

Creating a Work or Home-Based Ergonomic Workspace with Peter Johnson

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Course Outline

> **How to set up your workstation**

- **Desk, chair, keyboard and monitor height and set-up**
- **Keyboards and pointing devices and how to select and position for optimal work**
- **Monitor Placement**
- **Sit stand workstations**

> **Your workstation on the go**

- **Laptop stands**
- **Portable mice and keyboards**

> **Common physical ailments from computer work**

- **Common potential ailments**
- **When to take Action**

Workstation Set Up

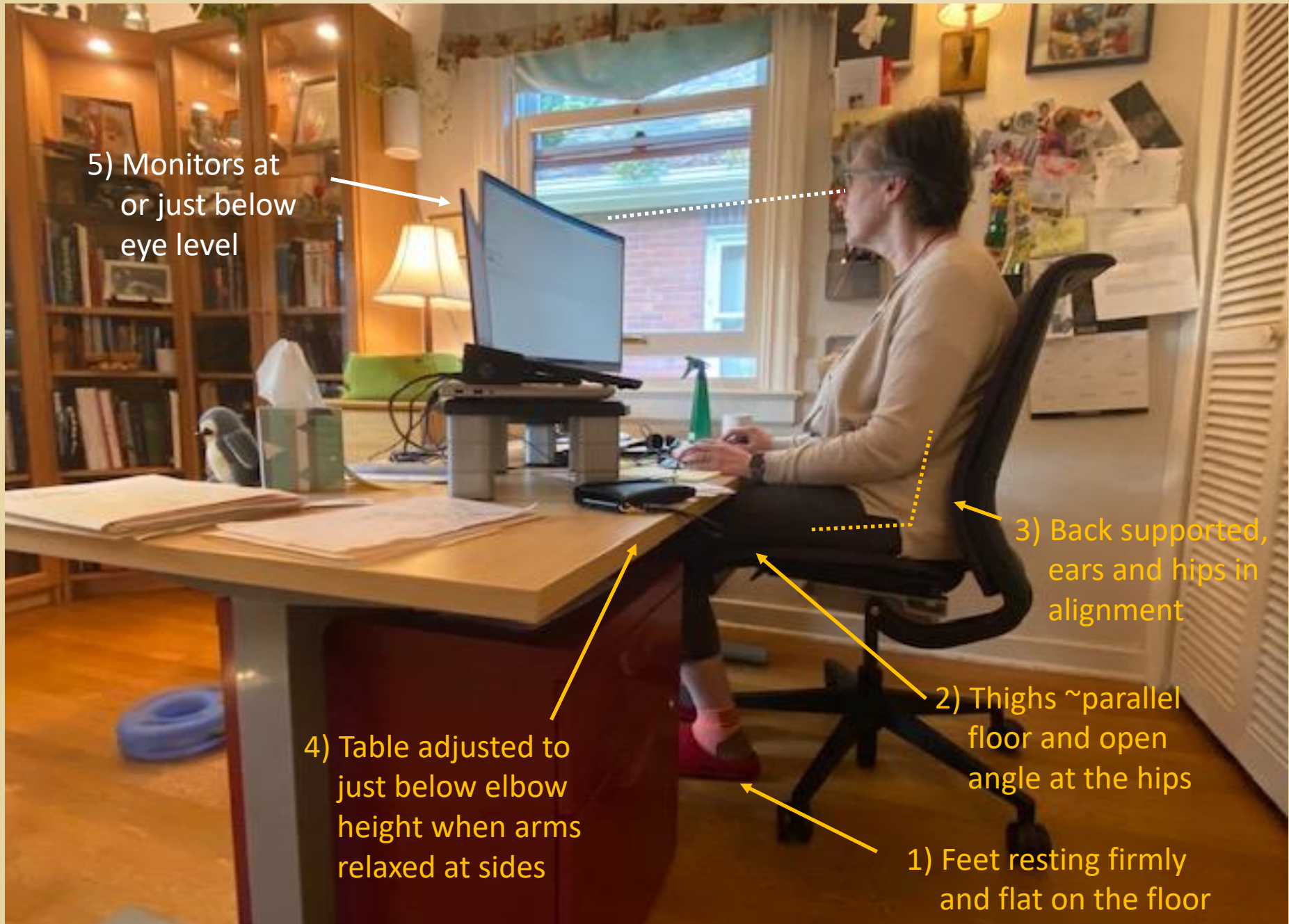


Work Station Set up



- > **If your workstation is height adjustable, adjust your chair first to optimize sitting posture**
- > **If your workstation is not adjustable, you have to adjust your chair to meet your workstation**
 - **Foot rests so feet can rest flat on the floor**
 - **Keyboard drawer to lower the height of your worksurface**
- > **Adjust your keyboard, pointing device and monitors**

