



Co-funded by the Erasmus+ Programme of the European Union



IMCert

Immune Modulation Certificate For Post Graduate Students Enabled by Blended Learning



First report for IMCert project (first 6 months)



IMCert
Immune Modulation Certificate
For Post Graduate Students Enabled by Blended Learning

Internal Evaluation Report
ASU

Erasmus+ Co-funded by the Erasmus+ Programme of the European Union

[AZHU] [ULEI] [UL] [NKUA] [ASU] [DMU] [CU] [ASWU]

IMCert Quality Assessment (WP 6)



Ain Shams University [ASU]
Coordinator



Descriptive Information

- **Name of Program:** Immune Modulation Certificate for Post Graduate Students Enabled by Blended Learning
- **Reference number:** 619017-EPP-1-2020-1-EG-EPPKA2-CBHE-JP
- **Type of the Project:** Erasmus+ Program of the European Union for Capacity Building in field of Higher Education. Call for proposals 2020 - EAC/A02/2019
- **Funder:** Erasmus+ Program of the European Union
- **Period of evaluation:** From M1-M6
- **Total Project time plan:** (36 Months) starting from 15th January 2021 and will be ended on 14th January 2024
- **Objective:** This aim of this WP is twofold: to ensure the quality of the project as a whole and of the various activities, as well as to evaluate it. It will be largely based on the Quality control and monitoring plan [QCMP] which will be adopted in the early stages of the project. The aim of the QCMP is to support project coordinator and WP leaders in ensuring highest quality of project outputs, activities, and results, as well as in improving project performance. It should support decision making by delivering necessary evidence to introduce any significant changes, should they be needed.

1st IMCert ACTIVITY REPORT

[15th January 2021 -14th July 2021]

Progress Against Deliverables & Milestones

1. Project Preparation / Communication/management (WP1)

- 1.1 Kick-off meeting and appointments of other 4 physical meeting with consortium**
- 1.2 Consortium agreement plan [financial plans]**
- 1.3 Subcontracting outline**
- 1.4 Mapping stakeholders' needs and possible inputs**
- 1.5 Stakeholders' survey for immune modulation postgraduates–teaching- teachers / technicians standards and Competences [Situational analysis]**
- 1.6 Framework for Competences and standards development of IMCert**
- 1.7 Creating Project managerial bodies and on-line communication plan**

2. Development of human competences (WP2)

- 2.1 Selection and training of members of educator selection committee**
- 2.2 Interviews for selection of 50 academic staff to join training**
- 2.3 Training of 50 academic staff on IMcert curriculum designing and integration**
- 2.4 Training 50 potential staff educators on hands on practical issues in competences of immune modulation**

4. Establishment of 5 TLC (WP4)

- 4.1 Specifications of equipment and call of tender**
- 4.2. Establishment of 5 TLC with its e-class rooms &Installing Equipment**

6. Quality assurance

- 6.1 QCMP**
- 6.2 Reports of quality Internal and external assessment**

7. Dissemination

- 7.1 Dissemination, and sustainability strategic plan**
- 7.2 Project's Web site completed**

