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**Anna Sartori-Rupp**

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anna.sartori.rupp@gmail.com

49 years, Italian, married, two children

FluentinItalian, English, French and German

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**RESEARCH INTERESTS**

My research interests focus on developing novel strategies and pipelines for high resolution 3D cryo-electron tomography and for cryo-correlative light and electron microscopy (cryo-CLEM) applied to the study of cellular systems and in particular of host-pathogen interaction and neurodegenerative diseases.

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**EDUCATION**

1998 - 2001 **PhD in Mathematical Physics**, Imperial College, London, UK

1995 - 1996 **Erasmus** **student**, Imperial College, London, UK

1991 - 1997 **Master Degree in Physics,** University of Padua, Italy

Grade: 110/110 Cum Laude (1st class honours degree with distinction)

**RESEARCH EXPERIENCE**

Since 09/2007 **Research Engineer**

**Institut Pasteur, Ultrastructural BioImaging (UBI) Unit, Paris, France** (Head: *Adeline Mallet*; 2019-2021, Head-ad interim: *Dr. Guillaume Dumenil; 2015-2019,* Head*: Jacomine Krijnse-Locker; 2007-2015, Head: Spencer Shorte)*

* Development of cryo-CLEM pipelines combining grids micropatterning, cryo-fluorescence imaging, cryo-focused ion beam (cryo-FIB) milled lamellae and cryo-electron tomography
* Development of an original cryo-CLEM approach for the structural study of Tunnelling Nanotubes in neuronal cells (Sartori-Rupp et al, Nat. Comm. 2019)

2014 - 2016 **Visiting scientist**

**Paul Sabatier University, Laboratoire de Biologie Moléculaire Eukaryote (LBME), Toulouse, France** (*Prof. P.-E. Gleizes*)

* ANR (Agence nationale de la recherche) grant RIBOMAN obtained.

2004 - 2007 **Post-doctoral position** (German SFB563 grant)

**MPI of Biochemistry, Dept of Mol. Structural Biology, Munich, Germany** (*Prof. W. Baumeister*)

Research project: “*Three dimensional structural studies of macromolecules and cells on rigid substrates by the establishment of a correlation between fluorescence microscopy in cryo-conditions and cryo-electron tomography*”

* Establishment of a novel technique: the correlation between cryo-fluorescence microscopy and cryo-electron tomography of frozen hydrated biological samples (Sartori et al., *J. Struct. Biol.*, 2007)

2001 - 2003 **Post-doctoral position** (Marie Curie - EU - Individual fellowship)

**Institut Curie, Macromolecules and Microsystems in Biology and Medicine Group, Paris, France** (Dr. J.-L. Viovy)

Research project: "*Non-linear modelling of electrophoresis in viscoelastic matrices. Applications to lab-on-chips*"

* Theoretical modelling and characterisation of DNA migration in polymer matrices by fluorescence video-microscopy (Sartori et al., *Macromolecules*, 2005).

1998 - 2001 **PhD student**

**Imperial College, Department of Mathematical Physics, London, UK** (*Prof. A.O. Parry*)

PhD thesis: “*Wetting at non-planar surfaces: Unbending, Unbinding and Beyond*“.

* Characterisation of the density and scaling laws describing wetting of a fluid film on geometrically structured surfaces (Sartori & Parry, *J. Phys. Cond. Matt.*, 2002).

**PUBLICATIONS**

**ORCID number:** 0000-0001-8540-9910  **IDHAL number:** 184738

**Papers in Peer-reviewed Journals**

Witwinowski, J., **Sartori-Rupp, A.**, Taib, N., Pende, N., Tham, N., Poppleton, D., Ghigo, J.-M., Beloin, C. & S.. Gribaldo. 2021. *OmpM is critical for outer membrane stability in the diderm Firmicute Veillonella parvula: implications for the diderm/monoderm transition.* In Press in Nature Microbiology.

Pende, N., Sogues, A., Megrian, D., **Sartori-Rupp, A.**, England, P., Palabikyan, H., Rittmann, S., Graña, M., Wehenkel, A. M., Alzari, P.M. & S. Gribaldo. 2021. *SepF is the FtsZ anchor in archaea, with features of an ancestral cell division system*. Nat. Comm. 12:3214-27.

