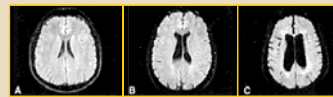


Responding to the Changing Adaptive Equipment Needs of Individuals with Neurodegenerative Disorders

Don Fredette
Adaptive Equipment Specialist
The Boston Home

“Myelin dissolves, nerves short out, muscle atrophies, but the old brain, riddled now with sclerotic patches, goes on wailing, ‘I can do it myself!’ ”
Nancy Mairs

Brain Atrophy



Reprinted with permission from Rudick RA et al. *Neurology*. 1999;53:1698-1704.

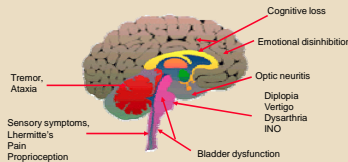
Pathology of MS

- An immune-mediated disease in genetically susceptible individuals
- Demyelination leads to slower nerve conduction
- Axonal injury and destruction are associated with permanent neurological dysfunction
- Lesions occur in optic nerves, periventricular white matter, cerebral cortex, brain stem, cerebellum, and spinal cord

Thompson DC et al. *N Engl J Med*. 1996;336:270-285.

Sources of Symptoms

Symptoms vary widely in incidence and severity



Common MS Symptoms

- Fatigue
- Depression
- Focal muscle weakness
- Visual changes
- Bowel/bladder/sexual dysfunction
- Gait problems/spasticity
- Paresthesias

Less Common MS Symptoms

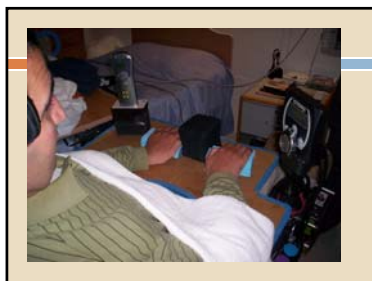
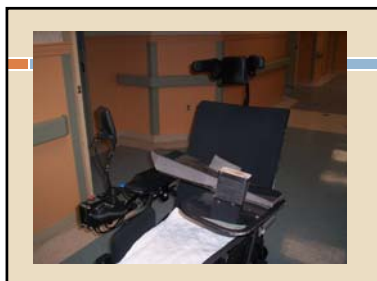
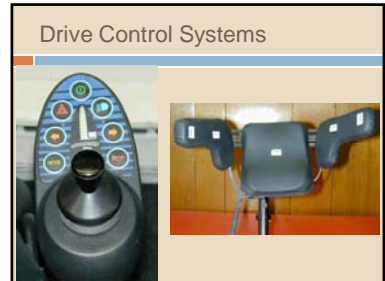
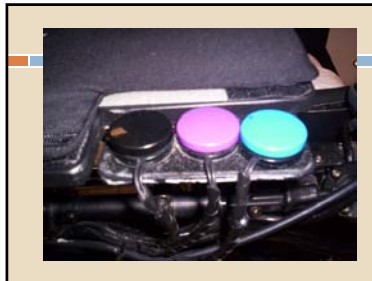
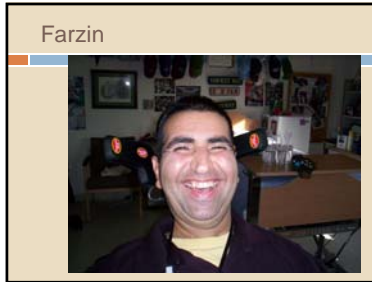
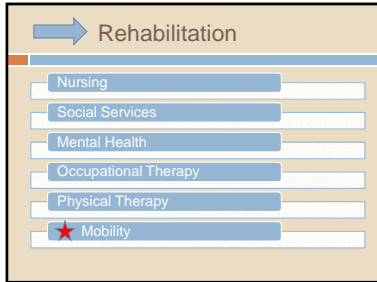
- Dysarthria, scanning speech, dysphagia
- Lhermitte's phenomenon
- Neuritic pain
- Vertigo/ataxia
- Cognitive dysfunction
- Tremor/incoordination

