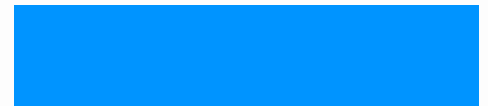


LIVINGLAB YEARBOOK

2022

Bio/Nano & ICT Technologies
ESIM



TABEL OF CONTENTS

03 LivingLab's Message

04 The LL in photos

05 LL Journey

06 Partner Profile

12 Events and Seminars

LIVINGLAB'S MESSAGE



Dear Transdairy Community,

, As we reflect on the accomplishments and strides of the Transdairy Living Lab throughout 2022, it is evident that our collective efforts have once again propelled us forward in the pursuit of excellence in dairy research and technology. The year has been a testament to our resilience, innovation, and the collaborative spirit that defines our community.

The Brokerage event, entrepreneurship sessions, and focus groups held in the past year have been forums for insightful discussions, cutting-edge presentations, and exchanging ideas that transcend disciplinary boundaries. Each contribution, from researchers, industry professionals, or our esteemed partners, has played a crucial role in advancing our understanding of the dairy value chain.

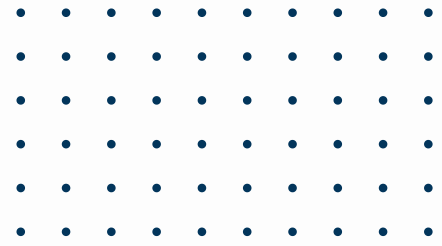
The Living Lab's commitment to addressing the complexities of the dairy industry through interdisciplinary collaboration has been truly inspiring. The presentations on biotechnologies, probiotic potential, and transformative technologies showcase the breadth and depth of our research endeavors.

As we look to the future, let us carry forward the momentum of our achievements.

LIVINGLAB PHOTOS



PARTNER PROFILE



**Higher School
Of Engineers
of Medjez El
Bab**

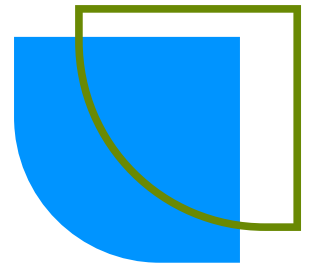


LL JOURNEY >>>>

Our Innovators



EVENTS AND SEMINARS



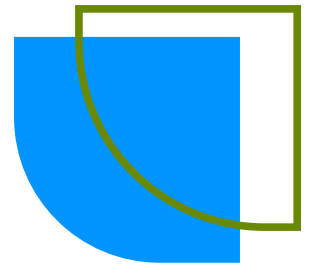
TRANSDAIRY launched entrepreneurship-training sessions to promote spin-off creation in the dairy sector

The Higher School of Engineers of Medjez El Bab (ESIM) launched in Tunisia the TRANSDAIRY entrepreneurship training sessions dedicated to the creation of cross-border Spin-offs specialized in Bio-nano and ICT technologies applied to dairy value chain (DVC).

These training sessions are dedicated to researchers, SMEs, start-ups, young and women entrepreneurs working on the application of the Bio/Nano and ICT technologies in dairy value chain. Through the provided lessons, participants will have the opportunity to acquire specific knowledge related to entrepreneurship and innovation, the transfer of technologies from the laboratory to the market, the DVC products consumption, Internationalization, pitching, etc.



EVENTS AND SEMINARS



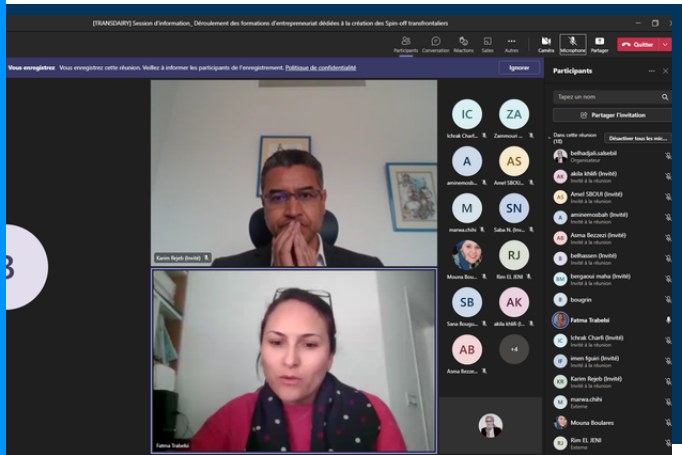
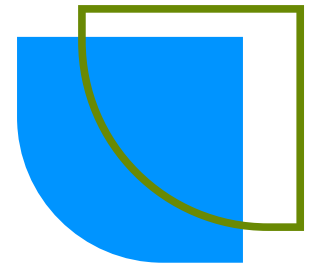
In order to communicate the call for training courses, ESIM team organized from 28 February to 15 March 2022 door-to-door meetings with researchers and professionals working on the bio-nanotechnologies, ICT and DVC citing STIAL Delice Danone, CTAA, INSAT, ISBST, ENMV Sidi Thabet, GIVLAIT, ESIAT, CRM Sousse. The visits aimed to communicate the topics of courses and to highlight the opportunity given by TRANSDAIRY project to transform the innovative ideas into business spin-off.



