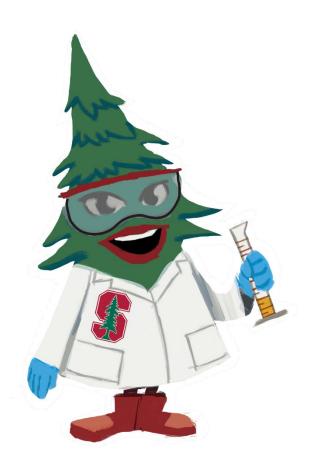
Pre-Approved Lab Ergonomic Product List



Stanford | Environmental Health & Safety

OSH Report # 19-048

Updated: June 2019

Table of Contents

Ordering Guidance	2
Chair Ordering Instructions	3
Chairs	4
Single Channel Mechanical Pipettes	8
Single Channel Electronic Pipettes	10
Multi-Channel Mechanical Pipettes	11
Multi-Channel Electronic Pipettes	12
Padding/Armrests	13
Lab Bench Accessories	15
Hand Tool Accessories	16
Microscope Accessories	17
Container Solutions	18

About this list:

This product list contains lab items and furniture evaluated and approved by Stanford University Environmental Health and Safety as ergonomically-sound. When properly setup and used, items on this list can help resolve common ergonomic concerns related to office computer use.

<u>IMPORTANT:</u> Before starting your work routine at your computer workstation, complete the required ergonomics training and workstation self-evaluation following the guidance on Page 2.

EH&S Ergo Showroom:

Sample products can be seen and tried out at the Ergo Showroom located on-campus at EH&S (484 Oak Road). Ergo Showroom visits can be arranged by emailing the Ergonomics Team at ergonomics@lists.stanford.edu.

Ergonomics at Stanford University

To help campus departments prevent workplace musculoskeletal injuries and assist their compliance with Cal/OSHA regulatory requirements, Stanford's Ergonomics Program provides key resources including employee training and support with workstation evaluations.

Training: Lab Ergonomics (EHS-4800)

This course provides complete guidance on properly adjusting your lab setup and reviews ergonomic best practices. This live training is available quarterly at EH&S Interested people can register through STARS (axess.stanford.edu). Departments wishing to schedule a special group training should contact EH&S at 3-0448.

<u>Lab Ergonomics:</u> Guidance provided at https://ehs.stanford.edu/topic/ergonomics/laboratory-ergonomics

- Workstation Evaluations
- General Lab Workstation Guidelines
- Lab Ergonomic Equipment Matching Fund Program

EH&S Pre-Approved Laboratory Products

No one product will guarantee proper ergonomics or necessarily be an improvement for every individual or situation. Proper selection, adjustment, and use of equipment are essential practices for reducing the risk factors commonly associated with repetitive motion injuries.

Ordering Guidance

- Equipment can be ordered through Amazon Business, SmartMart, iProcurement or online using a department PCard.
- Non-catalog items (e.g. equipment ordered through Cube Solutions or Grandstands):
 http://www.stanford.edu/group/fms/fingate/finsystem/iprocure/howto/create_standard_reg.html

Office Master Chair Ordering Instructions

Email Cube Solutions at kurt@cubesolutions.net with the following information:

- 1) Your contact information and shipping information
- 2) Chair Information:
 - CHAIR MAKE/MODEL
 - FABRIC GRADE: See Below
 FABRIC COLOR: See Below
 - ARMRESTS: NO ARMS, KR-200 ARMS, KR-465 ARMS
 - SEAT: Standard
 - DELIVERED: ASSEMBLED
 - > Cube Solutions will provide a quote. Verify the quote is accurate.
 - Order the chair with a PCard or as a non-catalog item in iProcurement process at http://www.stanford.edu/group/fms/fingate/finsystem/iprocure/howto/create_standard_req.html

CHAIR COLOR OPTIONS

Symphony Grade 3 (100% Vinyl)

Stage Grade 3 (100% Vinyl/Urethrane Topcoat)



^{*}Additional fabric types and colors can be found in the Office Master Fabric Catalog.

