, Hummel T (2019) Emotional and autonomic processing of olfactory stimuli is compromised in patients with a history of mild traumatic brain injury. *J Neurotrauma*
- Zang Y, Han P, Burghardt S, Knaapila A, Schriever V, Hummel T (2019) Influence of olfactory dysfunction on the perception of food. *Eur Arch ORL* (in press)
- Bogdanov V, Walliczek-Dworschak Ute, Whitcroft KL, Landis BN, Hummel T (2019) Response to glucocorticosteroids predicts olfactory outcome after ESS in chronic Rhinosinuitis. *Laryngoscope* (in press)
- Kebir S, Hattingen E, Niessen M, Rauschenbach L, Fimmers R, Hummel T, Schäfer N, Lazaridis L, Kleinschnitz C, Herrlinger U, Scheffler B, Glas M (2019) Olfactory Function as Independent Prognostic Factor in Glioblastoma. *Neurology* (in press)
- Chen B, Klarmann R, Israel M, Ning Y, Colle R, Hummel T (2019) Difference of olfactory deficit in patients with acute episode of schizophrenia and major depressive episode. *Schizophr Res* (in press)
- Stoegbauer J, Wirkner K, Engel C, Moebus S, Pundt N, Teismann H, Löffler M, Hummel T, Beule AG, Berger K (2019) Prevalence and risk factors of smell dysfunction - a comparison between five German population-based studies. *Rhinology* (in press)
- Liu DT, Besser G, Renner B, Seyferth S, Hummel T, Mueller CA (2019) Retronasal Olfactory Function in Patients with Smell Loss but Subjectively Normal Flavor Perception . *Laryngoscope* (in press)
- Tremblay C, Emrich R, Cavazzana A, Klingelhofer L, Brandt MD, Hummel T, Haehner A, Frasnelli J (2019) Parkinson-specific electrophysiological chemosensory pattern: a potential avenue for early detection. *J Neurol* (in press)
- Lotsch J, Hummel T (2019) A data science-based analysis of seasonal patterns in outpatient presentations due to olfactory dysfunction. *Rhinology* (in press)
- Solla P, Masala C, Liscia A, Piras R, Hummel T, Haehner A, Defazio G (2019) Evidence of gender-related differences in olfactory function among patients with Parkinson's disease. *J Neurol* (in press)
- Lotsch J, Hummel T (2019) Machine-learned analysis of side-differences in odor identification performance. *Neuroscience* (in press)
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### Other publications (Chapters, peer-reviewed reviews, letters)

- Landis BN, Hummel T (2019) Measuring olfaction instead of asking – it's more than luxury! *Eur Arch ORL* (in press)
- Landis BN, Hummel T (2019) Editorial to the The Smell and Taste Corner: The Human Chemical Senses Are Useless, Are They Not? *ORL* (in press)
- Schriever VA, Landis BN, Gellrich J, Hummel T (2019) Too early to smell the effect, 27 July 2019. Comment to Muelbert M, Lin L, Bloomfield FH, Harding JE (2019) Exposure to the smell and taste of milk to accelerate feeding in preterm infants (Review). *Cochrane Database Syst Rev*. 2019 Jul 16;7:CD013038
- Han P, Zang Y, Yoshi A, Hummel T (2019) Magnetic resonance imaging (MRI) in research on patients with olfactory loss. *Britain Topogr* (in press)

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## Guests

- Ayaho Yoshino from the Department of Otorhinolaryngology, 1715 Kamakari Inzai city, Chiba, Japan starts her 6 months visit on July 1<sup>st</sup>, 2019
- Dr. Mem Mahmut from the Department of Psychology, 4 First Walk, Macquarie University, NSW, Australia, starts his 6 months visit on July 1<sup>st</sup> 2019
- Caterina Pacifico (Biophysics student from McGill University, Montreal, Canada) starts her 1 week visit on July 15<sup>th</sup>, 2019
- Andreia Oliveira (Medical Student from the University of Lisbon) starts her 4 week visit on July 15<sup>th</sup>, 2019
- Dr. Cagdas Guducu from Dokuz Eylul University, Faculty of Medicine, Biophysics Dept, Izmir, starts his visit on 22<sup>nd</sup> of August until the 4<sup>th</sup> of September
- Yan Xiaogang, M.D. from Anzhen JHospital, China, starts his 3year PhD on the 22<sup>nd</sup> of August 2019
- Yunmeng Zhu, M.D., from Beijing, China, starts his 3year PhD on the 2<sup>nd</sup> of September 2019
- Guliz Akin, from Dokuz Eylul University, Faculty of Medicine, Biophysics Dept, Izmir, starts her 7 months visit on September 1<sup>st</sup>
- Coralie Mignot, PhD, from Strasbourg, visit son September 9<sup>th</sup>
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## Grants/Awards

