

NBP
Science Equipment/Systems Allocation
ANALYTICAL INSTRUMENTS AND EQUIPMENT

| Product(s) | Quantity on Hand |
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| Autoclave | |
| Autoclave, sterilizer, top-loading, 50 L capacity, 105 °C to 135 °C sterilization temp, timer, programmable, Bio Lab, Hirayama HV-50. | 1 |
| Aquarium | |
| Aquarium, glass, 10 gallon, 20" L x 10" W x 12" H. | 5 |
| Balance and Scale | |
| Balance, analytical, w/ draft shield, digital, 320 g x 0.0001 g (capacity x readability), 9 cm diameter pan, Mettler New Classic MF, MS304S/03 (for use in port at Punta Arenas, Chile unless otherwise requested). | 1 |
| Balance, analytical, w/ draft shield, digital, 320 g x 0.0001 g (capacity x readability), 9 cm diameter pan, Mettler MS304TS/00 (for use in port at Punta Arenas, Chile unless otherwise requested). | 1 |
| Balance, marine scale, motion compensated, digital, capacity 1.5 kg, resolution 0.1 g to 0.3 kg; 0.2 g to 0.6 kg; 0.5 g to 1.5 kg, 12 cm x 12 cm pan, POLS S-182. | 1 |
| Balance, marine scale, motion compensated, digital, capacity 3 kg, dual resolution, resolution 0.5 g to 1.5 kg, resolution 1 g from 1.5-3 kg, 25 cm x 30 cm pan, Marel M1100 PL2262. | 1 |
| Balance, topload, digital, 2100 g x 0.01 g (capacity x readability), 16.5 cm x 16.5 cm pan, Mettler PG2002-S. | 2 |
| Balance, topload, digital, 3200 g x 0.01 g (capacity x readability), 17 cm x 20 cm diameter pan, Mettler MS3002S (for use in port at Punta Arenas, Chile unless otherwise requested). | 1 |
| Scale, cargo, digital, 400 lbs x 0.5 lbs / 180 kg x 0.2 kg, 12" x 12". | 2 |
| Scale, hanging, 110 lbs x 8 oz / 50 kg x 200 g, accurate to one part in 250, Salter 235-6S. | 1 |
| Scale, hanging, spring with clip, 100 g x 1 g division, Pesola Micro-Line 20100. | 1 |
| Scale, hanging, spring with clip, 600 g x 5 g division, Pesola Medio-Line 40600. | 2 |
| Scale, hanging, spring with clip, 1000 g x 10 g division, Pesola Medio-Line 41000. | 1 |
| Scale, hanging, spring with hook, 1000 g x 10 g division, Pesola Medio-Line 41000 (this item originally came with a clip. The clip was modified to a hook). | 1 |
| Scale, hanging, spring with hook, 2500 g x 20 g division, Pesola Medio-Line 42500. | 2 |
| Scale, hanging, spring with hook, 5 kg x 50 g division, Pesola Macro-Line 80005. | 2 |
| Bath, Circulating | |
| Bath, circulating, digital, -24 °C to +150 °C, stability +/- 0.01 °C, ID 8.8" x 9.4" x 9", 18.1 L, Neslab RTE-17. | 2 |
| Bath, circulating, digital, -25 °C to +150 °C, stability +/- 0.01 °C, ID 9.3" x 10" x 6", 12.1 L, Neslab RTE-211D. | 1 |
| Bath, circulating, digital, -20 °C to +100 °C, ID 5.3" x 4.8" x 5", 5.4-6.5 L, Polystat 1C6. | 1 |
| Bath, circulating, digital, -28 °C to +100 °C, ID 6.8" x 7.2" x 5", 6.8-8.6 L, Polystat 1C15. | 2 |

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| Bath, circulating, digital, -25 °C to +150 °C, stability 0.02 °C, ID 7.2" x 6.8" x 8", 12 L, Thermo Scientific SC150-A25. | 1 |
| Bath, non-circulating, analog, +5 °C above ambient to +99 °C, uniformity +/-0.2 °C at 37 °C, ID 11" x 12" x 6", 12 L, VWR 1212. | 1 |
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| Bath, Dri | |
| Bath, dri, modular, holds six blocks, ambient to +150 °C, accuracy: +/- 0.5% repeatability, with 50, 15, 1.5 ml and 25 mm tube size blocks (request below), VWR 13259-038. | 3 |
| Heat block, 12 x 15 ml conical bottom centrifuge tubes, 0.672" diameter, VWR 13259-250. | 2 |
| Heat block, 20 x 1.5 ml non-graduated (smooth sided) microtubes, tapered, VWR 13259-286. | 3 |
| Heat block, 5 x 50 ml conical bottom centrifuge tubes, 1.14" diameter, VWR 13259-254. | 1 |
| Bath, dri, modular, holds three blocks, ambient to +110 °C, stability +/- 0.1 °C, uniformity +/- 0.5 °C, with 6, 13, 16 mm tube size blocks (request below), Thermolyne DB16525. | 1 |
| Heat block, 12 x 16 mm tube size, max tube size 16.75 mm, Thermolyne BK165X7A. | 1 |
| Heat block, 20 x 13 mm tube size, max tube size 13.75 mm, Thermolyne BK165X5A. | 1 |
| Heat block, 30 x 6 mm tube size, max tube size 6.5 mm, Thermolyne BK165X3A. | 2 |
| Bath, dri, modular, holds two blocks, ambient to 130 °C, uniformity +/- 0.5 °C, with 6, 12, 13, 25 mm tube size blocks (request below), Fisher Model 2052FS, p/n 11-718-2Q. | 1 |
| Heat block, 6 x 6 mm test tubes, 5 x 12 mm & 13 mm test tubes, 3 x 25 mm test tubes, Fisher 11-718-22Q. | 4 |
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| Bath, Ultrasonic | |
| Bath, shaking, heated, +5 °C above ambient to +70 °C, accuracy +/- 0.1 °C, uniformity +/-0.3 °C, ID 14" x 10" x 5", 7 L, 50-150 oscillations/min/60Hz, timer to 60 min, Yamato YB521. | 1 |
| Bath, ultrasonic cleaner, ID 11.5" x 6" x 6", 5.7 L, Branson 3200R-1. | 1 |
| Bath, ultrasonic cleaner, ID 11.5" x 9.5" x 5.8", 10.4 L, heat, adjustable power burst and degassing, timer to 20 min, Ney ULTRASONIK 300. | 1 |
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| Burner | |
| Burner, alcohol, 4oz. | 1 |
| Burner, torch kit, with propane. | 1 |
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| Calipers | |
| Calipers, electronic, digital, 0-200 mm, resolution 0.01 mm, accuracy +/- 0.03 mm, stainless steel, traceable to NIST Standards, VWR 12777-830. | 1 |
| Calipers, dial, 0-150 mm, dial gradation 0.1 mm, 10 mm per revolution, Super Polyimid (fiberglass-reinforced polymer), Swiss Precision Instruments 31-415-3. | 1 |
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| Centrifuge | |
| Centrifuge, benchtop, refrigerated, -20 °C to +40 °C, variable speed up to 18,000 rpm, timer to 9 hr 59 min, Beckman Allegra X-30R. | 2 |
| Rotor, fixed angle, 25°, 10-place x 15 mL conical bottom tubes, 10,000 rpm max / 10,416 x g rcf max, C1015 for Beckman Allegra X-30R. | 2 |

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| Rotor, fixed angle, 25°, 6-place x 50 mL conical bottom tubes, 10,000 rpm max / 10,304 x g rcf max, C0650 for Beckman Allegra X-30R. | 2 |
| Rotor, fixed angle, 25°, 8-place x 50 mL round bottom tubes, 11,400 rpm max / 13,682 x g rcf max, F0850 for Beckman Allegra X-30R. | 1 |
| Rotor, fixed angle, 30°, 6-place x 30 mL round bottom tubes, 18,000 rpm max / 28,305 x g rcf max, F0630 for Beckman Allegra X-30R. | 1 |
| Rotor, fixed angle, 45°, 30-place x 1.5/2.0 mL, 16,000 rpm max / 28,672 x g rcf max, FX301.5 for Beckman Allegra X-30R. | 2 |
| Centrifuge, benchtop, non-refrigerated, variable speed up to 16,000 rpm, timer to 99 hr 59 min, Thermo Scientific Sorvall ST 8. | 2 |
| Rotor Adapter, 1-place x 15 mL conical bottom tube, for use with TX-150 and HIGHConic III rotors for Thermo Scientific Sorvall ST 8. | 2 |
| Rotor Sleeve, 1-place x 15 mL conical or round bottom tube, for use with CLINIConic rotor for Thermo Scientific Sorvall ST 8. | 2 |
| Rotor, fixed angle, 37°, 30-place x 15 mL conical or round bottom tubes (requires sleeves - request above), 4,400 rpm max / 3,030 x g rcf max, CLINIConic for Thermo Scientific Sorvall ST 8. | 2 |
| Rotor, fixed angle, 45°, 6-place x 50 mL conical bottom tubes, 8,700 rpm max / 10,155 x g rcf max, HIGHConic III for Thermo Scientific Sorvall ST 8. | 2 |
| Rotor, swinging bucket, 8-place x 50 mL conical bottom tubes, 4,500 rpm max / 3,260 x g rcf max, TX-150 for Thermo Scientific Sorvall ST 8. | 2 |
| Centrifuge, micro, non-refrigerated, variable speed up to 15,060 rpm / 21,300 x g rcf, timer to 9 hr 59 min, Eppendorf 5425. | 2 |
| Rotor, fixed angle, 45°, 24-place x 1.5/2 mL microfuge tubes, conical, 11 mm bore, aerosol-tight, 15,060 rpm max / 21,300 x g rcf max, FA-24x2 for Eppendorf 5425. | 2 |
| Centrifuge, micro, refrigerated, -11 °C to +40 °C, variable speed up to 16,220 rpm / 25,001 x g rcf, timer to 9 hr 59 min, Eppendorf 5427R. | 2 |
| Rotor, fixed angle, 45°, 30-place x 1.5/2 mL microfuge tubes, conical, 11 mm bore, aerosol-tight, 14,000 rpm max / 20,817 x g rcf max, FA-45-30-11 for Eppendorf 5427R. | 2 |
| Conductivity | |
| Conductivity Meter, benchtop, conductivity: 0.000 to 3000 mS/cm, cell constant: 0.001 to 199.9 cm ⁻¹ , salinity: 0.1 to 80.0 ppt, temperature: -5 °C to +105 °C, Orion 3 Star. | 1 |
| Conductivity Cell, DuraProbe, 4 electrode, range: 1 µS/cm to 200 mS/cm, cell constant: 0.475 cm ⁻¹ , epoxy/graphite, built-in ATC temperature sensor, Thermo Orion 013005MD. | 1 |
| Conductivity Meter, portable, conductivity: 0 to 199.9 mS/cm, cell constant: 0.07 to 14.99 cm ⁻¹ , salinity: 0.0 to 80.0 ppt, temperature: -5 °C to +105 °C, Orion 115. | 1 |
| Conductivity Cell, 2 electrode, range: 1 µS/cm to 20 mS/cm, cell constant: 1.0 cm ⁻¹ , epoxy/platinum, w/ thermistor, Orion 011050. | 2 |
| Conductivity Salinity Temperature Meter, handheld, measures conductivity (0 to 200 mS/cm), salinity (0 to 80 ppt), and temperature (-5 °C to +95 °C), 10 ft cable, YSI 30. | 1 |
| Counter | |
| Counter, tally, hand held, 1 place, 4 digits (0 - 9999). | 13 |
| Counter, tally, laboratory, 1 place, 3 digits (0 - 999). | 2 |
| Counter, tally, laboratory, 2 place, 3 digits (0 - 999). | 2 |

