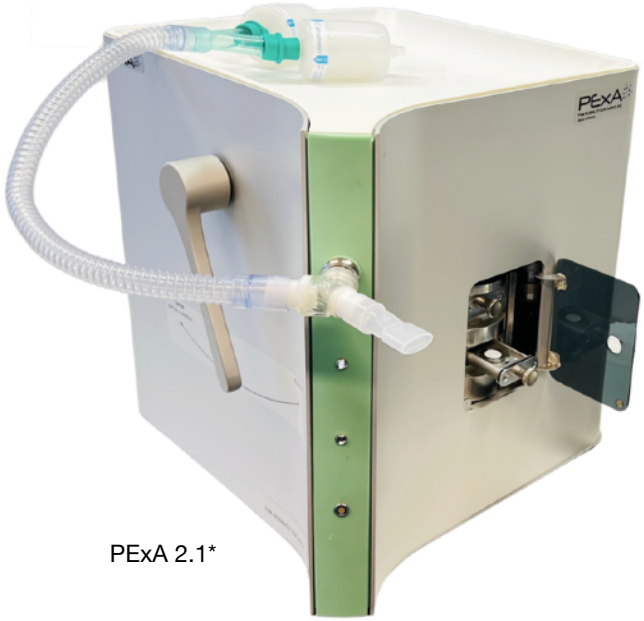
PExA
Particles in Exhaled Air

Sample where it matters

Unlocking the Deep Lung – Non-Invasive Liquid Biopsy from the Small Airways

PExA enables precise, repeatable sampling from the distal airways - the site where many respiratory diseases starts and progress to an untreatable state.

Our unique, non invasive technology collects undiluted respiratory tract lining fluid for biomarker discovery paving the way for future early and precise diagnostics.



PExA 2.1*

Biomarker discovery

Ongoing biomarker discovery studies in e.g. lung cancer, COPD, pulmonary embolism & occupational health.

Hundreds of proteins, lipids and miRNA can be analyzed in this novel matrix.

Pharmacokinetics

Proof-of-principle for measuring local drug effects at site-of-action

Small Airway Atlas™

A first-of-its kind database for distal airway omics

* The PExA 2.1 is a research only device

Scan for scientific publications

www.pexa.se

Some of our users

umcg

NHS Manchester University NHS Foundation Trust

baua: Federal Institute for Occupational Safety and Health

Uppsala Universitet | Akademiska Sjukhuset

Göteborgs Universitet — Sahlgrenska Akademin

Lund University

NIH National Institutes of Health — Turning Discovery Into Health

Karolinska Institutet

Örebro Universitet

NHS University Hospital Southampton NHS Foundation Trust

PIKKUJÄTTI

NIOSH National Institute for Occupational Safety and Health

Global Pharma Companies

P4O2 Precision Medicine for more Oxygen - P4O2

Fraunhofer ITEM

Selected scientific publications

Review

- **Particles in Exhaled Air (PExA): Clinical Uses and Future Implications.** Roe T, Silveira S, Postle AD, Dushianthan A. et al. Diagnostics (Basel). 2024 May 7;14(10):972

- **Assessing Human Lung Pharmacokinetics Using Exhaled Breath Particles.** Holz O, Hohlfeld JM et al. J Aerosol Med Pulm Drug Deliv. 2024 Dec 5. Epub ahead of print.
- **Exhaled breath particles as a novel tool to study lipid composition of epithelial lining fluid from the distal lung.** Larsson, P., Holz, O., Jens M Hohlfeld. et al. BMC Pulm Med 23, 423 (2023).
- **Proteomic characteristics and diagnostic potential of exhaled breath particles in patients with COVID-19**. Hirdman, G., Bodén, E., Kjellström, S. et al. Clin Proteom 20, 13, 2023
- **A novel non-invasive method allowing for discovery of pathologically relevant proteins from small airways.** Östling, J., Van Geest, M., Olsson, H.K. et al. Clin Proteom 19, 20, 2022

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