

ALMA MATER STUDIORUM Università di Bologna



Department of Agricultural and Food Sciences | DISTAL

MISSION

Promoting knowledge and scientific culture in agricultural and food sciences by advanced research



ALMA MATER STUDIORUM Università di Bologna

DISTAL

Born in 2018 as an integrated organisation incorporating all the teaching and research activities of the agricultural area of the University of Bologna



Agriculture & Forestry: UNIBO 1st out of 21 Italian Universities



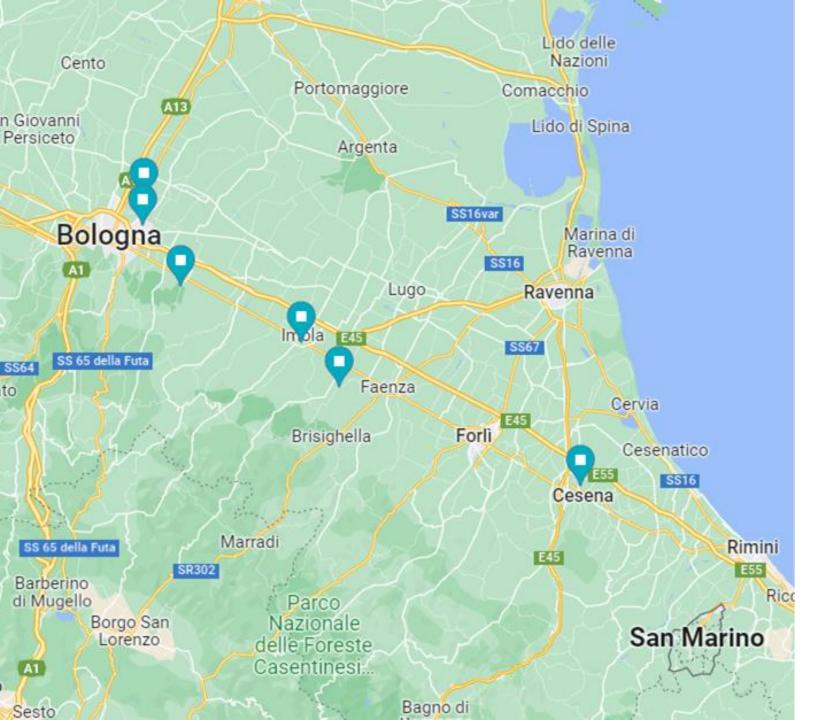


DISTAL LOCATIONS

Two main headquarters in: Bologna (BO) Cesena (FC)

Other teaching and research activities in: Ozzano (BO) Cadriano (BO) Imola (BO) Tebano (RA)





