

BIOS WORKWEEK 2022 – BRUSSELS AND PARIS

12TH MAY: VISIT TO IPGG, PARIS

S.No	Start	Stop	Event
1.	08:45	09:00	Arrival of BIOS group at IPGG and settling in
2.	09:00	09:20	Introduction talk from IPGG <i>Talk given by: Costantino Creton, Annie Colin</i>
	09:20	09:40	Introduction talk from BIOS <i>Talk given by: Prof. dr. ir. Albert vanden Berg</i>
	09:40	10:00	Talk from IPGG <i>Talk given by: Stephanie Descroix Curie</i> Title: The development of a new generation of /in vitro/ models is of interest in different fields such as basic research in life sciences to decipher physiological and patho-physiological mechanisms or for pharmaceutical industries to drastically improve drug screening process. Organ on chips (OoC) recently emerged as a promising new generation of /in vitro/ models. OoCs aim at recapitulating on-chip the main features of an organ such as the different cell types, the forces at play /in vivo/ or the ECM composition... Microfluidics thanks to its remarkable properties and versatility is now considered as a key technology for the development of such miniaturized microphysiological systems. In this presentation, I will discuss how microfluidics and microfabrication can be used to develop new relevant /in vitro/ models of tumor microenvironment. We will address the main following questions :How tumor microenvironment can be recapitulated on chip? What could we learn from tumor on chip models?
	10:00	10:20	Talk from BIOS <i>Talk given by: Prof. dr. ir. Mathieu Odijk</i> Title: <i>Micro- and Nanodevices for Chemical Analysis</i> Abstract: In this presentation I will demonstrate how micro- and nanofabricated devices can push the limits in chemical analysis. After a short general introduction, I will demonstrate two projects. (1) screening the heterogeneity of single catalyst particles using microfluidics, (2) our micromachined infrared and SERS structures embedded in flow reactors to conduct ultra-fast (microseconds), and highly sensitive spectroelectrochemistry.

3.	10:20	10:40	Coffee break
	10:40	11:00	<p>Talk from IPGG <i>Talk given by:</i> <i>Title:</i> liquid interfaces microengineering</p> <p>Abstract: Functional lipid droplets are a powerful tool to address immunological questions, when coupled to microfluidic devices. In this talk, I will present what our group has achieved so far in the field of phagocytosis, cell migration, and B cell antigen recognition, using carefully designed colloidal particles as biophysical probes, and microfluidic trapping arrays. In a second part of the talk, I will present how trapping arrays can be used to address plant development questions, and enzymatic activity quantitation.</p>
	11:00	11:20	<p>Talk from BIOS <i>Talk given by: Prof. dr. ir. Loes Segerink</i> <i>Title:</i></p>
4.	11:20	12:50	<p>Poster session 10 posters presented from BIOS and 10 postered presented from IPGG</p>
5.	12:50	14:00	Lunch at IPGG
6.	14:00	16:00	<p>Lab tours in groups of 5 people Visit lab 1: Stephanie Descroix Curie Visit lab 2: Michael Tatoulian Chime Paris tech Visit lab 3: Youcef Brahmi MIE ESPCI Visit lab 4: Clean room Visit lab 5: Mathieu Piel Curie Visit lab 6: Chen Baigl ENS</p>
7.	16:00	16:30	Coffee break
8.	16:30	18:00	Brainstorm session for students/ Pitching game/ Brainstorm for future collaborations with PI's
9.	18:00	20:00	Dinner at IPGG

Poster Titles TBA .