

Overview

Establishment of Intercalated Program in Basic Medical Sciences in Jordan (iBMS-JO) project is the first of its kind not only in Jordan but also in the MENA region, offering an intercalated bachelor's degrees in basic medical sciences. This degree will significantly benefit medical students of high ability who are considering a career in academia. In addition to gaining an understanding of the scientific principles that underpin modern medical practice, students will become skilled in a range of laboratory techniques, and experience the challenges of performing substantial laboratory research projects.

iBMS-JO will also allow students to make contacts that may be valuable in their future careers. Besides meeting the critical needs for basic medical scientists across the region, iBMS-JO will improve the professional network connecting medical schools in Jordan and the European Union.

Objectives

iBMS-JO is a 3-year project, co-funded by the Erasmus+ program, aiming at establishing an intercalated program in basic medical sciences and improving the capacity of all medical schools in Jordan in order to develop new programs in Basic Medical Sciences (BMS) parallel to the currently available programs in Medicine and Surgery, and establishing interconnected Telemedicine Laboratories (TL) locally.

Kick off Meeting

The kick-off meeting was organized by Jordan University of Science and Technology (JUST), the lead partner of iBMS-JO project, which is financed within the Erasmus+ program for Higher Education Institutes. The meeting took place in the period 19-23, February 2020, at the Holiday Inn Resort Dead Sea, in Jordan.

The main objective was to introduce and thoroughly present the project's main activities, work packages, deliverables, and time table by each partner as appropriate. In addition, specialized committees have been formed to aid the successful implementation of the project. The committees include; steering, quality, dissemination, and training. The meeting was attended by all the 11 partners; each presented their institution and their contribution to the project activities based on their skills and capacities. JUST presented its action plan to implement the project.





Website Launch

A website dedicated to iBMS-JO was launched in the first week of February 2020. It contains all the materials, information, and news related to the project and is going to be continuously updated as the project proceeds. This website is intended to serve as a reference for iBMS-JO and will be sustained even after the project ends. The website can be accessed through the following link:

www.ibmsjordan.com

Partners

P1: JUST- Jordan University of Science and Technology (Jordan)

P2: UJ-The University of Jordan (Jordan)

P3: MU-Mutah University (Jordan)

P4: YU-Yarmouk University (Jordan)

P5: HU-Hashemite University (Jordan)

P6: BAU-Al-Balqa Applied University (Jordan)

P7: MONOJO-Jordan Company for Antibody Production (Jordan)

P8: AQACHEI-Accreditation & Quality Assurance Commission for Higher Education Institutions (Jordan)

P9: UPORTO-Universidade do Porto (Portugal)

P10: UNIPI-Università di Pisa (Italy)

P11: UmU-Umeå University (Sweden)

Work Packages

WP1: Baseline analysis to prepare the grounds for effective implementation
(Lead: UJ)

WP2: Capacity Building Plan
(Lead: UmU, UniPi)

WP3: Developing the iBSc Programs Curricula
(Lead: U. of Porto and Patras)

WP4: Implementation and Integration of iBMS-JO Courses into Existing Curricula
(Lead: JUST)

WP5: Implementing & Assessing of the IBSc Programs
(Leader: MU)

WP6: Set up of Telemedicine Laboratories
(Lead: JUST, MONOJO)

WP7: Project Assurance and Efficiency
(Lead: CRE.THI.DEV.)

WP8: Dissemination, Exploitation of Results, and Sustainability Capacity Building Plan
(Lead: UJ)

Establishment of Intercalated Program in Basic Medical Sciences in Jordan (iBMS-JO)
ERASMUS+ KA2 – Capacity Building
Leader: Jordan University of Science and Technology (JUST), Irbid
Duration: 15/01/2020 – 15/01/2023

Contact:

ibmsjordanjust@gmail.com | (+962) 2 720 1000





Work Package 1

Baseline Analysis to Prepare the Grounds for Effective Implementation

Objectives

This work package aims to achieve the following:

- a) Assess the available resources and modules on basic medical sciences.
- b) Assess training needs for staff at Higher Education Institutes in Jordan.
- c) Organize national workshops for stakeholders in the health sector.
- d) Identify EU best practices in delivering iBSc programs in BMS.