8. Management

8.1 Project day to day management and coordination

8.2 Conflicts, risks and risk management

8.3 Biannual progress reports

8.4 Financial management

8.5 Assistance to partner organizations with organizing meetings and events m1-m12

1. Project Preparation / Communication/management (WP1)

1.1. Kick-off meeting and appointments of other 4 physical meeting with consortium: (m=2)

- Over 6 months, the work team of Al-Azhar University had several meetings with the representative team members of the four Egyptian partner universities, Cairo University (1/9/2020), Ain Shams university (14/9/2020), Damanhur university (30/8/2020) and Aswan university (30/8/2020) to present and discuss general agenda including emphasizing the basic idea of the project as well as specific agenda with each university highlighting its responsibilities in the project besides clarifying what to be discussed at the kick-off meeting, such as the election of the project management board, work packages leaders, presenting the general financial plan for the project, and listing the financial details for each participating university to approve the financial plan and distribute it according to the role of each participating university (**ANNEX 1.1.1.1.**).
- Kick-off meeting was held on 8-9 March 2022 through an online meeting – conference hall at Al-Azhar University.
- The meeting agenda comprised 6 sessions over 2 days (**ANNEX 1.1.1.2**) that included:
 - Opening session
 - Project overview
 - Introduction of partners and each partner project members
 - Introduction, Preparation, Management and communication
 - Development of human capacity and IMCert curriculum
 - Detailed description of project work packages
 - Developing of teaching and learning centers [TLC] and Implementing the Immune modulation Diploma Programme
 - Quality plan, Monitoring and Evaluation of the Project
 - Dissemination and Exploitation

- Overview of Grant Agreement and Partnership Agreements
 - Budget (Staff, travels, costs of stay)
 - Budget (Equipment and subcontracting)
 - Assessment of the Progress of the IMCert. Stakeholders' Surveys and Mapping stakeholder needs & inputs; for postgraduates– teaching Competences.
 - Good practice and main recurrent mistakes
 - Reporting in CBHE Projects
 - Project Committee Election
 - The Project Management Board (PMB) was determined to involve:
 - Prof. Dr. Mohamed Farag
 - Dr. Reham Hammad
 - Prof. Dr. Ulrich Sack
 - Prof. Dr. Rachid Solimani
 - Prof. Dr. Eleni Efthimiadou
 - Prof. Dr. Mohamed Hafez
 - Prof. Dr. Khaled Abo Shanab
 - Prof. Dr. El Hamy Tarabees
 - Dr. Shazly Baghdady
 - Closing remarks
- Project Work package leaders in each of the 5 Egyptian Universities were nominated. This was posted on the IMCert website (<https://imcert.azhar.live/2021/09/creating-project-managerial-bodies/>).
 - The kick-off minutes was discussed in details as the following annex (**ANNEX 1.1.1.3.**)
 - The number of attendees was 62 members from all European and Egyptians partners (**ANNEX 1.1.1.4.**) including:
 - **Prof. Mahmoud Seddik- Vice president of Al-Azhar university.**
 - **Prof. Hesham Farhood, Dean of faculty of Medicine (for girls), Al-AzharUniversity.**
 - **Prof. Maha Ghazi, Dean of faculty of Science (for girls), Al-Azhar University**
 - **Prof. Sayed Bakry, Dean of faculty of Science, Al-Azhar University**
 - **Prof. Awad Tageldin, Egyptian Presidential Adviser for Health Affairs**
 - IMCert team of **Al-Azhar University, Cairo.**
 - IMCert team of **Leipzig University, Germany.**

- IMCert team of **Lorraine University, France.**
- IMCert team of **kapodestian University, Greece.**
- IMCert team of **Cairo University, Cairo.**
- IMCert team of **Ain-Shams University, Cairo.**
- IMCert team of **Damanhur University, Damanhur.**
- IMCert team of **Aswan University, Aswan.**

1.2. Consortium agreement plan [financial plans] [2-3]

- Several meetings were held between the work team of Al-Azhar University and the representative team members of the four partner universities, Cairo University, Ain Shams university, Damanhur university and Aswan university to discuss the responsibilities of each university in the project, as well as all the technical and financial details for each participating university (**ANNEX 1.1.1.1**)
- Following this, Partnership Agreement plans [**Grant Agreement Number: 619017-EPP-1-2020-1-EG-EPPKA2-CBHE-JP**] were signed on May 2021 by the legal representative of Al-Azhar University, Egypt (Prof. Dr. Mohamed El-Mahrasawy), and each of Ain Shams University (**ANNEX 1.1.2.1**), Cairo University (**ANNEX 1.1.2.2**), Damanhur University (**ANNEX 1.1.2.3**) and Aswan University (**ANNEX 1.1.2.4**).
- Partnership agreement plans were also signed between Al-Azhar University and Lorraine University (**ANNEX 1.1.2.5**), Leipzig University (**ANNEX 1.1.2.6**) and NKUA University (**ANNEX 1.1.2.7**).
- The partnership agreement plans have outlined the following: the partnership agreement subjects, project duration, obligations and responsibilities of the agreement subjects, financing issues, payment arrangements, accounting books and financial information, reporting schedule, budgeting and financial management, general administrative provisions, promotion and visibility, confidentiality and data protection, authorship and property rights, liability, conflict of interest, working languages, conflict resolution, applicable law and jurisdiction termination of the agreement, force majeure, and amendments.