Léa Swistak, Anna Sartori-Rupp, Matthijn Vos, Jost Enninga. Micropatterning of cells on EM grids for efficient cryo-correlative light electron microscopy. Methods in Microbiology, 48, Elsevier, pp.95-110, 2021, ⟨10.1016/bs.mim.2020.11.001⟩. ⟨pasteur-03263636⟩

Staropoli, I., Dufloo, J., Ducher, A., Commere, P.H., **Sartori-Rupp, A.**, Novault, S., Bruel, T., Lorin, V., Mouquet, H., Schwartz, O. & N. Casartelli. 2019. *Flow-cytometry analysis of HIV-1 Env conformations at the surface of infected cells and virions: role of Nef, CD4 and SERINC5.* J Virol. pii: JVI.01783-19. doi: 10.1128/JVI.01783-19.

**Sartori-Rupp, A.**, Cordero Cervantes, D., Pepe, A., Gousset, K., Delage, E., Corroyer-Dulmont, S., Schmitt, C., Krijnse-Locker, J. & C. Zurzolo. 2019. *Correlative cryo-electron microscopy reveals the structure of TNTs in neuronal cells.* Nat. Comm. 10:342-58.

Grassart, A., Malardé, V., Gobba, S., **Sartori-Rupp, A.**, Kerns, J., Karalis, K., Marteyn, B., Sansonetti, P. and N. Sauvonnet. 2019. *Bioengineered Human Organ-on-Chip Reveals Intestinal Microenvironment and Mechanical Forces Impacting Shigella Infection.* Cell Host Microbe. 26:435-44.

Kühn, S., Lopez-Montero, N., Chang, YY., A., **Sartori-Rupp, A.** and J. Enninga. 2017. *Imaging macropinosomes during Shigella infections.* Methods. 127:12-22.

Bonazzi, M., Vasudevan, L., Mallet, A., Sachse, M., **Sartori, A.**, Prevost, M.C., Roberts, A., Taner, S.B., Wilbur, J.D., Brodsky, F.M. and P. Cossart. 2011. [*Clathrin phosphorylation is required for actin recruitment at sites of bacterial adhesion and internalization.*](http://www.ncbi.nlm.nih.gov/pubmed/22042622) J. Cell Biol. 195:525-36.

[Stavru, F](http://www.ncbi.nlm.nih.gov/pubmed/?term=Stavru%20F%5BAuthor%5D&cauthor=true&cauthor_uid=21321208)., [Bouillaud, F](http://www.ncbi.nlm.nih.gov/pubmed/?term=Bouillaud%20F%5BAuthor%5D&cauthor=true&cauthor_uid=21321208)., [**Sartori , A**](http://www.ncbi.nlm.nih.gov/pubmed/?term=Sartori%20A%5BAuthor%5D&cauthor=true&cauthor_uid=21321208)., [Ricquier, D](http://www.ncbi.nlm.nih.gov/pubmed/?term=Ricquier%20D%5BAuthor%5D&cauthor=true&cauthor_uid=21321208). and P. Cossart. 2011. *Listeria* monocytogenes transiently alters mitochondrial dynamics during infection. [PNAS](http://www.ncbi.nlm.nih.gov/pubmed/?term=sartori+a+stavru) 108:3612-17.

Mostowy, S., Bonazzi, M., Hamon, M.A., Tham, T.N., Mallet,A., Lelek, M., Gouin, E., Demangel, C., Brosch, R., Zimmer, C., **Sartori, A**., Kinoshita, M., Lecuit, M. and P. Cossart. 2010. *Entrapment of intracytosolic bacteria by septin cage-like structures.* Cell Host Microbe 8:433-44.

Lepper, S., Merkel, M., **Sartori, A.**, Cyrklaff, M. and F. Frischknecht. 2010. [*Rapid quantification of the effects of blotting for correlation of light and cryo-light microscopy images.*](http://www.ncbi.nlm.nih.gov/pubmed/20384834)J Microsc. 238:21-6.

**Sartori, A.,** Gatz, R., Beck, F., Rigort, A., Baumeister, W. and J. M. Plitzko. 2007. *Correlative Microscopy: Bridging the Gap between Fluorescence Light Microscopy and Cryo-Electron Tomography*. J. Struct. Biol. 160:135-145.

V. Lucic, A. H. Kossel, T. Yang, W. Baumeister, T. Bonhoeffer and **A. Sartori**. 2007. *Multiscale Imaging of Neurons Grown in Culture: from Light Microscopy to Cryo-Electron Tomography*. J. Struct. Biol. 160:146-156.

