

CNB Histology Facility



Lluís Montoliu, CNB, 8 March 2012



Histology Facility – INNOTEK Platform
<http://www.cnb.csic.es/~histocnb/>

CNB Histology Facility

- Why a Histology Facility?
- The Histology team
- The Histology lab
- Our tools, equipments and resources
- What do we offer to CNB scientists?
- Coordination of IIBm-CSIC/UAM Histology Facility
- INNOTEK Platform
- How to contact us?



Histology Facility – INNOTEK Platform
<http://www.cnb.csic.es/~histocnb/>

Why a histology facility?

- The bottle-neck in a histological or immunohistochemical analysis is to obtain tissue or organ blocks and the corresponding high-quality tissue sections to later on process and study them in details.
- To easily prepare convenient tissue sections from any species or organ, both animal and plants, also from human and non-human origin, for histological assessment.
- To obtain tissue sections using a variety of techniques: paraffin/wax, frozen/cryostat, plastic/resin.
- To contrast tissue sections with standard and specific staining solutions.
- **This is NOT a Pathology Facility.** We do not interpret your biological samples. The scientific interpretation is left to the researcher.

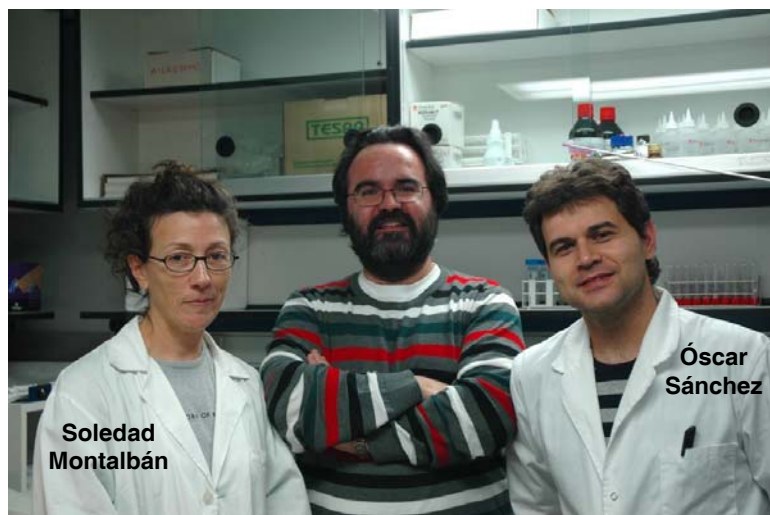


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The Histology Facility team at CNB



Soledad Montalbán

Óscar Sánchez



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The Histology Facility website

CNB Histology Facility

telephone: 915854903
histologia@cnb.csic.es

Esta página WEB en ESPAÑOL 

Time-table for contacting/receiving/delivering samples:
from 08:00 to 15:00 hours

Centro Nacional de Biotecnología
Department of Molecular and Cellular Biology
(Laboratory 126)
Campus de Cantoblanco, C/ Darwin 3
28049 Madrid

[WEB FORM FOR REQUESTING SERVICES](#)

Responsible Scientist: [Lluís Montoliu](#) (tel. 915854844, laboratory 111)
Technician Specialist: [Soledad Montalbán](#) (tel. 915853349-office 128; 915854903-laboratory 126)
Supporting Technician: [Oscar Sánchez](#) (tel. 915854903-laboratory 126; 915854312-office B15)

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The Histology Facility website

CNB Histology Facility



WEB FORM FOR REQUESTING SERVICES

Esta página WEB en ESPAÑOL 

To begin with, please type in your email address. If you previously used this CNB Histology Facility, you can recover introduced data from your last request which will be used for your next request. Next, you will be able to update them all, before sending the definitive request. In order to do so, you need your password, which you received by email upon submitting your last request. If this is the first time you use this facility, or if you do not want to use your data from your previous request then simply skip the password, leave it blank and click on "Start New Request Form..."