1.3. Subcontracting outlined to be fulfilled after that: [m2]

- Service Agreement contract have been outlined and signed with several agencies including:
 - Contract for website designer
 - Contract for financial auditing
 - Contract for external evaluator
 - Contract for the first conference (**ANNEXES 1.1.3.1, 1.1.3.2**)

1.4. Mapping stakeholders needs and possible inputs: [m1-2]

- **Stakeholders of this project are defined by:**

1. Staff members involved in immunology advanced methodologies in, Medical, Science, Pharmacy, Dentistry, hygiene, food engineering and quality management support fields who will:

- Acquire ability to design and implement blended modernized curriculum addressing the immune modulation field.
- Gain capacity in teaching and learning in the field of immune modulation involved in pathogenesis and outcome of disease of high concern in Egypt.
- Acquire ability for self-assessment and motivation to improve.
- Gain capabilities in creating an interactive, cooperative and supportive environment with their students in timely manner.
- Develop efficiency for boosting research in immune modulation field due to poor research competences.
- Gain of communication channels with European experience.

2. Postgraduate students of scientific faculties [Medical, Science, Pharmacy, Dentistry, hygiene, food engineering and quality management support fields]:

- Gain capacity in learning in the field of immune modulation involved in pathogenesis and outcome of disease of high concern in Egypt.
- Develop efficiency for boosting research competence in immune modulation due to absence of skills.
- Provide alternatives in learning other than face to face methods
- Gain capacity in handling advanced techniques.
- Provide motivation to apply for IMCert innovate curriculum.
- Open job opportunities in fields of advanced immunology study.
- Acquire awareness of postgraduates of importance of immune modulation field and diseases in its concern.

3. Universities of scientific background:

- Gain capacity in developing and implementing innovative blended curricula in immune modulation due to low resources.
- Develop center of excellence with advanced equipment's to perform researches concerning immune modulation and monitoring.

- Gain financial resources for establishing of teaching and learning center (TLC) of excellence with E-learning classrooms, with online database for IMCert resources and providing computers.
- Provide financial resources for advanced equipment's needed for research competence.
- Provide communication between postgraduates and the university.
- Gain of Data base of learning resources of immune modulation.
- Provide connection with European channels taking lead in this field.
- Increase number of citations of academic staff leading to upgrading of university rank.

4. Pre/in-service biology teachers/ HCW/ industry, water treatment and food processing employee:

- Gain of informative capacity in immune disorders issues in Egypt due to climate and poor hygiene to enable them to understand the role of surrounding environment in development of those diseases and how to decrease its negative impact (viral hepatitis, infections, chronic inflammation, parasitology, cancer, etc).

5. Laboratory technicians:

- Gain of required technician skills for using advanced equipment's and advanced methodologies addressing immune modulation concerning; Flow cytometry, Molecular methods, Sequencing, Cell culture and Elisa.
- Quality insurance and good practice.
- Need to improve their hygiene and ethical knowledge in handling research blood samples from human or participating in animal experiments.

6. National level:

- Addressing disease of immune related etiology or outcome impacting socio-economic state detection, evaluation.
- Provide motivation to keep pace with progress in immune modulation and monitoring of diseases concerning Egyptian community, with needs to achieve higher rates of prevention and recovery of immune related diseases using immune modulation.
- Presence professionalized certificate increases job opportunities in fields of immune modulation requiring high skills.
- Show out medico-social impact and awareness to politicians and decision makers.
- Promoting research projects.
- Reducing health cost by promoting prevention and early diagnosis.

