

AEROSOL Platform

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Aerosol generation and characterization

Medical nebulizing systems

- Jet Nebulizers
- Vibrating mesh technology
- Acoustic airflow (fixed or sweep frequency)

Aerosol metrology

- Cascade impactors: ELPI / DLPI / ANDERSEN
- Total aerosol output (NF13544-1) and expelled fraction



Aerosol deposition studies

Anatomical models

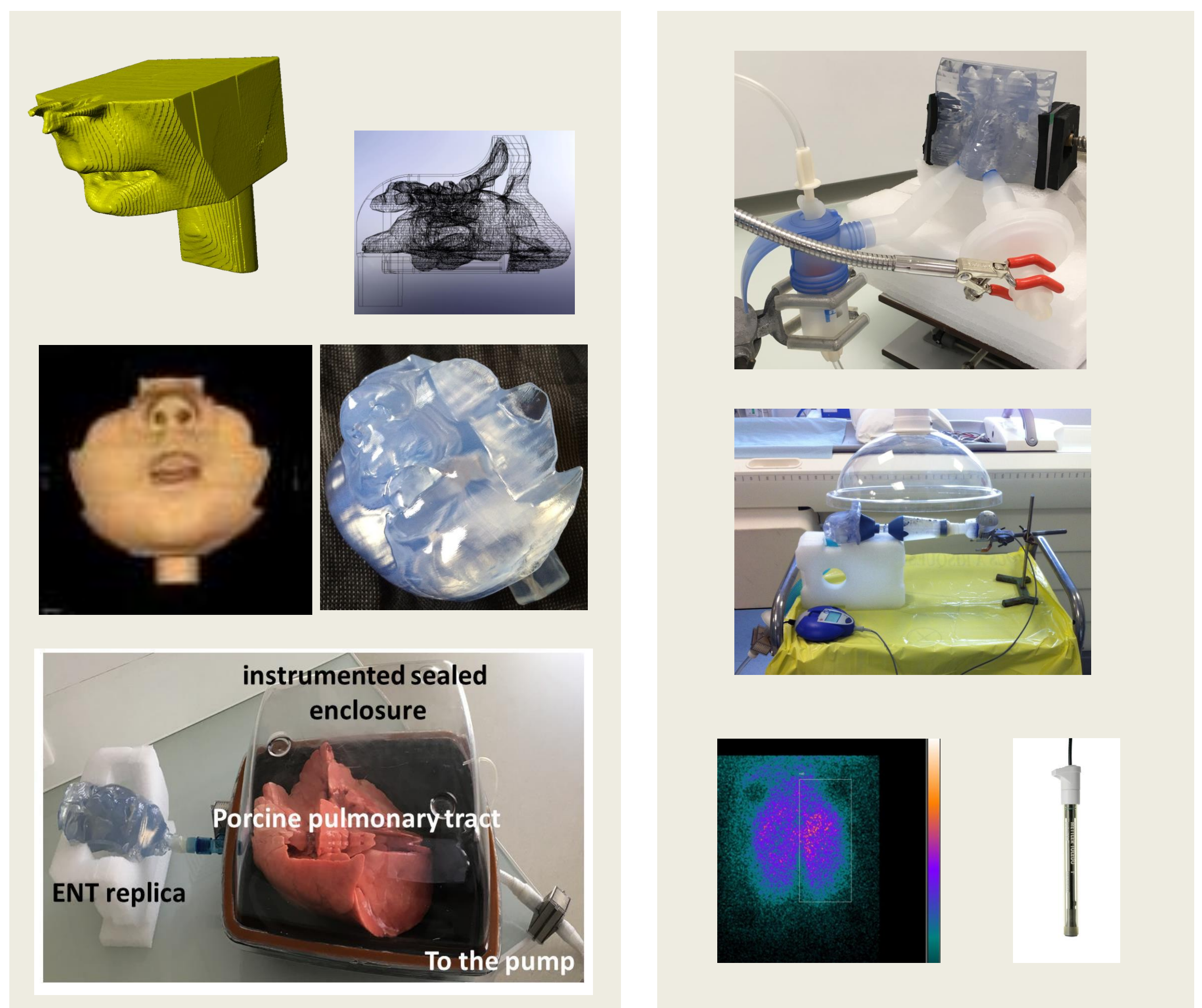
- 3D images analysis and CAD
- Human cast of upper airways using 3D printing (adult or pediatric, healthy or pathological)
- Respiratory tract model using *ex vivo* porcine lungs

Aerosol administration

- Nasal
- Buccal
- Naso-buccal

Aerosol tracers

- Sodium fluoride : NaF
- Drugs : antibiotic, etc.
- Radiotracers : Tc99m, etc.



Other

E-cigarettes

- Aerosol features
- Nicotine delivery

Bioaerosol

- Sampling and aerosol Legionella deposition within the respiratory tract

