

A Birth Simulator : BirthSIM

R. Moreau*, O. Dupuis**, M.T. Pham*, T. Redarce*

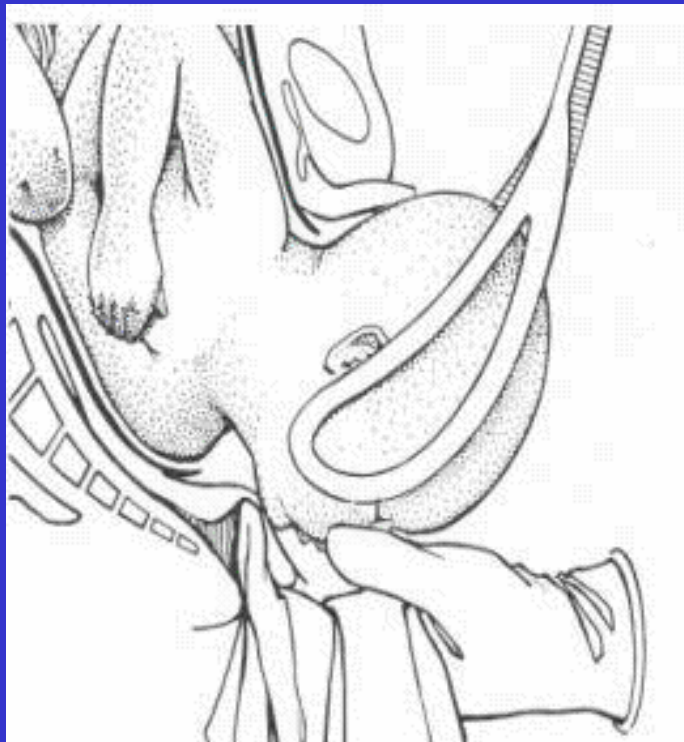
* LAI - INSA de Lyon

** Croix Rousse Hospital, Hospices Civils de Lyon

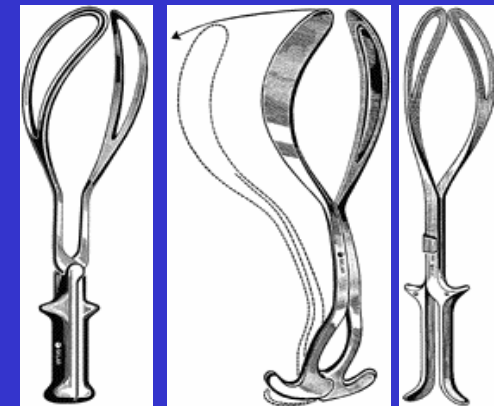
richard.moreau@insa-lyon.fr

Why a birth simulator ?

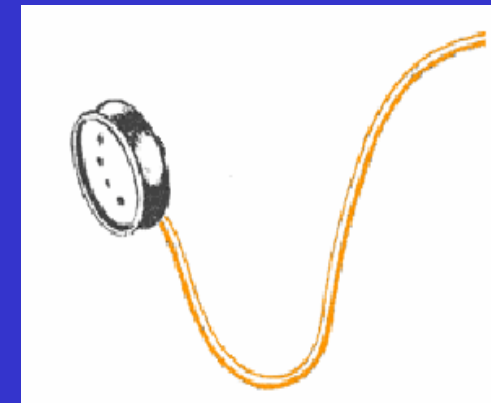
11.2% of births required the use of obstetrical instruments



6.3% by forceps



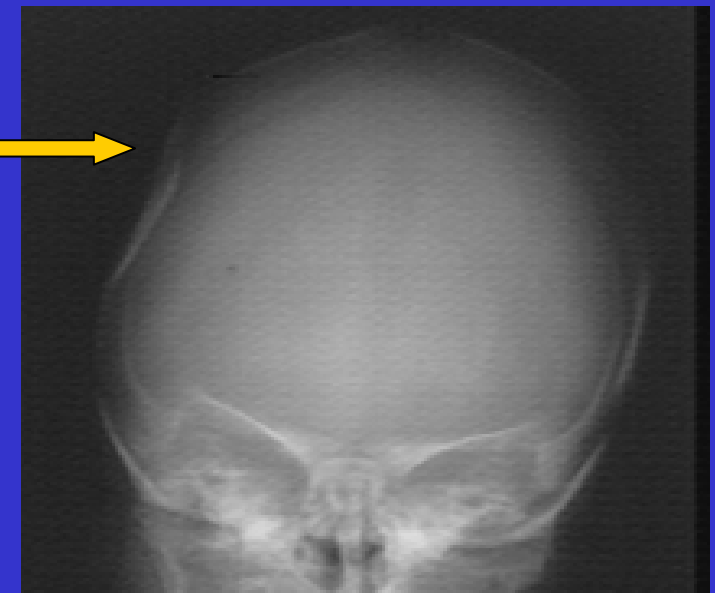
4.9% by vacuum extractor



Why a birth simulator ?

