

Downloadable Resource Equipment List*

(Last updated May 28, 2021)

Biomolecular Research Center

Imaging

Leica THUNDER Imager Model Organism
Leica Stellaris 5 confocal microscope
Image Analysis Workstation
SkyScan 1172 MicroCT X-Ray Scanner
EVOS Fluorescence Microscope
Zeiss Stemi 2000 Microscope
ProteinSimple FluorChem™ R Imager
Odyssey CLx Li-COR Imaging System I
VIS in vivo Fluorescence Scanner
Pentax Optio W80 Digital Camera
Mini-Computer Animated Visualization Environment Life Technologies
Countess® II FL Automated Cell Counter
Nikon TS100/SPOT RT3 camera

Histology

Leica TP1020 Benchtop autoembedder
Leica EG1150H Heated Paraffin Embedding Module
Leica RM2235 Rotary Microtome
Leica CM1950 Cryostat
Leica Vibratome VT1000
Leica Autostainer XL
Leica DM 1000 Microscope
PathScan Enabler IV Slide Scanner
Slide warmer XH-2001
StatSpin CytoFuge

Real-Time and Quantitative PCR

Applied Biosystem Veriti Thermal Cycler Roche

*This list is intended as a convenience and may not be comprehensive.

LightCycler® 96 Real-Time PCR System

Mass Spectrometry Facilities

Bruker maXis Q-TOF Mass Spectrometer

Thermo Scientific Velos Pro Linear Ion Trap Mass Spectrometer

Bruker Autoflex speed MALDI TOF/TOF Mass Spectrometer

Agilent 6470B Triple Quadrupole LC-MS (To be installed in July, 2021)

Thermo Scientific UltiMate™ 3000 RSLCnano HPLC with UV and fluorescent detection

Agilent 1100 HPLC with UV detection

Thermo Scientific EASY-nLC™ 1200 nano HPLC

HTX TM-Sprayer

Genius 1050- Nitrogen Generator

Cell and Tissue Culture and Molecular Biology

Life Technologies Countess® II FL Automated Cell Counter

Lonza Nucleofector II/2b Device

LabGuard Nuair Class II, Type A2 Biological Safety Cabinets

NuAire DH AutoFlow Tissue Culture CO2 Incubators

ThermoScientific Sorvall 16R Centrifuges

Synthecon Rotary Cell Culture System

Applied Biosystems Electric Cell-substrate Impedance Sensing (ECIS) ze

Thermo Scientific CryoPlus 2

EVOS M5000

Jasco V-750 Spectrophotometer

Thermo Scientific Sorvall mTX 150 micro-centrifuge

Nanodrop 2000 Spectrophotometer

Agilent 2100 Bioanalyzer

Applied Biosystems Quantstudio 3

Roche Lightcycler96

Eppendorf centrifuge 5430R

Molecular Interaction Determination

Biotek Synergy H1m Microplate Reader

Jasco J-810 Circular Dichroic Spectropolarimeter

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Beckman ProteomeLab XL-I Analytical Ultracentrifuge (AUC)

SynergyHT Multi-Mode Microplate Reader

Size Exclusion Chromatography Multi-angle Light Scattering (SEC-MALS)

Malvern Microcal PEAQ Isothermal Titration Calorimetry System (ITC)