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| Counter, tally, laboratory, 5 place, 3 digits (0 - 999). | 1 |
| Counter, tally, laboratory, 5 place, 3 digits (0 - 999), with totalizing place. | 1 |
| Counter, tally, laboratory, 8 place, 3 digits (0 - 999), with totalizing place. | 1 |
| Crimper | |
| Crimper, hand operated, for 20 mm seals, Alltech 666020, Wheaton 224303, W225303. | 3 |
| Decapper, hand operated, for 20 mm seals, Wheaton W225353. | 1 |
| Decapper, plier, for 20 mm seals, Alltech 6663. | 1 |
| Dessicator | |
| Dessicator, vacuum, polycarbonate with plate, inside diameter 19.7 cm, plate diameter 19 cm, volume 0.2 cu ft, holds 29.9" Hg vacuum at room temp for 24 hrs, Scienceware F42020. | 1 |
| Dewar | |
| Dewar, storage, 1 L, for liquid nitrogen. Lid fastens with clips so can be used as a transportable vessel for use in the field. | 1 |
| Dewar, storage, 4 L, for liquid nitrogen. | 2 |
| Dewar, storage, 35 L, for liquid nitrogen, with sample canisters/cryo canes for sample storage. | 6 |
| Dewar, storage, 50 L, for liquid nitrogen. | 5 |
| Dewar, storage, 160 L, for liquid nitrogen. | 8 |
| DI Water | |
| Water Purification System, Aqua Solutions RODI-C-12AL, reverse osmosis + type I ultra-low TOC analytical grade DI system, installed in Aft Dry Lab. | 1 |
| Water Purification System, Aqua Solutions RODI-C-12AL, reverse osmosis + type I ultra-low TOC analytical grade DI system, installed in Hyrdo Lab. | 1 |
| Dispenser | |
| Dispenser, bottle top, 0.5 mL fixed vol, Barnstead/Thermolyne Repipet Jr., w/ glass and PP (polypropylene) bottles, for aqueous solutions and dilute acids/bases. | 4 |
| Dispenser, bottle top, 1 mL fixed vol, Hirschmann Ceramus 9312100. Glass bottle included. | 2 |
| Dispenser, bottle top, 0.2-1 mL, Hirschmann Ceramus 9312000. Glass bottle included. | 8 |
| Dispenser, bottle top, 0.4-2 mL, Hirschmann Ceramus 9322000. Glass bottle included. | 3 |
| Dispenser, bottle top, 1-5 mL, Hirschmann Ceramus 9332000, Brinkmann 022-22-010-1. Glass bottle included. | 5 |
| Dispenser, bottle top, 2-10 mL, Hirschmann Ceramus 9342000, Eppendorf Varispenser Plus 4961 000.039. Glass bottle included. | 3 |
| Dispenser, bottle top, 5-25 mL, Brinkmann Chemsaver 022-22-120-5, Brinkmann 022-22-030-6. Glass bottle included. | 3 |
| Dispenser, bottle top, 5-30 mL, Hirschmann Ceramus 9352000. Glass bottle included. | 5 |
| Dispenser, bottle top, 10-60 mL, Hirschmann Ceramus 9362000. Glass bottle included. | 6 |
| Dispenser, bottle top, 0-0.5 mL, glass, Labindustries Repipet 3001/2AL. | 1 |
| Dispenser, bottle top, 0-5 mL, glass, Barnstead/Thermolyne L/I Repipet. | 1 |
| Filtration | |
| Base, glass, 25 mm, glass frit support, with clamp. | 32 |

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| Funnel, glass, 25 mm, 100 mL. | 13 |
| Funnel, glass, 25 mm, 1000 mL. | 1 |
| Funnel, glass, 25 mm, 15 mL. | 60 |
| Funnel, glass, 25 mm, 150 mL | 3 |
| Funnel, glass, 25 mm, 300 mL. | 23 |
| Base, glass, 25 mm, SS screen support, with clamp. | 8 |
| Funnel, glass, 25 mm, 100 mL. | 13 |
| Funnel, glass, 25 mm, 1000 mL. | 1 |
| Funnel, glass, 25 mm, 15 mL. | 60 |
| Funnel, glass, 25 mm, 150 mL | 3 |
| Funnel, glass, 25 mm, 300 mL. | 23 |
| Base, glass, 47 mm, glass frit support, with clamp. | 16 |
| Funnel, glass, 47 mm, 1000 mL. | 1 |
| Funnel, glass, 47 mm, 300 mL. | 27 |
| Base, glass, 47 mm, SS screen support, with clamp. | 15 |
| Funnel, glass, 47 mm, 1000 mL. | 1 |
| Funnel, glass, 47 mm, 300 mL. | 27 |
| Base, polysulfone, 25 mm, twist-lock, autoclavable, Pall-Gelman 4203. | 63 |
| Funnel, polysulfone, 25 mm, 200 mL, twist-lock, autoclavable, Pall-Gelman 4203. | 63 |
| Base, polysulfone, 25 mm, twist-lock, autoclavable, Pall-Gelman 4204. | 4 |
| Funnel, polysulfone, 25 mm, 50 mL, twist-lock, autoclavable, Pall-Gelman 4204. | 4 |
| Base, polyphenylsulfone, 47 mm, magnetic, autoclavable, Pall-Gelman 4242. | 7 |
| Funnel, polyphenylsulfone, 47 mm, 300 mL, magnetic, autoclavable, Pall-Gelman 4242. | 7 |
| Base, polyphenylsulfone, 47 mm, magnetic, autoclavable, Pall-Gelman 4247. | 6 |
| Funnel, polyphenylsulfone, 47 mm, 150 mL, magnetic, autoclavable, Pall-Gelman 4247. | 6 |
| Base, polysulfone, 47 mm, with clamp, autoclavable, Nalgene DS0315-0047. | 24 |
| Funnel, polysulfone, 47 mm, 250 mL, with clamp, with polypropylene cover, autoclavable, Nalgene DS0315-0047. | 24 |
| Base, polysulfone, 47 mm, Gravi-Seal, autoclavable, GE/Osmonics. | 6 |
| Funnel, polysulfone, 47 mm, 350 mL, Gravi-Seal, autoclavable, GE/Osmonics. | 6 |
| Manifold, vacuum, 3-place, PVC. | 3 |
| Manifold, vacuum, 3-place, stainless steel. | 5 |
| Manifold, vacuum, 6-place, PVC. | 11 |
| Manifold, vacuum, 6-place, stainless steel. | 1 |
| Manifold, vacuum, 6-place, aluminum. | 1 |
| Pump, vacuum, oil-less, diaphragm, max vacuum 25.5" Hg, max pressure 60 psi, w/ gauges, Gast DOA-P704-AA. | 13 |
| Vacuum Trap, carboy, 20 L, PP (polypropylene), heavy duty, with quick vent caps, Nalgene 2226-0050. | 13 |
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| Filtration, Other | |
| Filter Holder, in-line, 47 mm, polypropylene, Millipore XX4304700. Fits 1/4" to 3/8" ID tubing. Silicone tubing recommended by Millipore. | 6 |
| Filter Holder, in-line, 47 mm, polycarbonate, Pall-Gelman 1119. Fits 1/4" ID tubing. | 13 |
| Filter Holder, vacuum, with funnel (500 mL) & receiver (1000 mL) for 47 mm membrane filters, polysulfone, autoclavable, Thermo Scientific Nalgene 300-4100. Fits 1/4" to 5/16" ID tubing. | 4 |