[Returning to the main web page of the CNB Histology Facility](#)

Your EMAIL address

PASSWORD

www.cnb.csic.es/~histocnb/

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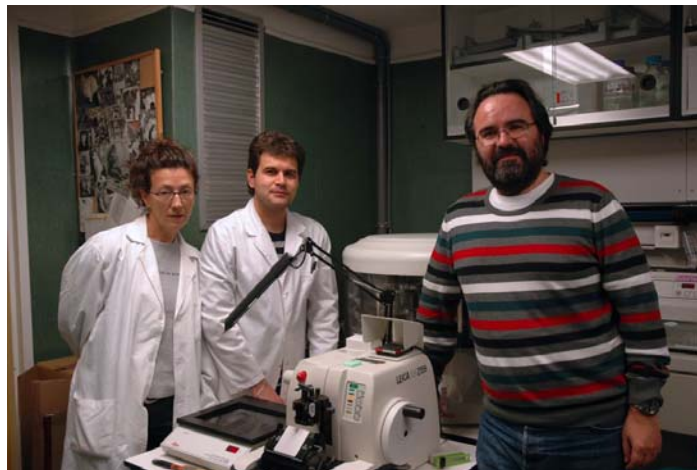
The Histology Facility website

Type of User (*)	Pass: select
Full Name (*)	
Laboratory / Unit (*)	
Institution (*)	
Centre / Faculty / Institute (*)	
Full address (*)	
E-MAIL (*)	mailto@cnb.csic.es
Telephone(s) (*)	
Account to charge expenses (*)	
Principal Investigator of this account (*)	
Requested Service (*)	Pass: select
Other procedures, please specify	
Requested Units (1-99) (*)	
Other Requested Service	Pass: select
Other procedures, please specify	
Requested Units (1-99) (*)	
Other Requested Service	Pass: select
Other procedures, please specify	
Requested Units (1-99) (*)	
Other Requested Service	Pass: select
Other procedures, please specify	
Requested Units (1-99) (*)	
Comments / Special Requirements (thickness of sections, alternative staining protocol, ...)	
The tissue or organ to be processed has been exposed, infected or in contact with any pathogen or infectious agent that might affect human health? (*)	<input type="checkbox"/> YES <input type="checkbox"/> NO
If you have responded "YES" to the previous question, please indicate which pathogen or infectious agent has been in contact with the sample to be processed:	
I am the principal investigator associated to the provided account, or I have obtained the corresponding authorization from the principal investigator to request this service (*)	<input type="checkbox"/> YES



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The Histology Facility lab



Laboratory 126 – First Floor – Department of Molecular and Cellular Biology



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The Histology Facility lab



Laboratory 126 – First Floor – Department of Molecular and Cellular Biology



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The Histology Facility lab



Laboratory 126 – First Floor – Department of Molecular and Cellular Biology



Histology Facility – INNOTEK Platform
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Our tools, equipments and resources



1 Tissue Processing Station Leica TP1020



1 Tissue Embedding Station Leica EG1160



Histology Facility – INNOTEK Platform
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Our tools, equipments and resources



1 Cryostat Leica CM1900



1 motorized Microtome (plastic/resin/paraffin/wax) Leica RM2155



1 motorized Microtome (plastic/resin/paraffin/wax) Thermo Scientific, Shandon, FINESSE ME+



Histology Facility – INNOTEK Platform
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What do we offer to CNB scientists?

- Fixing, processing, embedding and sectioning any tissue or organ
- Tissues and Organs from both Animals and Plants
- Tissue sections prepared with cryostat (frozen)
- Tissue sections prepared in paraffin/wax
- Tissue sections prepared in plastic/resin (highest resolution)
- Contrast staining with standard procedures (H/E, CV, ...)
- Staining samples with specific staining (i.e. Masson's Trichrome)
- We adapt to customer's needs (i.e. free-floating/gelatin/decalcifying)
- Currently, we do **not** offer immunohistochemistry. However we are ready to contrast and mount after you do the immunohistochemistry.



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Our expertise: animal tissues

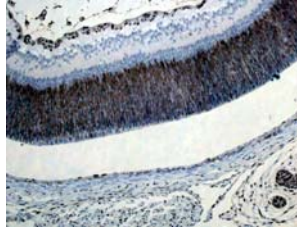
tissue/organ	species	paraffin/wax	cryostat	plastic/resin
Aorta	mouse	✓	✓	
Brain	mouse	✓	✓	
Brain	rat	✓	✓	
Brain	mole	✓	✓	
Brown adipose tissue	mouse	✓	✓	
Cochlea	rat	✓	✓	✓
Cochlea	mouse	✓	✓	✓
Colon	mouse	✓	✓	
Ears	mouse	✓	✓	
Elbow	mouse	✓	✓	
Embryos	chicken	✓	✓	
Embryos 7.5-17.5 dpc	mouse	✓	✓	✓
Epididymis	mouse	✓	✓	
Esophagus	mouse	✓	✓	
Eyes	mouse	✓	✓	✓
Eyes	fish			✓
Femoral artery	mouse	✓	✓	
Fetal Brain	mouse	✓	✓	
Fetal Limbs	mouse	✓	✓	
Ganglions	mouse	✓	✓	✓
Glioma	rat	✓	✓	
Gonads	mollusc	✓	✓	
Gut	mouse	✓	✓	
Head embryos/fetuses	mouse	✓	✓	✓
Heart	mouse	✓	✓	
Hindlimb bones	mouse	✓	✓	
Kidney	mouse	✓	✓	
Kidney	rat	✓	✓	
Knee	mouse	✓	✓	
Knee joint	mouse	✓	✓	
Large Gut	rabbit	✓	✓	
Large Gut	mouse	✓	✓	
Liver	mouse	✓	✓	✓
Liver	rat	✓	✓	
Lung	mouse	✓	✓	
Lung	piglet	✓	✓	
Lung	pig	✓	✓	
Lungs	pig	✓	✓	
Mammary gland tumours	rat	✓	✓	
Mammary gland tumours	mouse	✓	✓	
Mammary gland tumours	human	✓	✓	

