

# FALLING WALLS LAB Tunisia

24 May 2023

Tunisian Higher Institute of Applied Studies in  
the Humanities, University of Tunis



Deutscher Akademischer Austauschdienst  
German Academic Exchange Service

## CONCEPT

The Falling Walls Foundation founded Falling Walls Lab in 2011 to:

**CONNECT** aspiring innovators

**DISCOVER** and develop talents

**SUPPORT** interdisciplinary dialogue and international cooperation

**DEVELOP** new ways of scientific communication

**BUILD** new and strong networks

## TIMELINE

Master of ceremony: Martin Lampprecht

09:30-10 am	Participant arrival and registration/ Jury briefing
10:00 am	Welcome and introductory remarks
10:15-10:35 am	Pitches (Molka Nasraoui - Sirine Aouni – Rawen Zaafrani - Ahmed Mannai)
10:35-10:55 am	Networking break/ Jury session
10:55-11:15 am	Pitches (Narjes Bouguerra - Nadia Ben Aissa – Eya Boughanmi - Mohamed Ouerghi)
11:15-11:35 am	Networking break / Jury session
11:35-11:55 am	Pitches (Syrine Chabchoub - Imen Difai - Chaher Dhaoui - Sabine Chtioui)
11:55-12:25 pm	Networking break / Jury session
12:25 pm	Awards ceremony / Group picture

# JURY

## 1. Pr. Leïla Najjar, Jury Chair

### *SUP'COM*

Pr. Leïla Najjar received the Engineering Degree from Ecole Polytechnique de Tunisie in 1997, the Master's Degree in Automatic and Signal Processing from Ecole Supérieure d'Electricité Supélec, France, in 1998, and the Ph.D. Degree in sciences from the University of Paris XI, France, in 2002.

She joined the Higher School of Communication of Tunis (SUP'COM) as an Assistant Professor in 2006, where she is currently and since 2013 a Full Professor in Telecommunications. She conducts her research activities in the research laboratory Communications, Signal and Image (COSIM) of SUP'COM. Her current research interests are in the fields of statistical signal processing and signal processing for wireless communications. She supervised several MSc and PhD, as well as post-docs. She coauthored more than 20 publications in impacted scientific journals and 70 publications in ranked international conferences.

From 2020, she is the internship Director in SUP'COM, charged of International Relations and Partnership with Companies.

## 2. Dr. Sana Mami Kefi

### *Mediterranean School of Business (MSB)*

Sana Mami Kefi is an Associate Professor of Economics at the Mediterranean School of Business (MSB) in Tunis and a coordinator of the South Mediterranean University Research Center. She holds a PhD and a MSc in Economics from the University of Quebec at Montreal (UQAM). Prior to joining MSB, she worked as a Consultant for the Development Research Department of the African Development Bank (AfDB). She also was a Teaching Assistant at the UQAM. Her research interests include development economics, economics of immigration, household choices and economics of education.

### 3. Dr. Ahmed Debez

*Centre of Biotechnology of Borj-Cedria (CBBC)*

Dr Ahmed Debez is currently working as Associate Professor at the Centre of Biotechnology of Borj-Cedria (CBBC) (Tunisia). He is the member of the Laboratory of Extremophile Plants (LPE) since 2019. After completing his Agronomics Engineer studies at the "Institut National d'Agronomie" (Algiers), he obtained a DEA in Plant Ecophysiology and a PhD in Plant Biology at the Sciences Faculty of Tunis, respectively in 1999 and 2005. He was recruited as Assistant-Professor at the CBBC in 2011 and obtained his "Habilitation universitaire" at the Sciences Faculty of Tunis in 2017. Dr Ahmed Debez focuses in his research on the characterisation and valorisation plants native of extreme (mainly saline and arid) environments. At the fundamental level, his activities aim at unravelling the mechanisms enabling these unique plants to thrive in such hostile conditions, by using multidisciplinary approaches. At the applied level, the environmental and economic potentials of halophytes are mostly emphasized. Dr Ahmed Debez has a long international experience, especially with Germany. Indeed, he is a former fellow of both the German Academic Exchange Service (DAAD) and the Alexander von Humboldt Foundation, respectively as PhD student and later as post-doctoral researcher at the Institutes of Botany and Plant Genetics (Department of plant proteomics) at the Leibniz University of Hannover (Germany). Besides, he was selected in 2013 as member of the Arab-German Young Academy of Sciences and Humanities (AGYA). He has published 80 articles in International peer-reviewed journals and 15 book chapters related to his research topics. He is member of the Tunisian Association of Biotechnology and the International Plant Proteomics Organisation.