- In order to define the needs of those stakeholders, a questionnaire that consisted of questions revolved around immunity was prepared and set up using Google Forms and the generated link was shared on social media (i.e., Facebook and WhatsApp).
- Its objective was to measure the interest in joining immune modulation certificate.
- Along the 5 participated universities, 164 academic staffs, 222 postgraduates and 100 community members have responded this survey.
- The survey covered several points, most importantly the possible inputs of those stakeholders through asking about their previous experiences in the immunology tools, and their top immunology interests. Survey ([ANNEXES 1.1.4.1](#), [1.1.4.2](#), [1.1.4.3](#))

1.5. Stakeholders Surveys for immune modulation postgraduates–teaching-teachers/ technicians standards and Competences [Situational analysis]: [m1-3]

- The need and situational analysis in partner institutions based on governmental documents, publications, and discussions with experts' key stakeholders revealed that partner countries needs are:
 1. Lack of training of staff to design, develop and implement IMCert curriculum.
 2. Poor basic training tools of staff in teaching and learning in field of immune modulation.
 3. Low efficiency of staff needed for boosting research directed to immune modulation.
 4. Low awareness of postgraduates in the interest of learning immune modulation issues addressing socio-economic problems.
 5. Need for a center of excellence with advanced equipment's for technical capacity building and E-learning classrooms.
 6. Poor communication and exchanges of experience between postgraduates/ staff.
 7. Absence of education material for online learning resources to be shared on of immune modulation.
 8. Poor connection with European channels taking lead in this field.
 9. Absence of required skills for technician to use advanced equipment's.
 10. Universities needs to bridge the gaps between academia and socio-economic problems in community.

- **Questionnaires:**

- 1- **For Academic staff:**

- Questionnaires were designed to measure the level of experience in Western blot, sequencing, PCR, Cell sorting, ELISA, cell culture and flow-cytometry. Excellent experience (16.46%) was reported in using ELISA, while no experience (49.39%) was reported in cell sorting followed by western blot and sequencing (44.5% and 43.9%) respectively.
- Regarding measuring their interest in joining the IMCert; 47.5% were very interested and 36.6% would try to make time to join while 17.7% were interested but will not be able to join.
- Regarding Academician field of Interest in IMCert topics, the clinical immunology has taken the top interest while immune dosages was of least interest.
- Regarding mapping the needs of those stakeholders, PCR followed by ELISA then cell culture were most interesting diagnostic tools involved in IMCert for Academician reflecting the comfort zones of previous experiences.
- The template of the survey for Academic staff ([ANNEX 1.1.4.1](#)) and the detailed report of the survey ([ANNEX 1.1.5.1](#))

- 2. **For postgraduates:**

- Questionnaires were designed to measure the level of experience in Western blot, sequencing, PCR, Cell sorting, ELISA, cell culture and flow-cytometry. Excellent experience (9.9%) was reported in PCR followed by (9.9%) ELISA, while no experience (48.2%) was reported in cell sorting followed by western blot and flow-cytometry (44.5% and 43.9%), respectively.
- Regarding measuring their interest in joining the IMCert, 40.5% were very interested and 34.7% would try to make time to join while 17.1% were interested but will not be able to join
- Regarding their belief that environmental factors and climate nature are capable to amplify immune disorders, most of postgraduates had a solid belief.
- Cell culture followed by PCR then ELISA were most interesting diagnostic tools involved in IMCert.
- Both staff and postgraduates suggested for the theoretical: practical ratio of the curriculum to be proposed as 1: 2 ratio.
- The template of the survey for Academic staff ([ANNEX 1.1.4.2](#)) and the detailed report of the survey ([ANNEX 1.1.5.2](#))

