



## Science serving music

By Abigail Martinez

**OTTAWA** — When it came to tickling the ivories, Beethoven and Mozart never needed too much guidance. But for the rest of us, learning to play the piano may not come so naturally. In fact, roughly half of all people who take up the instrument quit within a few months of their first lesson. So what can be done to make these lessons more effective?

A new piano pedagogy research laboratory being built at the University of Ottawa may have the answer. Through statistical analysis and controlled observation, researchers are hoping to improve the age-old art of teaching piano.

The project is being led by Professor Gilles Comeau, who has been doing research on piano pedagogy for over twenty years.

Set to begin operation in the summer of 2004, the research lab will rely on cutting edge equipment to accomplish its



**Gilles Comeau is dedicated to helping beginners master the piano.**

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### The Intelligent Piano

- acoustic piano with built-in computer
- records notes played with great precision
- measure pressure of fingers on keys
- analyzes what factors have influence on loudness and rhythm
- prints graphs and statistical tables

### Motor Skills Involved in Playing the Piano

#### 1. Hindbrain/midbrain:

- make up the brain stem
- responsible for sensory and motor functions like eye movements, coordination of visual and auditory reflexes

#### 2. Cerebellum:

- processes balance and accurate timing of movements
- involved in learning of motor skills and particularly important in musical performance

#### 3. Basal Ganglia:

- regulates motor performance

goals. From intelligent pianos to broadband connections, the latest forms of technology will help music teachers see their art through a scientific lens.

Listen to the documentary:  
**Learning Piano just got easier**



**Technology will play a large role in the new piano pedagogy research laboratory.**

#### Related Links

- [University of Ottawa Department of Music](#)
- [National Research Council's Music Grid Program](#)
- [University of Ottawa Research Newsletter](#)

**Catalyst** A publication by the science reporting students at the School of Journalism and Communication