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| Flowmeter | |
| Flowmeter, mechanical, with standard rotor, for net sampling, 6 digit readout, w/ standard rotor, speed range approx. 1/5 knots to 15 knots, General Oceanics 2030R. | 10 |
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| Fluorometer | |
| Fluorometer, 10-AU, benchtop/field, water-tight case, digital, configured for discrete samples, spreadsheet interface software, Turner Designs 10-AU-005. | 3 |
| Cuvette Adapter, for 25mm and 13mm tubes, Turner Designs 10-AU-030, 016-1050, 10-229-1A. | 6 |
| Cuvette, tube, 13 mm x 100 mm, borosilicate glass, reusable, Turner Designs 10-031. | 95 |
| Cuvette, tube, 13 mm x 100 mm, borosilicate glass, screw top, reusable, Turner Designs 10-031. | 17 |
| Cuvette, tube, 13 mm x 100 mm, quartz, reusable, Turner Designs 10-299. | 6 |
| Cuvette, tube, 25 mm x 150 mm, borosilicate glass, reusable, Turner Designs 10-028A. | 57 |
| Individual filters available upon request. | |
| Optical Kit, ammonium/CDOM, Turner Designs 10-303. Turner Designs optical kits include excitation and emission filters, lamp, and attenuator plate when required. | 3 |
| Optical Kit, chlorophyll-a, extractive (acidification method) and chlorophyll in vivo, Turner Designs, 10-037R. Turner Designs optical kits include excitation and emission filters, lamp, and attenuator plate when required. | 3 |
| Optical Kit, chlorophyll-a, extractive (non-acidification method), Turner Designs, 10-040R. Turner Designs optical kits include excitation and emission filters, lamp, and attenuator plate when required. | 5 |
| Optical Kit, fluorescein, Turner Designs, 10-086R. Turner Designs optical kits include excitation and emission filters, lamp, and attenuator plate when required. | 1 |
| Optical Kit, long wavelength (crude) oil, Turner Designs, 10-302R. Turner Designs optical kits include excitation and emission filters, lamp, and attenuator plate when required. | 1 |
| Optical Kit, rhodamine WT, Turner Designs, 10-041R. Turner Designs optical kits include excitation and emission filters, lamp, and attenuator plate when required. | 1 |
| Solid Standard, secondary, red, for chlorophyll a and rhodamine analysis, Turner Designs 10-AU-904. | 7 |
| Fluorometer, 10-AU, benchtop/field, water-tight case, digital, configured for continuous flow, spreadsheet interface software, Turner Designs 10-AU-005. | |
| Continuous flow cuvette system, 25mm, Turner Designs 10-AU-020. | 8 |
| Continuous flow system, temperature compensation package, Turner Designs 10-AU-500. | 2 |
| Individual filters available upon request. | |
| Optical Kit, ammonium/CDOM, Turner Designs 10-303. Turner Designs optical kits include excitation and emission filters, lamp, and attenuator plate when required. | 3 |
| Optical Kit, chlorophyll-a, extractive (acidification method) and chlorophyll in vivo, Turner Designs, 10-037R. Turner Designs optical kits include excitation and emission filters, lamp, and attenuator plate when required. | 3 |
| Optical Kit, chlorophyll-a, extractive (non-acidification method), Turner Designs, 10-040R. Turner Designs optical kits include excitation and emission filters, lamp, and attenuator plate when required. | 5 |

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| Optical Kit, fluorescein, Turner Designs, 10-086R. Turner Designs optical kits include excitation and emission filters, lamp, and attenuator plate when required. | 1 |
| Optical Kit, long wavelength (crude) oil, Turner Designs, 10-302R. Turner Designs optical kits include excitation and emission filters, lamp, and attenuator plate when required. | 1 |
| Optical Kit, rhodamine WT, Turner Designs, 10-041R. Turner Designs optical kits include excitation and emission filters, lamp, and attenuator plate when required. | 1 |
| Fluorometer, Trilogy, benchtop, color touch screen, for discrete samples, sample chamber accepts snap-in optical modules (modules accommodate 10 mm x 10 mm cuvettes), USB interface, w/ laptop and Trilogy spreadsheet interface software, Turner Designs 7200-002. | 2 |
| Cuvette Adapter, for 12 mm tubes, Turner Designs 016-0810. | 2 |
| Cuvette, square, 10 mm x 10 mm, borosilicate glass, reusable, 3.5 mL capacity, Turner Designs 7000-955. | 2 |
| Cuvette, square, 10 mm x 10 mm, methacrylate, disposable, 3.5 mL capacity, Turner Designs 7000-959. | 300 |
| Optical Module, for ammonium, w/ light source and filters, Turner 7200-067, methacrylate cuvettes, Turner 7000-959, recommended. | 2 |
| Optical Module, for chlorophyll-a extracted (acidification), w/ light source and filters, Turner 7200-040-W, use with glass or quartz only, Turner 7000-955 recommended. | 2 |
| Optical Module, for chlorophyll-a extracted (non-acidification), w/ light source and filters, Turner 7200-046-W, use with glass or quartz only, Turner 7000-955 recommended. | 2 |
| Optical Module, for chlorophyll-a in vivo, qualitative analysis only, w/ light source and filters, Turner 7200-043, methacrylate cuvettes, Turner 7000-959, recommended. | 2 |
| Solid Standard, secondary, red, adjustable, for use with chlorophyll, rhodamine, phycocyanin and phycoerythrin modules, Turner Designs 8000-952. | 2 |
| Freezer/Refrigerator | |
| Freezer, flammable storage, -20 °C to -12 °C, upright, 20.6 cu ft, Aft Dry Lab, Fisherbrand Isotemp, 20FFEEFSA, 13-986-149. | 1 |
| Freezer, flammable storage, -20 °C to -12 °C, upright, 20.6 cu ft, Aft Dry Lab, Fisherbrand Isotemp, 20FFEEFSA, 13-986-149. | 1 |
| Freezer, flammable storage, -20 °C to -12 °C, upright, 20.6 cu ft, Helo Hangar Workshop, Fisher Scientific Isotemp, 13-986-149. | 1 |
| Freezer, flammable storage, -20 °C to -12 °C, upright, 20.6 cu ft, Helo Hangar Workshop, Fisher Scientific Isotemp, Isotemp 149. | 1 |
| Freezer, ultra-low, -86 °C to -50 °C, upright, 19.4 cu ft, Aft Dry Lab, Thermo Scientific Revco RLE Series, RLE40086A. | 1 |
| Freezer, ultra-low, -86 °C to -50 °C, upright, 19.4 cu ft, Aft Dry Lab, Thermo Scientific Revco UxF Series, UXF40086D. | 1 |
| Freezer, ultra-low, -86 °C to -50 °C, chest, 20 cu ft, Aft Dry Lab, Thermo Scientific Revco CxF Series, ULT2090-10-D. | 1 |
| Freezer, ultra-low, -86 °C to -50 °C, chest, 20 cu ft, Aft Dry Lab, Thermo Scientific Revco CxF Series, ULT2090-10-D. | 1 |
| Refrigerator, +1 °C to +12 °C, flammable storage, undercounter, 5.5 cu ft, Hydro Lab, Thermo Scientific 05FREETSA. | 1 |
| Refrigerator, +1 °C to +12 °C, flammable storage, undercounter, 5.5 cu ft, Bio Lab, Thermo Scientific 05FREETSA. | 1 |

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| Refrigerator, +1 °C to +12 °C, flammable storage, upright, 20.9 cu ft, Aft Dry Lab, Fisher Scientific Isotemp 20FREEFSA, 13-986-152. | 1 |
| Furnace | |
| Muffle Furnace, digital, programmable temperature control, 4 programs, 16 segments per program, +204 °C to +982 °C continuous (3 hours), +982 °C to +1093 °C (intermittent), ID 14" W x 14" D x 14" H, 1.6 cu ft, 45L, Aft Dry Lab, Thermolyne 30400, Model F30438CM. | 2 |
| Homogenizer | |
| Homogenizer, w/ stand, variable speed range from 10,000 to 30,000 rpm, PRO Scientific, PRO 250. | 2 |
| Generator, 10 mm diameter x 150 mm long saw tooth bottom, capacity 1.5 to 100 mL, 13 m/s max peripheral speed in medium, PRO Scientific 02-10150. | 1 |
| Generator, 5 mm diameter x 75 mm long flat bottom, capacity 0.03 to 5.0 mL, 6 m/s max peripheral speed in medium, PRO Scientific 02-05075. | 1 |
| Homogenizer, ultrasonic, w/ stand, variable power output from 0-300 watts, timer 1-15 min, constant and pulse modes, 20 kHz output frequency, Omni International Omni-Ruptor 400. | 1 |
| Intermediate tip, titanium, 3/8" (9.5 mm) diameter, 4" length, 10 mL - 250 mL processing volume, Omni International OR-T-375. | 1 |
| Micro-tip, titanium, 5/32" (3.9 mm) diameter, 10.01" length, 350 µL -10 mL processing volume, Omni International OR-T-156. | 1 |
| Hood | |
| Hood, fume absorber, portable, 31.5x25" working space, 87 cu ft/min, Captair Labx. | 2 |
| Filter for Acid Vapors, ErLab F4.BEP. | |
| Filter for Ammonia/Amine Vapors, ErLab F4.KP. | |
| Filter for Formaldehyde Vapors, ErLab F4.FP. | |
| Filter for Organic Vapors, ErLab F4.ASP. | |
| Hood, fume, 32" D x 48" W working area, installed in Bio Lab, Fisher Hamilton SafeAir. | 2 |
| Hood, vertical laminar flow workstation, bench model, extra long, interior dimensions 47" W x 23" D x 18" H, w/ HEPA filters, ISO 5/class 100, AirClean Systems AC600 Series, AC648LF. | 1 |
| Filter (2 ea), HEPA for AirClean, 99.997% efficient at 0.3 µm, AirClean Systems ACFHEPA18. | |
| Hood, vertical laminar flow workstation, bench model, tall, interior dimensions 31" W x 23" D x 27" H, w/ HEPA filter and UVtect Automatic Safety Controller, ISO 5/class 100, AirClean Systems AC600 Series, AC632TLFC. | 2 |
| Filter, HEPA for AirClean, 99.997% efficient at 0.3 µm, AirClean Systems ACFHEPA. | |
| Hood, vertical laminar flow workstation, bench model, interior dimensions 31" W x 23" D x 20" H, w/ HEPA filter, UVtect Automatic Safety Controller, and 254 nm short-wave UV light, ISO 5/class 100, AirClean Systems AC600 Series, AC632LFUVC. | 1 |
| Filter, HEPA for AirClean, 99.997% efficient at 0.3 µm, AirClean Systems ACFHEPA. | |
| Hood, laminar flow, Envirco Mac 10 HEPA, 2' x 4', 120 V, for Trace Metal Use. | 2 |
| Filter, HEPA for MAC 10, 9" thickness, standard filter, 99.97% efficient, 0.3 µm, Envirco 69600S-001HAPXX (HEPA). | |
| Hood, snorkel, portable, ceiling mounted, 3-joint, Alsident System 100, Model 100-10585-3-5. | 3 |
| Hot Plate/Stirrer | |