3. For Community members:

- In order to determine the knowledge of community members regarding immunity, a 40-question based questionnaire was designed and set up using Google Forms and the generated link was shared on social media (i.e., Facebook and WhatsApp).
- As this questionnaire was mainly targeting community members, and Arabic is the mother tongue language in Egypt, Arabic version was supplied.
- Out of the 100 responders, Aswan university has responded with (22%), followed by Cairo governorate with (18%).
- As a conclusion, community members had good knowledge about immunity.
- The template of the survey for Academic staff (**ANNEX 1.1.4.3**) and the detailed report of the survey (**ANNEX 1.1.5.3**)

1.6. Framework for Competences and standards development of IMCert according to situational analysis]: [m 3-m4]

- The team of Ain shams university, responsible for project quality assurance, had several online meetings over 4 weeks for discussing and formulating the project framework of competencies. By the end of the diploma, the participants should be able to grasp several knowledge, information, and skills.
- First, participants were divided into teaching staff, students, and laboratory operators. Different competencies would benefit each of those providers/participants based on acquired education and experiences.
- Competencies included fundamental medical knowledge, professionalism, system-based learning, and practice-based learning, where teaching staff and students would benefit the most from. While, all Participants, including laboratory operators, will gain practical skills, personal skills, and communication skills.
- Team members utilized several resources while formulating such competencies including competencies from similar immunology programs both in national and international universities (Ain shams university and university of Copenhagen) as well as articles from literature (**ANNEX 1.1.6**)

1.7. Creating Project managerial bodies and online communication plan: (m1-2)

- Over 6 months, the work team of Al-Azhar University had several meetings with the representative team members of the four partner universities, Cairo University, Ain Shams university, Damanhur university and Aswan university highlighting its responsibilities in the project besides clarifying

what to be discussed at the kick-off meeting, such as the formation of a project board, presenting the general financial plan for the project, and listing the financial details for each participating university to approve the financial plan and distribute it according to the role of each participating university (**Managerial meeting minutes ANNEX 1.1.1.1**)

- The IMCert managerial committee developed over two weeks a timed communication plan with all managerial bodies to settle different ways of communications (**ANNEX 1.1.7.1**)
- The communication plan included even managerial meetings over the three years of the project to closely monitor the project development, via online and physical meetings as well as submitting bi-annual reports and project website, financial reports tackled by project coordinator and partners leaders every 6 months for money transfer per partnership agreement. Importantly, biweekly developmental meeting by work package leaders to be held for sake of sharing information, distributing responsibilities, and coordinating work among team members who are also meeting on regular weekly basis to identify next steps and solving any emerged problems/challenges. Notably, over the three years of the project, stakeholders should be aware about the project progress and have the opportunity to share their thoughts nationally via the project website as well as social media reports, workshops, local conferences and other dissemination tools and internationally through holding two international conferences in France and Germany. Communication is also available to any project member through emails and phone calls anytime in case of emergency situations that mandated quick solutions. At the end of third year, a physical meeting should be held including all partners and stakeholders, under supervision of Aswan university team, to review the status and subsequently identify success/drawbacks for future learning as well as announcing the final project data
- The kick-off meeting was held on 8th -9th March 2021 as mentioned previously (**Activity 1.1**); where all project details were introduced to the partners by the host university, **Project Management Board (PMB)** was elected as follows; Prof. Dr. Mohamed Farag, Dr. Reham Hammad, Prof. Dr. Ulrich Sack, Prof. Dr. Rachid Solimani, Prof. Dr. Eleni Efthimiadou, Prof. Dr. Mohamed Hafez, Prof. Dr. Khaled Abo Shanab, Prof. Dr. El Hamy Tarabees, Dr. Shazly Baghdady. Moreover, **project work packages leaders** were nominated from each partner university (5 universities) for total of 8 work packages. This was posted on the IMCert website (<https://imcert.azhar.live/2021/09/creating-project-managerial-bodies/>)
- Moreover, an online meeting was held on April 3rd, 2021, where stockholders discussed several important items including mapping needs and the criteria of nominating the educator's selection committee as well as the 50 educators (**ANNEX 1.1.7.2**). The meeting agreed on that the number

of candidates from each university should not be neither more than thirteen nor less than seven, while they deferred the final discussion for choosing the educator selection committee to managerial board.

