

**Prof. Peter Lercher** (peter.lercher(a)tugraz.at) – Technical University Graz

### Short CV

Dr. Lercher has a background in general medicine, hygiene, social medicine and environmental health. He holds a MPH in Public Health Epidemiology from Chapel Hill, NC (1990).

He worked as Associate Professor for Social Medicine at the Medical University of Innsbruck. In 2010 he was appointed director of the Division of Social Medicine. He retired in Oct. 2015.

October 2018 move to TU Graz: appointed as “Distinguished Lecturer”  
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Since October 1. 2018 at TU-Graz

### Editorial boards membership

Dr. Lercher was on the editorial board of *Noise & Health* and is since 2008 on the editorial board of the *Journal of Environmental Research and Public Health*.

### Reviewing activities

He is a regular reviewer for several environmental health journals (*JASA*, *Atmospheric Environment*, *Acta Acustica*, *Environmental and Occupational Medicine*, *Environment International*, *J Environ Psychology*, *Int J of Hygiene and Environmental Health*, *Science of the Total Environment*, *PLOS ONE*, *Environmental Health Perspectives*).

### Professional activities & Projects

Dr. Lercher served as chair/co-chair (1993-1998; 1998-2003) of Team 3 (non-auditory physiological effects induced by noise) for the International Commission on the Biological Effects of Noise (ICBEN). Later he was Co-Chair of ICBEN between 2003 and 2008. 1994-2003: Participation in various international projects such as COST (air pollution, 1994-95) and PAN - EEC Concerted Action on Protection against Noise (1998-2000) and NOPHER - Noise Pollution Health Effects Reduction (2000-2003). 1998-2006: Primary investigator in several multi-method studies within the framework of EHIA, where the integrated assessment (noise, air pollution, quality of life, health) of a new rail track in two alpine valleys (“Lower Inn valley-rail” and “BBT” (Brenner Base Tunnel) was the main research aim.

2005-2008 Temporary advisor for the WHO in the EU-funded night-time noise guideline project (NNGL) and the aircraft noise assessment project. 2005-2008: Principle health investigator ALPNAP-project, which aimed at better predictions of noise and air pollution exposure and health effects due to transportation in alpine areas.

2009-2011: Section editor “Noise & Health” for the first Encyclopedia of Environmental Health published by Elsevier in Feb 2011. 2009-2013: Special adviser (“Champion”) in the EU-project ENNAH (European Network on Noise and Health).

Working group chair in the COST action TD 0804 “Soundscape of European Cities and Landscapes” (2009-2013)

2013-2017: Special issue editor for the *Int. J. Environ. Res. Public Health* (see there)

2013-2015: Temporary advisor in the WHO Noise guideline development group (update 1999 Guidelines)

2013-2018: Primary investigator “Alternative noise indicators for health studies”

2016-2018: Special issue editor “WHO Noise and Health Evidence Reviews” in the *IJERPH*.

2018: Special issue’s advisor on city sounds and health of the *Cities & Health Journal*

### Publications

Selected articles (past 15 yrs) Dzhambov AM, Markevych I, Lercher P. Greenspace seems protective of both high and low blood pressure among residents of an Alpine valley. *Environ Int.* 2018 Sep 28;121(Pt 1):443-452

Lercher, P. et al., 2017. Community Response to Multiple Sound Sources: Integrating Acoustic and Contextual Approaches in the Analysis. *International Journal of Environmental Research and Public Health*, 14(6), p.663

Cik M, Lienhart M, Lercher P. Analysis of Psychoacoustic and Vibration-Related Parameters to Track the Reasons for Health Complaints after the Introduction of New Tramways, 6, December:398 (2016)

Eike von Lindern, Terry Hartig, Peter Lercher. Traffic-related exposures, constrained restoration, and health in the residential context. *Health & Place*, 39, May:92-100 (2016)

Lercher, P., Widmann, U., & Thudium, J. (2014). Hypotension and Environmental Noise: A Replication Study. *International journal of environmental research and public health*, 11(9), 8661-8688.

Lercher P, Evans GW, & Widmann U. The ecological context of soundscapes for children’s blood pressure. *The Journal of the Acoustical Society of America*, 2013, 134(1), 773-781.

Lercher P, & Widmann U. (2013). Association and moderation of self-reported hypotension with traffic noise exposure: A neglected relationship. *Noise & health*, 2013, 15(65), 205–216.

Lercher P, Botteldooren D, Widmann U et al. Cardiovascular effects of environmental noise: Research in Austria. Review of studies in Alpine valleys over 25 years - exposure response and effect modification. *Noise & Health* 2011, 13: 234-250.

Lercher P, Brink M, Rüdissler J, Van Renterghem T, Botteldooren D, Baulac M, Defrance J. The effects of railway noise on sleep medication intake: Results from the ALPNAP-study. *Noise & Health*, 12, April-June 2010: 110-119.

De Coensel B, Botteldooren D, De Muer T, Berglund B, Nilsson ME, Lercher P. A model for the perception of environmental sound based on notice-events. *J Acoust Soc Am* 2009, 126 (2):656-665.

Rüdissler J, Lercher P, A Heller. Traffic exposure and medication - a GIS based study on prescription of medicines in the Tyrolean Wipptal. *Italian Journal of Public Health* 2008, 5(4): 261-267.