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| Hot Plate/Stirrer, 4" x 4", 30 °C to 500 °C, ceramic top, VWR Model 610-HPS Standard, 12365-346. | 1 |
| Hot Plate/Stirrer, 5" x 7", 5 °C to 550 °C, digital temperature display, digital speed display, ceramic top, Corning Model PC-420D, 6795-420. | 1 |
| Hot Plate/Stirrer, 7" x 7", 50 °C to 500 °C, digital temperature display, ceramic top, VWR VMS-C7. | 1 |
| Hot Plate/Stirrer, 7" x 7", 5 °C to 540 °C, digital temperature display, ceramic top, Barnstead/Thermolyne, Cimarec Model SP131325. | 1 |
| Hot Plate/Stirrer, 7" x 7", +5 °C above ambient to 500 °C, ceramic top, VWR NO97042-634. | 1 |
| Stir Plate, 5" x 7", ceramic top, Corning Model PC-410. | 1 |
| Stir Plate, 5" x 7", ceramic top, digital speed display, Corning Model PC-410D. | 1 |
| Stir Plate, 7" x 7", ceramic top, VWR/Henry Troemner LLC Model 620-S Standard, 12365-380. | 1 |
| Ice Maker | |
| Ice maker - shaved ice - installed in Hydro Lab. | 1 |
| Incubator | |
| Incubator, lab, upright, lighted, low-temp, -10 °C to +44 °C (with lights on), -12 °C to +44 °C (with lights off), +/- 0.5 °C, 300 µmol/m ² /s, fluorescent lights, programmable day/night temperature/light control, 500 programmable steps, 37.2 cu ft interior space, 13.6 sq ft shelf space, Aft Dry Lab, Percival Model LT-41VLC8. | 1 |
| Incubator, lab, upright, lighted, low-temp, -10 °C to +44 °C (with lights on), -15 °C to +44 °C (with lights off), +/- 0.5 °C, 515 µmol/m ² /s, LED lights, programmable day/night temperature/light control, 500 programmable steps, 29.7 cu ft interior space, 10.8 sq ft shelf space, Aft Dry Lab, Percival Model LT-36VLC8. | 1 |
| Irradiance | |
| Irradiance sensor, scalar, quantum, for PAR measurement, handheld, w/ 1.9 cm diameter spherical irradiance collector, calibrated for use in water or air, digital output, w/ laptop and software, Biospherical Instruments QSL-2100. | 3 |
| Datalogger, for LI-COR light sensors, handheld, 3 BNC connectors, digital, user-selectable sampling rates and logging intervals, 500 Hz max, 1GB memory, LI-COR LI-1500. | 1 |
| Quantum Light Sensor, for PAR measurement, 5 m cable w/ BNC connector, calibrated for use in air, LI-COR LI-190R, w/ mounting and leveling fixture (p/n 2003S). | 1 |
| Quantum Light Sensor, underwater, for PAR measurement, calibrated for use in air and water, LI-COR LI-192SA, w/ 3 m underwater cable (p/n 222UWB-3), w/ BNC connector. | 1 |
| Light meter, digital, handheld, three-range: 0 to 200/2000/20,000 lux (0 to 20/200/2000 foot-candles), accuracy +/-3% of reading in two narrowest ranges; +/-5% of reading in widest range, max resolution 10 lux (1 foot-candle), General DLM2000. | 2 |
| Light Table | |
| Bench Light, UV-A, 1 x 365nm 15 watt BLB tube, Spectroline X-15A. | 1 |
| Bench Light, UV-A, 2 x 365nm 15 watt BLB tubes, Spectroline XX-15A. | 1 |
| Magnifier Lamp, 2X magnification, swing arm, Fisher Scientific 12-071-10. | 1 |
| Microscope | |

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| Cold Stage, for compound scope, used with slides, Instec, Inc., STC200, TS62. | 3 |
| Cold Stage, for dissecting scope, used with petri dishes, Instec, Inc., STC200, TS62. | 1 |
| Hematocytometer, 1/400 SQ MM, 1/10 MM deep, Spotlite B3175. | 1 |
| Imaging, digital camera, Nikon, Coolpix 5000, w/ microscope adapters for Nikon Eclipse Ni-L, Nikon SMZ1500, Zeiss Axioskop 50, Zeiss Standard 25, Leica/Wild M3C, Nikon SMZ1270. | 1 |
| Imaging, digital camera, SLR, Canon, EOS 60D, w/ microscope adapters for Nikon Eclipse Ni-L, Nikon SMZ1500, Zeiss Axioskop 50, Zeiss Standard 25, Leica/Wild M3C, Nikon SMZ1270. | 2 |
| Speedlite, round head camera flash, 76 Ws output, rechargeable 2600 mAh Li-ion battery, 480 full power shots on one charge, maximum 1.5 second recycling time, 1/8000s high speed sync (HSS), 330 degrees rotation, 120+ degrees tilt, Godox V1-C, for use with Canon EOS 60D Digital SLR. Comes with 3 ft long, TTL off-camera flash cord (Vello), and dual TTL hot shoe bracket (Vello). | 2 |
| Imaging, digital camera, high definition, 4k resolution, 8.0 Mp, w/ 1/1.8" Sony IMX334 CMOS sensor, VIEW4K, w/ microscope adapters for Leica/Wild M3C and Nikon SMZ1270. | 2 |
| Imaging, digital camera, Spot Insight, color mosaic, 12 Mp, w/ Sony Pregius CMOS sensor, IN42C12IR. Comes with computer, monitor and current software. Installed on Nikon Eclipse Ni-L. | 2 |
| Imaging, digital camera, Spot RT, monochrome cooled (-45 °C differential cooling w/o IR filter), 5 Mp, w/ Sony Pregius CMOS sensor, RT39M5. Comes with computer, monitor and current software. Installed on Nikon Eclipse Ni-L. | 2 |
| Imaging, smart phone camera adapter, SnapZoom Universal Digiscoping Adapter. | 2 |
| Micrometer, stage, 0.01 mm, Mikro-Zubehör 3401 45. | 1 |
| Micrometer, stage, 0.02 mm - 0.1 mm - 1.0 mm = 22 mm, Leica 13K27970. | 1 |
| Micrometer, stage, 0.02 mm - 0.1 mm - 1.0 mm = 25 mm (25 mm scale: 0-20 mm in 1 mm increments; 20-24 mm in 0.1 mm increments, 24-25 mm in 0.02 mm increments), Klarmann Rulings KR-812. | 1 |
| Microscope, compound, brightfield, darkfield, DIC, epi-fluorescence, phase contrast, polarizing, Nikon Eclipse Ni-L. | 2 |
| Epi-Fluorescent Filter, DAPI, premium ET filter with sputtered coating, zero pixel shift and blocking, Nikon 96360, Chroma 49000, installed on Nikon Eclipse Ni-L. | 2 |
| Epi-Fluorescent Filter, DAPI/FITC/TRITC, premium ET filter with sputtered coating, zero pixel shift and blocking, Nikon 96383, Chroma 69000. | 2 |
| Epi-Fluorescent Filter, DAPI/Green/Orange #1 FISH, premium ET filter with sputtered coating, zero pixel shift and blocking, Nikon 70774913, Chroma 69013v2. | 2 |
| Epi-Fluorescent Filter, DsRed (TRITC/Cy3), premium ET filter with sputtered coating, zero pixel shift and blocking, Nikon 96364, Chroma 49005, installed on Nikon Eclipse Ni-L. | 2 |
| Epi-Fluorescent Filter, EGFP (enhanced green fluorescent protein) (FITC/Cy2), premium ET filter with sputtered coating, zero pixel shift and blocking, Nikon 96362, Chroma 49002, installed on Nikon Eclipse Ni-L. | 2 |
| Epi-Fluorescent Filter, FITC, Semrock FITC-2024B-NQF. | 1 |
| Epi-Fluorescent Filter, mCherry, Texas Red, premium ET filter with sputtered coating, zero pixel shift and blocking, Nikon 96365, Chroma 49008, installed on Nikon Eclipse Ni-L. | 2 |
| Epi-Fluorescent Filter, TRITC/Cy3 LP (Long Pass), AT filter, Nikon 96228, Chroma 19004, installed on Nikon Eclipse Ni-L. | 2 |
| Eyepiece, CFI UW 10X/25 (field number: 25), wide-field eyepiece, Nikon MAK30105, installed on Nikon Eclipse Ni-L. | 4 |
| Objective, 2X/0.10, INF/0-0.17, WD = 8.5, Plan Apo, Nikon MRD70020, installed on Nikon Eclipse Ni-L. | 2 |

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| Objective, 4X/0.20, INF/0-0.17, WD = 20, Plan Apo, Nikon MRD70040, installed on Nikon Eclipse Ni-L. | 2 |
| Objective, 10X/0.45, INF/0.17, WD = 4. Plan Apo, Nikon MRD70170, installed on Nikon Eclipse Ni-L. | 2 |
| Objective, 20X/0.80, INF/0.17, WD = 0.8, Plan Apo, Nikon MRD70270, installed on Nikon Eclipse Ni-L. | 2 |
| Objective, 40X/0.95, INF/0.11-0.23, WD = 0.21, Plan Apo, Nikon MRD70470, installed on Nikon Eclipse Ni-L. | 2 |
| Objective, 60X/1.42 Oil, INF/0.17, WD = 0.15, Plan Apo, Nikon MRD71670, installed on Nikon Eclipse Ni-L. | 2 |
| Objective, 100X/1.45 Oil, INF/0.17, WD = 0.13, Plan Apo, Nikon MRD71970, installed on Nikon Eclipse Ni-L. | 2 |
| Objective, 4X/0.13, INF/-, WD = 17.2, Plan Fluor, Nikon MRH00045, installed on Nikon Eclipse Ni-L. | 2 |
| Objective, 10X/0.30/Ph1/DL, INF/1.2, WD = 15.2, Plan Fluor, Nikon MRH20105, installed on Nikon Eclipse Ni-L. | 2 |
| Objective, 20X/0.45/Ph1/ADM, INF/0-2, ELWD (Extra Long Working Distance), WD = 8.2-6.9, Super Plan Fluor, Nikon MRH48230, installed on Nikon Eclipse Ni-L. | 2 |
| Objective, 40X/0.60/Ph2/ADM, INF/0-2, ELWD (Extra Long Working Distance), WD = 3.6-2.8, Super Plan Fluor, Nikon MRH48430, installed on Nikon Eclipse Ni-L. | 2 |
| Objective, 60X/0.70/Ph2/ADL, INF/0.1-1.3, ELWD (Extra Long Working Distance), WD = 2.6-1.8, Super Plan Fluor, Nikon MRH48600, installed on Nikon Eclipse Ni-L. | 2 |
| Reticle, diameter 27 mm, grid, 10 mm x 10 mm, 100 squares total, 1 mm x 1 mm each, Klarmann Rulings KR-406. | 1 |
| Reticle, diameter 27 mm, grid, 10 mm x 10 mm, 100 squares total, 1 mm x 1 mm each, top and left side of grid are numbered, Klarmann Rulings KR-406A. | 1 |
| Reticle, diameter 27 mm, grid, 10 mm x 10 mm, 100 squares total, 1 mm x 1 mm each. Also has a horizontal 10mm scale with 100 divisions above the grid. Klarmann Rulings KR-407. | 1 |
| Reticle, diameter 27 mm, scale 10 mm in 100 divisions (No. 0 thru 10), Klarmann Rulings KR-207. | 1 |
| Reticle, diameter 27 mm, scale, 10 mm in 100 divisions. | 1 |
| Microscope, compound, brightfield, darkfield, DIC, epi-fluorescence, phase contrast, polarizing, Zeiss Axioskop 50. | 1 |
| Epi-Fluorescent Filter, DAPI, Chroma/Carl Zeiss CZ702. | 1 |
| Epi-Fluorescent Filter, DAPI, Chroma/Carl Zeiss CZ709. | 1 |
| Epi-Fluorescent Filter, DAPI, Chroma/Carl Zeiss CZ902, installed on Zeiss Axioskop 50. | 1 |
| Epi-Fluorescent Filter, FITC, Chroma/Carl Zeiss CZ909, installed on Zeiss Axioskop 50. | 1 |
| Eyepiece, E-PL10X/20, (field number 20), for eyeglass wearers, Carl Zeiss 444232, installed on Zeiss Axioskop 50. | 2 |
| Filter, 18mm, green interference, for phase contrast, Zeiss 467859-9901. | 1 |
| Filter, 42mm, color balance, blue daylight, Zeiss 467851-0000, 467850-9901. | 3 |
| Filter, 42mm, heat dispersion, Zeiss 467828-0001, 467830-9902. | 3 |
| Objective, 10X/0.30/Ph1, INF/0.17, Plan Neofluar, Zeiss 440331, installed on Zeiss Axioskop 50. | 1 |
| Objective, 20X/0.50/Ph2, INF/0.17, Plan Neofluar, Zeiss 440341, installed on Zeiss Axioskop 50. | 1 |