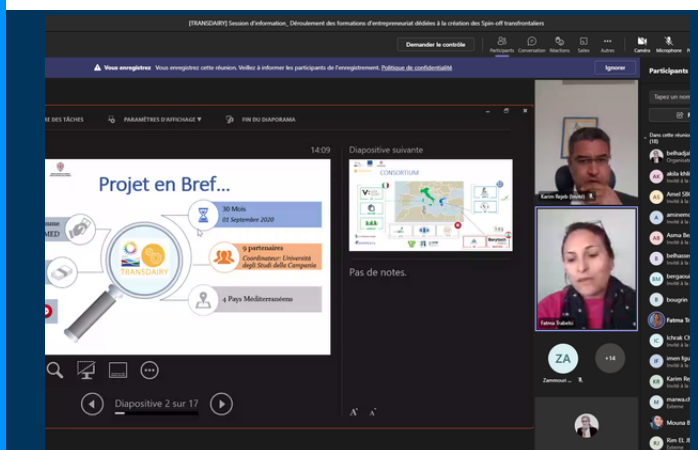
On April 01, 2022, a focus group (FG), composed of representatives of researchers, professionals and private sectors, met to review training sessions applications and conduct interviews with candidates. The aim of this meeting was to choose candidates that present potentialities for creating the specialized spin-offs. The selection of candidates was made considering the criteria of the relevance of the project idea, scientific publications and patents, professional experience, experience in the dairy value chain field. After the evaluation, the members of the FG agreed on the acceptance of 24 candidates.



EVENTS AND SEMINARS



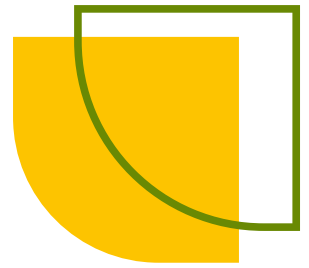
After that, the formative sessions started on April 5th, 2022 for the two groups in Bio-nanotechnology and TIC, and they will last in three months with a frequency of two training days per week presented by senior experts in their field. This training program started with three online courses: design thinking, initiation to spin-off creation and entrepreneurship.



These trainings continued in the over Three months with series trainings courses. The topics covered by these two consecutive training programs are namely : Strategy innovation, opportunity for ACT and nano-biotechnology, social entrepreneurship, business creation, dairy products consumption, business creation, DVC environmental sustainability, marketing, trademarks, graphics, safety and security, internationalization, pitching.



EVENTS AND SEMINARS



Researchers & Young Entrepreneurs pitch their future spin-offs in Tunisia

The pitching sessions were animated by debates during which questions were asked to the speakers and advice and recommendations were offered by senior researchers in Bio/Nano, ICT, and DVC, expert in intellectual property and innovation process, experts in the spin-off creation, industrial in DVC and communication coach.



EVENTS AND SEMINARS



TRANSDAIRY brings together a cross-border community of researchers, entrepreneurs and decision-makers in Tunisia (First day)



After eighteen months of hard-working in the TRANSDAIRY Living Labs to enhance the Technological Transfer and entrepreneurship among research, industry, and SMEs in the fields of Key Enabling Technologies (KETs) applied to the Dairy Value Chain (DVC), the Higher School of Engineers of Medjez El Bab (ESIM), and the associate partner Livestock and Pasture Office (OEP) offered an excellent opportunity to the TRANSDAIRY Living Labs innovators from Italy, Lebanon, Greece, and Tunisia to meet in the cross border brokerage event in Tunisia, to pitch their innovative solutions, compete each other, and built cross border collaboration and networking. This event started with an opening session inaugurated by the Tunisian decision-makers, the representatives of the ENI CBC med program, and the coordinator of the TRANSDAIRY project.