### 4. Dr. Julius Dihstelhoff

*Merian Centre for Advanced Studies in the Maghreb (MECAM)*

Dr. Julius Dihstelhoff has served since May 2020 as Academic Coordinator for the international "Merian Centre for Advanced Studies in the Maghreb (MECAM; [www.mecam.tn](http://www.mecam.tn))", which is based in Tunis. He is also post-doctoral research fellow in the Department of Politics at the Centre for Near and Middle Eastern Studies (CNMS) at Philipps University Marburg. His research focuses on Political Islam and German foreign policy in the Arab world since the so-called "Arab Spring" of 2010/2011, with a special focus on Tunisian transformation processes.

## 5. Manel Matmati

*Industrial Company of Canned Food (SICAM)*

Manel Matmati is an Agronomic Engineer with 4 years of experience in industrial crop production and transformation. Working directly whether in technical assistance or production planning, she is in constant interaction with the different actors alongside the canned food value chain.

Specialized in agricultural production, Manel uses that experience to manage the harvest and transformation of the product within the quality standards.

By focusing on developing the food chain production in Tunisia, Manel has been able to put the agricultural production degree to good use.

Over the years MATMATI has been a part of many Projects that directly impact the community of crop producers in Tunisia by implementing innovative techniques regarding Mushroom production in urban farming or sustainable tomato production and transformation.

She also has a master in Biotechnology and Horticultural Genetics from the Mediterranean Agronomic School of Chania, Greece; and had the chance to participate in the Postgraduate training course, food chain in Agriculture in Germany.

In her free time Manel is a Nature lover and likes spending time outdoors with friends and family."

## MASTER OF CEREMONY

**Martin Lampprecht**

*Manouba University*

Martin Lampprecht, born 1976, is currently teaching German language, history and literature as a DAAD lecturer at Manouba University. Following his studies in Heidelberg, Vienna and Berlin, he gained a Master's degree in modern German literature from Humboldt University, Berlin. He subsequently taught at various universities in Germany, France and Lebanon. While working as a DAAD lecturer at the University of Aix-Marseille, he continued his studies and obtained a second Master's degree in film studies and documentary filmmaking. He has been living and working in Tunisia since 2022.

# PRESENTERS

- 1** Molka Nasraoui  
National School of Advanced Sciences and Technologies of Borj Cedria  
Molka Nasraoui is an engineering student at the National School of Advanced Sciences and Technologies of Borj Cedria (ENSTAB), specializing in advanced electronics and nanotechnology. She has gained professional experience through summer internships at the Research Laboratory in Smart Grids and Nanotechnologies (LaRINa) and the Devoteam company, where she worked on projects related to plant growth monitoring systems using deep learning algorithms and the migration of an industry's infrastructure to the Azure cloud. In addition, she is a co-founder of initiative H'art. Molka Nasraoui has also completed several academic projects, including the synthesis of a smart hydroponic system and the development of a crowdfunding platform. She completed her preparatory cycle in physics and chemistry at the Faculty of Sciences of Tunis (FST) from 2018 to 2020 before pursuing her engineering degree.
- 2** Sirine Aouni  
Private Higher School of Engineering and Technology (ESPRIT)  
I'm Sirine Ouni, actually i'm a Telecommunication engineering student specialized in Internet of Things Systems and Services (IoSyS) in the private higher school of Engineering and Technology (ESPRIT) and Master of research student specialized in cyber physical systems at the higher institute of applied sciences and technology in Mateur (ISSATM). My studies in ISSATM started in 2016 where I obtained my bachelor degree in 2020 and my final year project was achieved in Telebec Underground Communications Research Laboratory (LRTCS) School of Engineering University of Quebec at Abitibi-Temiscamingue (UQAT) in which i designed two antennas for wireless body area network (WBAN) applications. For now, I'm working on how to optimize the reconfigurable intelligent surfaces for better underground communications as a final year research project for the master thesis.