M. Cyrklaff, P. Chandla, **A. Sartori**, S. Lepper. 2007. *Cryo-electron Tomography of Whole Cells: Three-dimensional Mapping of Intact Cellular Architecture*. Imaging and Microscopy 9: 50-53.

**Sartori, A.**, Johner, A., Viovy, J.-L. and J.-F. Joanny. 2005. *Theoretical Study of Comb-Polymers Adsorption on Solid Surfaces*. Macromolecules 38:3432-3441.

**Sartori, A**., Barbier, V. and J.-L. Viovy. 2003. *Sieving Mechanisms in Polymeric Matrices*. Electrophoresis 24:421-440.

**Sartori, A**. and A. O. Parry. 2002. *Critical Wetting in Power Law Wedge Geometries*. Journal of Physics: Condensed Matter 14:L678-L686.

Rascòn, C., Parry, A.O. and **A. Sartori**. 1999. *Wetting at non-Planar Substrates: Unbending and Unbinding*. Physical Review E 59:5697-5700.

**Book Chapters:** U. Fascio & A. Sartori,“*A correlative Microscopy: a combination of light and electron microscopy*”, in “Optical Fluorescence Microscopy: From the Spectral to the Nano Dimension”, Springer

**Conference Papers: 9**

**GRANTS**

2022-2024 **PFR6** (Programme Fédérateur de Recherche) grant : *“SI-CoV-2:* *Structural Imaging of precoce SARS-CoV-2 cell interaction”*, **leader** of **WP2 : “***Imaging virus cell surface interaction at the cell surface in vitro and in situ with correlation cryo-EM”***.** Coordinators: Jost Enninga & Anne Brelot, Institut Pasteur, Paris, France.

2020 **DIM ELICIT**: UltraPath – “*Pipeline for in cellulo ultrastructure determination of dynamic host-pathogen interactions”,* **participant.** Coordinators: Jost Enninga, Institut Pasteur, Paris, France.

2019 iNEXT funding (grant number 653706, funded by the Horizon 2020 programme of the European Commission), with Anna Pepe from C. Zurzolo’s lab.

2019 **PTR** (Transveral Research Projects*)* grant*: “InSCEMiX: Inhibitor Screening, Cryo-Electron Microscopy, X-ray studies of CyaA”,* **participant**. Coordinator: Alexandre Chenal, Institut Pasteur, Paris, France.

2016 **ANR** (Agence Nationale de la Recherche) grant: “*RIBOMAN: an integrative approach of ribosome biogenesis in human cells*” grant, **participant.** Coordinator: Pierre-Emmanuel Gleizes, LBME, Toulouse.

2008 **IBISA** (Infrastructures en Biologie Santé et Agronomie) grant. **Coordinator**: **Anna Sartori-Rupp**; 500k obtained as funds for the Tecnai F20 cryo-EM at the UBI.

2007 **SESAME** grant, **participant**, 150k obtained for a Gatan Ultrascan 4k camera for the Tecnai F20 cryo-EM at the UBI. Coordinator: Spencer Shorte, Institut Pasteur, Paris.

**COURSES ORGANISATION**

2021 **1st Image Processing for Electron Tomography *IPEMTomo* course** at Institut Pasteur, with Anastasia Gazi, UBI, Institut Pasteur.

2017 **2nd FBI CLEM course**: “*Correlative Microscopies: theory and applications*”, with Institut Curie & Institut Jacques Monod, Paris, France.

2013 **FBI course** “*CLEM workshop*” at Institut Pasteur, with Institut Curie, Paris, France

**ORGANISATION OF SCIENTIFIC SESSIONS AT CONFERENCES/**

**PARTICIPATION IN SCIENTIFIC COMMITTEES**

2022/2023 Member of the "PhD thesis following committee" of Benoit Gallet, IBS, Grenoble

2021 Organisation of the CLEM session in the COST COMULIS 2nd annual conference

2021 Scientific committee member for the *Sfmu conference*, Reims, France

2019 Member of the Jury for the PhD Viva of Olivier Gemin, Laboratoire de Biologie Cellulaire de la Synapse, ENS, Paris. Thesis director: Prof. Antoine Triller, ENS, Paris, France