DNA and Protein Isolation and Characterization

Beckman Optima Ultracentrifuge Agilent 1200 HPLC System

Omni GLH Homogenizer

BioRad Criterion 12-Gel Electrophoresis Tank

LifeTechnologies iBLOT2

GyroMax 727 & GyroMax 727R Orbital Incubators

Fisher Scientific IsoTemp Plus Chromatography Refrigerator

BioRad Biologic LP Low Pressure Chromatography System

BioRad Protean Isoelectric Focusing System

ThermoMix 500

FisherScientific Accuspin Microcentrifuge

NanoDrop 1000

Eppendorf Vacufuge Vacuum Concentrator

Branson Tabletop Ultrasonic Cleaner

Fisher Scientific IsoTemp Plus Chromatography Refrigerator

ThermoScientific Sorvall LYNX 4000

Department of Biological Sciences

AGFA CPI000 Automatic Film Processor Biotek

SynergyMx Microplate Reader

Zeiss Stemi SV1/M2Bio Microscope Olympus BX53

Compound Microscope Zeiss Axiovert 40CFL

Zeiss AxioCam ERcSS digital camera

BioRad ProFX Fluorescent Imager

Olympus BX53 Microscope

Olympus BX53 Polarizing Microscope

Applied Biosystem ABI 7300 Real-Time PCR Machine

Cepheid Smart Cycler Real-Time PCR Machine Applied

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Biosystem GeneAmp Thermal Cycler
BTX 630 Electroporator
BTX 830 Square Current Electroporator
Eppendorf InjectMan NI2 Micromanipulator
BioFlux Inverted Microscope Microfluidic Flow Chamber
Reichert SR7000 Surface Plasmon Resonance Instrument
Varian Cary 100 UV/VIS Spectroscopy
Biotek SynergyMx Microplate Reader
BioTek Elx405R 96 Well Plate Washer
NanoDrop 1000
Cary Eclipse Fluorescence Spectrophotometer
Thermo Scientific Spectronic 200E
BioRad Mini-Protean Electrophoresis Tank System
Invitrogen X-Cell Surelock Electrophoresis Tank System Fisher
Scientific IsoTemp Plus Chromatography Refrigerator BioRad
Biologic Low Pressure Chromatography System Invitrogen –
iBLOT Blotting System
Millipore SNAP I.D. Protein Detection System
BioTek Elx405R 96 Well Plate Washer
Eppendorf 5430R Microcentrifuge
ALC PM140 Refrigerated Centrifuge
GeneQuant Spectrophotometer
GreenChem Plus mini-Vessel Accessory Set/ Solvent Extraction Option
Barocycler NEP2320
Thermo Scientific Locator Jr Cryo Tank

Flow Cytometry Core Facility

BD INFLUX Cell Sorter
BD Biosciences Accuri™ C6

Department of Chemistry and Biochemistry

Analytical Services Laboratory Assets

Agilent 6470 Triple Quadrupole LC/MS System Agilent

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1100 HPLC System
Beckman LS-750 Ultracentrifuge
Bruker HCT Ion Trap Mass Spectrometer Bruker
MPA spectrophotometer
Cary 60 UV-Vis Spectroscope
Cary Eclipse Fluorescence Spectrophotometer CEM
Corporation MARSS chemical microwave
CS Bio CS136XT Automated Solid Phase Peptide Synthesizer Dionex
ASE 200 Accelerated Solvent Extractor
Eppendorf Mastercycler Real-Time Machine
Harvey SterileMax Autoclave
Heidolph rotary evaporator
Labconco freeze dry lyophilization system
ProteinSimple FluorChemE Imaging System
PupilCAM Megapixel KAM140
Savant SpeedVac DNA 110 & DNA 120 Concentrator
SynergyHT Multi-Mode Microplate Reader
Thermo Finnigan TRACE T Ultra Gas Chromatograph/AS 3000 II autosampler
Thermo Scientific UltiMate 3000 HPLC/MS-diode array and charged aerosol detector
Thermo Scientific UltiMate 3000 HPLC/MS-diode array detector and fraction collector
Thermo Scientific Sorvall Legend XIR Refrigerated Benchtop Centrifuge
Thermo Scientific Sorvall ST 16R Refrigerated Benchtop Centrifuge
NanoDrop 2000C
Varian Cary 50 Bio UV/VIS Spectrophotometer
Varian Cary 100 UV/VIS Spectroscopy

Nuclear Magnetic Resonance (NMR) Spectroscopy Laboratory

Bruker IPSO 300 MHz NMR Spectrometer Bruker
AVANCE III 600 MHz NMR Spectrometer

Department of Physics

Dr. Fologea's Lab

Molecular Devices Electrophysiology (patch clamp, whole cell clamp, bilayer) systems:

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Axopatch 200B, Amplifier, Digidata 1440A Digitizer with pClamp software
Nikon TSI00 Fluorescence Microscope/Imaging software
Olympus IX-71 Epifluorescence microscope with motorized/ with TIRF capabilities
Acton Photonmax 512 High sensitivity camera/WinView Imaging software
Horiba FluoroMax-4 Spectrofluorometer
Avantilipids Liposome Extruder Avantilipids
Sonicator
Sutter Instruments Glass Pipette Puller
Electroporation apparatus for single cell/cell suspension (custom)
Nano-injection system for single cell microinjection (custom) Horiba
Surface Plasmon Resonance (SPR) Instrument
Sapidyne Kinexa 3200 platform- quantifying biomolecular interactions

Dr. Fergeson's Lab

Zeiss LSM Meta 510 Confocal Microscope

College of Engineering

Boise State Center for Materials Characterization

JEOL JEM-2100 HR Analytical Transmission Electron Microscope
Hitachi S-3400N-II Analytical Scanning Electron Microscope
Bruker AXS D8 Discover X-Ray Diffractometer
CAMECA SXFive Electron Microprobe (EPMA)
FEI TENE0 Field Emission Scanning Electron Microscope (FESEM)
Rigaku Miniflex 600 Benchtop X-Ray Diffractometer
Leica DM6000 M Materials Microscope

Surface Science Laboratory

Bruker Dimension Icon FastScan Bio SPM with 64 bit Nanoscope V Controller
Bruker MultiMode 8 SPM with Nanoscope V Controller
Bruker Dimension 3100 SPM (formerly Digital Instruments/Veeco) with Nanoscope IV Controller
Hysitron TS 75 Triboscope
Phenom Tabletop SEM

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Northwest Tissue Mechanics Lab

Instron EI0000 Electropulse Biaxial Test System Load

Sensors (IOkN Biaxial, 1kN Biaxial, 10 N Axial)

Omega signal conditioner

Supreme Air LV Fume Hood

Computing Lab - includes: quad-core iMac; quad-core Asus; HPC cluster (16 nodes/16 cores); Software includes LS-DYNA, LS-DYNA PrePost, FEBio, OpenFOAM), vmd, Amber-11, Charmm, Gromacs, Namd and Solidworks

Transport Characterization Laboratory

Advanced Electrical Characterization Systems, Computer Controlled (3 systems Advanced DC & sub-RF)

Keithley 4200 -SCS semiconductor Parameter Analyzer-DC and pulse characterization

Agilent 4156C semiconductor characterization system with switch matrix HP

4284A LCR meters (20Hz to 1MHz), (3)

Closed-cycle cryogenic Probe Stations (5.5 to 450 K)

High-temp probe station (673K)

Room temperature probe station

Low Noise Spectroscopy System

Agilent 4294A precision impedance analyzer

Lock-in Amplifiers (2, SRS SR830 dual phase and SRS SR810 single phase)

Mixed Signal oscilloscope (1GHz 4 channel 4GSamples/s)

Cascade Micromanipulator probes (4 high temperature);

Horiba Scientific LabRAM HR Evolution Raman Microscope

Advanced Nanomaterials & Manufacturing Laboratory

Axon MultiClamp 700B patch clamp amplifier on a vibration isolation table

Axon Digidata 1550 low-noise data acquisition system

pClamp 10 electrophysiology data acquisition and analysis software

Custom quartz tube variable pressure chemical vapor deposition system/4 inlet gases & 2 solid-source precursors

QSonica Q125 probe-tip ultra-sonicator

Branson 2800 variable temperature ultra-sonicator

Mettler Toledo Analytical Balance

Thermo Scientific Legend Micro 21 Microcentrifuge

Thinky Planetary Centrifuge

Thermo Scientific Heratherm Programmable Gravity Convection Oven

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Heraeus Megafuge 8 with TX-150 Cell Cult Pkg (8 x 50 ml)

MTI 2" Quartz Tube furnace with inert gas inlet and vacuum compatible

Janis CCS-400H/204N high temp. optical cryostat system/

Model 335 temp. controller, and Model TS-75-DTurbopumping station