tissue/organ	species	paraffin/wax	cryostat	plastic/resin
Mammary Tissue	rata	✓	✓	
Metacarpal toes	mouse	✓	✓	✓
Metatarsal	mouse	✓	✓	
Muscle	mouse	✓	✓	
Ovary	mouse	✓	✓	
Ovary	sheep	✓	✓	
Ovary	rabbit	✓	✓	
Oviduct	rabbit	✓	✓	
Pancreas	mouse	✓	✓	
Placenta	mouse	✓	✓	
Polyps	coral	✓	✓	
Prostate	mouse	✓	✓	
Prostate tumours	human	✓	✓	
Raquis	mouse	✓	✓	✓
Sane Mammary Tissue	mouse	✓	✓	
Skin	mouse	✓	✓	
Skin tumours	mouse	✓	✓	
Skull/Calota	rabbit	✓	✓	✓
Spleen	mouse	✓	✓	
Testis	mouse	✓	✓	
Testis	sheep	✓	✓	
Testis	lynx	✓	✓	
Testis	gacela	✓	✓	
Testis	cat	✓	✓	
Testis	pig	✓	✓	
Thin Gut	rabbit	✓	✓	
Thin Gut	mouse	✓	✓	
Thin Gut	pig	✓	✓	
Thin Gut	piglet	✓	✓	
Thymus	human	✓	✓	
Thymus	mouse	✓	✓	
Thyroid	mouse	✓	✓	
Thyroid	mouse	✓	✓	
Trachea-thyroid	mouse	✓	✓	
Uterus	mouse	✓	✓	
Uterus	rabbit	✓	✓	
White adipose tissue	mouse	✓	✓	

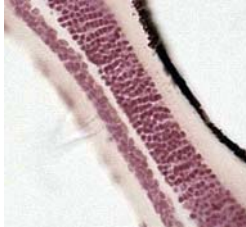


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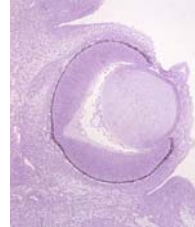
Our expertise: animal tissues



Paraffin/Wax



Cryostat/Frozen



Resin/Plastic



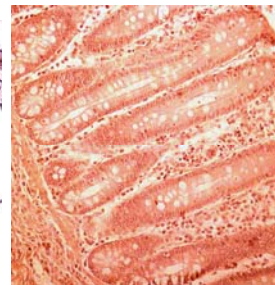
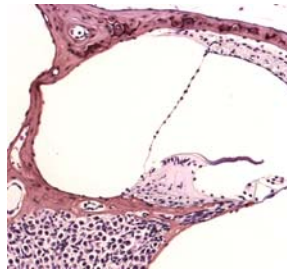
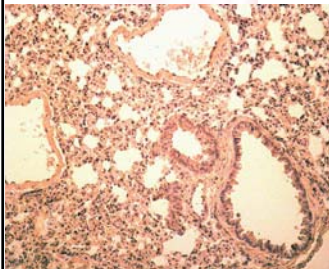
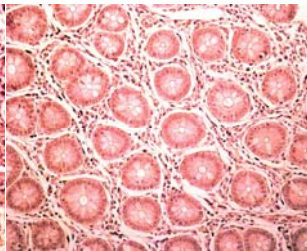
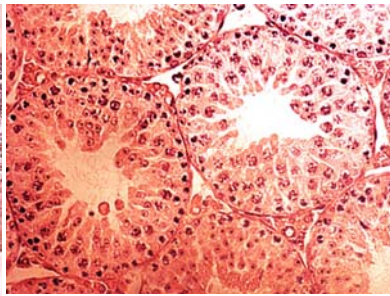
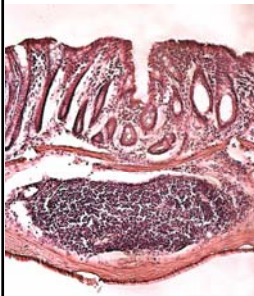
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Paraffin/Wax

