



**Ergonomics Awareness  
Grants and Awards  
2016-2017**

# The Ergonomics Team

## Service Providers

- Suzanne Bade: MHealthy Medical Ergonomics
- Sarah Cooney: Environment, Health & Safety (EH&S)
- Bridget Daly: MHealthy Medical Ergonomics
- Naomi Gilbert: MHealthy Medical Ergonomics
- Christopher Kahle: Dearborn EH&S
- Gary Kupfner: MI Medicine Safety Management Services
- Michael Lane: Flint EH&S
- Brenda Myers: MI Medicine Safety Management Services
- Tom Perez: Dearborn EH&S
- Laura Rometsch: Flint EH&S
- Amie Rush: MI Medicine Safety Management Services
- Pamela Koczman Rutter: Ann Arbor EH&S

# Goal

## Reduce risk factors related to Musculoskeletal Disorders

- Sprains, Strains, Pain
- Back, Neck, Arm, Leg, Vision, Sensation

## Issues/Risk Factors

- Postures, Repetitive Movement/Sustained Postures, Force, Contact Stress, Temperature, Vibration

## Risk Reduction via

- Personal Habits, Administrative Controls, Engineering (Equipment)

## Disability Accommodations



# Ergo Departmental Awards (T=17)

## Gold - Plaque and Celebration(1)

### MI Medicine - PICU 10 East

Height Adjustable Transition Bed Project.

This space is designated for end of life care. It was extremely low to the ground, not on wheels, not height adjustable, and the head of bed was also not adjustable.

# Michigan Medicine/ PICU 10 East

**Plaque for Outstanding Contribution** - In recognition of your Height Adjustable Transition Bed Project.

Before

After



# Ergo Departmental Awards: Bronze

## Bronze - Letter of Commendation (4)

### Note: Received a Hero pin and a letter

- ❖ Ann Arbor –Patient Relations & Clinical Risk (formerly the Office of Clinical Safety)
- ❖ MI Medicine – Brighton Health Center
- ❖ Ann Arbor – Computer Aided Engineering Network (CAEN)
- ❖ Ann Arbor – International Programs in the College of Engineering



# Individual Heros for Managers

- These Departments' supervisors and managers were awarded an individual Ergo Hero Award for providing sit/stand workstations
  - Mobility Transformation Center
  - ISR
  - Briarwood Center for Women and Children and Young Adults
  - MPU Call Center
  - Zell Lurie Institute
  - The Center for Research on Learning
  - Patient Relations and Clinical Risk
  - CAEN
  - Computing and Multimedia Technology, ISR
  - College of Engineering, Office of Research Relations
  - Frankel CVC Admin
  - Institutional Analysis

# Ergo Grants

- **Dept.** annual competitive application process
  - Over \$93,000 requested for 45 projects. Funded projects with \$45,000 central fund. Dept. cost sharing nearly doubles the impact.
- **Individuals** with medical accommodation needs
  - \$10,000 fund to cost share with departments for medical ergonomics clients needing significant equipment purchase to meet their work and medical needs. Maximum offer of \$200 per client, and only if accommodation cost exceeds \$400.

# AA/PMMS

## Pallet Jack, Panel Movers, Cart modification

### Before



**Before:** This issue is with lifting and transporting heavy/awkward shaped materials. Pipe transport, especially in elevators and access into the back of box trucks.

### After



**After:** “The pallet jack is easy to use and heavy duty. This will save us from having to carry pipe up stairs. The panel movers make it a lot easier on the arms ”

# MI Medicine/Michigan Quality System Mobile Office Transportation

## Before



**Before: “ Issues with back, neck, arm and shoulder strain related to lugging laptops and teaching materials to and from classes and mentoring sessions. ”**

## After



**After: “If (we) didn’t have it, (we) would either be killing shoulders hauling what (we) might need, or compromising preparedness by making choices of what to carry. ”**

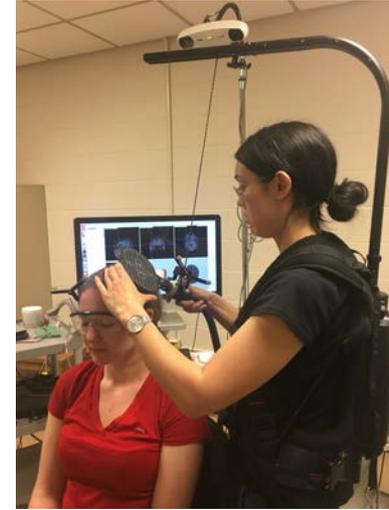
# AA/School of Kinesiology Suspension Stabilizer

## Before



**Before:** This requires us to hold a coil that weights over 5 pounds for up to 3 hours. The weight of the coil and the handle position causes forceful grip and awkward position of the wrists. Maintaining such positions results in muscle fatigue and joint pain.”