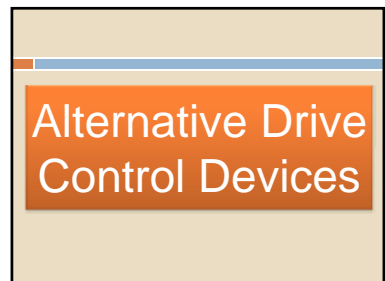
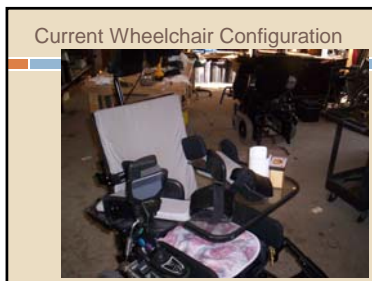
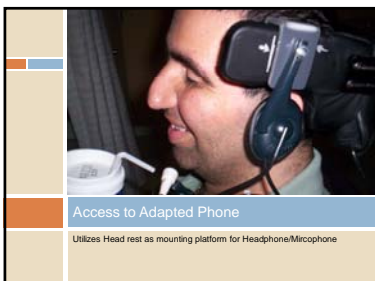
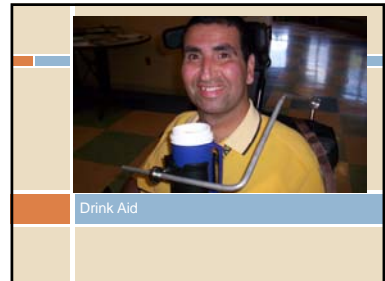
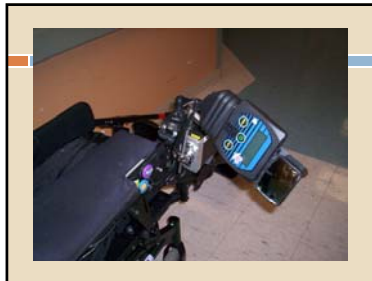
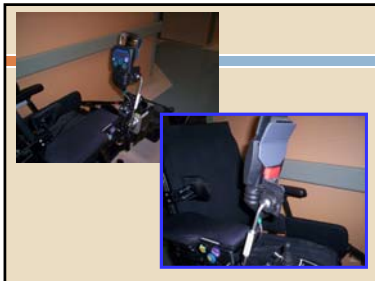
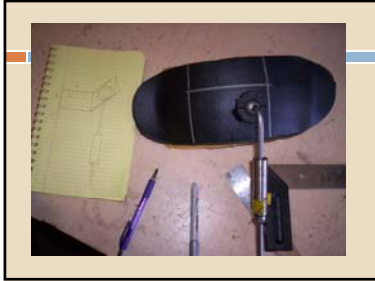
Rare MS Symptoms

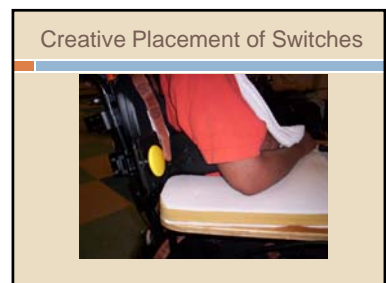
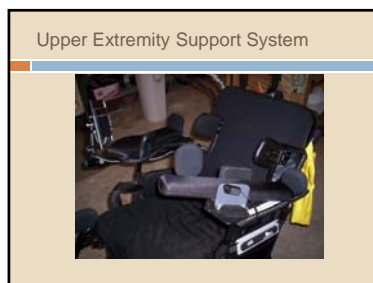
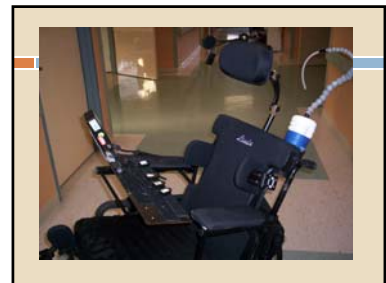
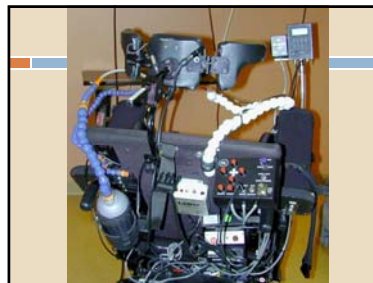
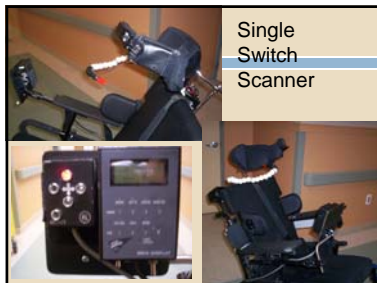
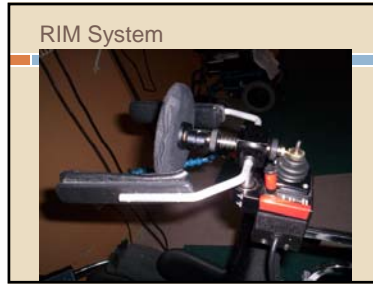
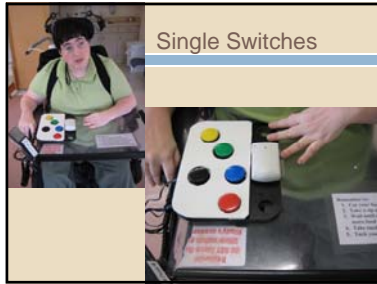
- Decreased hearing
- Seizures
- Tinnitus
- Mental disturbance
- Paralysis