- July 2019: Moustafa Bensafi and Thomas Hummel: Lyon-Dresden Human ChemoSensation Project (LIA Proposal 2019/2022), awarded with 40.000 Euro; running from 2019-2022
- July 2019: Anna Oleszkiewicz receives the meddrive award of the TU Dresden for the project: "Pheromone-like effects on human behavior – a proof of principal study examining the impact of the putative pheromone Hedion", awarded with 18.300 Euro, running from Jan to Dec 2020
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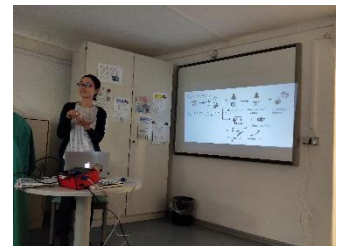
## Thesis

- 9.7.2019: Frau Maren Eckhardt – Dr. med: „Korrelation posttraumatischer Riechstörungen mit MR- tomographisch detektierbaren Veränderungen am Riechhirn - eine retrospektive Analyse“
- 9.7.2019: Herr Islam Batashev – Dr. med: „Topische Kortikosteroidtherapie bei sinusalen Riechstörungen Kortikosteroid in Inhalations- oder Sprayform“
- 9.7.2019: Frau Anna-Luisa Bartmuß – Dr. med: „Charakterisierung und topographische Verarbeitung von ereigniskorrelierten Potenzialen verschiedener sensorischer Stimuli auf der Zunge“
- 24.8.2019: Frau Helene Bichtemann – Dr. med.: „Abhängigkeit der Riechschwellenmessung von der quantitativen und qualitativen Zusammensetzung der Duftgemische“
- 8.10.2019: Frau Kyri-Kristin Lindner – Dr. med.: „Zusammenhang zwischen posttraumatischen Riechstörungen und Läsionen des präfrontalen Kortex“

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## Courses, Presentations etc.:

- Laiquan ZOU, PhD, from the Neuropsychology and Applied Cognitive Neuroscience (NACN) Lab, Key Laboratory of Mental Health, Institute of Psychology, Chinese Academy of Sciences, Beijing, presents on July 4<sup>th</sup> on **Olfactory Dysfunction and Its Relationship with Anhedonia in Schizophrenia Spectrum Disorders**
- Mem MAHMUT, PhD, from the Department of Psychology, 4 First Walk, Macquarie University, NSW, Australia, presents on the 5<sup>th</sup> of July on his research at the MacQuarrie University on “Body Odors”
- **6.7.2019**, 18-24 h: **Museumsnacht Dresden – Hygienemuseum**: Durchführung von Riech- und Schmecktests, Nasenendoskopie: Gesine Dölz, Franziska Heyne, Babette Schaab, Yunpeng Zang, Ayaho Yoshino, Caterina Pacifico, Mesi Krause, Janina Dimow, Dmitriy Desser, Max Penzler, Julia Draf, Thomas Hummel
- Ayaho Yoshino from Department of Otorhinolaryngology, Chiba, Japan, presents on the 12<sup>th</sup> of July at 11:30 a.m. on her clinical olfactory projects
- Andreia Oliviera, medical student from the University of Lisbon, presents on the 23<sup>rd</sup> of July at 15:00 p.m. on Kurtenbach et al. , Cell-Based Therapy Restores Olfactory Function in an Inducible Model of Hyposmia, Stem Cell Reports, 2019, 12: 1354–1365.
- **Summerschool Human Olfaction** from July 28 to August 2, 2019, with presentations from Thomas Hummel (“Clinical olfaction”), Antje Haehner (“Neurodegeneration and olfactory function”), Ayaho Yoshino, Mesi Krause, Georg Lober, Henriette Zimmeck (“EOG and NMP recordings”), Ben Chen, Yunpeng Zang, Laiquan Zou (“Taste function”), Akshita Joshi (“trigeminal function”).