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| Objective, 40X/0.75/Ph2, INF/0.17, Plan Neofluar, Zeiss 440351, installed on Zeiss Axioskop 50. | 1 |
| Objective, 100X/1.30 Oil/Ph3, INF/0.17, Plan Neofluar, Zeiss 440481, installed on Zeiss Axioskop 50. | 1 |
| Reticle, diameter 26 mm, full crosshairs, Klarmann Rulings KR-301. | 1 |
| Reticle, diameter 26 mm, grid, 10 mm x 10 mm, 100 squares total, 1 mm x 1 mm each, top and left side of grid are numbered, Klarmann Rulings KR-406A. | 2 |
| Reticle, diameter 26 mm, scale 10 mm in 100 divisions (No. 0 thru 10), Klarmann Rulings KR-207. | 1 |
| Reticle, diameter 26 mm, scale 10 mm in 100 divisions (No. 0 thru 100), Klarmann Rulings KR-207A. | 2 |
| Stage, circular, rotating, Zeiss 453550. | 1 |
| Microscope, compound, brightfield, epi-fluorescence, phase contrast, Zeiss Standard 25. | 1 |
| Epi-Fluorescent Filter, DAPI, Semrock DAPI-1160B-000, installed on Zeiss Standard 25. | 1 |
| Filter, 18mm, green interference, for phase contrast, Zeiss 467859-9901. | 1 |
| Filter, 42mm, color balance, blue daylight, Zeiss 467851-0000, 467850-9901. | 3 |
| Filter, 42mm, heat dispersion, Zeiss 467828-0001, 467830-9902. | 3 |
| Objective, 10X/0.25/Ph1, 160/-, A-Plan, Zeiss 460418, installed on Zeiss Standard 25. | 1 |
| Objective, 20X/0.45/Ph2, 160/0.17, Plan, Zeiss 460633, installed on Zeiss Standard 25. | 1 |
| Objective, 40X/0.65/Ph2, 160/0.17, Achromat, Zeiss 4454383, installed on Zeiss Standard 25. | 1 |
| Objective, 40X/0.65/Ph2, 160/0.17, Plan, Zeiss 460733, installed on Zeiss Standard 25. | 1 |
| Objective, 40X/0.75/Ph2 W, 160/-, for water, Achromat, Zeiss 4462856. | 1 |
| Microscope, compound, brightfield, epi-fluorescence, phase contrast, Zeiss Standard 25. | 1 |
| Epi-Fluorescent Filter, DAPI/FITC/Acridine Orange, Zeiss, installed on Zeiss Standard 25. | 1 |
| Filter, 18mm, green interference, for phase contrast, Zeiss 467859-9901. | 1 |
| Filter, 42mm, color balance, blue daylight, Zeiss 467851-0000, 467850-9901. | 3 |
| Filter, 42mm, heat dispersion, Zeiss 467828-0001, 467830-9902. | 3 |
| Objective, 40X/0.65, 160/0.17, Plan, Zeiss 460700, installed on Zeiss Standard 25. | 1 |
| Objective, 40X/0.75/Ph2, 160/0.17, Zeiss, installed on Zeiss Standard 25. | 1 |
| Objective, 100X/1.25 Oil/Ph3, 160/0.17, Plan, Zeiss 461933, installed on Zeiss Standard 25. | 1 |
| Microscope, stereo, epi-fluorescence, brightfield, darkfield, Nikon SMZ1500, comes with 10X eyepieces and 1X objective (details below). | 1 |
| Eyepiece, C-W10XA/22 (field number: 22), Nikon, installed on SMZ1500. | 2 |
| Illuminator, Nikon NI-150, w/ 150 watt halogen lamp, EEG2823 dual gooseneck fiber optic light guides, LH-759 focusing lenses. | 1 |
| Objective, 1X, WD = 54mm, Plan Apo HR, Nikon, installed on SMZ1500. | 1 |
| Microscope, stereo, dissecting, parallel-optics type optical system, zoom ratio 12.7:1, zoom range 0.63-8X (0.63X, 1X, 2X, 3X, 4X, 6X, 8X stops), total magnification with 10X eyepiece and 1X objective 6.3-80X, Nikon SMZ1270. Comes with P-DSL32 LED Diascopic Illumination Stand, 10X eyepieces and 1X objective (details below). | 2 |
| Base, P-DSL32 LED Diascopic Illumination Stand, w/post, Nikon MND51520, installed on Nikon SMZ1270. | 2 |
| Eyepiece, C-W10XB/22 (field number: 22), wide-field eyepiece, Nikon MMK30102, installed on Nikon SMZ1270. | 4 |
| Illuminator, Dolan-Jenner Fiber-Lite 181-1, MI-150F, MI-150RL, w/ 150 watt halogen lamp, EEG2823 dual gooseneck fiber optic light guides, LH-759 focusing lenses. | 9 |

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| Illuminator, LED, 6 watt cool light, variable intensity, w/ dual 23-1/4" long gooseneck illuminators (3 watts each) and intensity control box, AmScope LED-6W. | 4 |
| Objective, 1X, WF (wide field), WD = 70 mm, Plan Apo, Nikon MNH54100, installed on Nikon SMZ1270. | 2 |
| Reticle, diameter 25 mm, crosslines, each crossline (x and y axis) is 10 mm, in 100 divisions, Nikon MMM10110. | 2 |
| Microscope, stereo, dissecting, w/ 5 step (0.64X, 1.0X, 1.6X, 2.5X, 4.0X) magnification changer, Leica/Wild M3C. Comes with standard base, 10X eyepieces and 1.0X objective (details below). | 4 |
| Analyzer, rotating, 66mm diameter, Leica 10367929, for use with transmitted light base. | 1 |
| Base, standard, incident light base, w/ 320 mm post, Leica 424300, installed on M3C. | 4 |
| Base, transmitted light base, for brightfield/darkfield, illuminated, w/ 320 mm post, Leica TL4000 BDFD, 10450124. | 4 |
| Eyepiece, 10X/21B (field number: 21), wide-field eyepiece for eyeglass wearers, Leica 445111, installed on M3C. | 8 |
| Eyepiece, 16X/14B (field number: 14), wide-field eyepiece for eyeglass wearers, Leica 445301. | 4 |
| Eyepiece, 25X/9.5B (field number: 9.5), wide-field eyepiece for eyeglass wearers, Leica 445302. | 4 |
| Illuminator, Dolan-Jenner Fiber-Lite 181-1, MI-150F, MI-150RL, w/ 150 watt halogen lamp, EEG2823 dual gooseneck fiber optic light guides, LH-759 focusing lenses. | 9 |
| Illuminator, LED, 6 watt cool light, variable intensity, w/ dual 23-1/4" long gooseneck illuminators (3 watts each) and intensity control box, AmScope LED-6W. | 4 |
| Objective, 0.32X, WD = 297 mm, Leica 370759. | 1 |
| Objective, 0.5X, WD = 187 mm, Leica 10422563. | 2 |
| Objective, 1.0X, WD = 89 mm, PlanApo, Leica 445355, installed on M3C. | 4 |
| Objective, 1.5X, WD = 49 mm, Leica 10422562. | 4 |
| Objective, 2.0X, WD = 27 mm, Leica 422561. | 2 |
| Reticle, scale, 12 mm x 120 divisions, full crosshairs, Leica 376119. | 6 |
| Vibration Free Slab/Platform, tabletop isolation platform, max 270 lbs @ 80 psi, 20" x 24" surface, Kinetic Systems Inc., Vibraplane Model 2210 Benchmate. | 3 |
| Vibration Free Table, Micro-g vibration isolation table, Technical Manufacturing Corp 63-533, installed in Microscope Room under Zeiss Axioskop 50. | 1 |
| Vibration Free Table, Micro-g vibration isolation table, Technical Manufacturing Corp 63-2708601, installed in Microscope Room under Nikon Eclipse Ni-L. | 1 |
| Oven | |
| Oven, forced air, +40 °C above ambient to +240 °C, uniformity +/- 0.9 °C @ 150 °C, ID 18.25" W x 19" D x 16.5" H, 4 cu ft, installed in Bio Lab, VWR 1350FM. | 2 |
| Oven, forced convection, +10 °C above ambient to 260 °C, distribution accuracy +/- 2.5 °C @ 210 °C, ID 17.7"W x 17.7"D x 17.7"H, approx. 90L, Yamato DKN402. | 1 |
| Oven, gravity convection, +5 °C above ambient to +200 °C, uniformity +/- 4.0 °C, ID 20" W x 19" D x 28" H, 6.1 cu ft, VWR 1326. | 1 |
| Oven, gravity convection, +40 °C to +260 °C, uniformity +/- 3 °C @ 100 °C, ID 19" W x 15" D x 18" H, 3.0 cu ft, 85 L, Thermo/Lindberg/Blue M GO1390A-1. | 1 |
| Oven, vacuum, +6 °C above ambient to +260 °C, uniformity +/- 3.5 °C, ID 12" W x 18" D x 12" H, 1.5 cu ft, 42.5 L, Thermo/Lindberg/Blue M VO1218C-1. | 1 |