**3 Rawen Zaafrani**  
Higher Institute of Applied Sciences And Technology of Sousse  
S As a second-year electromechanical engineering student at higher Institute of Applied Sciences And Technology of Sousse, I am versatile, self-motivated, and autonomous. My passion lies in exploring the intersection of electrical and mechanical systems, and I thrive in the challenges of designing and optimizing complex engineering solutions. Currently pursuing my Bachelor's degree, I have already gained hands-on experience in various projects involving robotics, automation, and control systems. I am proficient in solidworks and arduino, programming languages such as Python, Matlab and C++. Outside of my academic pursuits, I enjoy staying active by participating in sports and outdoor activities such as dancing, reading. These experiences not only help me maintain a well-rounded lifestyle but also enhance my problem-solving abilities and teamwork skills.

**4 Ahmed Mannai**  
Université Virtuelle de Tunis  
I am Ahmed Mannai, a dedicated student and accomplished professional in computer science. I hold a Master's degree in Computer Science and currently work as a System Engineer. I have participated in the Med2IAH program and actively contribute to finding solutions for student mobility and internationalization. With a strong technical background and commitment to progress, I strive to make a positive impact in the

field of computer science and beyond.

**5 Narjes BOUGUERRA**  
National School of Electronics and Telecommunications of Sfax  
I, Narjes Bouguerra, am a passionate student engineer currently in the third year of the Engineering Cycle in Data Engineering and Decisional Systems at the National School of Electronics and Telecommunications of Sfax. I hold a Bachelor's degree in Computer Science applied to Management, which I obtained in 2020 from the Higher Institute of Business Administration of Sfax, part of Sfax University. With a strong interest in Data Engineering, Data Analytics, Data Science, and Development, I demonstrate a dedicated approach to my academic and professional pursuits. I have gained practical experience through engineering internships, where I developed machine learning models and worked on integrating new functionalities into an ERP CRM software package. Additionally, I have been involved in various academic projects, including implementing an English/Arabic dialect model and developing an E-Commerce application for traditional items. I have also showcased my skills through personal projects, such as an intelligent computer system utilizing Blockchain and IoT and projects involving handwriting recognition, data scraping, fraud detection, and creating sales reports. Outside of my technical pursuits, I am a poet, actively participating in poetry events at both the Tunisian and Arab levels. I have also achieved recognition in

hackathons and held positions in student organizations.

**6 Nadia BEN AISSA**

Faculty of Legal, Political, and Social Sciences in Tunisia.

Nadia BEN AISSA is Ph.D.

Candidate in Public International Law, affiliated with the Faculty of Legal, Political, and Social Sciences in Tunisia.

She is an alumna of several Academies and Workshops: the Arabic Association for the Constitutional Law Academy (6th session), the San Remo Institute of IHL (Italia), ICRC Africa, and the CIL Academy (between 2021 and 2023).

She took part in the Tunisian NDC discussions about Gender and Human Rights in 2021 and won the Best Team Prize in the LawAthon competition (Fight Against Corruption) in 2020.

Actually, she is an independent consultant working on Gender and Minorities, Human Rights, and Climate Change.

**7 Eya Boughanmi**

University of Tunis El Manar

My name is Eya Boughanmi, a second-year Ph.D. student at the University of Tunis El Manar working in the laboratory of Analytical Chemistry and Electrochemistry, under the supervision of Pr. Nouredine Raouafi and Mme. Mouna Marrakchi. I'm currently conducting my research on the development of bioanalytical platforms for disease diagnosis and environmental monitoring. Besides my studies, I work as an ambassador and scientific animator, where my mission is to conduct scientific workshops for kids and youth in various fields of science contributing to fostering their scientific curiosity and

developing their critical thinking skills.

During my research journey, I was able to acquire strong research skills in the field of biosensor technology, bionanotechnology, and analytical chemistry, as well as good competencies in project management and communication skills. The ability to work on biosensors, a powerful tool capable of detecting small traces of molecules, has driven my entrepreneurship interests and inspired me to apply my research to practical issues. Therefore, I had the idea to create BIOTRACK, a point-of-care start-up for early diagnosis of leishmaniasis in dogs. To embrace the business world, I took part in the UTM-Innov competition, where I came out on top by winning the first prize.