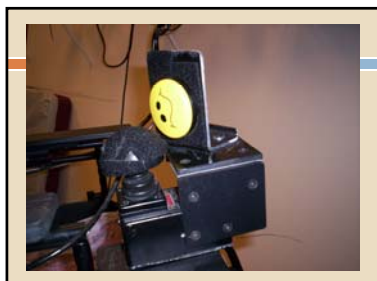
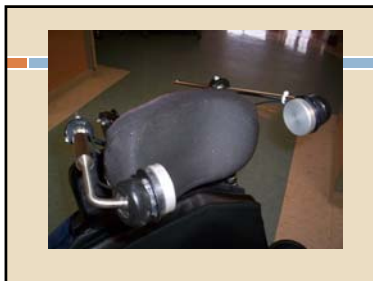
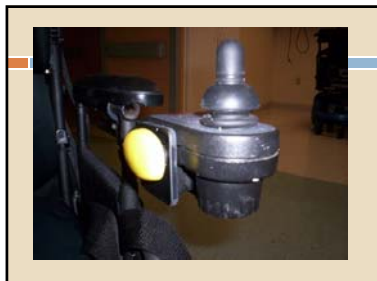
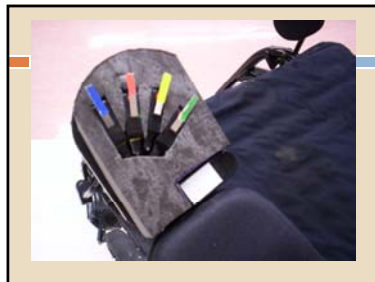
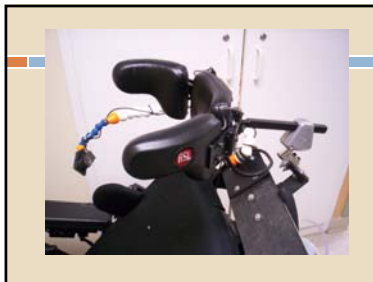
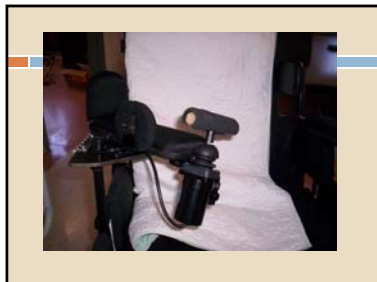
Implications of MS

- Cognition
- Speech
- Fatigue
- Pressure wounds
- Vision
- Impaired Memory
- Depression
- Spasticity
- Decreased Motor Function