## After



**After:** “The equipment purchased by this grant has made data collection easier on the experimenter and will increase lab productivity. ”

# AA/ITS SS Tech Repair Security Cages

## Before



**Before:** “(Cages) We move a multitude of machines around campus. (Racks) We store the machines on low, below the waist tables, and have to pick them up each time. ”

## After

**After:** Security cages and racks allow us to be able to move a lot more machines, a lot safer, and in a more secure way

# AA/LSA Museum Paleontology Zoom Microscope

## Before



**Before: “Employees’ current microscope causes forward and neck bending for long hours of use. Current microscope unable to be adjusted ”**

## After



**After: “People have reported less stress and strain on neck and back using microscope. ”**

# AA/ITCS Merit Network Lift table

## Before



**Before: “[We want to prevent] staff from bending over repeatedly for lifting of desktop printers, supplies, items that are received, etc. ”**

## After



**After: “The lift cart has made it easier to move our larger pieces of equipment. It has prevented possible strain and other injuries from happening to staff. People have expressed gratification that there is now equipment available if they need it.”**

# MI Medicine/Livonia Surgery Center

## Before



**Before: “One staff member is 5’2” and the other two are 5’10”. The current workstation height is not adjustable and back injuries are likely. ”**

## After



**After: “Both users love the new workstations. They meet the needs of the patient care professionals. ”**

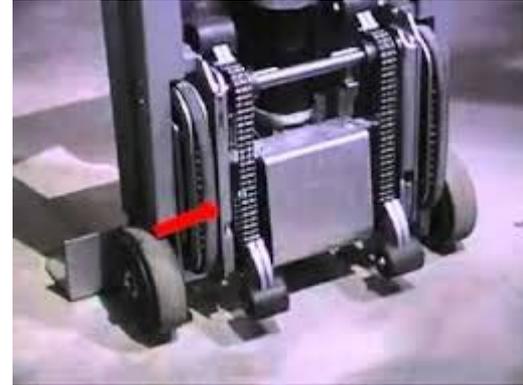
# AA/Housing Power Stair Climber Dolley

**Before**



**Before:** “The manual process of moving heavy appliances up and down the stairs, is very strenuous on the back and legs. The bending of the back so the angle of the appliance can move up and down the stairs is difficult and in some case very dangerous. ”

**After**



**After:** “Using this stair climber has made delivering refrigerators much easier on the body/back, this unit safely does the lifting/climbing of stairs so we can move refrigerators without hurting our backs.”

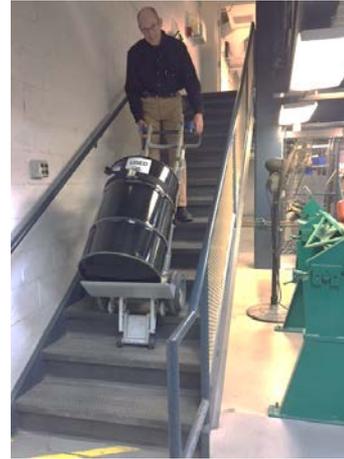
# AA/Wilson Student Team Project Center

## Before



**Before:** “There is no elevator service to the second floor. To move a large item to or from the second floor we have two options: gather several people together and manhandle the item up the stairs or borrow the necessary equipment.”

## After



**After:** “It is much easier to now move things up and down the stairs. We are, in fact, looking forward to our next big project so that we can use the new dolly. ”

# AA/Athletic Medicine/Athletics Height Adjustable Table

## Before



## After



**Before:** “Most of the treatment/exam tables we use are fixed height and do not allow proper technique for treatment due to varying size of student-athletes and providers.”

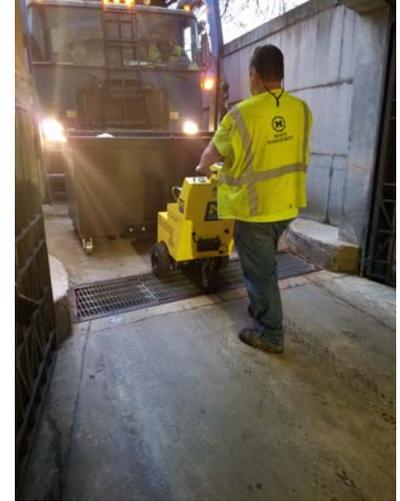
**After:** “I’m no longer putting myself in uncomfortable positions in order to adapt to different athletes on a fixed-height table.”

# AA/F&O Waste Management Services Waste Caddy

**Before**



**After**



**Before:** “The building’s 3 trash/recycle dumpsters are located in the basement parking area of the building, and we are required to manually push them outside up a ramp. The safety risks are compounded when the pavement is wet and/or icy.”