2018 Scientific committee member for the “*Yeast Imaging Symposium*”, Toulouse, France

2010 Scientific session at the **Microscopy and Microanalysis** conference, Richmond, USA

2009 Scientific session at the Sfmu conference, Jussieu campus, Paris, France

**PARTICIPATION AND ANIMATION OF NATIONAL AND INTERNATIONAL NETWORKS**

* **COST COMULIS** (Correlated Multimodal Imaging in Life Science) EU action:  
  **co-chair of CLEM workgroup** **WG1** & **deputy member of the Management Committee**
* **FBI** (France BioImaging) representative for the UBI
* Member of: **Sfmu** (French EM society) and **CTLS** (Core Technology for Life Science)

**STUDENTS SUPERVISION**

* 2021/22, 2022/23 Supervision of a master student (Alice Marteil)
* 2006 - 2021 Supervision of one master student (Marie Roy), of a PostDoc (Anna Pepe) & of a third year degree student (Alice Marteil)

**TEACHING ACTIVITY**

2021 **1st Image Processing for Electron Tomography *IPEMTomo* course**, Institut Pasteur

2016 - 2021 **Master 2 “*Ingenierie de platforme*”,** Paris 5 Descartes University, Paris, France.

2021 **EMBO course:** “I*n-situ CLEM at Room Temperature and in cryo*”, EMBL, Germany.

2017 & 2019 **Course**: “*High- Accuracy CLEM: applications at RT and in Cryo*”, EMBL, Germany.

2019 **EMBO CLEM** **course** Bristol, UK.

2017 **2nd FBI course**: “*Correlative Microscopies: theory and applications*”, Institut Pasteur.

2013 **FBI workshop on CLEM**: “*CLEM days*”, Institut Pasteur, Paris, France.

2008 **Course on CLEM:** International School of Biophysics “Antonio Borsellino”, Erice, Italy.

1998 - 2001 **Physics tutorials**, Imperial College, London, UK, 100 hours/year.

**COLLABORATIVE PROJECTS**

2021/2022 Collaborative showcase project within the WG1-CLEM of the COST COMULIS EU

network: “*Developing a super-resolution cryo-correlative light and soft X- method for the intracellular tracking of polymeric nanoparticles*”, with Ori Avinoam (Weizmann Institute, Israel), Silvia Pujals (IBEC, Barcelona, Spain), and Paul Verkade (University of Bristol, UK).

2021 Collaboration with Benoit Gallet & Guy Schoen, IBS, Grenoble, France

Project: “*Resolve the structure of the protein-complex connecting chloroplast and mitochondria by cryo-electron tomography combined with cryo-lamellae in the diatom Phaeodactylum tricornutum*”, with Stéphane Tachon, NIC, I. Pasteur, Paris, FR

2020-2022 Collaboration with Matthias Eibauer & Ohad Medalia, University of Zurich, CH

Project: “*Polarity of actin in Tunnelling Nanotubes by sub-tomogram averaging and neural networks approaches*”.

2007 Collaboration with Pascale Cossart & Esteban Veiga, Institut Pasteur, France

Project: “*Study of clathrin structure surrounding large particles by cryo-CLEM*”.

2006-2007 EU, 6th FRP, EU Excellence frame network « 3D-EM ».WP 13: Correlative Microscopy

Participant. Coordinator: A. Engel (Biozentrum, Basel)

Project: LSHG-CT-2004-502828: “*New Electron Microscopy Approaches for Studying Protein Complexes and Cellular Supramolecular Architecture*”.

Collaboration with S. Marco, Institut Curie UMR759, Paris, France.

Project: “*Cryo-correlative microscopy of immunolabelled centrioles*”.

Collaboration with A. Koster & J. Valentijn, Université de Leiden, Hollande.

Project: “*Cryo-correlative microscopy of pancreatic granules*”.

2006-2007 Collaboration with Marek Cyrklaff & Friedrich Frischknecht, Heidelberg University, DE

Project: “*Cryo-correlative microscopy of GFP transfected Plasmodium Berghei*”.

2006 Collaboration with Jean-Louis Viovy, Institut Curie UMR 168, Paris, France.

Project: “*Cryo-EM of latex beads, coated with a PAM brush & proteins*”

2004-2005 Réseau de recherche allemand SFB563.

Project: “*3D structural studies of macromolecules and cells on rigid supports by the establishment of a correlation between fluorescence microscopy and cryo-electron tomography*”. Participant. Collaboration with Prof. A. Bausch, DE.

Project: “Cryo-electron microscopy of actin-myosin networks”.