DISTAL SPACES

Research labs 31 for about 5.000 m²

Teaching labs about 1.000 m² **Computer classrooms** about 200 m²

Classrooms more than 2.000 m² **Greenhouse** more than 2.000 m²

Green areas

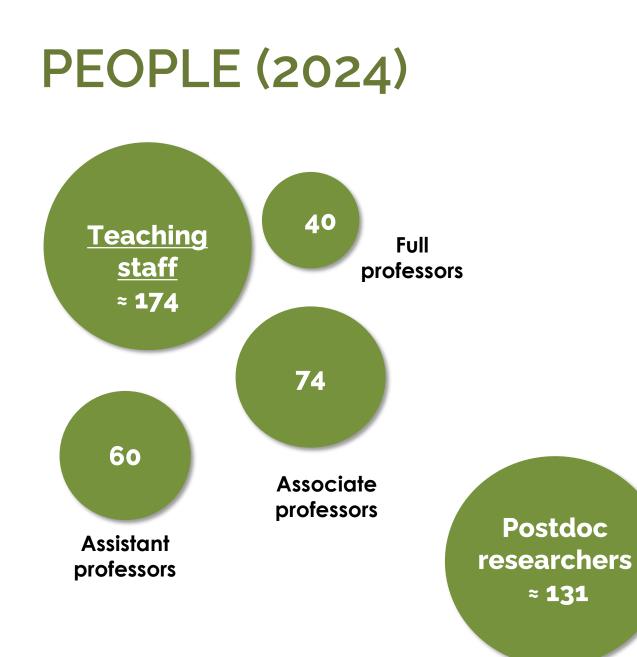
more than 7.000 m²

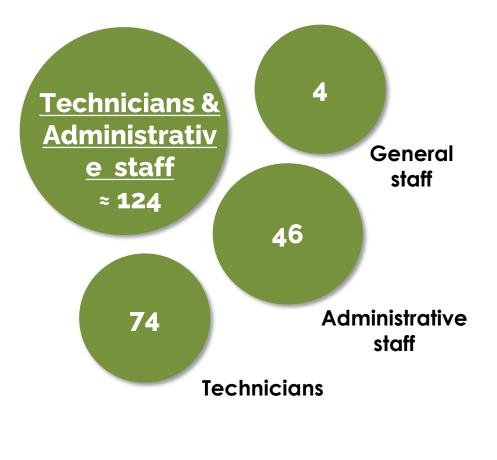
Study/lunch rooms

about 400 m²

Shade structures more than 100 m²











Agronomy and field, vegetable, ornamental crops



Agricultural and food economics



Agricultural chemistry, pedology and agricultural genetics



Agricultural engineering



Agro-environmental and food microbiology



Animal sciences

Mycology Chernelity Ch

Chemistry, biochemistry and botany



Food science and technology



Plant pathology and entomology



Fruit tree and woody sciences

10 RESEARCH AREAS

- <u>Agronomy and field, vegetable,</u>
 <u>ornamental crops</u>
- <u>Agricultural and food economics</u>
- <u>Agricultural chemistry, pedology and</u>
 <u>agricultural genetics</u>
- <u>Agricultural engineering</u>
- <u>Agro-environmental and food</u>
 <u>microbiology</u>
- <u>Animal sciences</u>
- <u>Chemistry, biochemistry and botany</u>
- Food science and technology
- Fruit tree and woody plant sciences
- Plant pathology and entomology



«GABRIELE GOIDANICH» LIBRARY OF AGRICULTURE Reference library in Bologna

<u>«LEON BATTISTA ALBERTI»</u> <u>CESENA CAMPUS LIBRARY - FOOD SCIENCE SECTION</u> Reference library in Cesena

Blocontrol News and

Main services:

- Library loan
- Interlibrary loan
- Document delivery

Useful links:

- <u>On-line books catalogue</u>
- On-line Italian catalogue of journals (ACNP)
- University librarian system



