

**DEPARTAMENTO DE INGENIERÍA BIOMÉDICA**

**International Research Experience in Biological Modeling (IRES- BM)**  
BME summer course (Main language: English)

**INTRODUCTION**

The International Research Experience (IRES) in biological modeling is a summer course offered by the department of Biomedical Engineering and it is going to take place in Villa de Leyva, Colombia from Monday June 18<sup>th</sup> to Saturday June 30<sup>th</sup> 2018. The experience has three main components: First, to learn from an expert the art of developing, implementing, solve and simulate biological systems. Second, to develop a high-quality research project led by doctoral students from Universidad de Los Andes (Uniandes) and Arizona State University (ASU) in a topic chosen by the students and guided by several faculty. Third, to participate and present the results of this work in an international workshop that is going to take place from Thursday June 28<sup>th</sup> to Saturday June 30<sup>th</sup> 2018 also in Villa de Leyva.

**METODOLOGY**

A four hours lectures in the morning followed by a 4 hours practical workshops in the afternoon. Students will find time to work on their projects at the time that best suits them.

Evaluation will be based on the home-works students make during the workshops and their projects that have to be presented both orally and in written.

**REGISTRATION INFORMATION**

Students must register for a 4 credit class, either at master level or undergraduate level. The registration covers: the class, course materials, transportation, hotel, meals and registration to conference. The venue is Hotel Duruelo. There are only 20 slots available for this class. Selection of students will be made on a merit basis. For more information

ask at *Coordinación Departamento Ingeniería Biomédica*. Students must have finished all level 2 courses in order to register for the class. Students from all programs in the university are welcome to apply. Due to the small number of students that can be accommodated applications should be made by e-mail to [jucordov@uniandes.edu.co](mailto:jucordov@uniandes.edu.co) before May 15<sup>th</sup>. Only selected students can register the class.

### **PARTICIPANT FACULTY**

<b>Name</b>	<b>Department</b>	<b>Role</b>	<b>e-mail</b>
Carlos Hernandez	Mathematics – University of Colima and Cornell University	Main instructor	carlos_hernandez@ucol.mx
Juan M. Cordovez (JMC)	Biomedical Engineering- Uniandes	Director	jucordov@uniandes.edu.co
Jose Arteaga (JRA)	Math- Uniandes	Co-director	jarteaga@uniandes.edu.co

### **PROJECTS and EVALUATION**

We want the projects to be the result of collaborative work. Lead students will present topics to registered students and will work in teams based on common interest. Students will develop their projects and have to present their results orally in an open session and must submit a manuscript that follow the guidelines for paper submission by a chosen journal. Two progress reports are scheduled so students can show faculty their advancement and discuss any possible issues.

### **SPONSORS**

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