**REVIEWER ACTIVITY**

Since 2008 Reviewer for J. Structural Biology and Nano Letters

**EQUIPMENT RESPONSIBILITIES & TRAINING ACTIVITIES**

Since 2012 **In charge of advanced cryo-microscopes and ancillary equipment:**

a Tecnai F20 cryo-EM, a Leica EMGP cryo-plunger and a Leica EM Thunder cryo-CLEM system, a Zeiss Axiovision fluorescent microscope

Since 2007 **Training** members and users of the EM facility in advanced methodologies:

cryo-EM, cryo-electron tomography, SerialEM automated acquisition, tomography reconstructions with IMOD, 3D rendering with Amira, Image analysis, fluorescent microscopy, (cryo-)CLEM

**INDUSTRIAL PARTNERSHIP**

* **Leica Microsystems**: design new cryo-grid holders for the Leica EM cryo-CLEM system
* **Thermo Fisher**: automated segmentation and quantification in tomograms with Amira

**IT SKILLS**

*Languages:* Fortran 77, MatLab, Mathematica;

*Operational Systems*: Linux, Unix, Windows;

*Application Software*: SerialEM, IMOD, Thermo Fisher tomography software, EPU, Amira, ImageJ, Photoshop, Latex, Excel, Word, PowerPoint, Xfig

**CONFERENCES**

24 Invited Talks in National and International Conferences; 11 Invited Talks in Scientific Institutes, 8 Talks selected from Abstracts.

***Invited Talks* in National and International Conferences & in Meetings**

2022 “Unravelling the Complexity of Biological Systems by Transmission Electron Microscopy” Lake Como School of advanced Studies, Como, Italy

2021 “#Wefreezeonthebeach” meeting, Institut de la Mer de Villefranche, IMEV and ONLINE

2021 COST COMULIS second annual conference (ONLINE)

2021 MMM conference, Maastricht, Nederlands (ONLINE)

2021 RIME-RTMFM azur colloque, Albi, France

2019 “COST COMULIS conference”, Vienna, Austria

2019 “MC - Microscopy Conference”, Berlin, Germany

2019 TOPIM Tech ESMI conference, Chania, Crete, Greece

2017 FBI 4th annual meeting: “Future challenges in BioImaging”, Inst. Curie, Paris, France

2016 CNRS “Journée sur la relocalisation d’échantillons”, Institut Pasteur, Paris, France

2014 “Méthodologies Avancées en MET pour la Biologie”, LBME, Toulouse, France

2013 “Facility manager meeting”, Zeiss, Munich, Germany

2010 “Imagopole Symposium”, Institut Pasteur, Paris, France

2009 “Nanoparticles workshop”, ENS Cachan, Paris, France

2009 “RCCM”, Lyon, Paris, France

2009 “Microscopy and Microanalysis conference”, Richmond, USA

2009 “Sfmu conference”, Jussieu campus, Paris, France

2008 Annual Meeting of the Cryo-microscopy Group of the Royal Micr. Society, Bristol, UK

2008 Institut Pasteur & Walter and Eliza Hall joint meeting, Melbourne, Australia

2007 “CMJ meeting”, Paris, France

2007 “GUMP meeting”, Cadarache, France

2007 “Dutch EM society annual meeting”, Groeningen, Holland

2006 “GN-MEBA meeting”, Paris, France

2005 “Histochemical Society meeting”, Leeuwenhorst, Holland

***Invited Talks* in scientific Institutes**

2021 Departmental retreat, Domaine des Bois-Francs, France

2021 Assemblée générale de la direction de la technologie, Institut Pasteur, Paris, France

2008 by Esteban Veiga, Centro Nacional de Biotecnologia, Madrid, Spain

2007 by Pierre-Emmanuel Gleizes at the LBME, Toulouse, France

2007 by Holger Stark, MPI of Biophysical Chemistry, Goettingen, Germany

2006 by C. Montecucco, Dept. of Biomedical Sciences, University of Padua, Italy

2006 by Spencer Shorte and P. Cossart at Institut Pasteur, Paris, France

2006 by Sergio Marco, Institut Curie, Paris, France

2002 by Armand Adjari, ESPCI, Paris, France

**Talks selected from Abstracts**

2019 “Integrative Structural Biology (ISB) conference”, Toulouse, France

2007 “MC - Microscopy Conference”, Saarbruecken, Germany

2007 “Third Annual Meeting 3DEM Network of Excellence”, Palma de Mallorca, Spain

2006 “The 16th International Microscopy Congress”, Sapporo, Japon

2005 "EM and X-ray Cryst. in Struct. Det." EMBO course, Gif-sur-Yvette, France

2005 "347 Heraeus Seminar: Dynamics of Cells and Tissue Struct.", Bad Honnef, Germany