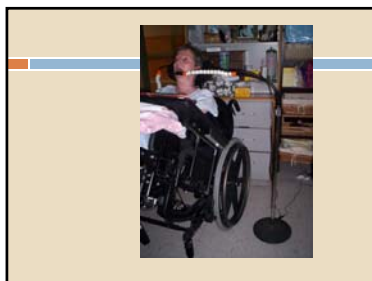
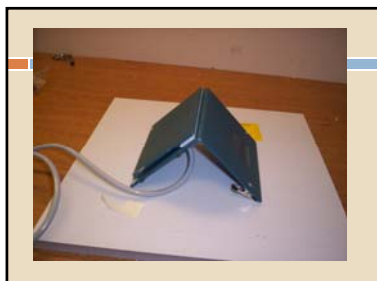
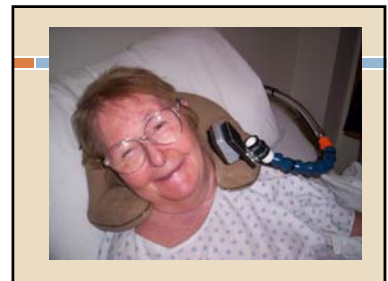
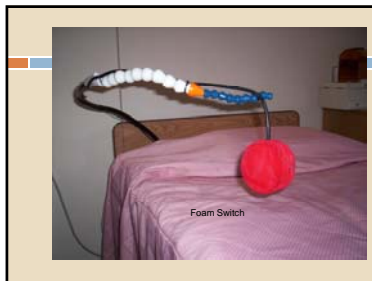
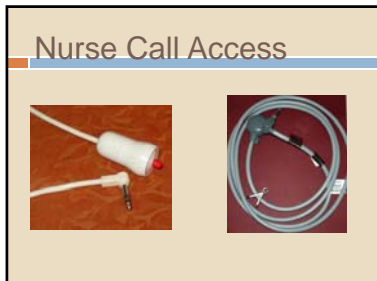
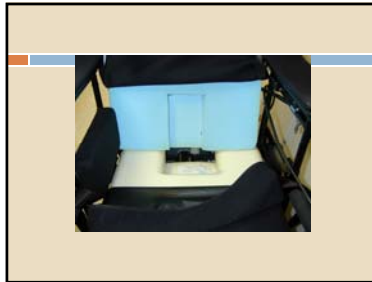


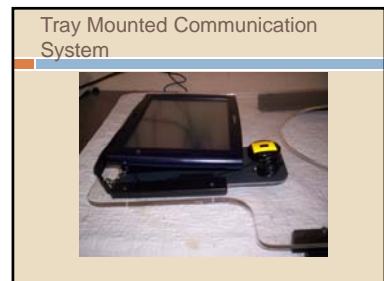
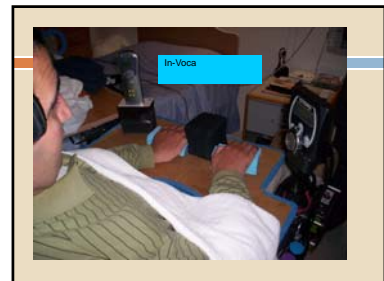
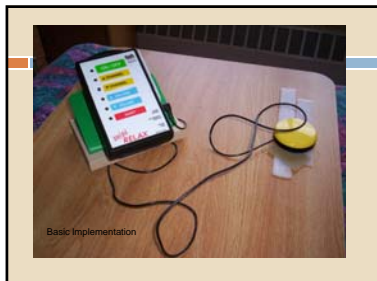
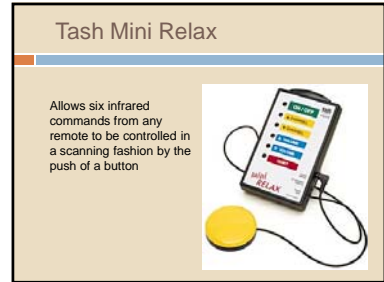
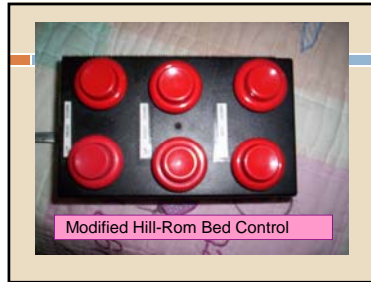
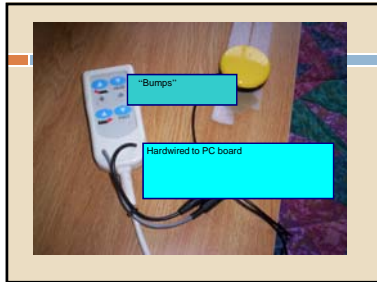


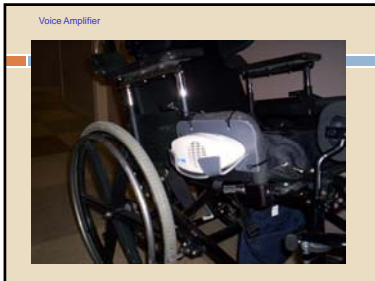
Wound Management

- Wound committee meets 2 to 4 times per month
- Address problems and possible solutions to assist in healing of wounds
- For seating issues - assess seat cushions, back cushions and foot support - common problem areas