Van Renterghem T, Botteldooren D, Lercher P. Comparison of measurements and predictions of sound propagation in a valley-slope configuration in an inhomogeneous atmosphere. *J Acoust Soc Am* 2007; 121:2522-2533.

Botteldooren D, Lercher P. Soft-computing base analyses of the relationship between annoyance and coping with noise and odor. *J Acoust Soc Am* 2004; 115(6): 2974-2985.

Lercher P, Evans GW, Meis M. Ambient noise and cognitive processes among primary school children. *Environment and Behaviour*, 2003, 35: 725-735.

Lercher P. Which health outcomes should be measured in health related environmental quality of life studies? *Landscape and Urban Planning* 2003; 65:63-72.

Lercher P, Evans GW, Meis M, Kofler WW. Ambient neighbourhood noise and children’s mental health. *Occupational and Environmental Medicine* 2002; 59: 380-386.

Evans GW, Lercher P, Meis M, Ising H, Kofler W. Typical community noise exposure and stress in children. *Journal of the American Acoustical Society* 2001; 109(3): 1023-1027.

**Contributions to books** Lercher, P. Noise in Cities: Urban and Transport Planning Determinants and Health in Cities. In *Integrating Human Health into Urban and Transport Planning*; Nieuwenhuijsen, M., Khries, H., Eds.; Springer: Cham, Switzerland, 2019, pp. 443-481; ISBN 978-3-319-74982-2.

Peter Lercher, Irene van Kamp, Eike von Lindern, Dick

Botteldooren. Perceived Soundscapes and Health-Related Quality of Life, Context, Restoration, and Personal Characteristics. Chapter 5 in: Jian Kang, Brigitte Schulte-Fortkamp (ed.s): *Soundscape and the Built Environment*, pp 89-131. CRC Press, Boca Rota. ISBN 1482226324, ebook:9781482226324. (2015) Irene Van Kamp, Ronny Klæboe, A. L. Brown, Peter Lercher. (2015). *Soundscapes, Human Restoration, and Quality of Life*. Chapter 3 in Jian Kang, Brigitte Schulte-Fortkamp (eds): *Soundscape and the Built Environment*, pp43-68. CRC Press, Boca Rota. ISBN 1482226324, ebook:9781482226324. (2015)

Lercher P. Combined noise exposure at home. In: Nriagu J. (ed) *Encyclopedia of Environmental Health*. Pages 764-777, Elsevier B.V., Amsterdam 2011 (ISBN: 978-0-444-52273-3). Lercher P. Environmental noise: A contextual public health perspective. In: L. Luxon & D. Prasher (eds) *Noise and its effects*: pp 345-377. London: Wiley, London 2007. Heimann D., de Franceschi M., Emeis S.,

Lercher P., Seibert P. (Eds.), 2007: *Air Pollution, Traffic Noise and Related Health Effects in the Alpine Space - A Guide for Authorities and Consultants*. ALPNAP comprehensive report. Università degli Studi di Trento, Dipartimento di Ingegneria Civile e Ambientale, Trento, Italy, 335 pp.

**Key notes** Lercher, P. The diversity of environmental noise related health effects at the population level. *Proceedings of Euronoise*. Prague 2012

#### **Special issue editor**

Lercher P, Klæboe R & Sliwinska-Kowalska (eds). "The Combined Health Effects of Environmental Exposures ": Special issue in *Int. J. Environ. Res. Public Health*: [http://www.mdpi.com/journal/ijerph/special\\_issues/environmental-exposures](http://www.mdpi.com/journal/ijerph/special_issues/environmental-exposures)

Lercher P (ed). "Sound and Health related Quality of Life": Special issue in *Int. J. Environ. Res. Public Health*:

[http://www.mdpi.com/journal/ijerph/special\\_issues/quality-of-life](http://www.mdpi.com/journal/ijerph/special_issues/quality-of-life) Lercher P, Klæboe R & Sliwinska-Kowalska (eds). "The Combined Health Effects of Environmental Exposures ": Special issue in *Int. J. Environ. Res. Public Health*:

[http://www.mdpi.com/journal/ijerph/special\\_issues/environmental-exposures](http://www.mdpi.com/journal/ijerph/special_issues/environmental-exposures)

Lercher P (ed). "Noise & Quality of life": Special issue in *Int. J. Environ. Res. Public Health* [http://www.mdpi.com/search/?s\\_journal=ijerph&s\\_special\\_issue=588](http://www.mdpi.com/search/?s_journal=ijerph&s_special_issue=588).

Lercher P (ed). "The Protection of Quiet Areas as a Public Health Aim Towards Sustainable Health: Approaches, Case Studies and Implementation": Special issue in *Int. J. Environ. Res. Public Health*

[http://www.mdpi.com/journal/ijerph/special\\_issues/quiet\\_areas](http://www.mdpi.com/journal/ijerph/special_issues/quiet_areas).

#### **Book editor**

Lercher P (Section editor: noise & health). *Encyclopedia of Environmental Health*. Elsevier Feb 2011. (13 articles published)

**Awards** Konrad-Lorenz-Preis 1989 (as main contributor to the Symposium „Transitland Österreich“). Austria's highest environmental prize till 2005 Thomas Kuhn Honor pin in Gold 2002 (from IUAPPA for contribution to a comprehensive model of the interaction of human's health with the environment)