General Features of Office Master Chairs: www.officemaster.com

- Pneumatic lift
- Tilting backrest

- EZ back height adjustment
- Seat depth adjustment
- 12 year warranty
- 300 lb. weight capacity

CL47 Lab Stool



Height adjustable footring

Non-porous material required for lab settings (e.g. Silica)

\$267+

YS75 Lab Stool



Height adjustable footring

Mesh Back

Non-porous material required for lab settings (e.g. Silica)

CLS53 Lab Stool



Fixed footring

Non-porous material required for lab settings (e.g. Silica)

\$237+

DB54 Lab Stool



Height adjustable footring

Increased thoracic support

Non-porous material required for lab settings (e.g. Silica)

Armrest Options







KR-200

Height and width adjustment

Adjustable height range of 2.75"

KR-300

Height and width adjustable

Tallest adjustable height range

KR-465

Four way adjustable armrest

Adjustable height range of 2.75"

Single Channel Mechanical Pipettes

Ovation Bionatural Pipette



- Available in left or right handed models
- Minimizes wrist rotation
- Low activation force
- Mechanical Volume Adjust, Quick Set Digital Volume Adjust or Fixed Volume

To order or request a demo, contact Michael Barbieri (michael.barbbieri@thermofisher.com) or Caroline Smullen (caroline.smullen@thermofisher.com)

Eppendorf Research Plus Pipettes



- Volume adjustment by turning
- Low operating force
- Volume display is in 4 digits
- Spring loaded tip cone for a tight fit

To order or request a demo, contact Michael Barbieri (<u>michael.barbbieri@thermofisher.com</u>) or Caroline Smullen (caroline.smullen@thermofisher.com)

Rainin Pipet-Lite XLS+, LTS



- Low friction lip sealing system
- Antidrift volume adjustment
- Tip eject shock absorber
- Fully autoclavable shaft assembly
- Corrosion Free tip ejector and RFID advanced asset ID system
- LTS system to reduce tip ejection force

To order or request a demo, contact Katarina Short at katarina.short@rainin.com or (415) 846-8712

Rainin Liquidator 96 Manual Pipetting System



- Minimize repetitive pipetting
- Pipette as low as 0.5 μL
- Little training required
- Manual system, not robotic
- Can pipette up to 96 wells and reduce strain from single channel or multichannel pipettes.
- Unique pipette tips required for this device

To order or request a demo, contact Katarina Short at katarina.short@rainin.com or (415) 846-8712

Single Channel Electronic Pipettes

Rainin E4 XLS+



- Create and save Protocols
- Joystick manipulation for navigating and pipetting
- Low eject force
- GLP/GMP Secure

To order or request a demo, contact Katarina Short at katarina.short@rainin.com or (415) 846-8712

Ovation Bionatural Pipette



- Requires a power supply
- Available in left or right handed models
- Minimizes wrist rotation
- Low activation force

To order or request a demo, contact Michael Barbieri (<u>michael.barbbieri@thermofisher.com</u>) or Caroline Smullen (caroline.smullen@thermofisher.com)

Eppendorf Research Pro Pipetters



- Programmable Modes
- Individual aspiration and dispensing speeds can be programmed
- Reverse pipetting, blow out, manual pipetting, and rinsing functions
- Fixed-Volume mode allows commonly used volumes for quick recall
- Dispensing mode provides repetitive dispensing of a constant volume
- Autoclavable and the tip ejection lever can be adjusted for left or right handed users.

To order or request a demo, contact Michael Barbieri (michael.barbbieri@thermofisher.com) or Caroline Smullen (caroline.smullen@thermofisher.com)

Novus Single Channel Pipettes



- Multilingual graphical user interface
- 10 pipetting options and 9 aspirate/dispense speeds
- Forward, reverse, diluting, stepper pipetting, mixing, sequential stepping, and more functions
- Available in left or right handed models
- Battery life for approximately 4000 pipetting operations, recharged in 1 hour
- Autoclavable tip cone ensures sterility and avoids cross-contamination

Multi-Channel Mechanical Pipettes

mLine Mechanical Pipettes



- Light pipetting and tip ejection forces
- Safe-Cone Filters and Full autoclavability
- Volume lock preventing accidental volume changes when pipetting

To order or request a demo, contact Shradda Venkat at Shradda Venkat@vwr.com

Rainin Pipet-Lite XLS Adjustable Spacer



- 6 or 8 adjustable nozzles to quickly transfer liquids from one format to another.
- Inter-pipette spacing is adjustable to accommodate for well sizes
- Low eject force
- Can help reduce repetitive pipetting
- Manual Version

To order or request a demo, contact Katarina Short at katarina.short@rainin.com or (415) 846-8712

Multi-Channel Electronic Pipettes

Picus NxT Electronic Pipette



- Soft-touch operating button and electronic tip ejection
- Repeated blow-out function to help disperse very last droplets of liquid
- Safe-Cone filters reduce the risk of contamination
- Adjustment wheel offers fast volume setting and menu navigation
- User interface in a choice of English, French, German, Russian, and Chinese.
- Calibration adjustment in 1, 2, or 3 points
- Li-polymer battery enables charging in approximately 1 hour
- Pipetting modes include reverse pipetting, manual, multi dispensing, diluting, sequential dispensing, multi aspiration, and titrate.