Adjustable Workstation



5) Monitors at or just below eye level

4) Table adjusted to just below elbow height when arms relaxed at sides

1) Feet resting firmly and flat on the floor

2) Thighs ~parallel floor and open angle at the hips

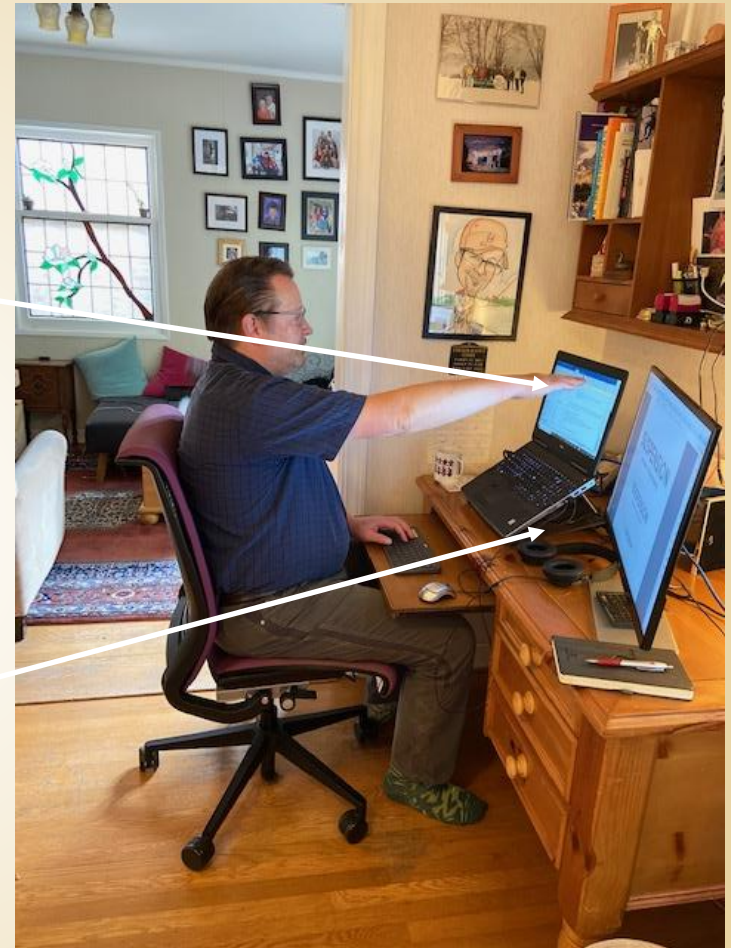
3) Back supported, ears and hips in alignment

Non-Adjustable Workstation



Monitors

- > **Monitor and keyboard need to be in line**
- > **Monitor Distance: 18" – 32" eyes to screen (arms distance)**
- > **Monitor Height: in general, eyes near the top of the screen. Actual position will depend on size of monitor and vision issues for user (low monitor height lower for bifocal wearers)**
- > **Laptops: Use laptop holder and peripherals for extended use**



Keyboard Trays

- > **Adjustable height and angle**
- > **Sturdy**
- > **Room to accommodate mouse**



Keyboard Trays



[Stand Up Desk Store Large Clamp-On Retractable Adjustable Keyboard Tray/Under Desk Keyboard Tray | Improve Comfort While Increasing Usable Desk Space \(27.5" W x 12.25" D\) \(Black\) \(Large\)](#)

4.3 out of 5 stars

\$54.00



[Mount-It! Under Desk Computer Keyboard and Mouse Tray, Ergonomic Keyboard Drawer with Gel Wrist Pad, Black](#)

3.9 out of 5 stars

\$65.99



[VIVO Adjustable Computer Keyboard and Mouse Platform Tray | Ergonomic Under Table Desk Mount Drawer \(MOUNT-KB01\)](#)

4.3 out of 5 stars

\$79.99

Chairs

- > Invest in a good chair, you use it all the time
- > Two types of chairs, personal preference
 - Static chairs, lock you in a position
 - Dynamic chairs, allow you to move
- > Not a fan or arm rest (can't get close to your desk), should be adjustable to gently support your elbows
- > Casters to match flooring (hard floor or carpet)



Herman Miller Aeron Ergonomic Office Chair with Tilt Limiter | Adjustable PostureFit SL and Arms | Large Size C with Graphite Finish

★★★★☆ ~ 128

\$1,185⁷⁵ ~~\$1,395.00~~

✓prime

FREE Shipping by Amazon
Temporarily out of stock.