2005 "HCS & SHF joint meeting", Leeuwenhorst, Holland

2005 "SFB 563", Ringberg, Munich, Germany

**Poster Presentations**

2021 Departmental retreat, Domaine des Bois-Francs, France

2019 “Integrative Structural Biology (ISB) conference”, Toulouse, France

2008 “Host-Pathogen Interaction Meeting”, Heidelberg, Germany

2007 “Third Annual Meeting 3DEM Network of Excellence”, Palma de Mallorca, Spain

2006 “4ICET” San Diego, USA

2004 "2004 MRS Fall Meeting", Boston, USA

2004 "Soft Matter Meets Solids: Perspectives in Multidisc. Res.", Donaustauf, Germany

2004 "334. Heraeus Workshop on Biofunctional Interfaces", Tutzing, Germany

2002 "IIGB: From Genome to Functional Analysis and Medical Applications", Capri, Italy

2002 "Rhodia", Bristol, England

2002 "HPCE 2002", Stockholm, Sweden

2000 "19th European Conference on Surface Science", Madrid, Spain

1999 "Solid and Liquid Interfaces", Castelvecchio Pascoli, Italy

1999 "Adriatico Research Conference on Wetting", ICTP, Trieste, Italy

**Conferences Participation**

2021 CCP, Diamond, UK (ONLINE)

2021 DIM Elicit (ONLINE)

2019 Crick EM Symposium: “Focus on Correlative Imaging Across Scales”, London, UK

2019 COST COMULIS CLEM workgroup meeting, Porto, Portugal

2018 FBI annual meeting, Bordeaux, France

2017 “Revolution in Structural Biology: Celebrating the 100th anniversary of Sir John Kendrew”, EMBL, Heidelberg, Germany

2017 Crick EM Opening Symposium: “EM: from Molecules to Organisms”, London, UK

2005 "EUPOC 2005", Gargnano, Italy

2003 "Biological Surfaces and Interfaces", Castelvecchio Pascoli, Italy

**TECHNICAL EXPERTISE**

**TECHNIQUES**

- (Cryo-)electron tomography - Widefield and confocal microscopy

- Cryo-FIB/SEM and cryo-lamellae - (Cryo-)CLEM workflows

- Ultramicrotomy of resin embedded & vitrified sample

**INSTRUMENTS** (autonomous user)

**(Cryo-)EM (cryo-)FLM**

- TFS Titan **Krios G3** - Zeiss widefield **AxioObserver** & **apotome**

with Gatan **K3** camera, **BioQuantum** energy filter, **VPP** - Zeiss confocal **LSM700**

- TFS **Aquilos** (upgrade to Aquilos 2 in Nov 2020) - Leica confocal **SP8**-

- FEI Tecnai **F20** TEM with **Falcon II** camera & Gatan **Elsa** - **Linkam cryo-FLM stage**

- Leica **EM GP** & TFS **Vitrobot** Mark IV - Leica **THUNDER Imager EM Cryo CLEM**

- Leica EM **UC7** (cryo-)ultramicrotomes

- Leica **EM ICE** HPF

**SOFTWARES** (autonomous user)

**(Cryo-)EM (cryo-)FLM**

- SerialEM - Leica LASX with CLEM & Thunder modules

- TFS EPU 2 & Tomography 5.3 - Zeiss ZEN & ZEN Connect

- TFS MAPS - Fiji

- IMOD

- PEET

- TFS Amira

**EM FACILITY ACTIVITIES (**Since 2007)

Training users: (Cryo-)EM, cryo-tomography, (cryo-)CLEM, SerialEM, IMOD, FLM microscopy, Amira, Image analysis with Fiji

In charge of maintenance: FEI Tecnai F20, Leica EM GP cryo-plunger,

Leica Thunder Imager EM cryo-CLEM,

Zeiss AxioObserver widefield microscope

Collaborative projects: With internal and external research groups

Keeping the facility state of the art: Implementing & developing cryo-CLEM workflows to study cells, viruses and host-pathogen interactions.

Interaction with LM and IT facilities & image analysis hub: For setting up 3D cryo-CLEM and tomography large data management

**INDUSTRIAL PARTNERSHIP**

Leica Microsystems: Collaboration (being signed). UBI: Leica demo center.

Carl Zeiss: cryo-CLEM with with cryo-Airyscan