

SmiLe Venture Hub Core Facilities Instrument List 2025

Our 300 m² Core facilites, featuring 12 specialized laboratories, is open to all companies. Whether you need cutting-edge instrumentation, cell culture and microbiology labs, or resources in food tech, you can start working on your ideas from day one—without the need for costly investments.





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Cell Culture & Microbiology Labs	Applications	Services and Infrastructure
Cell Culture lab - Cell lines BCL2, GMM L-Verksamhet Cell Culture lab - Primary Cells BCL2, GMM L-Verksamhet Cell Culture lab - Virus BCL2, GMM L-Verksamhet Microbiology lab BCL1, GMM F-verksamhet	Biological Analysis Bioreactors Centrifugation Chromatography Data Analysis FoodTech Histology Mass Spectrometry Microscopy Molecular Biology Spectrometry	Basic lab equipment Climate Chamber Cold Storage, ULT storage Lab services Open Wet Lab Map of Core Facilities



Cell Culture Lab for Cell lines

BCL2, GMM registered (L-verksamhet)		
CO2 incubator 1	HCP-168, Haier Biomedical	
CO2 incubator 2	HCP-168, Haier Biomedical	
LAF cabinet 1	Mars Premium, Scanlaf	
LAF cabinet 2	Mars Premium, Scanlaf	
Brightfield Microscope	Inverted Nikon with Brightfield	
Fluorescence Microscope	Primovert iLED with Camera AxioCam 202, Zeiss, Inverted, GFP	
Automated cell counter	Scepter 3.0, Sigma Aldrich, Hand-Held Cell Counter	
Centrifuge	Allegra X-12R, Beckman Coulter, Swing-out rotor for tubes and plates	



Cell Culture lab for Primary Cells

BCL2, GMM registered (L-verksamhet)		
CO2 incubator 1	HCP-168, Haier Biomedical	
CO2 incubator 2	HCP-168, Haier Biomedical	
LAF cabinet 1	HB2448, Holten	
LAF cabinet 2	Mars Premium, Scanlaf	
Brightfield Microscope	Primovert KMAT, Zeiss	
Fluorescence Microscope	EVOS M5000 Imaging System, Invitrogen - 5 channels	
Automated cell counter	Countess II, Invitrogen	
Centrifuge	Avanti J-15R, Beckman Coulter Biocontainment, Refrigerated, Adaptors for tubes and plates	
misc	Metall bead bath, Incubator, Rocker	



Cell Culture lab for Virus

BCL2, GMM registered ((L-verksamhet)
CO2 incubator 1	Stericycle i160, ThermoFisher
CO2 incubator 2	Stericycle i160, ThermoFisher
CO2 incubator 3	HeraCell 140, ThermoFisher
CO2 incubator 4	HeraCell 240, ThermoFisher
LAF cabinet 1	HB2448, Holten
LAF cabinet 2	Maxi Safe, Holten
LAF cabinet 3	Maxi Safe, Holten
Fluorescence Microscopes	Eclipse Ts2-FL, Nikon and Camera AxioCam 305, Zeiss – 3 channels, ZEN Imaging software
GFP Microscope	Primovert iLED, AxioCam 202, Zeiss – GFP channel, ZEN Imaging Software
Automated cell counter 1	Nucleocounter NC202, Chemometec
Automated cell counter 2	Countess II, Invitrogen
Centrifuge	Refrigerated Centrifuge with Swing-out rotor, Sorvall - Adaptors for tubes and plates
misc	Metall bead bath, Incubator, Rocker



Microbiology lab

BCL1, GMM registered (F-verksamhet)	
LAF cabinets 1	Class 2 LAF Mars, ScanLaf	UV disinfection and 220V connector
LAF cabinet 2	Class 2, Sirius, ScanLaf	Small bench top class 2 cabinet
CO2 incubator	HCP-168, Haier Biomedical	CO2 and temperature controlled, humid
Incubator	Termaks, Heraeus	Temperature control, dry
Shaker Incubator 1	Innova 40, New Brunswick Scientific	Benchtop Orbital Shaker, Ambient +5 °C to 80 °C
Shaker Incubator 2	Innova 43, New Brunswick Scientific	Floor Orbital Shaker, Ambient +10 °C to 80 °C
High speed Centrifuge	Avanti J-E, Beckman Coulter	Refrigerated, 15-50 ml vials, 500 ml bottles, max 38.000 g
Ultra Centifuge	Optima XPN 80, Beckman Coulter	Preperative Ultracentrifige, Rotor SW41Ti, Swinging-Bucket for 6 x 13.2 mL tubes, 41,000 rpm, 288,000 x g
Autoclave	2540 EL Tuttnauer Systec	Benchtop autoclave, fits 1l bottles
Water purification system	Purelab flex 2, ELGA	Inorganics (resistivity at 25°C): 18.2 MΩ-cm, Organics (TOC): <5ppb2, DNAse: <5pg/ml, RNase: <1pg/ml
Automated Colony Counter	iBright Imaging System FL1500, Invitrogen	Gels, blots, plates, 4-channel multiplexing and Colony counting capability