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| Oxygen Titrator | |
| Oxygen Titrator, Langdon automated amperometric. Comes as kit w/ burette and stepper motor, dual platinum titration electrode (Accumet 13-620-123), stir plate, Socorex bottletop dispensers (0.25-2.0 mL, Calibrex 520.002; 1-10 mL, Calibrex 520.010; or equivalent), 1000 mL amber glass bottles, laptop and software, and other necessary items. | 2 |
| Sample Flasks, glass, 125mL, calibrated, Pyrex 5400. | 144 |
| pH Meter | |
| pH Meter, benchtop, measures pH/mV/RmV/ORP/temperature, pH range -2.000 to 20.000, resolution 0.1/0.01/0.001 pH, 1-5 point calibration, automatic (w/ ATC probe) or manual temperature compensation, Thermo Scientific, Orion Star A211. | 1 |
| pH Electrode, pH/ATC triode, ROSS double junction, gel filled, pH range 0 - 14, epoxy body, BNC and Mini-DIN connectors, 1 m cable, Thermo Scientific Orion ROSS Ultra 8107BNUMD. Temperature connector is compatible with the Orion Star A211, A221 and A321 meters to provide automatic temperature compensation. | 1 |
| pH Electrode, pH/ATC triode, ROSS double junction, gel filled, pH range 0 - 14, epoxy body, BNC and Mini-DIN connectors, 3 m cable, Thermo Scientific Orion ROSS Ultra 8107UWMMD. Temperature connector is compatible with the Orion Star A211, A221 and A321 meters to provide automatic temperature compensation. | 5 |
| pH Meter, portable, measures pH/mV/RmV/ORP/temperature, pH range -2.000 to 20.000, resolution 0.1/0.01/0.001 pH, 1-5 point calibration, automatic (w/ ATC probe) or manual temperature compensation, Thermo Scientific, Orion Star A221. | 1 |
| pH Electrode, pH/ATC triode, ROSS double junction, gel filled, pH range 0 - 14, epoxy body, BNC and Mini-DIN connectors, 1 m cable, Thermo Scientific Orion ROSS Ultra 8107BNUMD. Temperature connector is compatible with the Orion Star A211, A221 and A321 meters to provide automatic temperature compensation. | 1 |
| pH Electrode, pH/ATC triode, ROSS double junction, gel filled, pH range 0 - 14, epoxy body, BNC and Mini-DIN connectors, 3 m cable, Thermo Scientific Orion ROSS Ultra 8107UWMMD. Temperature connector is compatible with the Orion Star A211, A221 and A321 meters to provide automatic temperature compensation. | 5 |
| pH Meter, portable, measures pH/mV/RmV/ORP/temperature, pH range -2.000 to 20.000, resolution 0.1/0.01/0.001 pH, 1-5 point calibration, automatic (w/ ATC probe) or manual temperature compensation, Thermo Scientific, Orion Star A321. The A321 meter has the following additional features over the A221: Timed measurements, ability to save 10 methods, more memory for data storage, ability to save sample and user ID info, high/low limit alarm. | 1 |
| pH Electrode, pH/ATC triode, ROSS double junction, gel filled, pH range 0 - 14, epoxy body, BNC and Mini-DIN connectors, 1 m cable, Thermo Scientific Orion ROSS Ultra 8107BNUMD. Temperature connector is compatible with the Orion Star A211, A221 and A321 meters to provide automatic temperature compensation. | 1 |
| pH Electrode, pH/ATC triode, ROSS double junction, gel filled, pH range 0 - 14, epoxy body, BNC and Mini-DIN connectors, 3 m cable, Thermo Scientific Orion ROSS Ultra 8107UWMMD. Temperature connector is compatible with the Orion Star A211, A221 and A321 meters to provide automatic temperature compensation. | 5 |

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| pH Meter, benchtop, measures pH/mV/temperature, pH range 0.00 - 14.00, resolution 0.1, 0.01 pH, 1-2 point calibration, digital LogR technology allows temperature compensated measurements without separate ATC probe, Thermo Scientific, Orion 320, Basic PerpHecT LogR. | 2 |
| pH Electrode, combination, Sure-Flow, refillable Ag/AgCl, pH range 0 - 14, BNC connector, Thermo Scientific, Orion 9165BNWP. If used with the Orion320 meter, digital LogR technology provides temperature compensation. | 2 |
| Pipettor | |
| Pipettor, adjustable volume, 0.2-2 µL, Gilson P2N. | 1 |
| Pipettor, adjustable volume, 0.5-10 µL, Eppendorf Research 10. | 1 |
| Pipettor, adjustable volume, 1-10 µL, Gilson P10, Gilson P10N. | 6 |
| Pipettor, adjustable volume, 2-20 µL, Gilson P20, Gilson P20N. | 5 |
| Pipettor, adjustable volume, 10-100 µL, Gilson P100, Gilson P100N, Eppendorf Reference 100. | 5 |
| Pipettor, adjustable volume, 20-200 µL, Gilson P200, Gilson P200N, Eppendorf Research 200. | 4 |
| Pipettor, adjustable volume, 200-1000 µL, Gilson P1000. | 7 |
| Pipettor, adjustable volume, 500-2500 µL, Eppendorf 4810/2244025-0, Autoclavable. | 1 |
| Pipettor, adjustable volume, 500-5000 µL, Eppendorf Research 5000. | 1 |
| Pipettor, adjustable volume, 1000-5000 µL, Gilson P5000. | 4 |
| Pipettor, adjustable volume, 1-10 mL, Gilson P10 mL, Eppendorf Research 10 mL. | 3 |
| Pipettor, pipette pump, manual roller wheel style, 2 mL, f/ serological pipets, Bel-Art Pipette Pump, 37897-0000. | 1 |
| Pipettor, pipette pump, manual roller wheel style, 10 mL, f/ serological pipets, Bel-Art Pipette Pump, 37898-0000. | 1 |
| Pipettor, pipette pump, manual roller wheel style, 25 mL, f/ serological pipets, Bel-Art Pipette Pump, 37899-0000. | 1 |
| Pipettor, pipet filler, manual ball style, 2 valve, 35 mL, rubber, red and black, f/ serological pipets. | 5 |
| Pipettor, pipette controller, electronic, accepts 0.1 to 100 mL serological pipets, Eppendorf Easypet 3, 4430000018. | 1 |
| Pipettor, pipette controller, electronic, accepts 1 to 100 mL serological pipets, 3.3mL/sec, Drummond Pipet-Aid, 4-000-100. | 2 |
| Pipettor, repeater, 2-5000 µL, Eppendorf 4780, 22260006. | 2 |
| Pipettor, repeater, digital, 1 µL-10 mL, Eppendorf Repeater Plus, 22260201. | 5 |
| Pump | |
| Pump, aeration, aquarium air pump, assorted, with various sizes of air diffusing stones. | 6 |
| Pump, peristaltic, Masterflex C/L (motor, controller and head are one unit), variable speed, analog, 1 to 6 rpm, reversible, dual-channel pump head, 0.002 to 1.3 mL/min per channel, accepts eight Microbore Autoanalysis Tubing sizes, Masterflex 77120-52. Tubing size (ID) and flow rate (mL/min) at 6 rpm: 0.008"=0.01, 0.010"=0.02, 0.020"=0.07, 0.035"=0.21, 0.045"=0.34, 0.056"=0.50, 0.081"=0.88, 0.110"=1.3. Comes with 0.1099" ID x 0.1779" OD Tygon tubing, formulation R3603, Cole Parmer 95609-48. | 1 |
| Pump, peristaltic, Masterflex L/S drive (motor and controller are one unit; request head below), variable speed, digital, 0.02 to 100 rpm, reversible, dispense by volume or time, accepts 4 pump heads, Masterflex 07523-90, 07522-30. Note that flow rate depends on drive rpm, pump head and tubing size. | 2 |