Steelcase Black Mesh Back Reply Chair with Black Fabric Seat -

★★★★☆ ~ 8

\$546⁵³

FREE Shipping
Usually ships within 6 to 10 days.



Herman Miller Mirra Chair Deluxe Fully Highly Adjustable Home Office Desk Task Chair with Graphite Frame with Dark Graphite Airweave Seat and TriFL...

\$499⁹⁹

FREE Shipping
Only 1 left in stock - order soon.



OFM Essentials Collection Mesh Back Office Chair, Armless, in Black

★★★★☆ ~ 252

\$61³¹

✓prime
FREE Shipping by Amazon

Chairs



Passive Chair

Herman Miller Classic Aeron Chair - Fully Adjustable, Adjustable PostureFit,

4.3 out of 5 stars

\$400 - \$900



Static Chair

Steelcase Amia Ergonomic Office Chair with Adjustable Back Tension and Arms | Flexible Lumbar with Sliding Seat | Black Frame and Buzz2 Blue Fabric

4.1 out of 5 stars

\$720.00



Static or Dynamic Chair

Office Star High Back ProGrid Back FreeFlex Seat with Adjustable Arms and Multi-Function and Seat Slider, Black Managers Chair

4.0 out of 5 stars

\$186.44



Dynamic Chair

Office Factor Executive Ergonomic Office Chair Back Mesh Bonded Leather Seat Flip-up Arms Molded Seat with a 55kg Foam Density Double Handle Mechanism You Can Lock The Back in Any Position (Black)

3.9 out of 5 stars

\$194.90 - 249.00

Keyboards



Shoulder Abduction



Standard

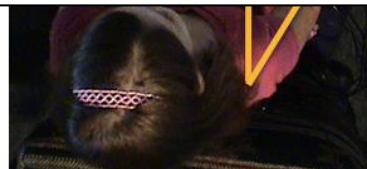
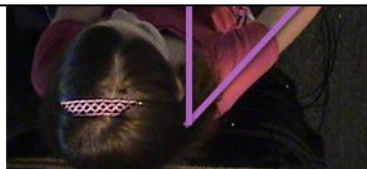
Small

34.6

PROCEEDINGS of the HUMAN FACTORS and ERGONOMICS SOCIETY 54th ANNUAL MEETING - 2010

Postural benefits for children and adults when using the mouse next to a small keyboard

Peter W. Johnson and Ling Cui
Department of Environmental and Occupational Health Sciences
University of Washington, Seattle WA



Child

*

Keyboards and Mice

- > Like small footprint keyboards
- > Use your more 2 to 4 times more than keyboard



Keyboards



[Perixx PERIDUO-406, Wired Mini Ergonomic Split Keyboard and Portable Vertical Mouse Combo, Adjustable Palm Rest, Tilt Scroll Wheel, and Membrane Low Profile Keys](#)

3.9 out of 5 stars

[\\$39.99](#)



[Microsoft Sculpt Ergonomic Wireless Desktop Keyboard and Mouse \(L5V-00001\) \(with Mouse\)](#)

4.2 out of 5 stars

[\\$179.99](#) (\$79.99 without mouse)



[Arteck 2.4G Wireless Keyboard Stainless Steel Ultra Slim Keyboard for Computer/Desktop/PC/Laptop/Surface/Smart TV and Windows 10/8 / 7 / Vista/XP Built in Rechargeable Battery](#)

4.5 out of 5 stars

[\\$29.99](#)



[Macally Slim USB Wired Small Compact Mini Computer Keyboard for Apple Mac, iMac, MacBook Pro/Air, Mac Mini, Windows PC Desktops, Laptop \(Space Gray\)](#)

4.3 out of 5 stars

[\\$29.99](#)

Mice



[Kinesis DXT2 Ergonomic Vertical Mouse \(RF Wireless\)](#)

3.8 out of 5 stars

[\\$99.00](#)



[Standard size Vertical Wireless Mouse, Jelly Comb Ergonomic Mouse Reduces Wrist Strain, Easy Switch Between 3 Computers with Bluetooth, USB or Type C Connection, Rechargeable - MV09D](#)