Reactors, Controllers and PIMS (Process Information Managing System)		
	250ml Glass reactor, MiniBio, Applikon	myControl, Lucullus logging software, Applikon Sensors: pH, dO, level, temp.
Configuration for mammalian cells	3l single use reactors, Compatable with Applikon or CellReady, Merck	Gases: N2, O2, CO2, Air 3 Addition pumps Located in Biological Analysis lab
Configuration for <mark>bacteria</mark>	3l Glass reactor, Applikon	myControl, Lucullus logging software, Applikon Sensors: pH, dO, level, temp. Gases: N2, O2, CO2, Air 3 Addition pumps Water cooling Located in Histology lab



Paraffin Workflow and Cryosectioning		
Automated Tissue processor	Excelsior AS, ThermoFisher	Vacuum infiltration and customizable protocols for dehydration and paraffine embedding of tissue
Embedding station	Histostar, ThermoFisher	Heated workspace with adjustable temperature controls and paraffin flow
Microtome	Cut 5062, SLEE	Rotary microtome with adjustable cutting speed and memory functions for repetitive sectioning
Cryostat	CM3050S, Leica	Motorized cutting, temperature control down to -40°C, and anti-roll systems
Cryostat	MEV+, SLEE	Rotary microtome, automatic feed, UV-C surface disinfection, two quick freezing positions, object cooling



Microscopy and Imaging

Fluorescence, Automated Microscopes and Imaging Systems		
Fluorescence Microscope, upright	Leica DMRE, Camera DC500 and LAS-X imaging suite	DAPI, FITC, Rhodamine
	Leica DM IRBE, Zeiss Axiocam 705 and ZEN imaging suite	4 channels
Fluorescence Microscopes,	Primovert iLED, GFP, Axiocam 203 Mono, Zeiss	GFP, placed in Cell lab
inverted	Nikon EclipseTs2-FL, Axiocam 305, Zeiss	3 channels, Cell lab
	EVOS M5000 Imaging System, Invitrogen	5 channels, Cell lab
Automated Fluorescence Microscope	ImageXpress Pico, Molecular Devices	5 channels, brightfield Plates (6-384 wells), 4-slides holder Image Analysis
Live Cell Imaging System	HoloMonitor M4, PHIAB	Lable- free holografic imaging, Image analysis
Imager for Chemoluminescence, Fluorescence	iBright Imaging System FL1500, Invitrogen	Gels, blots, plates 4-channel multiplexing Colony counting capability
High Content Image Analysis	MetaXpress, Molecular Devices	Build custom modules for advanced image analysis , Data Work station



Molecular Biology

PCR, Gel Electrophoresis and Western Blotting		
PCR	PCT-200, MJ research	Two sample blocks
RT-PCR	CFX96, Bio-Rad	
Digital PCR System	QIAcuity One, Qiagen	Automated dPCR System, 5plex High Sensitivity and Abolute Quantification
Droplet Digital PCR	QX600 AutoDG ddPCR System	Complete dPCR Workflow with Automated Droplet Generator, Plate Sealer, Thermo Cycler and Reader- 6plex High Sensitivity and Abolute Quantification
Gel Electrophoresis	Electrophoresis tanks, powerstations	Microwave and UV table, <u>iBright Imager</u> for gels
Western Blot	Mini Gel, iBlot2, iBind, iBright Invitrogen, ThermoFisher	A complete Western Workflow from Electrophoresis to Imaging- Histology lab
Spectrophotometer	NanoPhotometer, P330, Implen	Microvolume DNA/RNA Quantification and Protein Analysis
Imager for Chemoluminescence and Fluorescence	iBright Imaging System, ThermoFisher	Imaging of Gels and Blots, 4-channel multiplexing and Colony Counting Capability - Imaging lab



Biological Analysis and Mass Spectrometry

Spectrometyry, Chromatography, Microfluidics		
Plate reader	Spectramax i3, Molecular Devices	Absorbance, Fluorescence, Luminescence, Endpoint and Kinetics
Microplate Shaker Incubator	ThermoStar, BMG Labtech	Microplate Incubation System for 4 Microplates
Flow cytometer	CytoFLEX, Beckman Counter	3 lasers with 13 fluorescence channels
Droplet generator	Xdrop, Samplix	Microfluidics-based single-molecule enrichment and sequencing preparation system
FPLC	Äkta FPLC, Amersham Pharmacia Biotech	Liquid Chromatography for protein purification
UHPLC	Accela UHPLC, Thermo	Ultra-High Performance Liquid Chromatography Autosampler, PDA Detector
Gas Chromatograph	GC-MS, Agilent 5973	Agilent, 6890N gas chromatograph and 5973 mass selective detector.
Mass Spectrometer	LTQ XL, IT-MS/MS, ThermoScientific	Ion trap MSn, Best for Qualitative Analysis
High-resolution Mass Spectrometer	Agilent 6546 LC/Q-TOF,	Quadrupole Time of Flight LC/MS, high resolution, high sensitivity, wide dynamic range
Spectrophotometer	NanoPhotometer, P330, Implen	Microvolume DNA/RNA Quantification and Protein Analysis
Infrared Spectrometer	FT-IR, Spectrum Two, Perkin Elmer	Wide range of applications in Quality Control and Sample Characterization