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| Peristaltic Pump Head, Masterflex L/S Easyload II, for High-Performance Precision pump tubing, w/ adjustable occlusion, fits the following tubing sizes (flow rates in mL/min with 0.2-100 rpm drive): L/S 15: 0.033-170, L/S 24: 0.057-280, L/S 35: 0.077-380, L/S 36: 0.096-480, Masterflex 77201-62. | 16 |
| Peristaltic Pump Head, Masterflex L/S Easyload II, for High-Performance Precision pump tubing, w/ fixed occlusion, fits the following tubing sizes (flow rates in mL/min with 0.2-100 rpm drive): L/S 15: 0.033-170, L/S 24: 0.057-280, L/S 35: 0.077-380, L/S 36: 0.096-480, Masterflex 77200-62. | 4 |
| Pump, peristaltic, Masterflex L/S modular drive (motor and controller are separate; request head below), variable speed, 6 to 600 rpm, reversible, accepts 2 pump heads, Masterflex 07553-70. Note that flow rate depends on drive rpm, pump head and tubing size. | 1 |
| Peristaltic Pump Head, Masterflex L/S Easyload II, for High-Performance Precision pump tubing, w/ adjustable occlusion, fits the following tubing sizes (flow rates in mL/min with 6-600 rpm drive): L/S 15: 10-1000, L/S 24: 17-1700, L/S 35: 23-2300, L/S 36: 29-2900, Masterflex 77201-62. | 16 |
| Peristaltic Pump Head, Masterflex L/S Easyload II, for High-Performance Precision pump tubing, w/ fixed occlusion, fits the following tubing sizes (flow rates in mL/min with 6-600 rpm drive): L/S 15: 10-1000, L/S 24: 17-1700, L/S 35: 23-2300, L/S 36: 29-2900, Masterflex 77200-62. | 4 |
| Pump, peristaltic, Masterflex L/S precision process drive with integrated open-head sensor (motor and controller are one unit; request head below), variable speed, digital, 6 to 600 rpm, reversible, accepts 2 pump heads, wash-down rated, Masterflex 07528-50. Integrated open head sensor stops the drive motor when pump head is opened. Note that flow rate depends on drive rpm, pump head and tubing size. | 2 |
| Peristaltic Pump Head, Masterflex L/S Easyload II, for High-Performance Precision pump tubing, w/ fixed occlusion, with open-head sensor, fits the following tubing sizes (flow rates in mL/min with 6-600 rpm drive): L/S 15: 10-1000, L/S 24: 17-1700, L/S 35: 23-2300, L/S 36: 29-2900, Masterflex 77200-32. | 2 |
| Pump, vacuum, oil-less, diaphragm, max vacuum 25.5" Hg, max pressure 60 psi, w/ gauges, Gast DOA-P704-AA. | 13 |
| Pump, vacuum, hand-operated, 15 cc/stroke, w/o gauge, attains and holds vacuum of 25" Hg, fits 1/4" ID tubing (some tubing is supplied), Nalgene 6131-0010. | 3 |
| Pump, vacuum, hand-operated, 36 cc/stroke, w/ gauge, attains and holds vacuum of 25" Hg, fits 1/4" ID tubing (some tubing is supplied), Nalgene 6130-0020, 6132-0020. | 6 |
| Radioisotope Instruments | |
| Bath, circulating, digital, -25 °C to +150 °C, stability +/- 0.01 °C, ID 8.8" x 9.4" x 6", 11.3 L, Neslab RTE-10. For use with Radioisotopes only. | 2 |
| Centrifuge, micro, non-refrigerated, variable speed up to 13,200 rpm / 16,110 x g rcf, timer to 99 min, Eppendorf 5415D. For use with Radioisotopes only. | 1 |
| Rotor, fixed angle, 45°, 24-place x 1.5/2 mL microfuge tubes, conical, 11 mm bore, 13,200 rpm max / 16,110 x g rcf max, F-45-24-11 for Eppendorf 5415D. For use with Radioisotopes only. | 2 |
| Centrifuge, micro, refrigerated, -9 °C to +40 °C, variable speed up to 16,400 rpm / 25,000 x g rcf, timer to 99 min, Eppendorf 5417R. For use with Radioisotopes only. | 1 |

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| Rotor, fixed angle, 45°, 30-place x 1.5/2 mL microfuge tubes, conical, 11 mm bore, aerosol-tight, 14,000 rpm max / 20,800 x g rcf max, FA-45-30-11 for Eppendorf 5417R. For use with Radioisotopes only. | 1 |
| Dispenser, bottle top, 0.2-1 mL, Hirschmann Ceramus 9312000. Glass bottle included. For use with Radioisotopes only. | 2 |
| Dispenser, bottle top, 0.4-2 mL, Hirschmann Ceramus 9322000. Glass bottle included. For use with Radioisotopes only. | 2 |
| Dispenser, bottle top, 1-5 mL, Hirschmann Ceramus 9332000. Glass bottle included. For use with Radioisotopes only. | 4 |
| Dispenser, bottle top, 5-25 mL, Brinkmann 50-10-040-5. Glass bottle included. For use with Radioisotopes only. | 1 |
| Filtration base, glass, 25 mm, glass frit support, with clamp. For use with Radioisotopes only. | 6 |
| Funnel, glass, 25 mm, 1000 mL. For use with Radioisotopes only. | 7 |
| Funnel, glass, 25 mm, 300 mL. For use with Radioisotopes only. | 6 |
| Filtration base, polysulfone, 25 mm, twist-lock, autoclavable, Pall-Gelman 4203. For use with Radioisotopes only. | 6 |
| Funnel, polysulfone, 25 mm, 200 mL, twist-lock, autoclavable, Pall-Gelman 4203. For use with Radioisotopes only. | 6 |
| Hood, fume, 125 lfm, installed in Radioisotope Van. For use with Radioisotopes only. | 1 per Van |
| Liquid Scintillation Counter, Perkin Elmer Tri-Carb B2910TR, w/ laptop and QuantaSmart software. Computer controlled, for detecting low activity alpha, beta and gamma radioactivity. Installed in Radioisotope Van. | 1 per Van |
| Rack Adapters, vented microtube holders, for 1.5 mL tubes, 11 mm diameter, Perkin Elmer 6013402. For use with racks for 20 mL scintillation vials. | 300 |
| Racks for 20 mL scintillation vials, each rack holds 12 vials. | 32 |
| Racks for 7 mL scintillation vials, each rack holds 18 vials. | 57 |
| Standards, quenched, 14C, set of 10, 5 mL, Perkin Elmer 6007601A. | 1 |
| Standards, quenched, 3H, set of 10, 5 mL, Perkin Elmer 6007600A. | 1 |
| Standards, unquenched, set of 3 (blank, 3H, 14C), 15 mL, Perkin Elmer 6008500A. | 2 |
| Manifold, vacuum, 3-place, stainless steel. For use with Radioisotopes only. | 3 |
| Manifold, vacuum, 6-place, PVC. For use with Radioisotopes only. | 1 |
| Pipettor, adjustable volume, 0.5-10 µL, VWR VE 10. For use with Radioisotopes only. | 1 |
| Pipettor, adjustable volume, 1-10 µL, Gilson P10. For use with Radioisotopes only. | 3 |
| Pipettor, adjustable volume, 2-20 µL, Gilson P20. For use with Radioisotopes only. | 2 |
| Pipettor, adjustable volume, 10-100 µL, Gilson P100. For use with Radioisotopes only. | 2 |
| Pipettor, adjustable volume, 20-200 µL/50-200 µL, Gilson P200. For use with Radioisotopes only. | 3 |
| Pipettor, adjustable volume, 200-1000 µL, Gilson P1000, 100-1000µL, VWR VE 1000. For use with Radioisotopes only. | 5 |
| Pipettor, adjustable volume, 500-5000 µL/1000-5000µL, Gilson P5000. For use with Radioisotopes only. | 4 |
| Pipettor, adjustable volume, 1-10 mL, Gilson P10 mL. For use with Radioisotopes only. | 1 |
| Pipettor, repeater, digital, 1 µL-10 mL, Eppendorf Repeater Plus, 22260201. For use with Radioisotopes only. | 1 |
| Pipettor, repeater, 2-5000 µL, Eppendorf 4780, 22260006. For use with Radioisotopes only. | 3 |
| Pump, vacuum, oil-less, diaphragm, max vacuum 25.5" Hg, max pressure 60 psi, w/ gauges, Gast DOA-P104-AA, Gast DOA-P704-AA. For use with Radioisotopes only. | 2 |

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| Refrigerator, +1 °C to +12 °C, flammable storage, undercounter, 5.5 cu ft, Thermo Scientific 05FREETSA, installed in Radioisotope Van. For use with Radioisotopes only. | 1 per Van |
| Shaker, orbital, 4 mm orbit, digital, 80 to 800 rpm, timer 1 - 599 min or continuous, 10" x 12" platform, IKA KS 130 Control. For use with Radioisotopes only. | 3 |
| Platform, wooden. For use with Radioisotopes only. | |
| Stir Plate, 10" x 10", ceramic top, Corning Model PC-610. For use with Radioisotopes only. | 1 |
| Vacuum Trap, carboy, 20 L, PP (polypropylene), heavy duty, with quick vent caps, Nalgene 2226-0050. For use with Radioisotopes only. | |
| Vortex, various models. Fisher Scientific 232, variable speed; Scientific Industries Genie 2, G-560, G-560/S8223-1, variable speed. For use with Radioisotopes only. | 3 |
| Refractometer | |
| Refractometer, clinical, handheld, temperature compensated, Schuco 5711-2021. | 1 |
| Refractometer, salinity, handheld, temperature compensated, 0-160 ppt, Reichert-Jung (Leica) 10419. | 1 |
| Refractometer, salinity, handheld, temperature compensated, 0-100 ppt, VWR 12777-992, Sper Scientific 300011. | 2 |
| Regulators | |
| CGA 346 for breathing air, double stage. | 2 |
| CGA 320 for carbon dioxide, double stage. | 2 |
| CGA 350 for hydrogen, double stage. | 2 |
| CGA 590 for industrial air, double stage. | 4 |
| CGA 580 for inert gases, nitrogen, helium, double stage. | 8 |
| CGA 540 for oxygen, double stage. | 1 |
| CGA 510 for propane, double stage. | 1 |
| Salinometer | |
| Salinometer, w/ tubing, stoppers, laptop and software, and other necessary items. Measurement range 0.004 to 76 mS/cm, 0.0001:1.15 conductivity ratio; accuracy +/- 0.003 equivalent PSU; resolution 0.0003 mS/cm @ 15 °C and 35 PSU, 0.0003 equivalent PSU. Guildline Instruments, Portasal, 8410A. | 3 |
| External Sample Pump, peristaltic, w/ tubing, Guildline Instruments, 84105. | 6 |
| Sample Bottles, 250 mL, square, glass, w/ caps and inserts. | 288 |
| Shaker | |
| Shaker, orbital, 19 mm orbit, digital, 15 to 500 rpm, timer 1 sec - 160 hrs, 13" x 11" platform, VWR 3500 Advanced, 89032-096. | 1 |
| Platform, 13" x 11", universal, stainless steel, VWR 89027-702. | 1 |
| Platform, 13" x 13", w/ holders for 12 x 250 mL flasks, VWR 97003-618. | 1 |
| Platform, 13" x 13", w/ holders for 16 x 125 mL flasks, VWR 97003-616. | 1 |
| Sieve | |
| Sieve, 3" diameter, 25 µm mesh, No. 500, stainless steel. | 2 |
| Sieve, 3" diameter, 38 µm mesh, No. 400, stainless steel. | 3 |
| Sieve, 3" diameter, 63 µm mesh, No. 230, stainless steel. | 1 |