EDUCATION AND PROGRAMMES



– ALMA MATER STUDIORUM – Università di Bologna

TEACHING PROGRAMMES

PhD programmes Master degree programmes 8 Bachelor degree programmes





8 BACHELOR DEGREE PROGRAMMES

At Bologna campus

Agricultural Technology

Animal Production

Land and Agro-Forestry Sciences

Marketing and Economics of the Agro-Industrial

<u>System</u>

At Imola campus

Sciences and Technologies for Green and Landscape

At Cesena campus

<u>Food Technology</u>

Sciences and Culture of Gastronomy

Viticulture and Enology



ALMA MATER STUDIORUM Università di Bologna

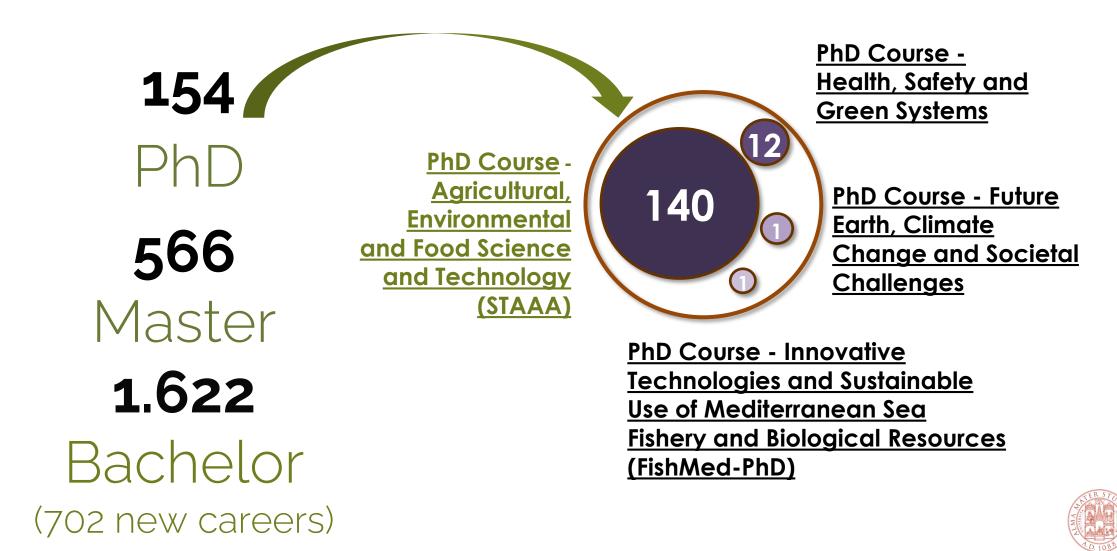
7 MASTERS DEGREE PROGRAMMES



| At Bologna campus | Agricultural Sciences and Technologies | |
|-------------------------------------|--|--|
| | Food Safety and Food Risk Management | |
| | International Horticultural Science | |
| | Planning and management of forest territory, landscape and environment | |
| Precise and Sustainable Agriculture | | |
| At Imola campus | Plant and agricultural biotechnology | |
| At Cesena campus | Food Science and Technology | |

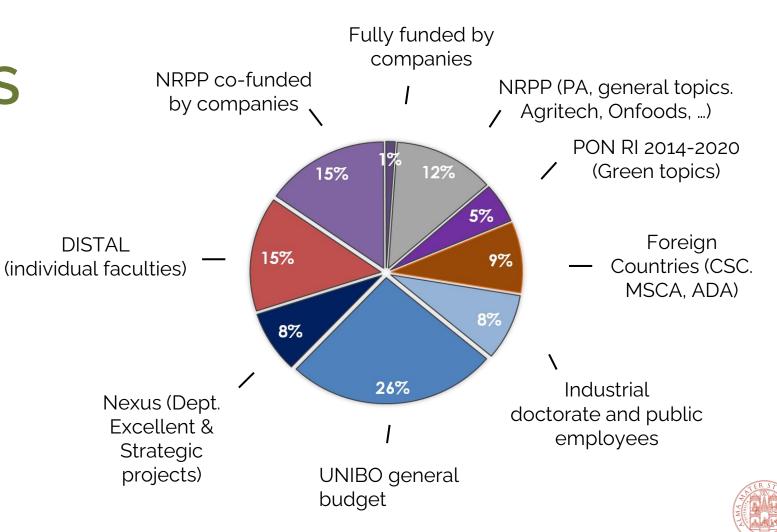


STUDENTS ENROLLED (A.Y. 2023/24)



DISTAL PhD PROGRAMMES

PhD positions activated (2021-2024)



STUDENTS' & GRADUATES' SATISFACTION

| 2023 | % |
|---|------|
| Students satisfied with teaching | 86 |
| Students satisfied with infrastructure | 93 |
| Graduated students satisfied with the degree program | 93 |
| Average satisfaction of Italian students in the same degree program class | 91.3 |

ALMA MATER STUDIORUM UNIVERSITÀ DI BOLOGNA

Source: RAD 2023 Focus didattica

EMPLOYMENT STATUS OF MASTER DEGREE GRADUATES

| YEAR | EMPLOYED 1 YEAR AFTER DEGREE % |
|------|-----------------------------------|
| 2020 | 85.1 |
| 2021 | 72.6 |
| 2022 | 88.6 |

Source: Alma Laurea



INTERNATIONAL DIMENSION



– ALMA MATER STUDIORUM – Università di Bologna

ENROLLED FOREIGN STUDENTS

| A.Y. | % |
|-----------|-----|
| 2019/2020 | 5.3 |
| 2020/2021 | 5.7 |
| 2021/2022 | 5.1 |
| 2022/2023 | 6.3 |

Enrolled students with previous foreign educational qualification or foreign citizenship on total of enrolled students.

Data source: RAD 2023

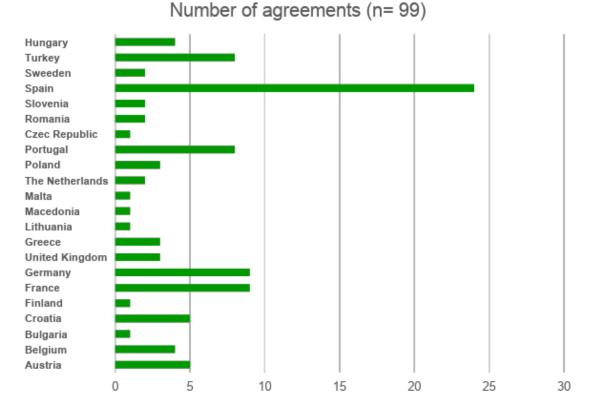


INTERNATIONAL MOBILITY WITHIN THE ERASMUS+ PROGRAMME

| A.Y. | No. active Erasmus+ agreements |
|-----------|-----------------------------------|
| 2019/2020 | 49 |
| 2020/2021 | 35 |
| 2021/2022 | 67 |
| 2022/2023 | 62 |

International agreements with at least one incoming or outgoing mobility of students or staff in indicated academic years (A.Y.)