- A poor formation or a lack of experience led to complications in 3.2% of the instrumental birth

Example of a depressed skull fracture



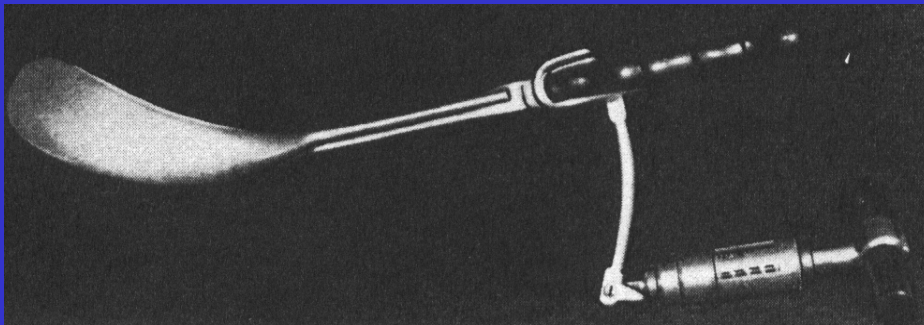
To avoid complications young obstetricians need a more complete formation

Conception of a new birth simulator

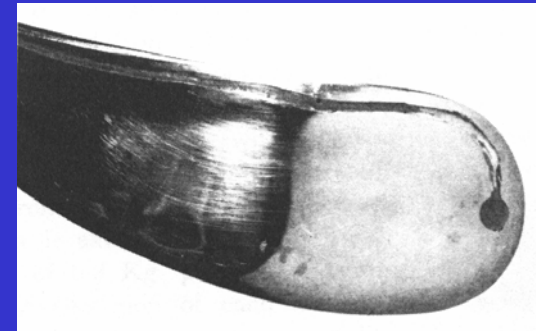
Previous instrumented Forceps

- Evaluation of the applied force

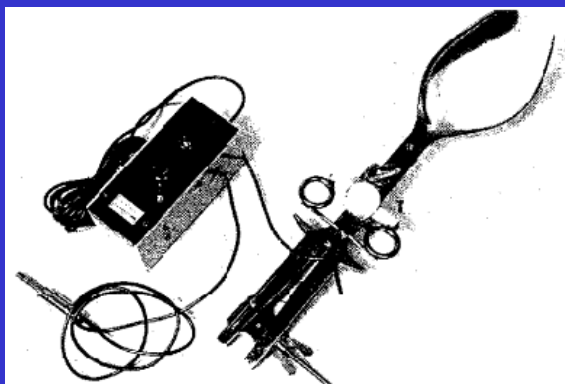
Dynamometer



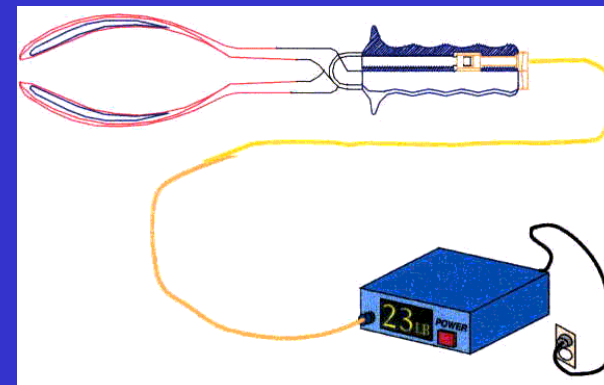