**8 Mohamed OUERGHI  
ENAU / ETHZ**

Mohamed OUERGHI is an experienced consultant in regional development and urban policies, validated through in-depth research. As a member of ISOCARP/AESOP, he advocates for digitally enabled citizen engagement for sustainable futures. Given his expertise, he would be an excellent fit for Falling Walls Lab, a global pitch competition offering participants a unique opportunity to network with experts from science, business, and policy-making. As a potential contender for the Breakthrough Winner title, Mohamed's skills and experience would undoubtedly be a valuable asset to the competition, which is organized by the Falling Walls Foundation and supported by various academic institutions and companies.



**9** Syrine Chabchoub  
Polytechnic School of Tunisia  
S My name is Syrine CHABCHOUB I'm a doctor and Civil engineer from the Polytechnic School of Tunisia. The scope of my PhD thesis was to investigate the fatigue behavior of bituminous mixes (EME 14) under cyclic loading. As part of my research work, I had the chance to spend several research stays in Montreal and in the United Arab Emirates. Currently, I am a professor of Civil Engineering and I am working on the promotion of the application of plant-based and recycled materials (Neem Oil, Nanomaterials and Crumb Rubber...) to produce asphalt binders that are both greener and more sustainable.

**10** Imen Difai  
Higher Institute of Applied Sciences and Technology of Sousse  
I am a second-year electromechanical engineering student specializing in automotive mechatronics at the Higher Institute of Applied Sciences and Technology of Sousse. My passion for mechanics and electronics led me to enroll in this field and pursue my studies with determination and rigor. I have acquired strong skills in the areas of mechanics, electronics, and computer science, as well as a deep understanding of mechatronic systems. And I am confident that dreams will one day become the reality I have always wished for to be able to create my own project in autonomous vehicles. My ambition is what drives me to venture into the challenging aspects of life. I am also a social

person who loves adventure and travel, especially to explore unfamiliar cultures and beliefs. Music and singing are also my companions to whom I turn to in difficult times because, to me, they are like a soothing balm for the soul.

**11** Chaher Dhaoui  
Virtual university of Tunis  
My name is Chaher Dhaoui, and I'm currently pursuing a Bachelor's degree in Information and Communication Technology. Graduating in July 2023, I'm thrilled to be working on my final year project, which is the realization of a long-standing dream. It all began during my first License in Science and Techniques of Physical and Sports Activities when I obtained my diploma in bodybuilding and fitness training. Furthermore, I've earned certificates in TRM (Theory of Reinforcement Muscular), APA (Physical Activities Adapted for the Elderly), and Aerobic from ISSEP Tunis. Given my passion for sports and fitness, I was inspired to create a platform that would assist strength coaches in designing personalized training plans for athletes and easily tracking their progress. This project represents the culmination of my academic journey, blending my technical expertise with my knowledge of physical training. In terms of work experience, I'm currently working as an Odoo developer at Tunisofts. I'm responsible for development, technical support, configuring SQL data, PDF and XLSX formats reports, web service, data synchronization between two Odoo applications, linking mobile and web applications with Odoo via API,

and development of custom models based on customer requests. Before that, I founded a company, where I was responsible for website development, development of specifications, wireframing, and hosting.

## 12 Sabrina

Institut Supérieur de gestion industrielle de Sfax

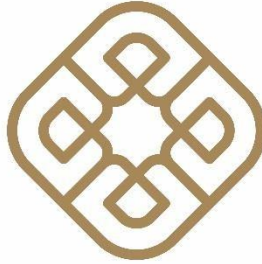
Currently, I am pursuing a master's degree in Industrial Engineering with a focus on research. Throughout my academic journey, I have actively engaged with various associations and clubs, where I have gained valuable experience and contributed to their missions. These experiences have allowed me to develop strong leadership skills and a deep understanding of collaborative work dynamics. What truly ignites my passion is entrepreneurship and startup creation. I find immense joy in exploring innovative ideas and transforming them into viable business ventures. The dynamic nature of the startup ecosystem fascinates me, and I am always on the lookout for opportunities to contribute my skills and knowledge in this field.

In addition to my academic pursuits, I hold a deep appreciation for volunteer work. I believe that it provides an invaluable opportunity to make a positive impact on society while building meaningful connections with like-minded individuals. I thrive on building new relationships and strongly believe in the power of collaboration to drive change and innovation.

FALLING  
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**PARTNERS**

**ميكام**  
مركز ميريان  
للدراستات المتقدمة  
في المنطقة المغاربية



**MECAM**

Merian Centre  
For Advanced Studies  
In The Maghreb