Source: ALMA RM



Bilateral agreements for Erasmus+ programme KA1, mobility for students and staffs



EXCHANGE STUDENTS

| INCOMING STUDENTS | |
|-------------------|-----|
| A.Y. | No. |
| 2019/2020 | 43 |
| 2020/2021 | 28 |
| 2021/2022 | 61 |

Number of incoming exchange students involved in EU or extra EU mobility programmes in a.y. t/ t+1.

| OUTGOING STUDENTS | |
|-------------------|-----|
| A.Y. | No. |
| 2019/2020 | 67 |
| 2020/2021 | 44 |
| 2021/2022 | 91 |

Number of outgoing exchange students involved in EU or extra EU mobility programmes in a.y. t/ t+1.

Data source: RAD 2023



OUTGOING PhD STUDENTS

| YEAR | % |
|------|------|
| 2019 | 32.5 |
| 2020 | 18.2 |
| 2021 | 27.1 |
| 2022 | 31.4 |

Percentage of outgoing PhD students of DISTAL who have spent abroad at least 30 days on total number of PhD students enrolled in DISTAL courses.

Data source: RAD 2023



VISITING PROFESSORS & RESEARCHERS

| YEAR | No. |
|------|-----|
| 2019 | 40 |
| 2020 | 5 |
| 2021 | 23 |
| 2022 | 41 |
| 2023 | 42 |

Number of visiting professors and PhD students from international research institutions hosted by DISTAL

Data source: ALMA RM



RESEARCH AND RESULTS



– ALMA MATER STUDIORUM – Università di Bologna

9 MULTIDISCIPLINARY THEMATIC GROUPS



Water & agriculture



<u>Apidology & apiculture</u>



<u>Agriculture & climate</u> <u>change</u>



<u>Genetic resources</u>



Precision agriculture





Big data





Circular bioeconomy

Activities: openDISTAL, workshops & position papers





31 RESEARCH LABS

- Agricultural garden | Greenhouse complexes | Growth chambers
- Phytotrons & Plant Physiology Labs
- Agri-environmental Microbiology labs
- Agricultural Chemistry and Pedology Labs
- Animal Production Quality and Food Safety labs
- Experimental Economics in Agriculture, Food, Environment | FARE-La
- Applied research and food formulation | RAFA
- Enology, Beverages and Sensory Analysis | LEBS
- Nutritional Biochemistry Labs
- Chemistry, instrumental and sensory analysis of food | LACASS
- Seed Research and Testing | LaRAS
- Mycology and Applied Botany | LAMBA
- Agricultural mechanics Labs
- Food Characterization and Food Technologies | LCTA



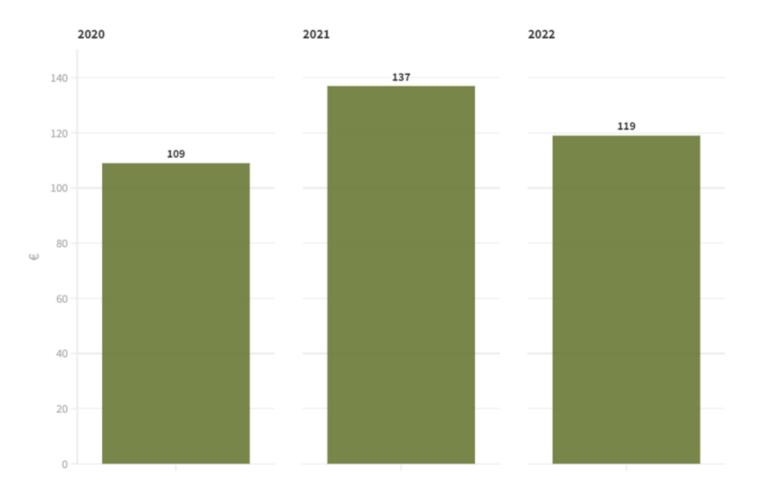
SCIENTIFIC PERFORMANCE OUTPUT (2022)

| Wos/Scopus total citations | 6,470 |
|---|-------|
| Wos/Scopus total citations by researcher | 50.9 |
| Number of publications/year | 648 |
| Number of publications/year by researcher | 4.0 |
| Publications with foreign co-authors | 43.7% |
| Interdisciplinary publications | 20.8% |