EVENTS AND SEMINARS



After a word of welcome by Prof. Hassen Kharroubi, General Director of ESIM, Prof Hichem Ben Salem, General Director of the Agricultural Institution of Research and Higher Education (IRESA), as well as Prof Hichem Sebai, President of the university of Jendouba have underscored the IRESA and university roles' and efforts in bolstering researchers' entrepreneurs' creativity.



Pr. Hassen KHARROUBI



Pr. Hichem BEN SALEM



Pr. Hichem Sbei

After that, Prof. Helmi Merdassi, General Director of the Management Unit of the European Union Framework Program for Research and Innovation in the Ministry of scientific research and Higher Education took the floor to congratulate the team of ESIM for having committed to this particular project deals with the entrepreneurship and innovation and highlighted that this topic is a current challenge in Tunisia and one of the priorities of the European program.

Mrs. Salwa Chatti, representative of the cross-border cooperation direction in the ministry of economy and planning praised how important TRANSDAIRY project is, by saying:" If we are meeting today, it is obviously because Transdairy is an excellent project, you are indeed aware of the tri-competitive nature of financing within the framework of cross-border cooperation which is allocated to the best project".



EVENTS AND SEMINARS



Then, the ENI CBC Med programme was presented by Dr. Khaled Saadany, Senior Expert of Education, Research & Innovation of the Joint technical secretariat, who expressed his thanks for the good organization of this special event that offered an excellent opportunity to meet all stakeholders with researcher's entrepreneurs, and he hopes that it will be very fruitful for the prosecution of the TRANSDAIRY project. Then he presented the new NEXTMED programme, its aims, and its horizons.

Additionally, Eng. Zied Kbaier project officer of Education, Research & Innovation of the Joint technical secretariat, presented the performance indicators of Tunisian participation in the ENI CBC MED programme.



Last but not least, Prof Luigi Zeni, the principal coordinator of the TRANSDAIRY project assured that the event was not only about coming up with ideas or evaluating pitches but also about boosting networking among innovators and building borderless relations that will create new business opportunities in the Mediterranean basin area.

The inaugural session was closed with the intervention of Dr. Fatma Trabelsi, communication manager of the TRANSDAIRY project, and the ESIM coordinator. She highlighted the opportunities and grants that TRANSDAIRY offers to all participants and proudly explained how satisfied to meet all distinguished guests.

EVENTS AND SEMINARS

Furthermore, to boost the synergies between the ENI CBC Med projects of the cluster innovation, a specific session was dedicated to presenting the activities of the INTECMED and PPI4Med projects by the Tunisian partner the National agency for the promotion of scientific research (ANPR) through its coordinator Mrs. Souad Boussaid and Mrs. Sonia Zgarni, respectively.



Mrs. Souad BOUSSAID



Mrs. Sonia ZGARNI

After the synergy session, it was time for the potential entrepreneurs to take a stand and present their creative projects. In fact, Twenty-Two creative projects, from the four countries, were presented during a two-hours pitching session.