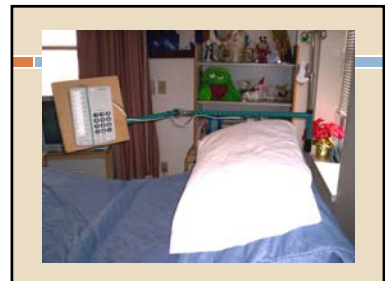
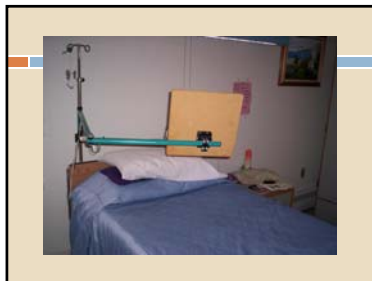


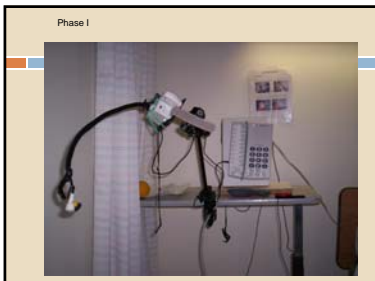
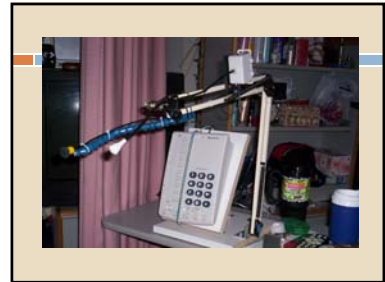
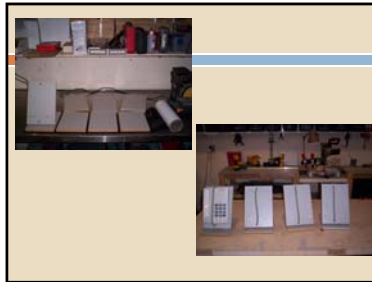






Telephone Access

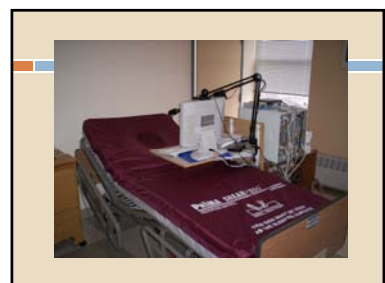
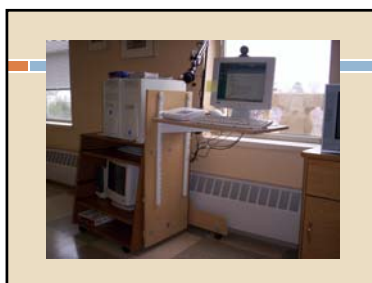


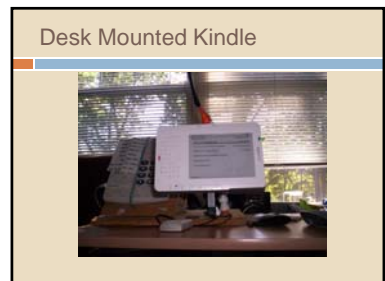
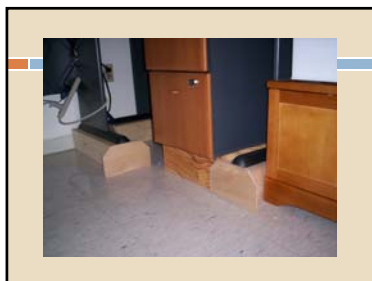
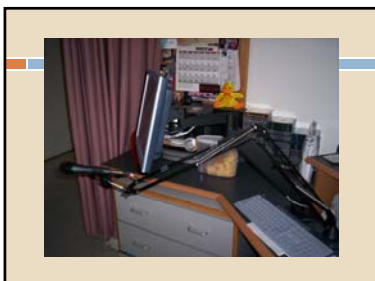
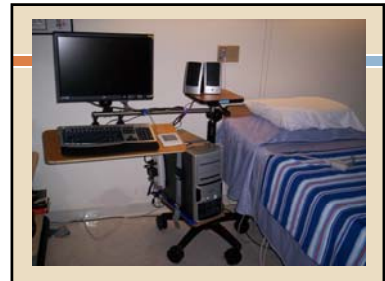
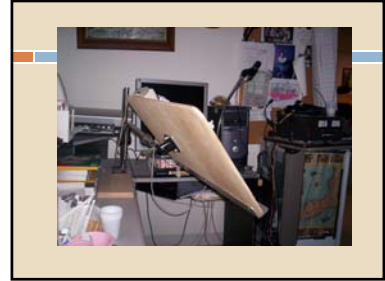
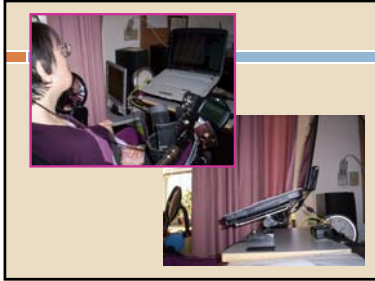