Source: RAD 2023

NUMBER OF COMPETITIVE INTERNATIONAL & NATIONAL PROJECTS (2020-2022)





Source: RAD 2023

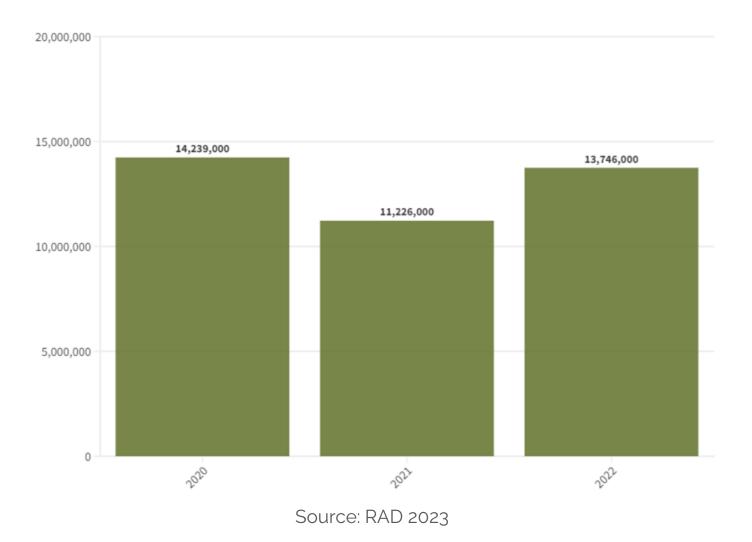
COORDINATED H2020 & HEU PROJECTS

| YEAR | No. of project | Total funding (Ml €) |
|-------------|----------------|-------------------------|
| 2014 | 1 | 0.434 |
| 2015 | 10 | 3.390 |
| 2016 | 8 | 3.879 |
| 2017 | 8 | 2.423 |
| 2018 | 6 | 1.555 |
| 2019 | 6 | 3.722 |
| 2020 | 3 | 2.118 |
| 2021 | 1 | 0.192 |
| 2022 | 1 | 1.285 |
| 2014 - 2022 | 44 | 17.448 |



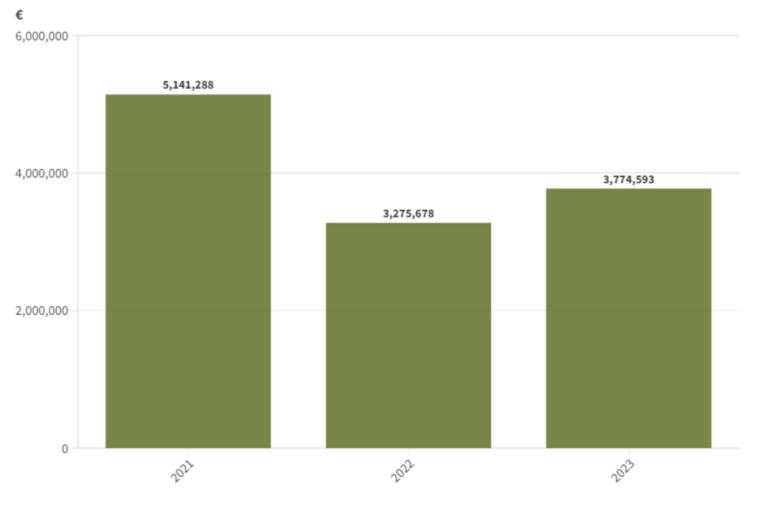
ALMA MATER STUDIORUM Università di Bologna

FUNDS FROM COMPETITIVE NATIONAL & INTERNATIONAL PROJECTS (2020-2022)





