



# SUMMER SCHOOLS

UNIVERSITY OF  
ANGERS-**FRANCE**

*Share your knowledge with  
international researchers and  
students from different countries  
and cultures.*

Vascular - Research - Cancer  
Bioinformatics - Plant science

[www.summerschools.univ-angers.fr](http://www.summerschools.univ-angers.fr)



# ANGERS

SUMMER SCHOOL ANGERS 2014



"Angers is the historical, political and economic chief town of the Anjou region and the 16th largest city in France. It is located in western France close to the Loire Valley, which is a UNESCO World Heritage and famous for its many châteaux and wines. Angers has a unique 12th century fortress which overlooks the Maine River and the world's largest medieval tapestry. With more than 30,000 students every year, it offers a very dynamic lifestyle with frequent cultural exhibitions and festivals all the year round. The city hosts several highly specialized research centres. In 2006, Angers was ranked one of the most business-friendly cities in France. Angers Medical School is close to the University Hospital Centre (CHU) and to the INSERM and CNRS laboratories." Thanks to the investments in developing and maintaining its "Green heritage" by preserving the biodiversity, Angers has been elected "France's Greenest City".

## Scientific program of the Summer Schools:

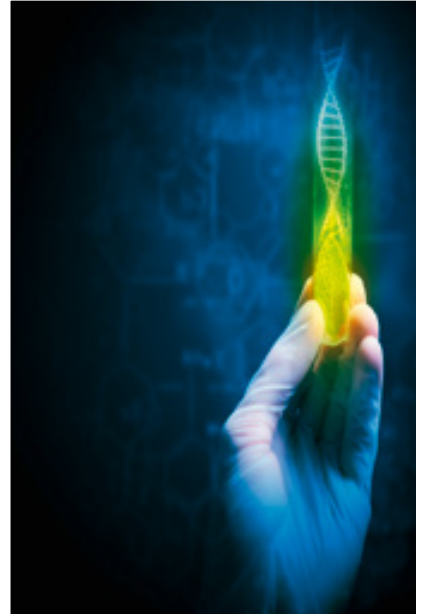
During these summer schools the students will be exposed to research methods in different medical/scientific fields. They will have the opportunity to meet international researchers and interact with European students in an intercultural and interdisciplinary context.

The 55-hours programs include lectures by international researchers (max. one hour) followed with questions and debates, Workshops organized in small groups of students, Visits of research institutions and, for some, Oral presentations on selected topics. The aim of these programs is mainly to give practical and interactive classes to students.



# BIOINFORMATICS

SUMMER SCHOOL ANGERS 2014



## 1st Edition 30th June – 12th July 2014 Faculty of sciences University of Angers

### Presentation:

The purpose of this summer school is to give students an innovative and interdisciplinary insight into the growing field of bioinformatics. The course is suitable for students from different backgrounds, including informatics, engineering, mathematics, biology, medicine, pharmacy.

The purpose is to give students the opportunity to be exposed to classical and original state of the art issues in this field and to facilitate their accession to advanced course degrees such as master programs

### Workshops:

Visits of international research institutes

- Bioinformatics platforms, University of Nantes

The program relies on interactive classes and hands-on activities. Several workshops are organized, among them

- "Creating a locus-specific database"
- "Analysis of a metabolic network"
- "Genomic data including Gene expression and high dimensional statistics (Software R)"

### Invited speakers:

- J. Weissenbach, Paris, France
- L. Jacob, Lyon, France
- A. Bockmayr, Berlin, Germany
- T. Vogel, Lyon, France
- R. Redon, Nantes, France

### Sessions:

Plenary conference by Prof Jean Weissenbach

Warm up session : Informatics for beginners or Biology for beginners

Session 1: Statistics and classification

Session 2: Clinicobiological Databases in genetics

Session 3: Applications and Pipelines "Next generation sequencing" (NGS) in genetics and genomics

Session 4: Bioinformatics and Business companies

Session 5: Microbial metagenomics

Session 6: Mapping, Structural note and NGS Data management

Session 7: Optimization methods for bioinformatics

Session 8: Ontologies

Session 9: Data structure

Session 10: Case study and guided exercises on "Computer modeling of living systems"

Session 11: Bioinformatics and Ethics

### Criteria:

The program is open to undergraduate students in informatics, mathematics, engineering, medicine, pharmacy interested in discovering the field of bioinformatics.

# PRACTICAL INFORMATION

SUMMER SCHOOL ANGERS 2014

## **Social program:**

Our summer schools not only offer you a fine selection of interesting courses and scientific visits. It also aims at giving the participants an unforgettable stay in France. Therefore we invite all students to an attractive social program, including excursions, sports and social gatherings and festivities. The activities will provide the perfect setting for you to get to know each other!

Few examples of socio-cultural activities: Welcome barbecue, Musical evening at the "Festival d'Anjou", Kayak session, free afternoon/evening in Nantes, Atlantic seacost day, Rowing session, Free afternoon/evening in Paris, Farewell dinner, etc.

These activities are mainly free (or cost no more than 5 euros).

## **Admission criteria:**

The selection of students will be made considering their motivation, English level and previous scientific experience, if any.

## **Application procedure**

Please complete the online application form and also submit the required documents under the following link: <http://summerschools.univ-angers.fr/schools/admission/online-application.html>

Number of places is limited to about 40 participants for each summer school.

**Application deadline: 1st May 2014**

**Final answer about your selection: 15th May 2014**

**Registration and payment deadline: 30th May 2014**

## **Fees**

700€ and include tuition, accommodation, lunches, scheduled excursions and extracurricular activities during the course. The Summer Schools do not cover the costs of passports, visas, health insurance, or travel to and from France.

Provided materials: access to the technological platform, university labs, university library, study rooms, multimedia- and videoconference rooms.

Each participant will receive a comprehensive binder containing all material presented in the summer schools, as well as a tram/bus pass for the two weeks.

A certificate of attendance and 6 ECTS will be delivered to the students.

## **Housing and catering**

Access to the university restaurants and residences.

Fully furnished single rooms with bathrooms and showers. Shared kitchen but no crockery, cutlery or cooking utensils. Please do take it with you.

Facilities include: IT/study room, laundry room, TV lounge, computer room, security phone & badges, wheelchair access, sports facilities, a doorman and a car park. In order to access the Internet all students should bring their own cable.

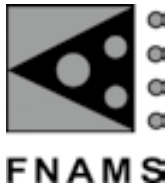




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