Deliverable	Responsibility	Deadline
D1.1 Surveys on available resources and courses (n. 2)	UJ, HU	End of March 2020
D1.2 Reports on available resources and modules on BMS (n.6)	UJ, HU	End of April 2020
D1.3 Workshop for health care stakeholders (n. 1)	JUST	April 2020
D1.4 Report on Training needs of JO staff (n. 1)	UJ, HU	May 2020
D1.5 Report on EU Best practices in developing and implementing iBSc programs (n.1)	UmU	July 2020
D1.6. Webinar on Bologna process (n.1)	UniPi	Mid March 2020

Work Package 2

Capacity Building Plan

Objectives

This WP aims at developing a capacity building plan for Jordanian staff to improve their skills and competences in BMS. The report produced by WP on local needs will guide the EU partners to prepare the needed training materials. Each EU partner will host 12 Jordanian staff over one week to deliver training sessions and seminars on the topics that will be identified in WP1. Based on the analysis & identification of gaps & needs at WP1, EU partner universities will develop training materials, training programs on the needed competences and skills in iBSc programs in BMS. Practical placements will be organized to EU partners in addition to a capacity building plan. That is, practical placements from PC countries to EU partners will be conducted to share experiences & best practices in the delivering iBSc programs in BMS. Each partners HEI will create a pool of teaching experts through selecting suitable candidates from each Jordanian HEI. n. 4 visits to the EU universities, each visit up to 2 staff from each JO HEI will attend training programs to improve their skills and competences in delivering and implementing courses in iBSc programs in BMS. In the second phase of TOT, the trainees will transfer their gained knowledge to other trainers in their institutions via training workshops and seminars organized at each Jordanian HEI.

Deliverable	Responsibility	Deadline
D2.1 Capacity Building (CB) plan for JO staff (n. 1)	UmU, UniPi	End of August 2020
D2.2 Selection criteria for staff to participate in the CB program (n. 6)	All JO HEIs	End of September 2020
D2.3 JO staff participation in the CB programs (n. 48)	All JO and EU HEIs	July 2021
D2.4 Trained JO staff train other JO staff in their institution (n 30)	All JO HEIs	July 2021

Work Package 3

Developing the iBSc Programs Curricula

Objectives

This work package builds on WP2 and it aims at defining the syllabi for the new or adapted modulus/courses, collect and put together lecture materials and adapt them to the local needs of the JO universities on the basis of the surveys carried out in WP1, according to International quality standards; developing the final curricula, and training teachers on iBMS-JO topics by the European partners in n.8 train-the-trainers courses and 7 BMS courses.

The developing of iBMS-JO courses will pass through the following steps:

- Elaboration of the syllabi according to the results of the surveys of WP1 on pre-existing curricula's;
- Monitoring of the experiences and competences of professors and trainers at the Beneficiary Universities on BMS;
- Elaboration of didactic materials for the new modules on BMS for the students. The contents will be developed through the close collaboration of European and JO Partners members of the consortium.

Deliverable	Responsibility	Deadline
D3.1 Detailed syllabi of BMS courses (n. 8)	University of Porto and University of Patras	End of July 2020
D3.2 Didactic materials for BMS courses (n. 8)	University of Porto and University of Patras	End of July 2021

Work Package 4

Implementation and Integration of iBMS-JO Courses into Existing Curricula

Objectives

This work package aims to follow up on a timely manner the development and approval of new program/courses. Once the syllabi of the courses/ modules are developed and detailed, they will be submitted to local authorities of each university (Department, Faculty and University) for formal approval. For this purpose a short but complete didactic plan will be elaborated.

Deliverable	Responsibility	Deadline
D4.1 Report of revised courses and curricula for iBSc programs curricula in BMS	JUST	End of August 2020
D4.2 Final iBSc programs curricula in BMS (n. 6)	All JO HEIs	End of May 2021
D4.3 Accredited iBSc programs in BMS (n. 6)	All JO HEIs	September 2021



Work Package 5

Implementing and Assessing of the iBSc Programs

Objectives

This work package aims first to pilot the iBSc programs after being accredited by the JO Accreditation body and approved by the Ministry of Higher Education in order to build up the confidence needed among the faculty and elicit valuable data for its further improvement.

