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► **To cite this version:**

Thierry Legou, Fabrice Silva, Pierre Champsaur, Antoine Giovanni, Aude Lagier. Motorized Cricothyroid Tilt Control on human excised larynx. Fall Voice Conference, Oct 2018, Seattle, United States. . hal-02139183

HAL Id: hal-02139183

<https://hal.science/hal-02139183>

Submitted on 24 Jan 2022

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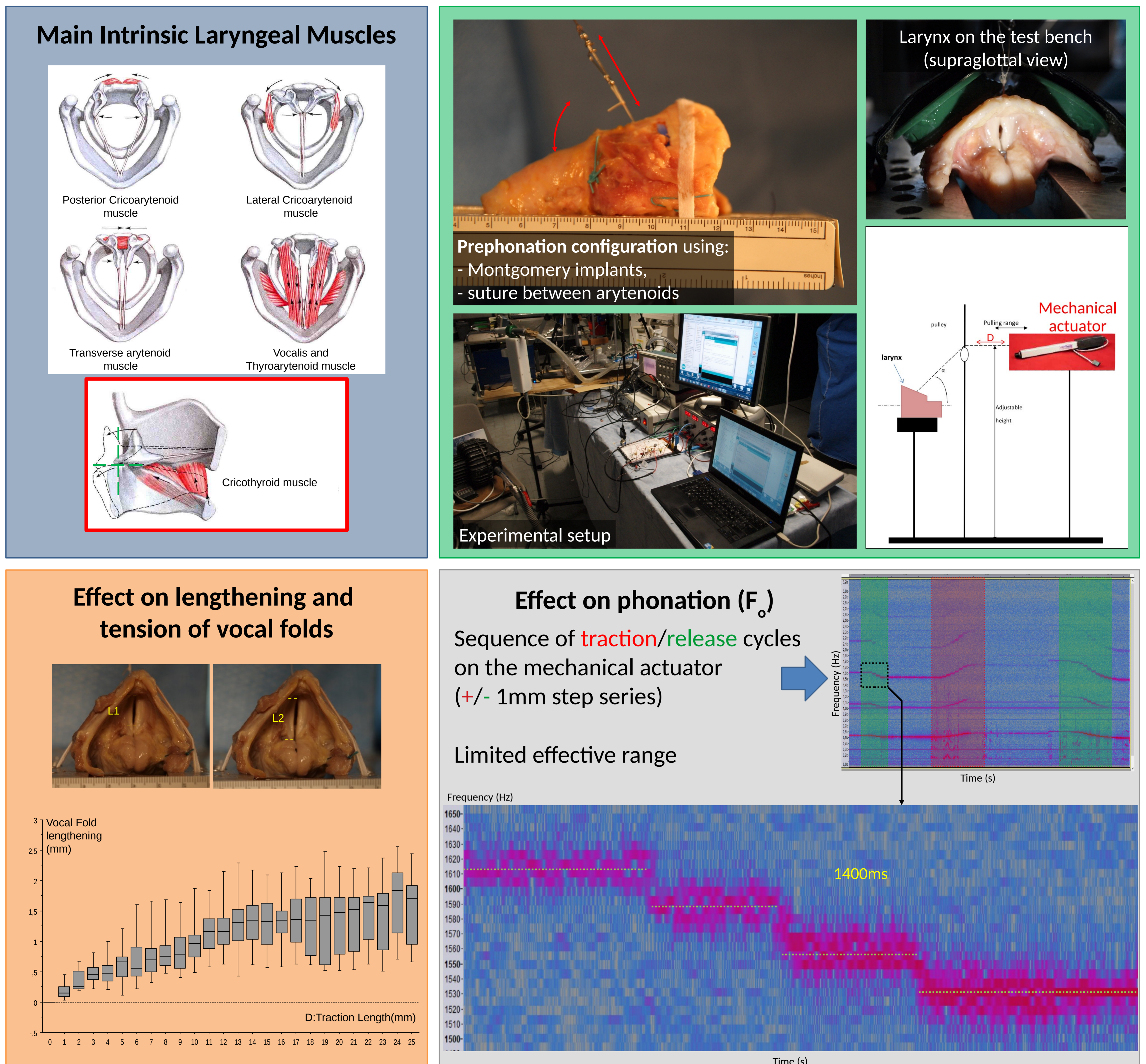
Motorized Cricothyroid Tilt Control on human excised larynx

T. Legou¹, F. Silva², P. Champsaur³, A. Giovanni^{1,4} and A. Lagier^{3,5}

Introduction

A **controlled human phonation** needs the coordination of **several extrinsic and intrinsic muscles**.

In order to study the contribution of the **Cricothyroid muscle (CT)**, we implement a **mechanical control of excised human larynx** able to finely reproduce actions of the CT and measure its consequences on phonation.



Discussion

This pilot study **validates the motorized Cricothyroid tilt**, by checking its effects onto:

- the **length of vocal folds**
- The phonatory **fundamental frequency (F_0)**: traction increases F_0 , while relaxation decreases F_0 .

References

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