# Promoting health and social interaction for school children with hyperacusis

Kristin Grindborg<sup>1</sup>, Örjan Johansson<sup>1</sup> <sup>1</sup>Luleå Tekniska Universitet

# Background

Hyperacusis is a condition where everyday sounds are perceived as disturbing, painful or unbearably loud by the affected individual. It is estimated to affect at least one child in a class of 30. Hyperacusis can cause decreased participation in school and social activities, leading to impaired quality of life for the affected children and their families. Although common in children, much research is still needed about the causes, diagnosis, effects, and management of hyperacusis.

Studies of school sound environments continue to show worrisome results as both children and teachers report poor sound environments, leading to negative effects on learning and interaction, with more adverse effects for children in need of special support. Thus, it is fair to assume that today's poor sound environments pose a major challenge for children with hyperacusis.

## Aim

This PhD project serves to study the prevalence, audiological characteristics and effects of hyperacusis in school children with a special focus on school sound environments.

# Methods

Parental questionnaires, semi-structured interviews with children, acoustic measurements in schools, audiological testing and listening tests.

#### Expected results

The anticipated outcome of the project is to a acquire knowledge of the needs of school children with hyperacusis, leading to propositions of improvements in school sound environments. These findings could promote inclusion for children with hyperacusis, with possible beneficial carry-over effects to other children and school staff struggling with challenging sound environments.

Moreover, the results may contribute to increased knowledge on the prevalence and proper audiological assessment for children complaining of hyperacusis.