**After:** “ ”

# AA/Construction Services Work Bench

**Before**



**Before: “[W]e have an existing work bench that all trade use for various projects. It is too high for some, and too low without the wheels for others. This causes an uncomfortable working situation. ”**

**After**



**After: “The tradespeople appreciate the ease of use and the relief on their backs. ”**

# MI Medicine/Gifts of Art Storage

## Before



**Before:** “The boxes and plastic bins are stacked one on top of another 2 deep, creating issues for staff who need to access these materials daily. ”

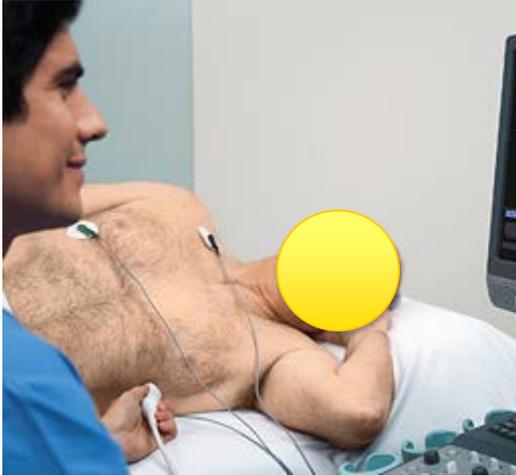
## After



**After:** “Job satisfaction and organization is at a high level. It is now easy for us to store and retrieve items that were once a real struggle to work with. The new step ladder has added an extra level of safety.”

# MI Medicine/Adult Echo Lab Scanning Mattress

## Before



**Before:** “With our current mattresses a sonographer is quite often unable to obtain quality images without having to twist their wrist and arm into awkward positions or put a great amount of pressure on their fingers and wrist due”

## After



**After:** “The ability to keep the wrist in neutral position helps reduce discomfort from repetitive scanning. The fact that it also improves image quality is a bonus. ”

# MI Medicine/Safety Management Services Adjustable Ladder

## Before



**Before:** “We are carrying around 6, 8, and 10 foot ladders. These ladders are awkward and heavy to lug around the hospitals. It is hard to move through the halls while carrying a ladder and trying to navigate around patients, visitors and other staff. ”

## After



**After:** “The ladders significantly reduce strain on the employees. We no longer have to carry the ladders from place to place. We can now easily move them from one location to another with much greater ease.”

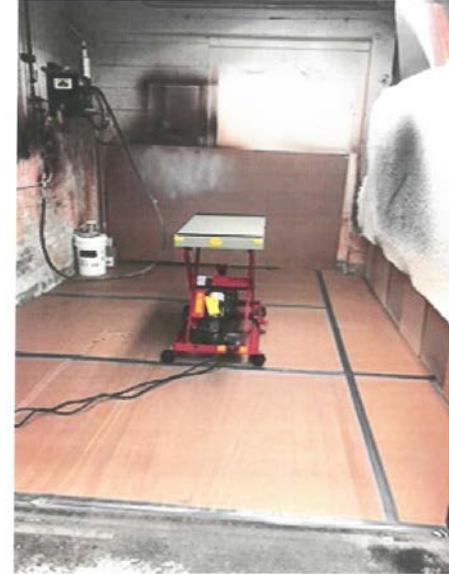
# AA/Upholstery Shop Scissor Lift Table

## Before



**Before:** “The ergonomic issue within my department is the transporting of sheet goods from one end of the shop to another. Currently, this task is performed by manually lifting the sheet goods off a shelf and on to a cart. ”

## After



**After:** “The equipment has made the current fabrication of the glue up applications much more ergonomic. The overall quality of work, along with, employee satisfaction has increased. ”

# MI Medicine/PMR MedRehab Mobile Laptop Carts

## Before



**Before:** “We have a small counter space for standing laptop use and a sliding tray table for sitting laptop use. Neither adjust to accommodate for various heights and are in a stationary location in the room. ”

## After



**After:** “The (cart) has greatly improved our work flow especially when transitioning from sit to stand and throughout the gym area. My computer is safer too—less likely to fall than when I set it on a stool or something.”

# MI Medicine/Safety Management Services Carts

## Before



**Before: “Pushing both of these carts leads to some discomfort in back, shoulders, neck and core. This is a very low handle height and causes the driver to have to lean over when driving it causing discomfort in the back and shoulders.”**

## After



**After: “It's more ergonomic to use. I can stand upright when pushing and there's less resistance in the wheels. ”**

# AA/Internal Medicine, Cardiovascular Med. Height Adjustable table

## Before



**Before:** “In one particular area, the surgeon is required to lean over a microscope for extended periods of time.”

## After

**After:** “ ”

# MI Medicine/Radiology Recovery Reclining Power Chair

**Before**



**Before: “Multiple staff are seeking medical attention or suffer pain in back and/or neck pain related to improper body mechanics with use of current equipment.”**

**After**



**After: “ ”**



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Ergonomic Grants and Awards  
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**Thank You!**