To order or request a demo, contact David Wobber at david wobber@vwr.com or (408) 206-3540

Rainin E4 XLS+ Adjustable-Spacer



- 6 or 8 adjustable nozzles to quickly transfer liquids from one format to another.
- Inter-pipette spacing is adjustable to accommodate for well sizes
- Low eject force
- Can help reduce repetitive pipetting
- Electronic version

To order or request a demo, contact Katarina Short at katarina.short@rainin.com or (415) 846-8712

Ovation 12-Channel Pipette



- Equipped with multiple dispense, pipet, reverse pipet, mix and serial dilute operations and liquid handling functions with recall of stored volume settings
- Available in left or right handed models
- Replaceable 3 volt lithium battery with an expected life of 1 year or more of typical use

To order or request a demo, contact Michael Barbieri (michael.barbbieri@thermofisher.com) or Caroline Smullen (caroline.smullen@thermofisher.com)

Padding/Armrests

Cole Parmer 3P Microscope Arm Pads



- Soft padded surface to support forearms
- Usable with work desks from 5/8" to 1 ¾" thick
- Vinyl Cover for easy cleaning and disinfection
- Angle can adjust for comfort
- For precision liquid dispensing from 0.5 to 850 μL
- Replaceable 3 volt lithium battery with an expected life of 1 year or more of typical use

To order or request a demo, contact Michael Barbieri (<u>michael.barbbieri@thermofisher.com</u>) or Caroline Smullen (caroline.smullen@thermofisher.com)

Wedge Ease Ergonomic Supports



- Support the wrists and forearms in a neutral position when working on microscope or hard lab desk
- Non-slip base
- Highly resilient soft foam core with 4 different sizes
- Static dissipative and certified safe to use with ESD sensitive components and assemblies
- Available through AliMed

Deluxe Edge Rest



- Provides protection against sharp edges. Careful when using in a Biosafety fume hood. Don't cover the ventilation surfaces.
- Available through AliMed

SoftEdge Corners



- Corner protector
- Available through AliMed

Ulnar Gel Pads



- Provides a cushioned surface for the elbows for highprecision tasks.
- Available through Alimed

Anti-Fatigue Mat



- Standing mat to reduce fatigue in the feet, legs and lower back.
- Recommended size: 0.75" thick, 20" x 32"
- Multiple options available on Amazon

Bench Accessories

Stainless Steel Turntable



- Extends user reach up to 12" to allow more efficient use of the work surface
- 100% stainless steel, easy to clean and autoclavable
- 12" diameter
- Part # NU-977-001
- Available through NuAire

https://www.nuaire.com/stainless-steel-turntable

Safco Tall Footrest



- Taller height range allows your feet to be supported in front of your lab stool.
- Adjustable height range of 5" 15"
- Model # 5124
- Available on Amazon

LED Magnifying Lamp



- Microscope stand adjusts in height and the base swivels.
 - Available through <u>Fisher Scientific</u>

Pipette Rack



- Organize pipettes and increase benchtop space
- Available on <u>Amazon</u>

Hand Tool Accessories

Rubber Grip Wrap



- Easily add, renew or regrip handles
- Increase padding on hand tools to reduce grip strength and contact stress
- Available on <u>Amazon</u>

MicroTube Tool



- Reduces stress for pinch gripping when opening microtubes.
- To order, visit the <u>Daigger website</u>.

Ergonomic Tweezers



- Wider, padded handles to reduce grip strength and contact stress.
- To order, visit the Excelta website

Microscope Accessories

Grandstands Height Adjustable Microscope Stand



- Microscope stand adjusts in height and the base swivels.
 - To order, contact Chris Lowe at clowe@intellifactors.com

Articulated Arm Microscope Stands



- Makes scope height adjustable; great for people of varying heights using same scope
- Table clamp options also available
- Multiple styles available through <u>MicroscopeWorld</u>

Microscope Positioning Plate



- Ideal comfort for extended periods of time spent at a microscope
- Wide range of adjustability; great for people of varying heights using same scope
- Solid construction with non-skid surface and weighted for stability
- Available through MarketLab

Extended Eyetube Binocular



- For use with stereomicroscopes
- 90mm extension to allow user to sit more upright
- Compatible with Leica (WILD) "M" stereo models (except the M5 and M5A)
- Available through <u>Bay Optical</u>

Container Solutions

DispensMate Plus Bottletop Dispensers



- Reduces the need to handle bottles
- Anti-drip cap to prevent accidental discharge
- Four volume ranges
- Available through <u>Daigger Scientific</u>

Lab Companion Carboys



- Reduces the need to handle containers
- 5L, 10L, and 20L available
- Available through <u>Daigger Scientific</u>