EVENTS AND SEMINARS

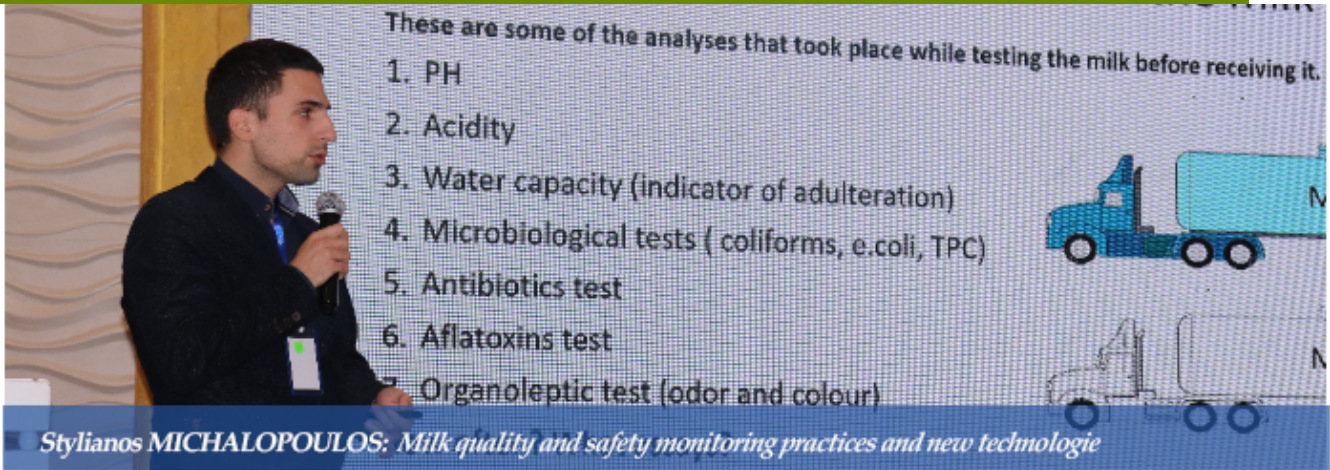
THE LIVING LAB OF THE INDUSTRY AND INNOVATION PROMOTION AGENCY (APII) IS REPRESENTED BY TWO ENTREPRENEURS;



EVENTS AND SEMINARS



THE LIVING LAB OF THE AGRICULTURE UNIVERSITY OF ATHENS (AUA) IS REPRESENTED BY THREE ENTREPRENEURS;



These are some of the analyses that took place while testing the milk before receiving it.

1. PH
2. Acidity
3. Water capacity (indicator of adulteration)
4. Microbiological tests (coliforms, e.coli, TPC)
5. Antibiotics test
6. Aflatoxins test
7. Organoleptic test (odor and colour)

Stylianos MICHALOPOULOS: Milk quality and safety monitoring practices and new technologie



Konstantinos KOLLIAS: Traceability system, animal nutrition software





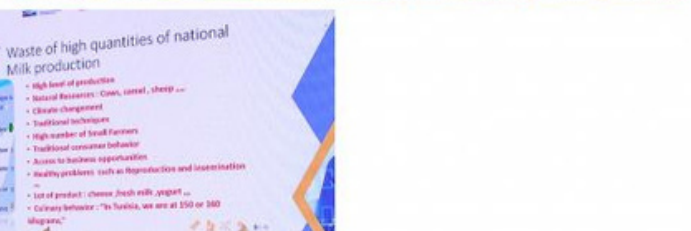

SYLCO HELLAS

- SYLCO is situated in Greece
- Is in the farm equipment busine

EVENTS AND SEMINARS

THE LIVING LAB OF THE HIGHER SCHOOL OF ENGINEERS OF MEDJEZ EL BAB (ESIM) IS REPRESENTED BY NINE ENTREPRENEURS;

