

Slide 1



Good morning, good afternoon, good evening.

On behalf of the Learning and Capacity Building Branch and of all IARC colleagues, I'm pleased to present you today a summary of the report on IARC Education and Training activities for 2020-2021.



Education and training is a statutory cross-cutting core programme of the Agency.

With two objectives and lines of activities:

Training scientists at IARC through the IARC Research training and fellowship programme
Contributing to life long learning of researchers and professionals world wide through IARC courses and learning material

The research branches are the key players, as the major part of activities are carried out within collaborative research projects or through dedicated capacity building programmes (such as the global initiative for cancer registry development) or networks (like the biobank and cohort building network). They supervise students and postdoctoral scientists and are the faculty of IARC courses.

The Services to Science and Research Branch is contributing a lot to the activities as well, in particular when it comes to policy aspects with the DAF, the human resources office for the internal courses offer or the information and technology services for the development of IT infrastructure.

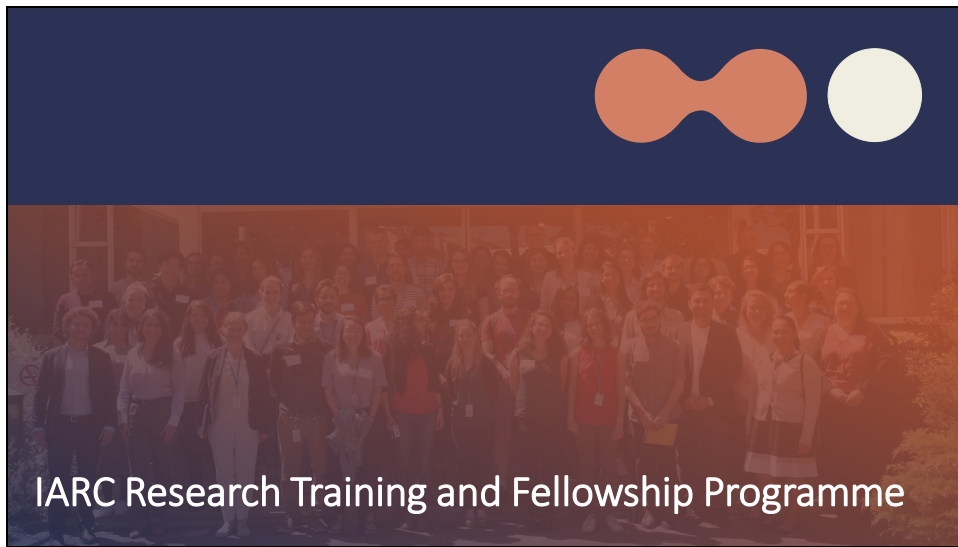
Resource mobilisation and communications are increasingly playing an obvious crucial role, together with other key stakeholders, such as the early career scientists themselves. I'll come back to this later.

In this agency-wide programmes, the Learning and Capacity Building Branch is providing a platform for coordination and support.

We are responsible for:

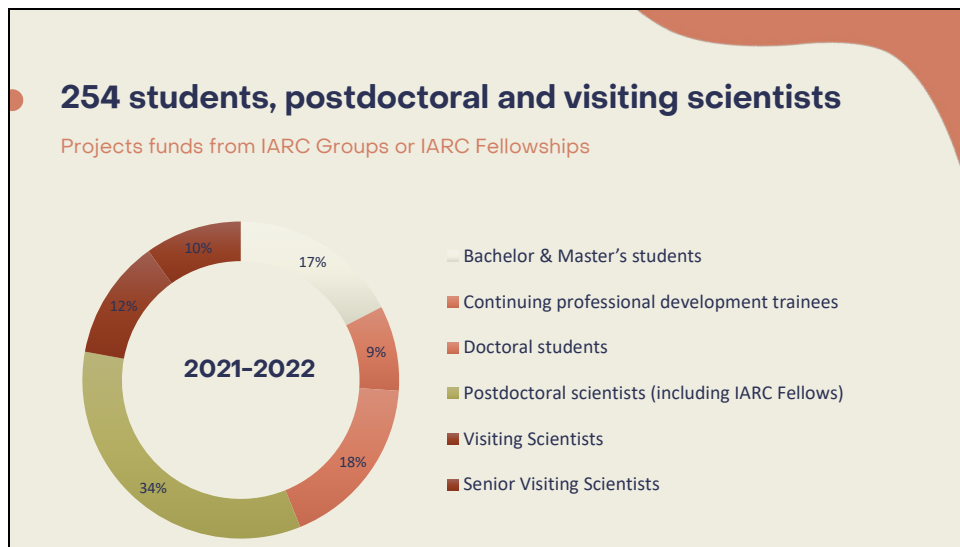
- Policy aspects, in particular vis a vis the training and fellowship programme
- Increasingly partnerships development and funding
- Administration of the early career scientists stays or internal courses programme
- Development of infrastructure such as the IARC Learning portal or tools to streamline the administration of stays
- Organisation of events such as the IARC Summer School
- Dedicated training project management for specific projects
- And support at all levels

Slide 3



The IARC Research Training and Fellowship Programme offers researchers at different levels of their career opportunities to get trained at IARC through their participation in collaborative research projects.

