



# 2<sup>nd</sup> ASTROTECH School "Studying Materials-Glial cells interfaces"

## 19<sup>th</sup> April -21<sup>st</sup> April

Area Territoriale della Ricerca di Bologna Via Gobetti 101, 40129, Bologna, Italy (Gotomeeting Link: https://meet.goto.com/561889837)

Organizing Commette: Valentina Benfenati, CNR-ISOF; Luca Maiolo, CNR-IMM; Emanuela Saracino, CNR-ISOF, Katherine Konstantoulaki, CNR-ISOF, Diletta Spennato, CNR-ISOF, Roberta Fabbri CNR-ISOF; Giorgia Conte CNR-ISOF.

## Tuesday, 19th April 2022

### 9.00-9.30 Workshop registration

9.30 Vincenzo Palermo – Director of CNR-ISOF Welcome and openings

9.35-13.00 - Session I - Materials-Glial-interfaces: inorganic materials fabrications and characterization - Chair: Valentina Benfenati

9.35 Valentina Benfenati - CNR-ISOF - School program overview-

9.40 Luca Maiolo, CNR-IMM

#### Flexible electronics based on inorganic materials for glial sensing

10.40-11.00 Coffee break

11.00 Matteo Ferroni-Vittorio Morandi, CNR-IMM,

SEM and TEM methods for materials surfaces and interfaces characterization

12.00 Andrea Candini, CNR-ISOF

AFM characterization of materials interfaces and surface properties

13.00-14.00 Lunch





14:00 Short visit to the clean room of the CNR-IMM in Bologna

14.00-15.30 CNR-IMM - TEM, SEM-FEG ed ESEM — Three groups of up to 5 people each, three 30 'slots that rotate on three instruments (Vittorio Morandi-Matteo Ferroni)

15.30-17.00 CNR-ISOF - Practical demonstration of AFM surface characterization (Andrea Candini). Cell culture plating, Cell Viability Assay (Emanuela Saracino, Giorgia Conte)

## Wednesday, 20th April 2022

(Gotomeeting Link:

https://meet.goto.com/561889837)

9.00-12.30 - Session II - Materials-Glial-interfaces: materials, interfaces and cell models- Chair: Luca Majolo

9.00 - Tamara Posati, CNR-ISOF,

Nanostructured Layered Hydrotalcytes and Silk Fibroin Biopolymers as materials for glial interfaces

10.00 - Emanuela Saracino, CNR-ISOF

Primary 2D and 3D cell culture models to study astrocytes

11.00- 11.30 Coffee break

11.30 - Valentina Benfenati, CNR-ISOF

#### Functional studies to characterize cell-materials interaction

12:30 - 14 Lunch

**14.00-15.30** Three groups of 5 ESRs each, three slots of 30' that rotate on three practical courses.

1)Hydrotalcite/Silk fibroin processing and film preparation (Tamara Posati, Marta Giannelli); 2)calcium imaging on primary neural cells (Roberta Fabbri, Giorgia Conte); 3)dynamic confocal imaging on 3D cell culture (Diletta Spennato-Chiara Lazzarini)

### 5 pm Bologna City Tour

21st April 2022

(Gotomeeting Link:

https://meet.goto.com/492729253)

## Tuesday 21st April 2022

9.30-12.30 - Session III - Science is not only Research - Chair: Valentina Benfenati

9.20 - Mila d'Angelantonio-CNR-ISOF - Sveva Avveduto-CNR-IRPPS - Mariangela Ravaioli-CNR-ISMAR- Associazione Donne e Scienza:

Gender issue impact on women scientific life: creating network between different skills for positive action in good quality, equitable and inclusive science careers





#### 10.15 - Michele Muccini- Mister Smart Innovation:

Scientific knowledge valorization: why and how to pursue it

11:00 - Giovanna Sotgiu- CNR-ISOF - Kerline srl

Keratin Biopolymer: from research to SME

## 12.00 conclusions and remarks

12.30-13.30 Lunch

13.30 - 17.30 @all ESRs and PIs

Preparation to mid-term review meeting with the PO

20.30 ASTROTECH Project Dinner at Cantina Bentivoglio

### Address for those who will stay at

Hotel Trevecchi
Via dell'Indipendenza, 47, 40121 Bologna BO