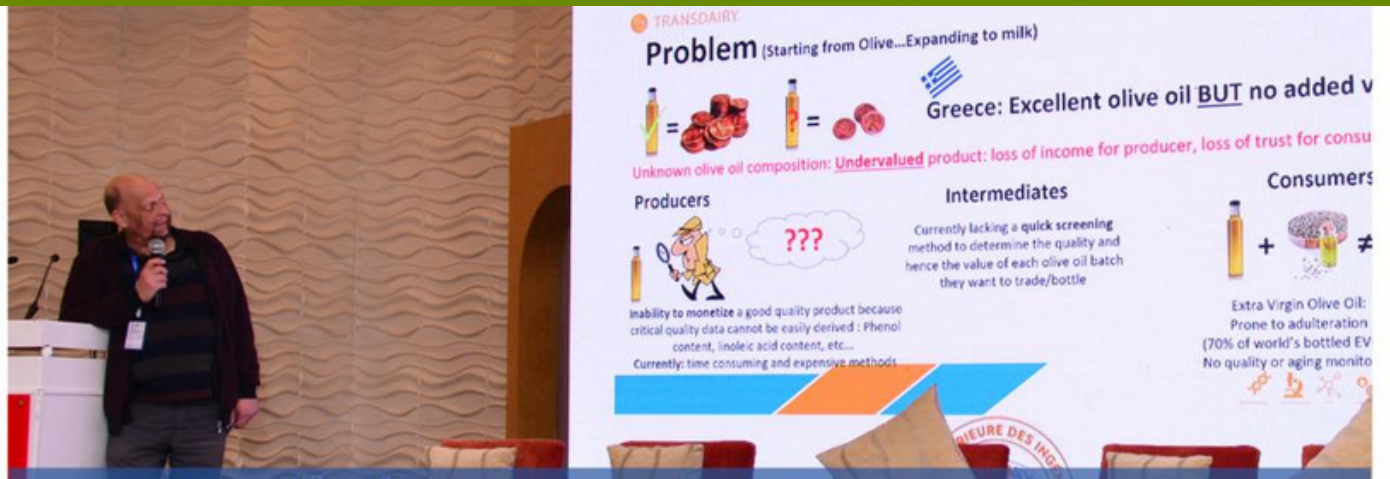
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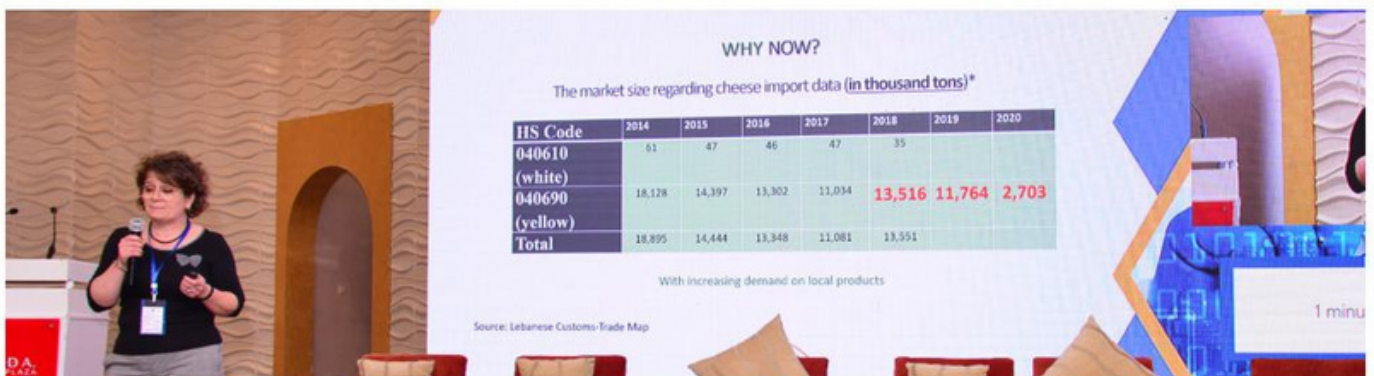
EVENTS AND SEMINARS



THE LIVING LAB OF THE INSTITUTE OF COMMUNICATIONS AND COMPUTER SYSTEMS (ICCS) IS REPRESENTED BY ONE ENTREPRENEUR;



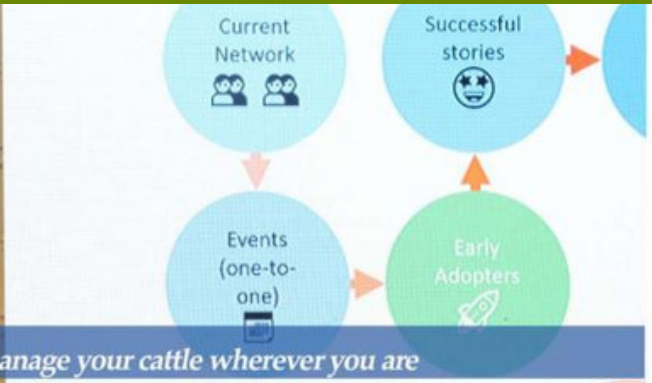
THE LIVING LAB OF THE INSTITUTE OF COMMUNICATIONS AND COMPUTER SYSTEMS (ICCS) IS REPRESENTED BY ONE ENTREPRENEUR;



EVENTS AND SEMINARS



THE LIVING LAB OF THE UNIVERSITÀ DEGLI STUDI DELLA CAMPANIA "LUIGI VANVITELLI" (UCLV) IS REPRESENTED BY THREE ENTREPRENEURS;