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| Sieve, 3" diameter, 125 µm mesh, No. 120, stainless steel. | 2 |
| Sieve, 3" diameter, 150 µm mesh, No. 100, brass. | 1 |
| Sieve, 3" diameter, 212 µm mesh, No. 70, brass. | 1 |
| Sieve, 3" diameter, 250 µm mesh, No. 60, brass. | 1 |
| Sieve, 3" diameter, 250 µm mesh, No. 60, stainless steel. | 1 |
| Sieve, 3" diameter, 500 µm mesh, No. 35, stainless steel. | 1 |
| Sieve, 3" diameter, 1.00 mm mesh, No. 18, stainless steel. | 2 |
| Sieve, 3" diameter, 2.00 mm mesh, No. 10, stainless steel. | 2 |
| Sieve, 3" diameter, top and bottom, brass. | 1 |
| Sieve, 8" diameter, 25 µm mesh, No. 500, stainless steel. | 1 |
| Sieve, 8" diameter, 38 µm mesh, No. 400, stainless steel. | 2 |
| Sieve, 8" diameter, 63 µm mesh, No. 230, brass. | 2 |
| Sieve, 8" diameter, 63 µm mesh, No. 230, stainless steel. | 2 |
| Sieve, 8" diameter, 125 µm mesh, No. 120, brass. | 1 |
| Sieve, 8" diameter, 125 µm mesh, No. 120, stainless steel. | 1 |
| Sieve, 8" diameter, 150 µm mesh, No. 100, brass. | 1 |
| Sieve, 8" diameter, 250 µm mesh, No. 60, brass. | 3 |
| Sieve, 8" diameter, 250 µm mesh, No. 60, stainless steel. | 1 |
| Sieve, 8" diameter, 300 µm mesh, No. 50, stainless steel. | 2 |
| Sieve, 8" diameter, 425 µm mesh, No. 40, brass. | 1 |
| Sieve, 8" diameter, 500 µm mesh, No. 35, brass. | 1 |
| Sieve, 8" diameter, 500 µm mesh, No. 35, stainless steel. | 1 |
| Sieve, 8" diameter, 600 µm mesh, No. 30, brass. | 1 |
| Sieve, 8" diameter, 859 µm mesh, No. 20, brass. | 1 |
| Sieve, 8" diameter, 1.00 mm mesh, No. 18, brass. | 2 |
| Sieve, 8" diameter, 1 mm mesh, No. 18, stainless steel. | 1 |
| Sieve, 8" diameter, 1.18 mm mesh, No. 16, brass. | 1 |
| Sieve, 8" diameter, 2.00 mm mesh, No. 10, brass. | 2 |
| Sieve, 8" diameter, 2.36 mm mesh, No. 8, brass. | 1 |
| Sieve, 8" diameter, 3.35 mm mesh, No. 6, brass. | 1 |
| Sieve, 8" diameter, 8.0 mm (5/16") mesh, stainless steel. | 1 |
| Sieve, 12" diameter, 1.0 mm mesh, No. 18, brass. | 1 |
| Sieve, 12" diameter, 1 mm mesh, No. 18, stainless steel. | 1 |
| Sieve, 12" diameter, 4 mm mesh, No. 5, stainless steel. | 1 |
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| Spectrophotometer | |
| Spectrophotometer, Lambda 365+, UV/VIS, dual-beam optics, variable spectral bandwidth capability 0.5 to 20 nm, wavelength range 190 to 1100 nm, w/ computer and software, Perkin Elmer N4100022. | 1 |
| Cell changer, 8-position, water-jacketed (requires external bath for sample temperature control), for 10 mm pathlength cells, Perkin Elmer N4101006. | 1 |
| Cell, 10 mm pathlength, UV Quartz Suprasil, reusable, 3.5 mL, PTFE lid, Perkin Elmer B0631009. | 1 |
| Cell, 10 mm pathlength, UV Quartz Suprasil, reusable, 3.5 mL, PTFE stopper, Perkin Elmer B0631027. | 1 |

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| Integrating Sphere, high sensitivity 50 mm transmission-reflectance accessory, spectral range 230~1100 nm (UV and visible), for measuring diffuse reflectance (specular component included – SCI), total transmittance or hemispherical transmittance, and performing color analysis. Recommended for solid color analysis. Perkin Elmer N4100219. | 1 |
| Integrating Sphere, powder cell holder kit, for reflectance measurement of paste and powder samples. Includes a powder cell, two quartz windows for trapping light, and two quartz caps for the white standard. Perkin Elmer N4101049. | 1 |
| Integrating Sphere, standard, white. | 2 |
| Spectrophotometer, USB UV/VIS absorbance spectrophotometer system (USB2000 Spectrometer with USB-ISS-UV/VIS light source and integrated 1 cm cuvette holder), 200-1100 nm, w/ laptop and software, Ocean Optics ChemUSB2-UV/VIS. | 2 |
| Cell Holder, single, adjustable 10-100 mm pathlength, accommodates filters up to 2 mm thickness, Ocean Optics CUV-VAR, no temperature control. | 2 |
| Cell Holder, single, cylindrical, 100 mm pathlength, temp controlled with additional water bath. | 2 |
| Cell Holder, single, square, 10 mm pathlength, filter slot accommodates filters up to 1/4" thickness, Ocean Optics CUV-UV, temp controlled with additional water bath requested separately. | 2 |
| Cell, 10 mm pathlength, Spectrosil Far UV quartz windows, reusable, 170 to 2700 nm, 1.4 mL volume, semi-micro, black masked, PTFE stopper, Starna Cells 29B-Q-10. | 2 |
| Cell, cylindrical long pathlength, 100 mm pathlength, Spectrosil quartz or equivalent windows, reusable, 170 to 2700 nm, 28.2 mL volume, PTFE stoppers (2 ea), Starna Cells 34-Q-100. | 1 |
| Cell, flow-through, 10 mm light path, Quartzglass Suprasil, reusable, 0.08 mL volume, Hellma Analytics 178.710.QS. | 1 |
| Cell, flow-through, 10 mm pathlength, Spectrosil Far UV quartz windows, reusable, 170 to 2700 nm, 0.420 mL volume, wide aperture, short window, black masked, Starna 583.65.65-Q-10/Z15. | 2 |
| Cell, rectangular, 100 mm pathlength, quartz, reusable, Far UV, 170 to 2200 nm, 7.0 mL volume, open top, PTFE lid, Spectrocell ML-3100. | 2 |
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| Thermometer | |
| Thermometer, analog, blue spirit, -100C to +50C, 1 °C division, 76 mm immersion, Fisherbrand 13-201-521. | 1 |
| Thermometer, analog, red spirit, kerosene, -100 °C to +50 °C, 1 °C division, total immersion. | 1 |
| Thermometer, analog, green spirit, -35C to +50C, 1 °C division, 76 mm immersion, H-B EnviroSAFE 20509, NIST Traceable. | 1 |
| Thermometer, analog, blue spirit, -35 °C to +50 °C, 1 °C division, 76 mm immersion, Fisher 15-160-30. | 1 |
| Thermometer, analog, blue spirit, -10 °C to +50 °C, 0.5 °C division, 76 mm immersion, Fisher 15-171-10. | 1 |
| Thermometer, analog, blue spirit, -1 °C to +51 °C, 0.2 °C division, 76 mm immersion, Ertco 1003-3BLS. | 1 |
| Thermometer, analog, green spirit, -1C to +61C, 0.1 °C division, 76 mm immersion, H-B EnviroSAFE 20527, NIST Traceable. | 2 |
| Thermometer, analog, green spirit, -20 °C to +110 °C, 1 °C division. | 1 |

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| Thermometer, analog, blue spirit, alcohol, -20 °C to +110 °C, 1 °C division. | 1 |
| Thermometer, analog, blue spirit, kerosene, -20 °C to +110 °C, 1 °C division, 76 mm immersion. | 1 |
| Thermometer, analog, blue spirit, -20C to +110C, 1 °C division, 76 mm immersion, Fisherbrand 13-201-644. | 2 |
| Thermometer, analog, blue spirit, -20 °C to +110 °C, 1 °C division, 76mm immersion, Fisher. | 3 |
| Thermometer, analog, red spirit, -20 °C to +150 °C, 1 °C division, total immersion. | 1 |
| Thermometer, analog, blue spirit, -10 °C to +150 °C, 1 °C division, total immersion, Fisher 15-160-35. | 2 |
| Thermometer, analog, blue spirit, -10C to +260C, 1 °C division, 76 mm immersion, Fisherbrand 13-201-555. | 1 |
| Thermometer, analog, red spirit, -30 °F to +120 °F, 2 °F division, Fisher 15-021-5C. | 1 |
| Thermometer, digital, platinum resistance, waterproof, -180 °C to +240 °C, 0.001 °C and °F resolution, measures in both °C and °F, w/ integrated probe, Guildline 9540. | 1 |
| Thermometer, digital, K, waterproof, -200 °C to +1300 °C, 0.1 °C resolution, accuracy +/- 0.3 °C, measures in both °C and °F, w/ type K beaded probe (-40 °C to +250 °C continuous or +300 °C short-term) w/ 4 ft cable, traceable to NIST Standards, Fisherbrand Traceable 15-078-186. Accepts all type K thermocouple probes. | 4 |
| Thermometer, gun, infrared, 8:1, -20 °C to +500 °C, 0.2 °C and °F resolution, accuracy +/- 2 °C to +100 °C and +/- 2% above, measures in both °C and °F, Sper Scientific 800102. | 2 |
| Timer | |
| Timer, digital, 1 channel, 10 hour, 1 second resolution, 0.01% accuracy, traceable to NIST Standards, Fisherbrand Traceable 06-662-50. | 7 |
| Tissue Grinder | |
| Tissue grinder, 10 mL, Wheaton USA. | 1 |
| Vortex | |
| Vortex, various models. Scientific Industries Genie 1, SI-0136, single speed; VWR Analog Vortex Mixer, 10153-838, variable speed. | 2 |
| Head set for large samples, for beakers, flasks, and large tubes, for Vortex Genie. Consists of recessed platform w/ elastic bands, tube foam inserts for tubes w/ diameters from 9 mm to 37 mm. Scientific Industries H302. | 2 |
| LABORATORY AND SCIENCE VANS AND WALK-IN COOLERS | |
| Radioisotope Van | |
| Radioisotope Van #2 . Designed for radioisotope research utilizing carbon (¹⁴ C) and tritium (³ H). | 1 |
| Radioisotope Van #4 . Designed for radioisotope research utilizing carbon (¹⁴ C) and tritium (³ H). | 1 |
| Trace Metal Clean Van | |
| Trace Metal Clean Van #7 . Contains a garage section for the deployment of a Trace Metal Clean rosette and a lab section for sample processing. | 1 |
| Walk-In Cooler (Constant Temperature Room) | |
| Constant Temperature Room, opens to main corridor and to Biolab, temperature to -10 °C +/- 1 °C, "Big Antarctica". | 1 |

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| Constant Temperature Room, opens to main corridor, temperature to -10 °C +/- 1 °C, "Little Antarctica". | 1 |
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