4.5 out of 5 stars

[\\$40.99](#)



[NORMIA RITA Foldable Arc Wireless Mouse Silent Click Bluetooth 2.4GHz Dual Modes Portable Curved Mouse for Home, Office, Travel](#)

4.3 out of 5 stars

[\\$38.99](#)



[Wired Vertical Mouse, Jelly Comb Small Ergonomic Mouse High Precision Optical Mice with Adjustable Sensitivity 800/1200 /1600 DPI, 6 Buttons, - Black](#)

4.5 out of 5 stars

[\\$19.99](#)

Hoteling

- > Working in different places for brief periods of time



Laptop Stands



[OMOTON Laptop Stand, Adjustable Aluminum Laptop Tablet Stand, Foldable Portable Desktop Holder Compatible with All Laptops \(Up to 14 inch\)](#)

4.7 out of 5 stars

[\\$23.99](#)



[Laptop Stand - JUBOR Adjustable Laptop Stand Portable Foldable Ergonomic Desktop Stand Holder Mount for MacBook Notebook Computer PC iPad Tablet](#)

4.5 out of 5 stars

[\\$21.99](#)



[Nexstand Laptop Stand - Portable Laptop Stand - PC and MacBook Laptop Stand](#)

4.5 out of 5 stars

[\\$39.95](#)