Phase II



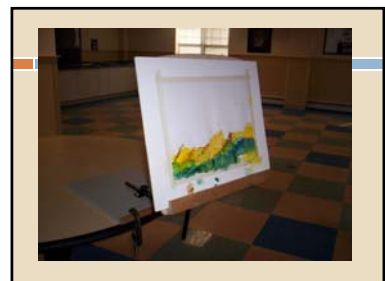
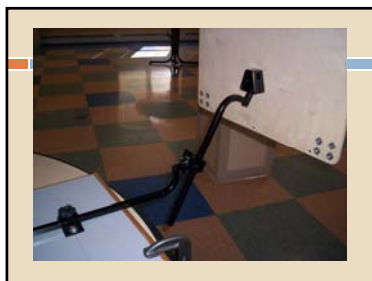
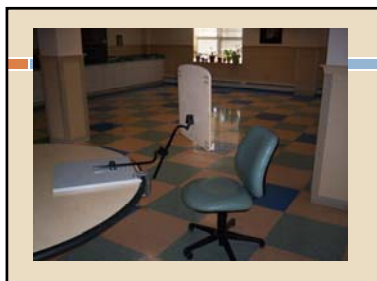
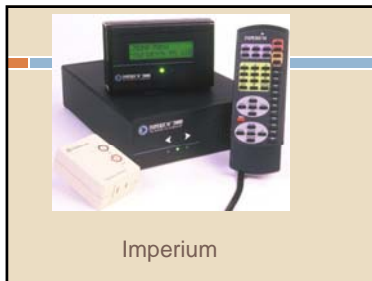
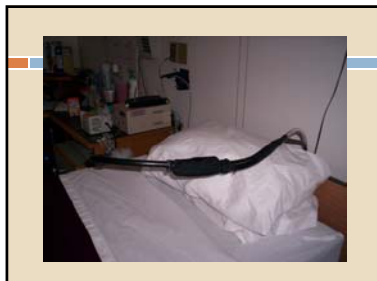
Computer Access

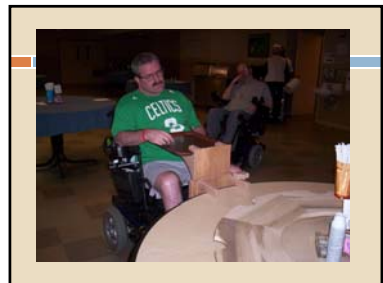
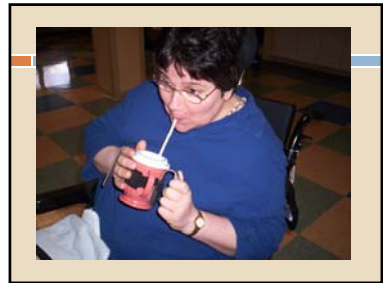
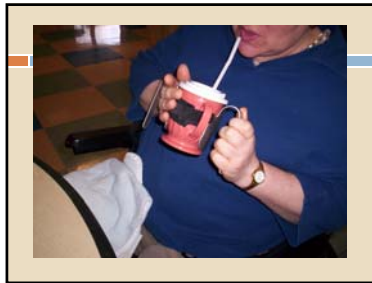






Environmental Control (ECU)
Electronic Aids to Daily Living(EADL)







Miscellaneous Projects