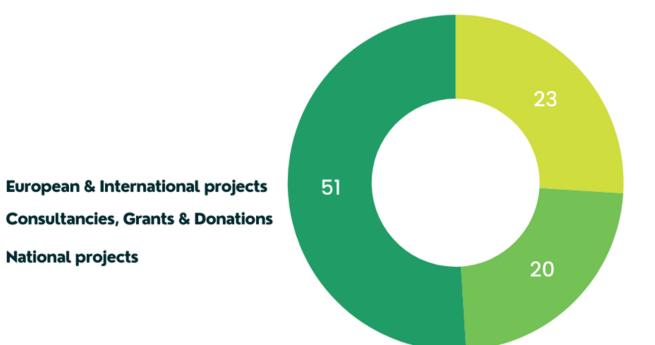
FUNDS FROM EXTERNAL CONSULTANCIES (2020-2022)





Source: RAD 2023

INCOMING FUNDS ~20 Million € per year (% average 2020-2022)





31

DISTAL CONTRIBUTION TO UNIVERSITY OUTREACH



– ALMA MATER STUDIORUM – Università di Bologna

PATENTS | PLANT BREEDERS RIGHTS | SPIN-OFF

- 25 Patent Families for a total of 83 patents
 - 58 granted 25 pending

• 34 plant breeders rights (link)

- 16 for cherries 4 for apples
- 5 for pears
- 9 for kiwi

• 3 Spin-off

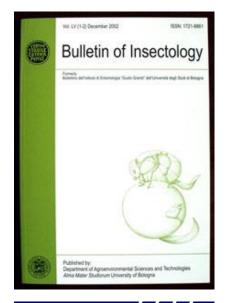
Aquaponic Design Ergo Consulting Last Minute Market





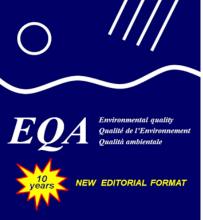
JNIVERSITÀ DI BOLOGN/

DISTAL OPEN ACCESS JOURNALS



Bulletin of Insectology

Publishes original articles mainly on morphology, biology, behaviour and physiology of insects and other arthropods; controls of insects, mites and other arphopods pests with particular reference to biocontrol and integrated pest management.



EQA – International Journal of Environmental Quality

Publishes original research or brief reviews and analyses dealing with the aspects concerning soil, water and air quality and the sustainable use of these environmental resources.



DISTAL COLLABORATIONS

154 BUSINESS COMPANIES

58 MUNICIPALITIES CONSORTIA ASSOCIATIONS NGOS





GUIDO GRANDI ENTOMOLOGICAL COLLECTION

Guido Grandi found in 1926 the Entomological Institute of the University of Bologna and soon gave a strong impulse to improve the entomological collections.

The collection is composed of several entomological boxes classified under the different Insect orders: ·15 Odonata; · 4 Blattoidea; · 2 Phasmoidea; · 26 Dermaptera; · 2 Mantoidea; · 40 Orthoptera; · 102 Hemiptera; ·36 Neuroptera; 3 Trichoptera; · 4 Mecoptera; · 292 Lepidoptera; · 299 Diptera; 461 Coleoptera; · 619 Hymenoptera

The «Guido Grandi» collection presents more than **51,000 specimens** belonging to approximately 3,000 different insect species.

Link to collection

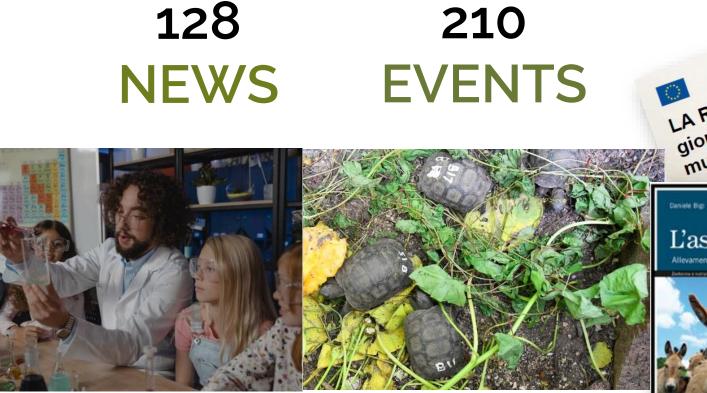




10.000 Bacterial strains, 9.000 of which belong to Bifidobacteriaceae family <u>BUSCOB website</u>



NEWS & EVENTS (2023)



Source: distal website



DISTAL SOCIAL NETWORKS



Subscribe to ours newsletter at DISTAL website

...thanks for your attention