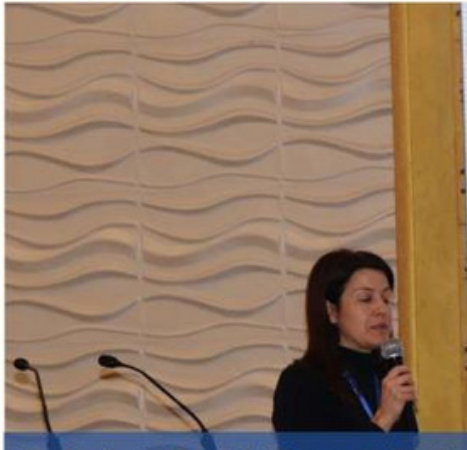
Dr. Giacomo TROMBI: Agrizapp - We help you better manage your cattle wherever you are



THADREMI

We plan for the new year to increase our range of products from the Dairy cheese, etc. etc.
 Made in Italy Bio is looking for Excellence in the Organic Dairy supply chain promoted through the website.
 Our business model has no intermediaries, just us and the customer!

Eng. Giovanna DE MICCO: Made in Italy bio : Commercaillizing natural and bio DVC products



TRANSDAIRY

Business charac

SAU 200ha
 ↓
 40ha alfalfa
 11ha pasture and 50ha gr
 100ha rotatin 200ha lact
 Corn barley
 Polyphyte meadow
 Automatic milking s

Dr. Stefania Daniela Zampetta De Luca: Tenuta Vannulo : History, tradition and innovation

EVENTS AND SEMINARS



The pitch session was closed by a fruitful debate during which questions were asked to the speakers and some recommendations and advice were suggested by the senior researchers in Bio/Nano, ICT, and DVC, the experts in intellectual property and innovation process, the experts in the spin-off creation, national and international donors, industrial in DVC and entrepreneurship coaches.

Among the TRANSDAIRY brokerage event goals is to boost networking for all young entrepreneurs with financing institutions, business incubators, and business angels. To do it, B2B matchmaking and round table session were organized in which all guests participated in two main groups dedicated to ICT & Bio/Nanotechnologies applied to DVC. During this session, entrepreneurs took other business opportunities and extended their network by receiving several collaboration proposals.



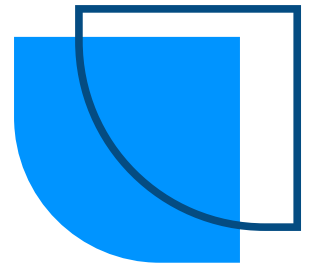
EVENTS AND SEMINARS



The first day of this cross-border brokerage event was closed by a coffee-talk break, a convivial opportunity for all TRANSDAIRY Living Labs innovators of Italy, Greece, Lebanon, and Tunisia to discuss future synergies for developing co-patent and co-publications.



EVENTS AND SEMINARS

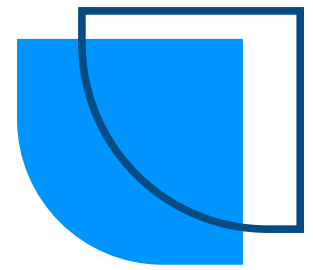


TRANSDAIRY innovative Minds Compete for Success in Tunisia

On the second day, during three competitions, the TRANSDAIRY project offered the Living Labs innovators the floor to convince three honorable juries of experts from the four countries to get vouchers for prototypes, co-publications, and co-patents.