The WP5 led by P1 with strong support from all partners starts with the development of an implementation plan that will set all the procedures for running the iBSc Programs in BMS. All JO partners will be responsible for the implementation of this package and its deliverables. The implementation plan identifies all the systemic components which are needed for the smooth implementation of the iBSc programs at each university, including description of the course curriculum, its organization; the processes; resource availability and skill sets; major blended learning system components essential to its implementation; how the implementation will be managed; major tasks involved; implementation support; personnel, staffing requirements, training, etc. The next activity, is to provide overall planning and coordination for its pilot implementation and ensure that all manuals applicable to the implementation are available when needed, including technical assistance. The proposed programs will run parallel to the Bachelor degree of Medicine program already in place in all the designated partners.

The selected students must have successfully finished the first three years of basic medical sciences in their medical schools to be considered for participation. Onwards, the intercalated program will offer a one yearlong intensive coursework in advanced basic medical sciences. Each of the students will also be assigned to conduct a short scientific research project for which he/she should write a final thesis. Participating students will be allowed to choose the research unit and the research project they aspire to take part in. The one academic year intercalated program will be divided into two four-month long semesters as per JO Universities academic calendar. At the end of each semester, written and oral exams will be conducted by a committee that includes external examiners from all participating institutions. Students enrolled in the intercalated program who successfully complete this course work will be awarded a Bachelor Degree in Basic Medical Sciences.

Deliverable	Responsibility	Deadline
D5.1 Reports on admission criteria (n. 6)	MU	End of May 2021
D5.2 Calls for admission (n. 6)	All JO HEIs	End of August 2021
D5.3 Students enrolled (n. 120)	All JO HEIs	September 2021
D5.4 iBMS-JO implementation plans (n. 6)	All JO HEIs	May 2021
D5.5 Pilot assessment plan of iBSc programs (n. 6)	All JO HEIs, UniPi, CRE.THI.DEV.	July 2022
D5.6 Report on mobility of students	All EU HEIs	December 2022
D5.7 Reports on feedback for further improvement	All JO HEIs, UniPi, CRE.THI.DEV.	January 2023



Work Package 6

Set up of Telemedicine Laboratories

Objectives

This WP aims at to fulfill and achieve the objectives of introducing the intercalated Bachelor degree of Basic Medical Sciences in Jordanian Medical schools by improving the research infrastructure and easy communication and consultation between the six medical schools. One of the most innovative methods to achieve such environment is Telemedicine. The WHO has advocated for Telemedicine in its famous report in 2010 to provide accessible, cost-effective, high-quality health care services. Telemedicine uses ICTs to overcome geographical barriers, and increase access to health care services and facilitates communication between clinicians and researchers. Videoconferencing facilities are increasingly needed as an efficient way of collaboration and discussion between researchers from different institutes. Pathology and laboratory services provide a huge source of database for research in all basic and clinical disciplines and always regarded as the treasure for research activities.

The Pathology department at King Abdullah University Hospital and Jordan University of science and Technology is the largest academic pathology and laboratory medicine department in Jordan and is a referral lab for almost 40% of Jordanian population. Digital pathology is an image-based information environment which is enabled by computer technology that allows for the management of information generated from a digital slide. Digital pathology is enabled in part by virtual microscopy, which is the practice of converting glass slides into digital slides that can be viewed, managed, shared and analyzed on a computer monitor. With the advent of Whole-Slide Imaging, the field of digital pathology has exploded and is currently regarded as one of the most promising avenues of diagnostic medicine in order to achieve even better, faster and cheaper diagnosis, prognosis and prediction of cancer and other important diseases. This huge archive will provide a huge source of research for all medical schools. JUST will act as the main hub for supporting all the intercalated degrees in other medical schools and even providing them with data, images, and clinical information needed to accomplish this mission. All the research activities will be subjected to the necessary ethical and IRB approvals.