2. Development of human competences (WP2)

2.1. Selection and training of members of educator selection committee

- Each partner university has chosen 1 expert member of their university specialized in subject of interest of IMCert. to form the educator selection committee [ESC] [N= 5] members.
- The ESC members included:
 - **Prof. Mohamed Farag**, Project coordinator and the head of the ESC, Al-Azhar University
 - **Dr. Reham Hamad**, representative of Al-Azhar University.
 - **Prof. Nady Girgis**, representative of Aswan University.
 - **Prof. Nadia Hamdy**, representative of Ein Shams University.
 - **Prof. Zainab Qurani**, representative of Cairo University.
 - **Prof. Sarah Magdy**, representative of Damanhur University (**ANNEX 1.2.1**).
- Selection of ESC was carried out in time (m4-m5 ie from 15 April-14 June).

➤ Current Problems and mitigation

- It was planned to train those 5 immunology experts on curriculum designing by applying Deconstruction-Construction-Reconstruction (DeCoRe) methodology by P2 [ULEI] from 15 May to 14 June. However, due to the COVID-19 pandemic, their training was carried out online together with the 51 staff educators in September 2021, February 2022, and March 2022.

2.2. Interviews for selection of 50 academic staff to join training

- ESC (under guidance of P2 & P3 and institutional support of all partner universities) set-up interviews for selection of 51 academic staff to be trained for designing the curriculum courses of IMCert.
- The interview was held in the meeting room on the first floor of the Al-Azhar University Building, from 3 to 5 August 2021. Official e-mails were sent to the participants, up to 30 July 2021 including the day and time of the interview, with the emphasis on bringing in a printed CV, personal photographs, and copy of scientific certificates.

- 50 staff educators were successfully selected by ESC to develop IMCert. These staff educators were from University of Al-Azhar, Cairo University, Ain Shams University, Aswan University, and the University of Damanhur (**ANNEX 1.2.2**).

➤ **Variations**

- Tasks done 3-5 August 2021 instead of 15 May-14 June due to difficulties resulting from COVID pandemic for off-line meetings and interviews face to face.

2.3. Training of 50 academic staff on IMcert curriculum designing and integration

- 51 staff educators together with the ESC members were trained on curriculum designing and integration through virtual theoretical workshops in designing and developing curriculum using DeCoRe and Kern cycle methodologies under supervision of members of the educator selection committee and European partners (Leipzig University, LU, Germany) and (Lorraine University, France). Three workshops were held for human development.
- The first workshop for development of human competencies were held in the period of 6th to 9th September 2021 (**ANNEX 1.2.3**). The attendance was explained in the following Annex (**ANNEX 1.2.4**).
- The second workshop for development of modules were held in the period 6th to 10th of February 2022 (**ANNEX 1.2.5**). The attendance was explained in the following Annex (**ANNEX 1.2.6**).
- The third workshop for curriculum assessment were held in (**ANNEX 1.2.7**).
- All data concerning the workshops is also available on the website <https://imcert.azhar.live/>

➤ **Variations**

- Tasks done 6th to 9th September 2021, 6th to 10th February 2022, and 3rd March 2022 instead of June, July and August due to difficulties resulting from COVID pandemic.

➤ **Details on Capacity Building**

- Number of academic staff from the partner country's Higher Education Institutions (professors, assistants with teaching tasks, etc.) trained/retrained <u>to the date of the 1st annual report submission:</u>	Male	18
	Female	33

4. Establishment of 5 TLC (WP4)

4.1. Specifications of equipment and call of tender

- Towards improving the quality of the teaching-learning experience, the project committee has made a proposal for the development and establishment of 5 TLCs of excellence, which provide a chance for building the capacity of the 5 Egyptian universities [AZHU, DMU, ASU, ASW, CU].
- During the first 6 months, TLC committee was established, where each of the 5 participating Egyptian universities has nominated and assigned a member to be responsible for the TLC work package.
- The TLC committee supervised by Prof. Dr. Mohamed Farag, Al-Azhar University, had several meetings to discuss and outline the specifications of the devices to be purchased.
- The TLC committee members have communicated with different companies and agencies to provide different offers, both technical and financial, for the required devices.