FoodTech

Sample Characterization, Preparation and Process Development

Texture Analyser	TA.XTPlusC 650H, Stable Micro Systems	Wide selection of probes and rigs, heavy duty platform
Rotational Viscometer	ViscoQC300R + PTD175, Anton Paar	Wide selection of spindels and vanes Temperature control from -45°C to 175°C
Particle Size Disitribution	Mastersizer, Malvern Panalytical	Uses Laser Diffraction to measure the particle size and particle size distribution of materials dispersed in liquid.
Climate Chamber	C-Series, FDM	Humidity 10-90%, Temperature 0-70°C
Freeze Dryer	CoolSafe Touch 100-9, Labogene	-100°C, 5 Heated shelves for 2l of sample material, 150 and 600 ml flasks
Infrared Spectrometer	FT-IR, Spectrum 2, Perkin Elmer	Wide range of applications in Quality Control and Sample Characterization

See also: <u>Bioreactors</u>, <u>Homogenizer</u>, <u>Sonicator</u>



Centrifugation

High-Speed-, Ultra- and Sample Processing Centrifuges

Ultra centrifuge	Optima XPN 80, Beckman Coulter	Preperative Ultracentrifige, Rotor SW41Ti, Swinging- Bucket for 6 x 13.2 mL tubes, 41,000 rpm, 288,000 x g Located in Microbiology lab
High-speed Centrifuge	Avanti J-E, Beckman Coulter	Refrigerated, 15-50 ml vials, 500 ml bottles, max 38.000 g Located in Microbiology lab
Vacuum Concentrator	Savant SpeedVac SPD2030, ThermoScientific	High Capacity Rotor RH200-12 Located in "Centrifuges"
CytoCentrifuge	Cytospin 3, Shandon	Deposition of cells onto a microscope slide creating a uniform layer for analysis.
Biocontainment Centrifuge	Fisherbrand Centrifuge GT 4R	Refrigerated, Plates, 15ml tubes, 4x1000ml bottles Located in "Centrifuges"
Biocontainment Centrifuge	Avanti J-15R, Beckman Coulter	Refrigerated, Plate and tube Adapters, Cell lab
Eppendorf centrifuge	Centrifuge 5424R, Eppendorf	Refrigerated Located in "Centrifuges"



Balances and Basic Lab Equipment

Precision Balances and Basic Equipment			
Micro Balance	Mettler MT5 analytical Microbalance Located in Balances		
Analytical Balance	Deltarange PR5002, Mettler Toledo Located in Balances		
Sonicator	Soniprep 150, MSE Located in Microbiology lab		
Homogenizer	Polytron PT3000, Kinematica AG		
Thermomixer	Thermomixer compact, ThermoFischer - for Eppendorf tubes Located in Open lab		
pH-meter	FiveEasy, Mettler Toledo Located in Microbiology lab		
Water Purification System	Veolia Purelab flex 2, ELGA Located in Microbiology lab		
Autoclave	Autoclave 2540 EL, Tuttnauer Systec – bench top, fits 1l bottles Located in Microbiology lab		
misc	Ultra Sonic Bath, Vortex, Rocker, Plate Shaker, Micro Centrifuge, Water Bath		



Data Analysis

Workstation for Image and Instrument Data Analysis					
Image Analysis	MetaXpress, Molecular Devices	Advanced High Content Image Analysis			
Flow Cytometry, General	Kaluza, Beckman Coulter	Advanced Analysis of any FCS Compliant File			
Flow Cytometry, CytoFlex	CytExpert, Beckman Coulter	Analysis of CytoFlex Data Files			
HoloMonitor	Holomonitor App Suite, PHIAB	Analysis of Holomonitor Data Files			
Spectramax i3	Softmax Pro, Molecular Devices	Analysis of Spectramax i3 Data Files			



Lab Services and Open lab

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Lab Coat Service, Ultra Pure Water, Ice

Access to ThermoFisher Supply Center

Access to Lab Knowledge Base

Introduction to Instruments and Support

Autoclaving and Dish Washing, Third Party Provider

Hazardous Waste Disposal, Third Party Provider

Dry Ice, Liquid Nitrogen, Third Party Provider

Cold room storage

-80°C Storage, Back-up freezer and Alarm system

ULT storage in Liquid Nitrogen tank

Open lab

Lab benches, Storage Cupbooards

Fume Hood, Ventilated Cupboards

Eppendorf centrifuge

Thermomixer

Waterbath, Vortex, Micro Centrifuge, Rocker,

Hot Plate Stirrer, Heating Block

Access to Freezer and Fridge

Writing desks

'Open lab' is a wet lab offering the functionality of a small lab unit.



Find your way around the Core Facilities



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