Deliverable	Responsibility	Deadline
D6.1 Centralized hub TL at JUST, and 5 TL at all 5 JO HEIs	All JO HEIs	End of October 2020
D6.2 Equipment of the established TL	MONOJO, JUST	End of August 2021
D6.3 A report on activities on the TL	All JO HEIs	January 2023

Work Package 7

Project assurance and efficiency

Objectives

The main objective of the quality management and assurance of the project is to ensure for the most effective and efficient implementation of the project in terms of qualitative outputs. The activities aim to define the equality requirements, internal characteristics and activities of the project in accordance with whether or not they have satisfied the specific quality requirements and measurements that must be achieved to define the level of quality that has been realized. The work package aims to monitor quality throughout the implementation of the project for the maximum achievement of the objectives set out and the undertaking of possible corrective actions that may be necessary. Quality management of the project basically aims to define the acceptable levels of quality of all actions and activities throughout the duration of the project.

A set of qualitative and quantitative indicators will be applied through monitoring instruments such as questionnaires, interview grids and check-lists. High attention will be paid to the involvement of all actors concerned, underlining the importance of the contribution of each body involved. Six-months monitoring reports will be elaborated and addressed to the Project Coordinator. As for internal evaluation, an intermediate and a final report will be elaborated, showing the first impact on organizations, territories and beneficiaries involved. A comparison among impact and objective of the action will be made explicit.

Deliverable	Responsibility	Deadline
D7.1 iBMS-JO Quality Committee (n. 1)	JUST	February 2020
D7.2 Internal Quality Assurance and Monitoring plan (n. 1)	CRE.THI,DEV.	End of April 2020
D7.3 Internal quality reports (n. 6)	CRE.THI,DEV.	Every six months
D7.4 External Monitor (n. 3)	JUST, CRE.THI.DEV.	May 2020

Work Package 8 Dissemination, exploitation of results, and sustainability

Objectives

This work package aims to ensure long-term sustainability and that the knowledge and results are shared with the wider community, locally, regionally and globally.

Activities that will contribute to the sustainability of the project outcomes is the accreditation of the iBSc programs at all Jordanian universities. It is the rule of all Jordanian partners that once the innovative academic program are approved and accredited by the responsible authorities, the Jordanian universities will allocate the necessary budget for running it. Considering that the university professors and all the administration teams are paid from the university budget, the need for additional funding is necessary to cover only the over-time, maintenance of equipment and other running costs related to the iBSc programs which are also covered by the annual university budgets. In addition, the iBSc programs have the potential to self-sustain due to the fact that such programs charge reasonable student fees. There is also high potential, due to the critical importance of the Clinical Nutrition program in Jordan and neighboring countries, to attract student scholarship and research finance from the hospitals and health care facilities.

All partners will support the WP leader in the executive design of the communication strategy, in the organization of events, in editing, printing and circulating dissemination materials, in web and social media communication, in mainstreaming results at policy level through press releases, articles, policy briefs, stakeholders' mailing lists.

Deliverable	Responsibility	Deadline
D8.1 Dissemination, communication, and exploitation plan (n. 1)	UJ, MONOJO	End of March 2020
D8.2 Dissemination materials	JUST	End of February 2020
D8.3 Project's Website and associated social media (n. 1)	JUST	April 2020
D8.4 Info days at JO universities (n. 12)	All JO HEIs	Every six months
D8.5 Dissemination meetings and local workshops (n. 6)	All JO HEIs	Every Six months
D8.6 Local and final conferences (n.1)	JUST, MONOJO	December 2022
D8.7 Sustainability plan (n. 1)	UJ	June 2020
D8.8 Newsletters (n. 6)	UJ to coordinate the issuance of the newsletters	(m6, m12, m18, m24, m30, m36)

Work Package 9 Project Management and Communication

Objectives

The aims of this work package focus on the coordination and management of all activities, communication, internal and external flow of information, provision of the deliverables, assessment and reporting on the progress made (for partners and EC) development and application of risk mitigation strategies and an application a contingency plan throughout the whole project in order to achieve the project and WP objectives complete and in time. First, two bodies will be set during the kick-off meeting. The Project Management Board (PMB) and the Work Package Leaders Board (WPLB) which will be led by the Project Coordinator (PC).