Slide 4



A total of 254 Early Career and Visiting Scientists (ECVS) from 58 different countries joined IARC during the biennium.

Those ECVS are supported either by project funds from IARC Groups or by IARC Fellowships.

This represents an overall 14% decrease as compared to the former biennium, which is related to the sanitary situation of the COVID-19 pandemic, with reduced mobility due to visa/entry and travel restrictions. Despite this overall decrease of ECVSs hosted at IARC during the biennium, the number of postdoctoral scientists and doctoral students, priority target audience of the programme, has remained stable as compared to the previous biennium.



A key player in the running of the programme is the early career scientists association (or ECSA), which was created in 2013. They are the liaison between the students and postdoctoral scientists and the administration when it comes to improving the rules of the programme. They are developing a wide range of career development and networking activities which are complementing what we develop, often in collaboration with them.

During the reporting period, and among other activities, ECSA successfully held online events: Career Day, including a career panel and a seminar on working efficiently from home, and a Scientific Week, to present work in front of peers from IARC, the Cancéropôle Lyon Auvergne Rhône-Alpes, the US National Cancer Institute, and the German DKFZ.



The internal programme of generic skills courses, jointly managed by LCB and the Human Resources Office, offered 30 courses to ECVS in 2020–2021 that were attended by more than 200 ECVS.

In view of the COVID-19 crisis, the offer was reduced to priority events and organised online.

In addition, ECVS accessed 97 learning resources from the WHO learning ilearn platform.



Based on the recommendations of previous reviews, additional support for career development was provided.

The importance of the supervisor's guidance on the project(s), but also on career prospects was reiterated and is clearly mentioned in the Handbook, as an essential element of a successful doctoral or postdoctoral experience.

The "job application clinic" available through the Career Prospects Portal continued to be offered by LCB.

As part of the Supervisory, Managerial and Leadership Training Plan, led by HRO in collaboration with LCB, a series of webinars were organized for supervisors to initiate and facilitate meaningful career conversations with team members, and for team members to reflect on their career.

As a complement to enhancing the skills of supervisors to discuss career aspiration with the ECS under their supervision, and as recommended by the Scientific Council, an IARC Mentoring Programme was developed with a group of volunteers from across the Agency as part of the IARC Quality of Worklife Initiative. **Please see related poster.**



The Agency awarded seven IARC Postdoctoral Fellowships to LMIC candidates for projects in line with IARC’s emerging priorities or on the relation between cancer and COVID-19.

In addition, and to identify complementary sources of funding for the programme, negotiations with Children with Cancer UK led to an ad hoc call for IARC Postdoctoral Fellowships targeting scientists wishing to carry our research on paediatric cancers or teenagers and young adults cancers. Two fellowships were awarded.

● **Visiting Scientist Awards**

Discontinuation of the 12-month Senior Visiting Scientist Award in 2020

Plans to convert it into 3 x six-month Mid-career Visiting Scientist Awards (or more shorter awards)

Reallocation of funding from Special Account for Undesignated Voluntary Contributions to be submitted to Governing Council in May 2022




As described in the last IARC Director's report to the Governing Council and in the IARC Medium Term Strategy 2021–2025, it was decided in 2020 to discontinue the IARC Senior Visiting Scientist Award. In view of the limited resources of the Agency and of the capacity building mission of the Agency, it was indeed considered more cost efficient to convert this award into several shorter awards targeting mid-career scientists from LMICs and/or Participating States, to develop collaborative research projects with IARC, and contribute to enhancing their career prospects and build the capacity of their instruction through longer term collaborations initiated/strengthened through the Fellowship.

It is foreseen that one 12-month Senior Scientists Award can be converted into three six-month Mid-career Visiting Scientist Awards (or more awards of shorter duration). A draft announcement is shared in Appendix 3 of the Biennial Report on IARC Education and Training activities (SC/58/6).

