

## UNB HISTORY

### INSTITUTE OF BIOMEDICAL ENGINEERING

- 1965 Officially named the Bio-Engineering Institute.  
First all Canadian fitting of a myoelectrically controlled artificial limb.
- 1966 One-muscle 3-state trainer.
- 1967 First forequarter patient fitted with myoelectrically controlled elbow and hand. (2 one-muscle 3-state controls).
- 1968-1969 Redesignated UNB control family with one-muscle 3-state and one-muscle 3-state proportional.  
Battery saver module designed for use with one-muscle 2-state "Cookie Cruncher".
- 1969-1970 Trainer designed to give multilevel indication of muscle signal to promote finer motor control while training patient.
- 1971-1972 A one-muscle 3-state newly designed control with external UNB battery pack.
- 1974 Commercial development of the 1972 version of UNB control with built-in battery.
- 1974-1975 First fitting of a one-muscle 3-state incorporating sensor feedback.
- 1975 New "round" designed control with built-in battery using dry electrodes.  
A new trainer designed to incorporate the patient's control as its own internal driving circuitry.
- 1978-1979 New family of one-muscle 3-state controls with or without built-in batteries.
- 1979 Eight patients fitted with one-muscle 3-state incorporating sensory feedback system.
- 1979 A small trainer was developed to couple with patients control. To adjust levels and provide light and hand feedback.
- 1979-1980 Toy controller developed to assist in training children.
- 1980 New one-muscle 3-state trainer with replaceable battery and external connection for remote hand or toy controller during training.
- 1981 Battery saver module designed to be added between control and hand for use with UNB and Otto Bock systems.

- 1982-1988 A family of controls both one-muscle 3-state, one-muscle 2-state, and 2-muscle 2-state; with one model having built-in batteries.
- 1986 A universal myoelectric trainer for use in training one-muscle 2-state, one-muscle 3-state, 2-muscle 2-state, and or two of one-muscle 3-states. This trainer incorporated a user friendly computer based controller with automatic indication of preferred level settings. It also had lights, bar graphs and connections for remote hand.
- 1989 A computer video game designed for training and evaluating children's performance. This incorporates score feedback and levels of play along with stored statistics to give the therapist a record of accomplishments during subsequent training sessions.
- 1990 During a review by the University, it was decided that the Institute of Biomedical Engineering should not be in the manufacturing business and as a result, Liberty Mutual Research Centre is negotiating a transfer of the product line to be manufactured in Boston.