Our expertise: animal tissues

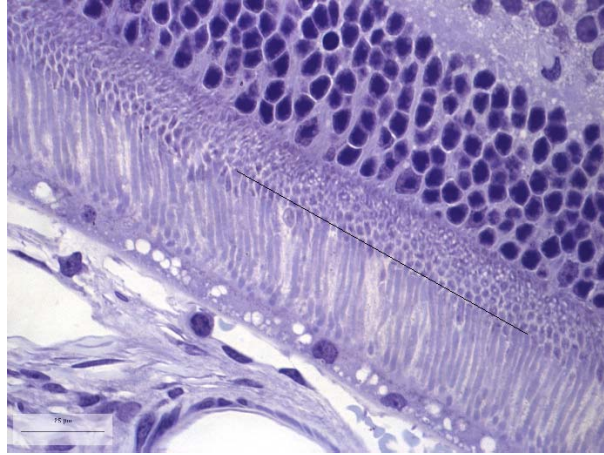


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Our expertise: animal tissues

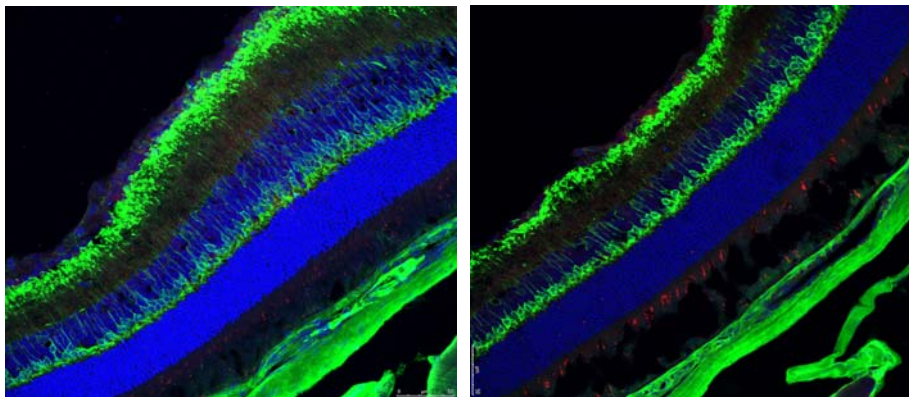


Mouse retina (resina/plastic)



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Our expertise: animal tissues



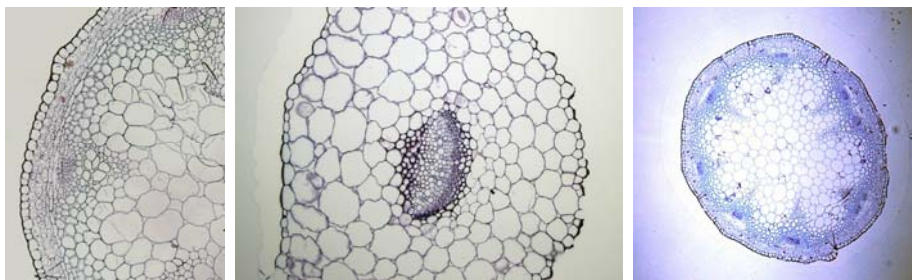
Mouse retina (frozen/cryostat)



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Our expertise: plant tissues

tissue/organ	species	paraffin/wax	cryostat	plastic/resin
Apical meristem	arabidopsis			✓
Fruit	tomato		✓	
Fruits	grape			✓
Leaves	arabidopsis			✓
Root	lupine			✓
Root	arabidopsis			✓
Stem/Shot	arabidopsis	✓		
Stem/Shot	potato			✓
Stem/Shot	pine	✓	✓	