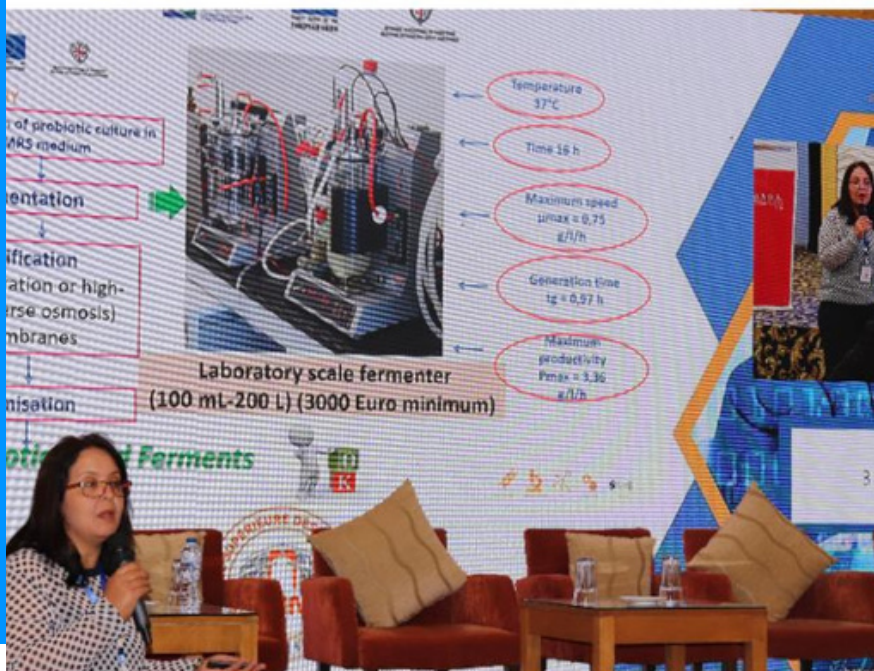
EVENTS AND SEMINARS



TRANSDAIRY innovative Minds Compete for Success in Tunisia

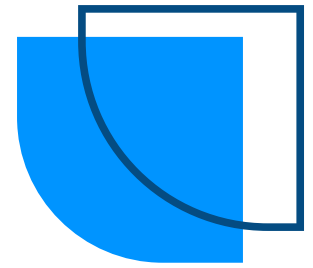


During the first phase of the competition, twelve brilliant innovators took over and pitched their ideas with the will and determination to hoist the prize. A member of the honorable jury stated that the competition was fierce and choosing a winner was challenging. They were impressed by the high quality and enlightening presentations, which not only featured innovative and unique ideas, but also very original solutions presented by the candidates.



THE JURY MEMBERS PRAISED THEIR SOLUTIONS' ORIGINALITY AND THEY GIFTED THE WINNERS VOUCHERS FOR 8 PROTOTYPES, 2 CO-PUBLICATIONS, AND 2 CO-PATENTS

EVENTS AND SEMINARS

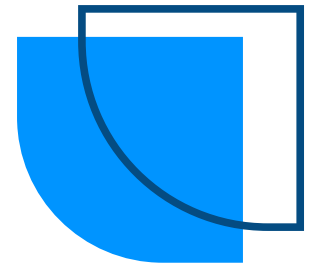


Eight participants were able to be chosen as winners and won a prize of €4000 each.

- .Mouna BOULARES: Valorization of natural resources in the dairy value chain: from animal feed to functional products
- Imen GHRAM: Conception of a biosensor to detect bacteria in milk
- Amel SBOUI: Camel milk and dairy products: the next superfood
- Rim EL JENI: Probiotic bacteria: Dairy production promoter
- Salma BESSALAH: Caminova : Camel skin. From waste to gold
- Imen MAHMOUDI: Production of industrial freeze-dried probiotic lactic culture
- Akila KHLIFI: Voltammetric electronic tongue based on nanocomposite for discrimination of milk quality
- Maha BERGAOUI: Making cheese with Tunisian vegetable rennet



EVENTS AND SEMINARS



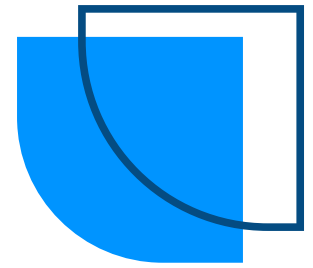
The Brokerage Event has provided unique opportunities for Living Labs innovators to establish future collaborations and partnerships and progress a step closer to their dreams via developing two clusters for co-publications.

The amount of this prize was up to €2000.

- Cluster 1:
 - Dr. Imen Ghram
 - Dr. Alejandra OLAY CHEU
 - Dr. Amel SBOUI
- Cluster 2:
 - Eng. Sabah CORM
 - Dr. Mireille KALLASSY
 - Dr. Giacomo TROMBI
 - Dr. Rim EL JENI



EVENTS AND SEMINARS



Last but not least, the third competition session was preserved for the co-patent clusters in order to win €8000 and it was for:

Cluster 1:

- Dr. Imen GHRAM
- Dr. Akila KHLIFI

Cluster 2:

- Dr. Mouna Boulaares
- Dr. Amel Sboui



**The dream has just begun,
Stay tuned for more.**