1- Quality assurance

1.1. Quality control Monitoring Team (QCMT)

- The quality control monitoring team consist of
 - 1. Members of Ain Shams University (Head of QCMP team)**
 - Prof. Dr. Khaled Aboshanab
 - Dr. Ghadir El-Housseiny
 - Dr. Sherihan Galal AbdelHamid
 - Dr. Amr Shaker
 - Dr. Mohamed Abo Auf
 - Dr. Mona El-Shahawy
 2. Prof. Dr. Mohammed Farag [Al-Azhar University]
 3. Prof. Dr. Ulrich Sack (Leipzig University, Germany)
 4. Prof. Dr. Claude Lambert [Lorraine University, France]
 5. Prof. Dr. Eleni Efthimiadou [NKUA, Greece]

1.2. Reports of quality Internal and external assessment

- The presented report is the first internal report for the project covering the period from M1 to M6.

7. Dissemination

7.1. Dissemination, and sustainability strategic plan

- A dissemination plan is provided in the very early stages of IMCert project for what will be disseminated, sustained and covering all risk aspects. Damanhur University (DMU) is the leader of IMCert dissemination, with active involvement of the other Egyptian (AZU, ASU, CU and ASWU) and European (ULEI, UL and NKUA) Universities. The dissemination plan of the project aimed to introduce the project, dissemination of project partners, strengthen the collaboration between Egyptian and European partners, clarification of the objectives and importance of the project. The dissemination plan targeted the following groups: postgraduates, lab technicians, administrative staff, educational academic staff, and non-academic researchers. IMCert is widely disseminated to publicity and communication activities at all the project phases through: Introductory PowerPoint presentation, project brochure, project posters, flyers, seminars, online webinars, social media, conferences, and publications.
- Every step of the project, like the project activities & methodology was published on the Facebook page of IMCert <https://www.facebook.com/profile.php?id=100069717429710>
- On 8 March 2021, Vice President of Al-Azhar University inaugurated the Conference on Immune modulation in Cooperation with Universities of Egyptian, Germany, France and Greece (ANNEX 1.7.1.1).
- On 12 March 2021, the official homepage of Ain Shams University announced that over two days, the Faculty of Pharmacy, Ain Shams University, participated in the inauguration and launch of Immune Modulation Certificate diploma in cooperation with Erasmus plus, which was held online using Zoom application (ANNEX 1.7.1.2).
- Also, several project meetings and seminars have been held to increase awareness of researchers with the project (ANNEX 1.7.1.3).

7.2. Project's Web site completed

- It was very important to develop a website for the IMCert Project, to provide an up-to-date set of dissemination materials to all stakeholders, increase number of applicants from all faculties, increase the number of qualified participants, improving practical experiences for all participants, Increasing awareness of postgraduates and educational academic staff of the immune modulation diploma certificate, Increasing awareness of researchers with TLC and its provided equipment, and promotion of career orientation of the postgraduates in the immune modulation field.

Actually, an official website for IMCert was successfully developed and includes all up-to-date information about the project <https://imcert.azhar.live/>

8- Management

- The project day to day was management and all the conflicts, risks and risk management were considered. Biannual progress reports and financial management were done.
- Management of project was by handled the financial issues and holding managerial meetings and biannual reports for coordination.
- Assistance to partner organizations with organizing meetings and events, which covering the following:
 - Project management and communication plans
 - Biannual progress report
 - Scheme of workshops, meetings, and events
 - Conflicts, risk mitigation plan
 - Activation of plans
 - Financial handling
 - Final report
- See all previous annexes