

Brief overview of ENSB

- The Higher National School of Biotechnology
- École Nationale Supérieure de Biotechnologie (ENSB) was founded on 2011;
- It is the single and only school of Biotechnology in Algeria;

*****ENSB opened it's doors in 2014 to more than 200 new students;

Today the number has encreased four times, around 800 engineering students study at the school.



• The School covers 3 hectars, with larges research and relaxing areas

It's devided in two main parts:

Administrative building and Pedagogical building



Consists of :

- The Director;
- The General secretary;
- Four Assistant-Directors;
- Two department heads;
- Administrative personnel.

- The Quality Assurance Cell office;

- The Entrepreneurship house.

ENSB Organisation Chart



• The pedagogical building has several floors which include: Several classrooms, 8 amphitheaters 30 educational laboratories

2 research laboratories (accountants since October 2018)



\circ Several halls with Technology plateforms





\circ A large Library





\circ A conference room





✓ The formation is organized in **2 cycles** :

1. The preparatory formation for **2** years.

2. The engineering formation for 3 years.

✓ To access the second cycle, students should pass an exam;

✓ During their 4th year at school, they could prepare a master degree if they want;

At the end, they will have engineering and master's degrees.

Types of Master's Degrees proposed by the school

1. Microbial Biotechnology

2. Plant Biotechnology

3. Environmental Biotechnology

4. Pharmaceutical Biotechnology

5. Biotechnology and health

The group responsible for training activities consists of:

10 Professors 26 associated Professors 16 assistants Professors 14 laboratory engineers

ENSB actively developes partnerships with leading

national and international universities, higher schools

and scientific research centers.

- ✓ The Ministry approved 5 research programs for the school;
- ✓ Since 2016, the research unit in immunology headed by
- professor Senhadji is implanted at the school;
- ✓ 12 students are enrolled in a doctoral program;
- \checkmark At the beginning of the year, ENSB proposed the
- establishment of a PhD school in Biotechnology.

A biotechnology's excellence pole in Constantine

Was established in July 2018

7 parts are brought together under this agreement:

Thematic Agency of Biotechnolgy







L'université des Frères Mentouri Constant



L'université Abdelhamid Mehri Constanti



L'université Salah boubnider Constantine 3





An Agreed Framework between biotechnology's excellence pole and JUVA Truffle Center's (Finland) was signed on february 2019.

Project Members

Director of ENSB



Biochemistry, molecular and cell biology

Assistant-Director of Information and Communication Systems and External Relations



Pr. BOUDAH Djamel

Physiology / Biochemistry



Dr KECHKAR Adel

Associate Professor class A Obtained his Doctorate at Bordeaux University (France) in Bioinformatics in 2013.
He is the head of Biotechnology department at National High School of Biotechnology, Constantine since April 2016.



Dr BENLOUNISSI Aïcha

Associate Professor class A

- Doctorat (Biochemistry and applied Microbiology);HDR;
- Head of a national research project;
- Master degree in e-learning;
- Certified as an expert in e-learning (Coselearn);
- Certified 11 times in T.I.C.



class A

- **Lecturer-Researcher** at the National Higher School of Biotechnology (ENSB) since 2015 and he coordinate the master's program in plant biotechnology.
- He worked during 3 years as **Graduated upper responsible for** scientific and technical activities at the Institute for Sustainable Agriculture (IAS-CSIC: Córdoba-Spain).
- He holds a **doctoral degree in Biosciences and agro-food sciences from Córdoba University (Spain).**
- His research activities focus on plant breeding for diseases resistance and plant-pathogen interactions studies.
- He participated in some international research projects such as ARIMNET, PRIMA and ABSTRESS projects and currently he is member of national lentil breeding project.
- He co-authored 07 papers in SCI Journals with IF, and 10 congress presentations.

Last three papers:

-Bani M, Pérez-De-Luque A, Rubiales D and Rispail N., **2018.** Physical and Chemical Barriers in Root Tissues Contribute to Quantitative Resistance to Fusarium oxysporum f. sp. pisi in Pea. **Front. Plant Sci.** 9:199.

-Bani, M., Cimmino, A., Evidente, A. Rubiales, D., and Rispail, N., 2018. Pisatin involvement in the variation of inhibition of Fusarium oxysporum f. sp. pisi spore germination by root exudates of Pisum spp. germplasm. Plant Pathology: 67: 1046-1054.

-Bani, M., Castillejo, M.Á., Rubiales, D., 2015. Understanding pea resistance mechanisms in response to Fusarium oxysporum through proteomic analysis. Phytochemistry 115, 44–58.



- Doctor of engineering of pharmaceutical processes;
- 2016- to this day: Quality Insurance Manager of ENSB;
- 2016- to this day: Coordinator of the support center for technology and innovation;

• 2011-2012 : Quality technical and scientific training at ONIRIS -National School of Veterinary Medicine, food industry and food Nantes Atlantique (formerly ENITIAA) for the regulation, management and quality control of products or services in the agro-food sector or related. (Quality management);

 2006-2015: Chief Inspector and Head of Physico-Chemistry department at the Algerian Center for Quality Control and Packaging (CACQE);

Internal Auditor;

Participate in an internal audit for the implementation of ISO
 26000 by a stakeholder within the Biscuiterie de l'Abbaye (Lower Normandy, France);

• Active member of the quality team of the laboratory (accredited ISO17025) (development of procedures and their implementation: responsible for the methods and validation of methods of analysis, inventory management, and equipment management);

Quality trainer: ISO17025, HACCP, ISO 14001, ISO 9001, ISO 22000, ISO 26000.



Degrees and Academic Distinctions

- Engineer in ecology

- Magister and PHD in Ecotoxicology

Professional Work History Chart

Associate Professor

class **B**

Dr BENTELLIS Alima

Having the art of transmitting, communicating and convincing allows me to succeed in everything I do.

From	to	Exact title of the post	Description of duties
10/2017	NOW	Private schools	Consulting in - The ethics and deontology in several domains -Marketing techniques Communication techniques -Loyalty techniques
		Teacher and research in Higher National School of Biotechnology	Teaching in - 1st year of the preparatory cycle - 1st year and 2cd year of master on environmental biotechnology
2013	10/2017	Private schools	Consulting in -The ethics and deontology in several domains -Marketing techniques Communication techniques -Loyalty techniques
		Head of department of the preparatory cycle and Teacher	Pedagogical Officer Allocation of lessons Planning management Teaching

From	to	Exact title of the post	Description of duties
2004	2013	Teacher and research Responsible for the specialty of ecology in University EL-Hadj Lakhdar of Batna (Algeria)	-Teaching - Design of programs of the License and Master of Ecology (LMD): Field of natural and life sciences, ecology of populations and stands.

RESEARCH FOCUS

Mobility of metallic traces elements in soils and plants.

Phytoremediation of soils polluted by metallic traces elements.

Composting techniques

Thank you for your attention