strain gauges



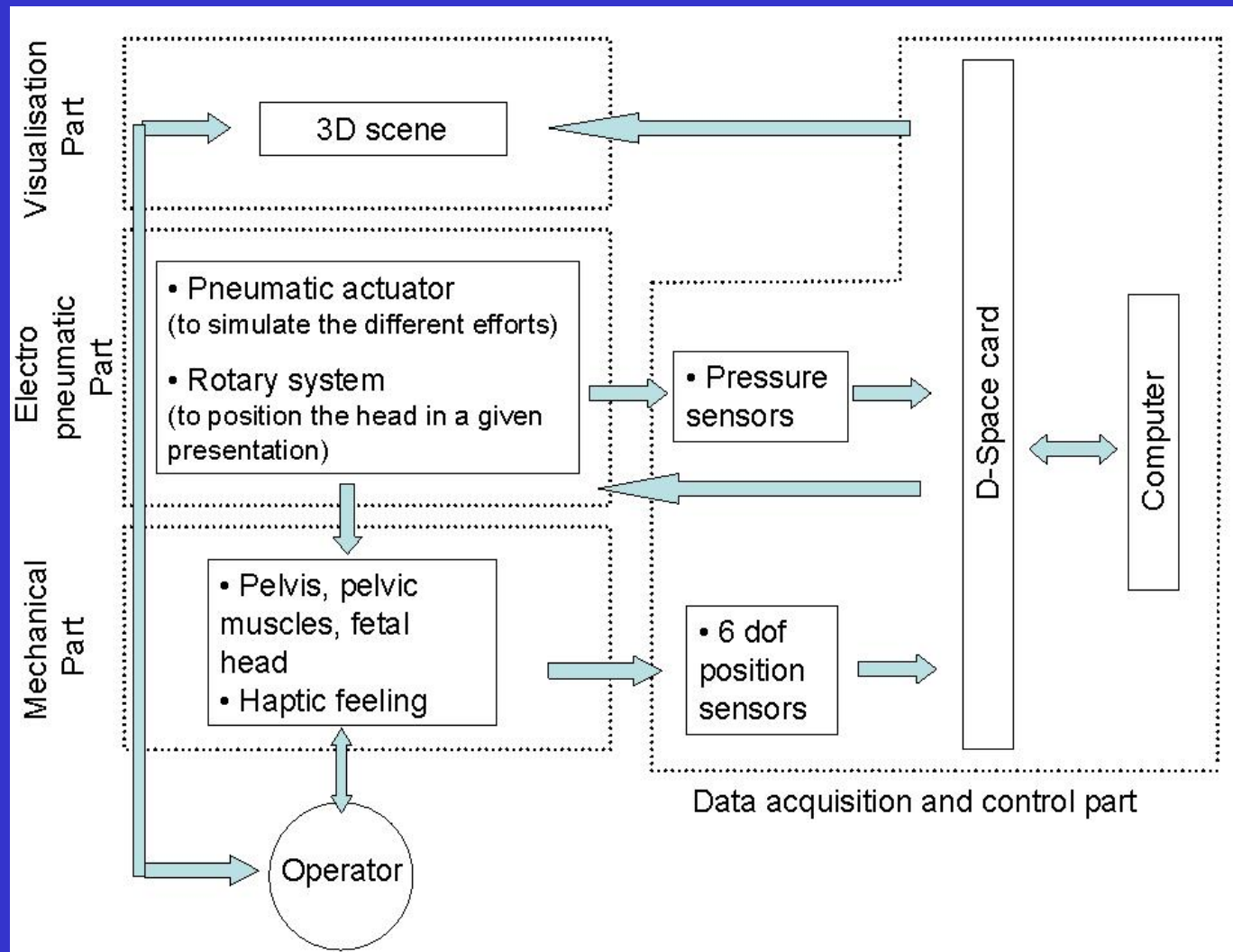
Hydro inflatable sensors



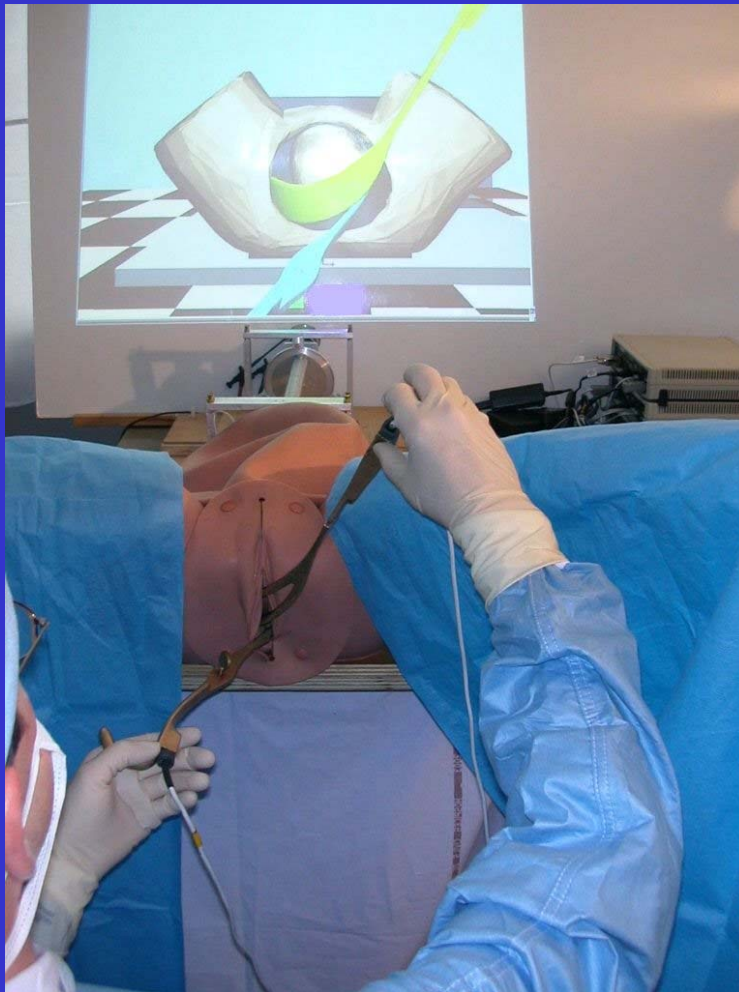
Optical Fibre sensors



The BirthSIM Simulator



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The BirthSIM Simulator

Un Simulateur d'Accouchement

BirthSIM

Outil de formation pour
les obstétriciens et les sages femmes

Laboratoire d'Automatique Industrielle - INSA de Lyon

Hôpital de la Croix Rousse - Hospices Civils de Lyon