- Andreia Oliveira presents on the 9<sup>th</sup> of August 2019 on Daniel B. Kurtz, Theresa L. White, David E. Hornung, and Elizabeth Belknap, [What a Tangled Web We Weave: Discriminating between Malingering and Anosmia](#), 1999, *Chemical Senses* 24(6):697-700
- Ben Chen presents on the 22<sup>nd</sup> of August on “Odorants: a tool to provide nonpharmacological intervention to reduce anxiety during normal and pathological aging”, by Ballanger, Bath, Mandairon, in *Neurobiology of Aging* 82 (2019) 18-29
- Cagdas Guducu, Dokuz Eylul University, Faculty of Medicine, Biophysics Dept, Izmir, Turkey, presents on the 26<sup>th</sup> of August on “Investigations of chemosensory ERP using time-frequency and entropy-analyses”
- Xuaogang Yan presents on the 25<sup>th</sup> of August on his work: [Efficacy and associated factors of olfactory training in the treatment of olfactory dysfunction](#). Yan XG, Gao X, Sun ZF, Guo YC, Yao LY, Liu J, Xiao W, Lyu QW, Wei YX. *Zhonghua Er Bi Yan Hou Tou Jing Wai Ke Za Zhi*. 2018 Nov 7;53(11):815-819
- Agnieszka Sabiniewicz, Dept of Psychology, University of Wroclav, presents on her work interspecies communication with odors: Sept 25, 2019
- Yunmeng Zhu presents her study plan on taste disorders: Sept 25, 2019
- [Smell and Taste 11](#), from September 27 to 28, 2019: Presentations from
  - Croy, Ilona (Dresden) - The social dimension of olfactory loss
  - Damm, Michael (Cologne) - Olfactory function in sinusal disease
  - Haehner, Antje (Dresden) - Neurodegenerative olfactory loss
  - Holbrook, Eric (Boston) – plasticity in olfaction
  - Hummel, Thomas (Dresden) - General aspects, olfactory testing
  - Konstantinidis, Jordan (Thessaloniki) - Posttraumatic olfactory loss
  - Landis, Basile (Geneve) - Taste dysfunction
  - Philpott, Carl (Norwich) – Postviral olfactory loss
  - Faria, Vanda(Dresden) - Imaging of olfactory function in olfactory loss
  - Rombaux, Philippe (Brussels) – Congenital anosmia, imaging of the olfactory bulb/sulcus
  - Schriever, Valentin (Dresden) – acquired olfactory loss in children
  - Whitcroft, Katie (London) – epidemiology of olfactory loss, spontaneous recovery
  - Witt, Martin (Rostock) - Anatomy of the human olfactory system
  - Welge-Lüssen, Antje (Basel) - Idiopathic olfactory loss / surgical therapy



Plus **practical courses** by: Ayaho Yoshino, Yunpeng Zang, Guliz Akin, Carla Masala

- **Riech- und Schmeckstörungen – eine Konferenz zusammen mit Betroffenen und Ärzten: 29.9.2019**

- **Vorträge von**

- Croy, Ilona (Dresden) – Riechverlust – die soziale Dimension
- Damm, Michael (Köln) – Sinunasal bedingte Riechstörungen
- Haehner, Antje (Dresden) – Neurodegeneration und Riechstörungen
- Hummel, Thomas (Dresden) – Generelle Aspekte von Riechstörungen, Messung des Riechvermögens
- Landis, Basile (Genf) - Schmeckstörungen
- Witt, Martin (Rostock) – Anatomie des menschlichen Riechsystems
- Welge-Lüssen, Antje (Basel) – Idiopathischer Riechverlust
- Ilona Owusu - Der Patient im Fokus: reuksmaakstoornis.nl & NoseMe.com
- Marcus Blonkowski – Kochen mit Hyposmie