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The Histology Facility fees

Our Fees

last update for these fees: January 2007

Service	Unit	Fee per unit	Fee per unit	Fee per unit	Fee per unit
		(CNB-INNOTEK user)* €	(other CSIC centres) €	(other public research institutions, not CSIC) €	(private research institutions) €
Preparing a paraffin block	1 U = 1 block	3 Euros	6 Euros	7,5 Euros	11,5 Euros
Cutting a paraffin block	1 U = 1 block / 10 slides	4,5 Euros	5,4 Euros	7 Euros	10,5 Euros
	1 U = 1 block / 5 slides	3 Euros	3,6 Euros	4,7 Euros	7 Euros
Staining and mounting (paraffin)	1 U = 10 slides	4,5 Euros	5,4 Euros	7 Euros	10,5 Euros
	1 U = 5 slides	3 Euros	3,6 Euros	4,7 Euros	7 Euros
Preparing a frozen block (cryostat)	1 U = 1 block	2 Euros	2,5 Euros	3 Euros	4,5 Euros
	1 U = 10 slides	4,5 Euros	5,4 Euros	7 Euros	10,5 Euros
Cutting a frozen block (cryostat)	1 U = 10 slides	3 Euros	3,6 Euros	4,7 Euros	7 Euros
	1 U = 5 slides	2,5 Euros	3 Euros	4 Euros	5 Euros
Staining and mounting (frozen)	1 U = 10 slides	1,5 Euros	2 Euros	2,5 Euros	3 Euros
	1 U = 5 slides	1,5 Euros	2 Euros	2,5 Euros	3 Euros
Preparing a plastic block (Histo-resin)	1 U = 1 block	16 Euros	19 Euros	24 Euros	36 Euros
	1 U = 10 slides	18 Euros	22 Euros	29 Euros	43,5 Euros
Cutting a plastic block (Histo-resin)	1 U = 5 slides	15 Euros	18 Euros	23,5 Euros	35 Euros
	1 U = 10 slides	1,5 Euro	2 Euros	2,5 Euros	3 Euros
Staining and mounting (plastic)	1 U = 5 slides	1 Euro	1,5 Euros	2 Euros	2,8 Euros
	1 U = 10 slides	1 Euro	1,5 Euros	2 Euros	2,8 Euros
Other procedures (specific stains, immunohistochemistry, ...)	please inquire	please inquire	please inquire	please inquire	please inquire

(*): Researchers/Users from the platform INNOTEK (CBMSO, CNB, IBM, UAM) are also included

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The INNOTEK Platform

SCIENTIFIC-TECHNOLOGICAL PLATFORMS IN SUPPORT OF RESEARCH AT THE INTERNATIONAL CAMPUS OF EXCELLENCE UAM-CSIC

INNOTEK

Advanced technologies for the generation and characterization of animal models

www.cnb.csic.es/~innotek/
innotek@cnb.csic.es

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The INNOTEK Platform

	Animal Experimentation Facility
	Responsible: Angel Naranjo
	Transgenic Facility CNB-CBMSQ
	Responsible: Belén Pintado
	Mouse Embryo Cryopreservation Facility
	Responsible: Lluís Montoliu
	Histology Facility CNB-IBM
	Responsible: Lluís Montoliu
	Animal Experimentation Facility
	Responsible: Javier Palacin
	Transgenic Facility CNB-CBMSQ
	Responsible: Belén Pintado
	Genomics Facility
	Responsible: M ^o Begoña Aguado
	Animal Experimentation Facility
	Responsible: Fernando Núñez
	Image and Spectroscopy by High Field Magnetic Resonance Facility: SIERMAC
	Responsible: Sebastián Cerdán
	Non-Invasive Neurofunctional Evaluation Facility: ENNI
	Responsible: Isabel Varela-Nieto
	Histology Facility CNB-IBM
	Responsible: Lluís Montoliu
	Animal Experimentation Facility-Veterinarian Laboratory
	Responsible: Carmen Fernández Criado

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The CNB-IIBm Histology Facilities

ibm Instituto de Investigaciones Biomédicas "Alberto Sols"

SERVICIOS

Servicio de Histología

PRESENTACIÓN

El servicio de Histología del Instituto de Investigaciones Biomédicas "Alberto Sols" se creó en el 2009 con la finalidad de preparar muestras histológicas. Este servicio funciona de forma coordinada con el servicio de Histología del CNB (www.cnb.uam.es/~histocnb/).

- ▶ Presentación
- ▶ Funciones
- ▶ Normas de funcionamiento
- ▶ Miembros

Ubicación

El servicio de Histología está situado en el edificio del Departamento de Bioquímica, planta 1ª B-39.

Adicionalmente el servicio supervisa los equipos de criostatos, localizados actualmente en el IIB2, 2ª planta, sala de Instrumentación.

Contacto

Tel. 914 97 27 28
Fax 91 595 44 01
Correo electrónico: vortega@iib.uam.es

Horario

8:00 a 15:00 h.



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