Sit Stand Workstations



Occupational Sitting and Standing and Cardiovascular Disease

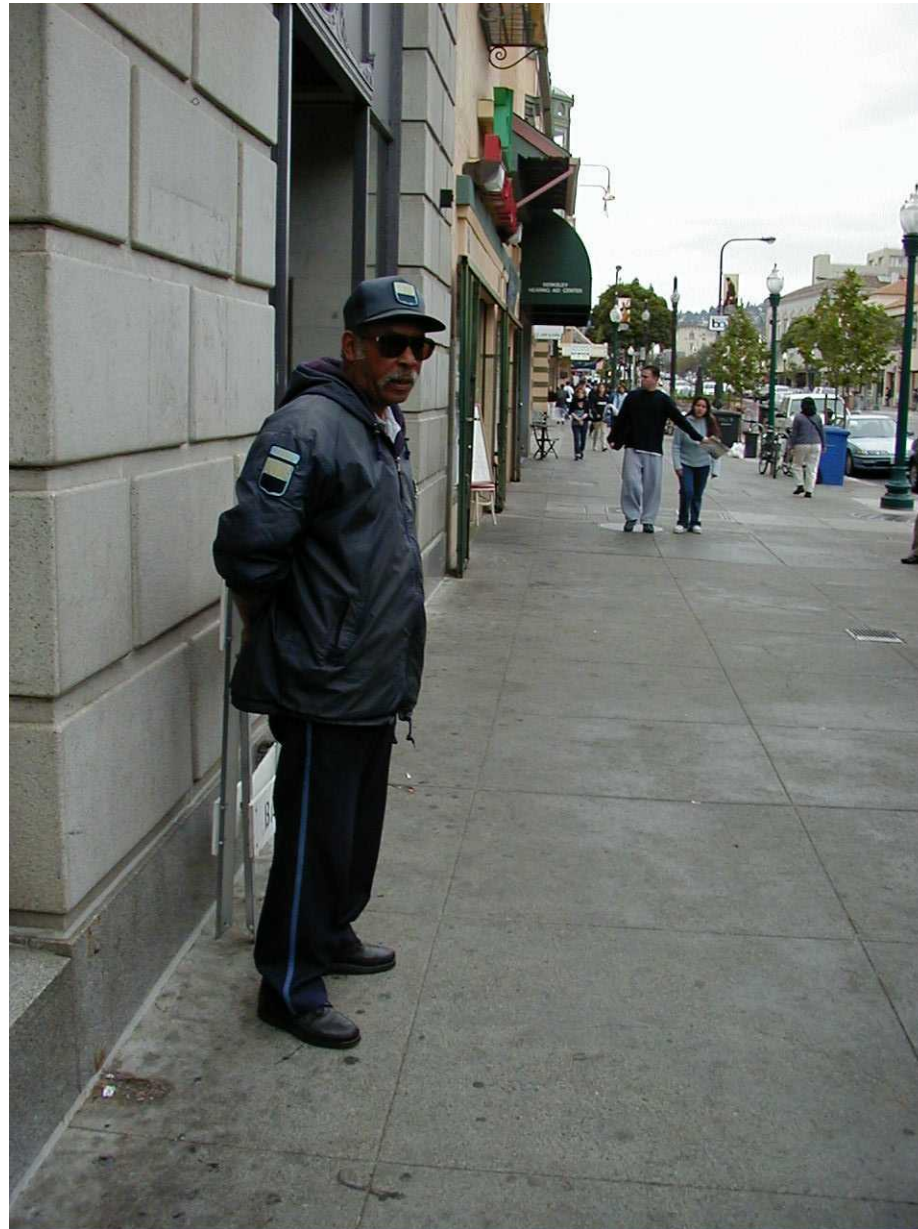
David Rempel, MD, MPH, CPE

Professor Emeritus, Department of Medicine
University of California San Francisco

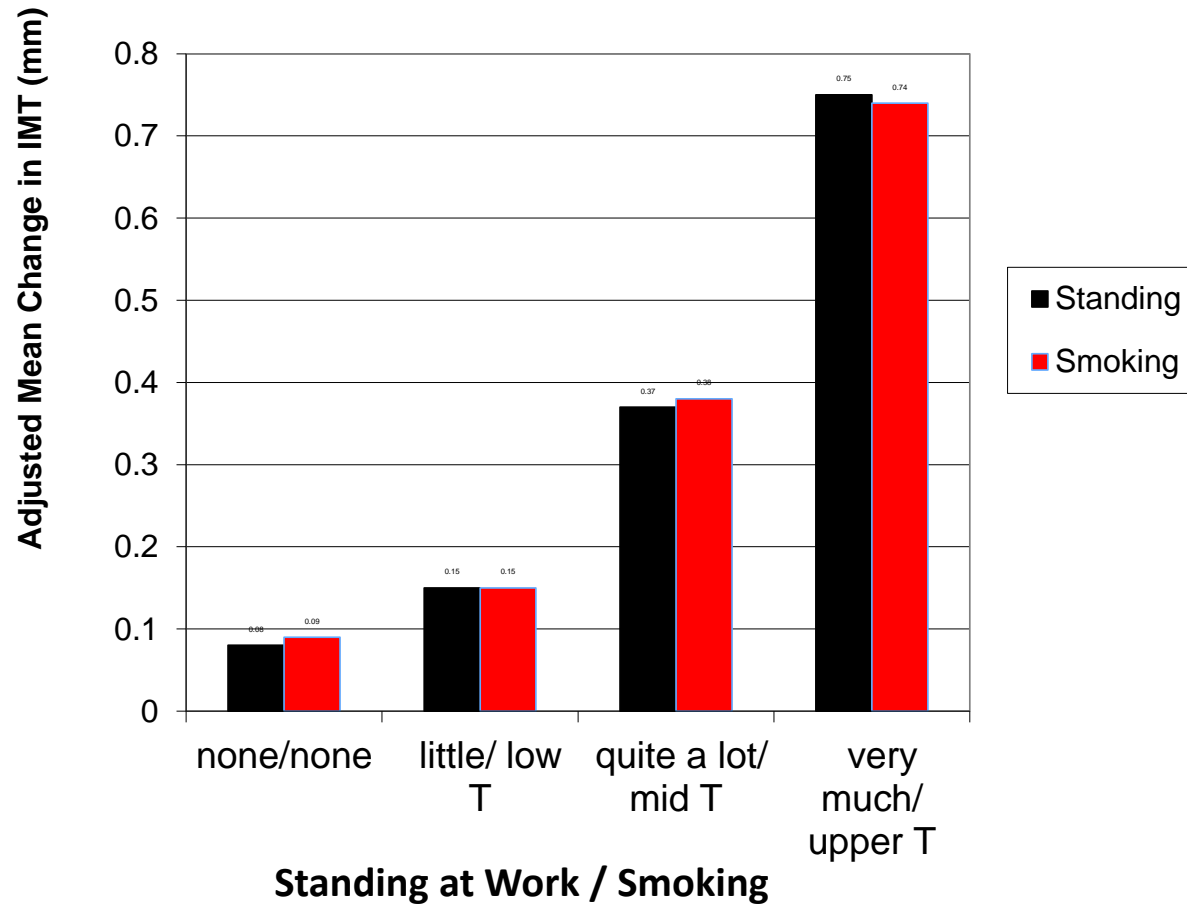
Professor, Department of Bioengineering
University of California, Berkeley

[I have nothing to disclose]

Standing at Work Increases CVD



Standing compared to Smoking



Common Computer Ailments



The End



Questions ?

Feel free to contact:

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