## Conferences

- 1.7.2019: Thomas Hummel presents together with Caroline Huart at the CEORL conference on Brussels
  - in an Instructional Course on “Neurodegenerative diseases: what can be learned from olfaction?”
  - In a Keynote Lecture on “Olfaction in 2019”
- 29.8.2019: Thomas Hummel presents at the Anzhen Hospital in Beijing on “Clinical news from the sense of smell”
- 30.8.2019: Thomas Hummel presents at the Chinese Rhinology Conference in Chongdou on “Clinical exploitation of the plasticity of the olfactory system”
- ECRO conference in Trieste, from Sept 11-14:

Presentations by

- Beauchamp J, Taylor A, Brand L, Pesce VD, Heer M, Hummel T, McGrane S, Margot C, Pieters S, Pittia P, Spence C, Antunes I: Commencing countdown engines on – interplanetary flavour perception on a mission to Mars
- Oleszkiewicz A: Presence of undetected olfactory loss in the general population
- Han P, Zang Y, Akshita Y, Hummel T: Magnetic resonance imaging of human olfactory dysfunction
- Haehner A: Idiopathic olfactory and gustatory disorders as predictors of Parkinson’s disease
- Krause ME, Hummel T: Recordings of electro-olfactograms from the human olfactory epithelium in response to HLA-related peptides



- Chen B, Haehner A, Mahmut M, Hummel T: Faster olfactory adaptation in patients with olfactory deficits: an analysis of results from odor threshold testing
- Zou L, Linden L, Cuevas M, Metasch ML, Welge-Lüssen A, Hähner A, Hummel T: Self-reported Mini Olfactory Questionnaire (Self-MOQ): a simple and useful measurement for the screening of olfactory dysfunction
- Masala M, Englmeier V, Hummel T: Correlation between body mass index, olfactory and gustatory function
- JASTS conference in Kochi, Japan: Sept 18, 2019: T. Hummel: Old and new ways to diagnose and treat olfactory dysfunction



Physiologie

## What else:

- Interview mit 3sat-nano, [Sendung am 4.7.2019, 9:45h](#)
- Interview with UGBforum 4/19: „Wenn Riechen und Schmecken gestört sind“
- [Interview mit dem TAGESSPIEGEL Berlin](#), am 2.8.2019
- Thomas Hummel nominated as Associate Editor for [ORL \(Karger\)](#)
- Interview with Detlev Brechtel for the BASF-Magazin, 9/2019. Pages 51-53: „Die Duftmacher“



## Wenn Riechen und Schmecken gestört sind

Prof. Dr. Thomas Hummel

Jeder fünfte Erwachsene in Deutschland leidet unter einem eingeschränkten Geruchssinn. Ein gestörter Schmecksinn tritt deutlich seltener auf. Um den Genuss beim Essen zu erhalten, gibt es zum Glück Hilfe für Betroffene.

Düfte - Feature

## Die Duftmacher

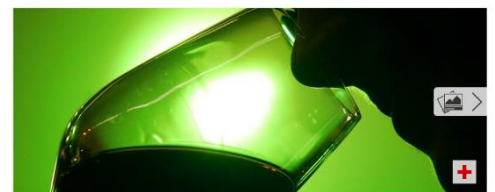
**Düfte** beeinflussen unsere Sinne, unser Denken und den Stoffwechsel. Ihre synthetische Herstellung ist nicht minder faszinierend. Ein einziger Aromastoff ist der Quell für Lavendel-, Rosen- oder Minzduft.

Riechforscher Hummel über den zweiten Sinn

03.03.2019, 19:06 Uhr

„Der Verlust kann jeden treffen“

Duftspuren, Schnüffeltraining – und ein Kolben im Gehirn: ein Gespräch mit Riechforscher Thomas Hummel über die besondere Bedeutung des zweiten Sinns. VON RICHARD FRIEBE



Ein Frau schnüffelt an einem Glas Rotwein. Meistens aber läuft das Riechen beim Menschen vor allem unterbewusst ab. FOTO: PATRICK WILHELM/ALAMY