

# BONITOS

BONe InTerdisciplinary sympOSium

2023



June 2nd, 2023

University Claude Bernard Lyon 1,  
Lyon FRANCE

 **société de  
BIOMÉCANIQUE**



June 2nd, 2023

## HOW TO REACH THE PLACE?



### Mediatheque Paul Zech

Faculty of Medicine, Lyon Est,  
Building J.F. Cier  
8 avenue Rockefeller

Lyon (see page 3 for details)

**Commute with public transportation**

**From Downtown Lyon:**

Metro B - Grange Blanche ( about 20 min)

**SCAN BELOW TO REGISTER**



**CONTACT:**

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**Official email address: [bonitos.symposium@gmail.com](mailto:bonitos.symposium@gmail.com)**



**BONITOS** symposium gathers leading experts in bone tissue from all the disciplines (biology, biomechanics, mathematics,...) into one place. To discuss bones in all its research approaches, we propose a hybrid symposium between all other the world fellows and expect to strengthen international collaborations.

We are very proud to open the **third** edition of this kind!

**Welcome to BONITOS 2023 !**

### IMPORTANT DATES

April 3rd Pre program announcement

May 1st Deadline Abstract submission through email for both talk and speakers:

**[bonitos.symposium@gmail.com](mailto:bonitos.symposium@gmail.com)**

(.doc 500 words max, with title, names and affiliations)

May 9th Submission Results

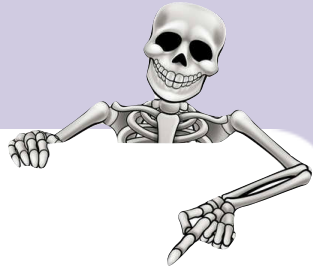
May 13th Full Program Announcement

May 16th Deadline Registration

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# PRE PROGRAM ANNOUNCEMENT

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## Schedule

### 08:30 Welcome attendees

09:00 Opening remarks H. Follet

09:15 **Keynote 1** **G. Huber**

09:50 Talk Session 1

### 10:35 Coffee Break

11:00 Workshop **P. Lasaygues**

### 12:00 Lunch

### 13:30 Poster Session

14:00 **Keynote 2** F. Peyrin

14:30 Talk Session 2

15:30 Poster Prize Announcement and Closing remarks **L. Pujo-Menjouet**

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## 9:15 KEYNOTE 1

RIGHT ANSWER, WRONG QUESTION

### **Gerd Huber Hamburg**

University of Technology  
Biomechanik  
Hamburg, Germany



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## 14:00 KEYNOTE 2

COMPUTED TOMOGRAPHY: THE FUTURE

IN BONE IMAGING

### **Françoise Peyrin**

Inserm, Creatis, ESRF  
Lyon, France



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## 13:30 WORKSHOP

BONE CELLS STIMULATED BY  
ULTRASOUND. SIMULATION OF WAVE  
PROPAGATION IN A PETRI DISH

### **Cécile Baron**

CRCN CNRS,  
IRPHé UMR 7342 CNRS/AMU/  
Centrale Marseille



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# GENERAL INFORMATION

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## LUNCH PLACE

Médiathèque - Buffet on site

## POSTER SESSIONS

Visio - 5 min each (no more than 3 slides for the talk)

## HOW TO COME TO LYON

**Airport:** Saint Exupéry airport

**Train station:** Part Dieu train station is the closest

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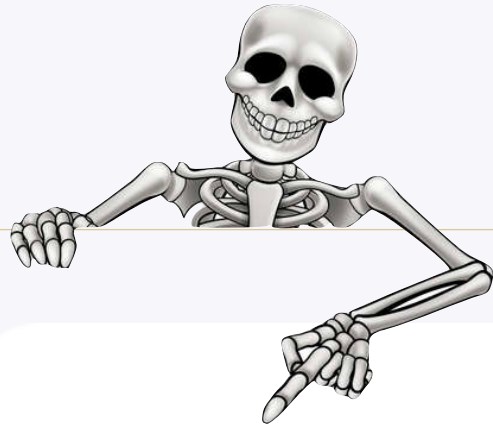
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# GOOD TO KNOW

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**Lyon** is not only one of the best french research poles, it is also one of the best in terms of gastronomy and *joie de vivre*.

**Before** and **after** the symposium, you can stay a couple of days more to enjoy the city and its great restaurants!



### Schedule

<b>08:30</b>	<b>Welcome attendees</b>	
09:00	Opening remarks	H. Follet
<b>9:15</b>	<b>Keynote 1</b>	<b>G. Huber</b>
09:50	Talk Session 1	
<b>10:20</b>	<b>Coffee Break</b>	
10:30	Workshop	<b>C. Baron</b>
<b>11:30</b>	<b>Lunch</b>	
<b>13:00</b>	<b>Poster Session</b>	
13:45	<b>Keynote 2</b>	F. Peyrin
14:15	Talk Session 2	
15:15	Poster Prize Announcement and Closing remarks	<b>L. Pujo-Menjouet</b>

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## PROGRAM AND TITLES



### MORNING / AFTERNOON

<b>08:30 am</b>	<b>Welcoming attendees</b>	<b>13:00</b>	<b>POSTER SESSION</b>
<b>09:00 am</b>	<b>Opening remarks</b>	1- W. Woolley (online) (Utah, USA)	
<b>09:15 am</b>	<b>KEYNOTE 1</b>	2- G. Ty (online) (New York, USA)	
	<i>Right answer, wrong question</i>	3- M. Hernandez-Guadarrama (Lyon, France)	
	<b>Gerd Huber (Hamburg, Germany)</b>	4- S. Touraivane (Paris, France)	
<b>09:50 am</b>	<b>TALK SESSION 1</b>	5- C. Baquié (Lyon, France)	
	<b>Computer Methods in Orthopaedics and Bone Research</b>	<b>13:45</b>	<b>KEYNOTE 2</b>
	1- Aurelie Levillain (Lyon, France)		<i>The present and future in X-Ray CT bone imaging</i>
	<i>Failure load prediction of metastatic femur: numerical modeling and mechanical characterization</i>		<b>Françoise Peyrin</b>
	2- Thomas Grenier (Lyon, France)	<b>14:15</b>	<b>TALK SESSION 2</b>
	<i>Deep learning for image analysis of bones: segmentation, denoising, and more</i>		<b>Recent Advances in Bone and Mineral Research</b>
<b>10:20 am</b>	<b>Coffee Break</b>	1 Claire Acevedo	
<b>10:30 am</b>	<b>WORKSHOP</b>	<i>Effect of lactation on spatial mineral distribution in murine bone</i>	
	<i>Bone cells stimulated by ultrasound. Finite Element modelling of wave propagation in a Petri dish</i>	2 Gunes Uzer	
	<b>Cécile Baron</b>	<i>Disruption of LINC complex in osterix positive progenitors results in decreased osteogenesis and trabecular architecture</i>	
<b>11:30</b>	<b>Lunch</b>	3 Abdennasser Chekroun	
		<i>Predicting Bone Mineralization by using a Stiffness-Dependent Gene Regulation Model</i>	
		4 Rémy Gauthier	
		<i>Osteocytes perilacunar and pericellular matrices as determinants of bone integrity</i>	
		<b>15:15</b>	<b>Poster Prize Announcement and Closing remarks</b>