The IARC Senior Visiting Scientists Award being funded through the Special Account for Undesignated Voluntary Contributions as per Resolution GC/34/R9, reallocation of funding will have to be formalized. The Scientific Council members are kindly requested to provide feedback on this proposal so that the matter can be brought attention of the 64th Session of IARC Governing Council in May 2022.

UICC-IARC Development Fellowships
Participants of the IARC Summer School 2021

Examples of projects
Oil production and risk of cancer in Azerbaijan
Enhancing Screening Services for Early Detection of Cervical Cancer in Georgia
Establishment of an Electronic based Alexandria Cancer Registry, Egypt
The impact of socioeconomic status on the molecular epidemiology of esophageal cancer



In collaboration with the Union for International Cancer Control (UICC), the UICC-IARC Development Fellowship set-up in 2012 enables a selected number of participants of the IARC Summer School to return to IARC for a period of one month for further training and collaborative work.

In 2021, this Fellowship was awarded to seven researchers from LMICs. Three fellowships were funded by UICC and four by IARC.

Partnerships and funding

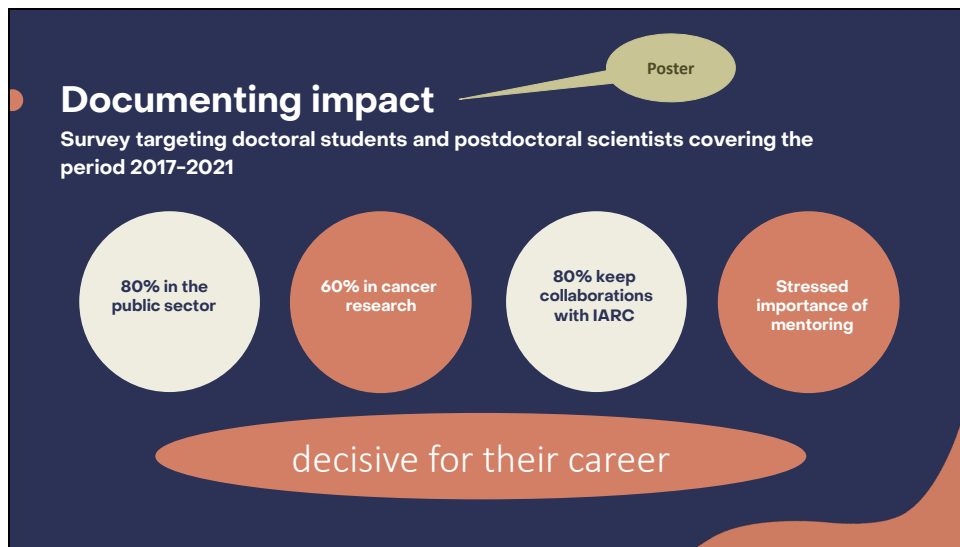
Funding of IARC Fellowships

Placement of students, postdoctoral or visiting scientists



As mentioned, and with the great support of the resource mobilisation team, efforts were intensified to mobilise funding for IARC Fellowships, which led to an agreement with Children with Cancer UK.

Regarding partnerships, an agreement was signed with the Italian ISS for the joint supervision/hosting of three PhD students. IARC was also invited to partner with the German DKFZ for the development of a Cancer Prevention Graduate School.



To contribute to document the outcomes of the Programme, a survey was run in Autumn 2021, targeting the 123 doctoral students and postdoctoral scientists (including IARC Fellows) who benefitted from the programme between 2017 and 2021.

Approx. 80% of respondents are now working in the public sector and 61% are still active in cancer research. 20% are managing their group.

81% of all respondents continued to collaborate with IARC after their stay.

More than 95% of respondents considered their stay to be either decisive (53%) or helpful (44%) for their career (the other options were “minimal” 3% or “adverse” 0%).

Please see related poster.



The IARC Research Training and Fellowship Programme continues to demonstrate its relevance and efficiency in providing opportunities for deserving early career scientists from all around the world to acquire excellent training and experience in an exceptional multicultural and international environment, enhanced by the hosting of visiting scientists.

In the coming years, and in addition to maintaining the programme at its current level of quality, and onboarding/supporting ECVS and their host team on a daily basis, the focus of LCB will be to:

- further implement the terms contained in the Programme’s Handbook and monitor the need for any modifications;
- continue to develop and sustain initiatives to contribute to enhance the training experience/career prospect of ECS, in particular doctoral students and postdoctoral scientists;
- continue to interact and support ECSA;
- identify additional resources to maintain or expand training opportunities for Postdoctoral Fellowships; and
- strengthen the links with local and international stakeholders.

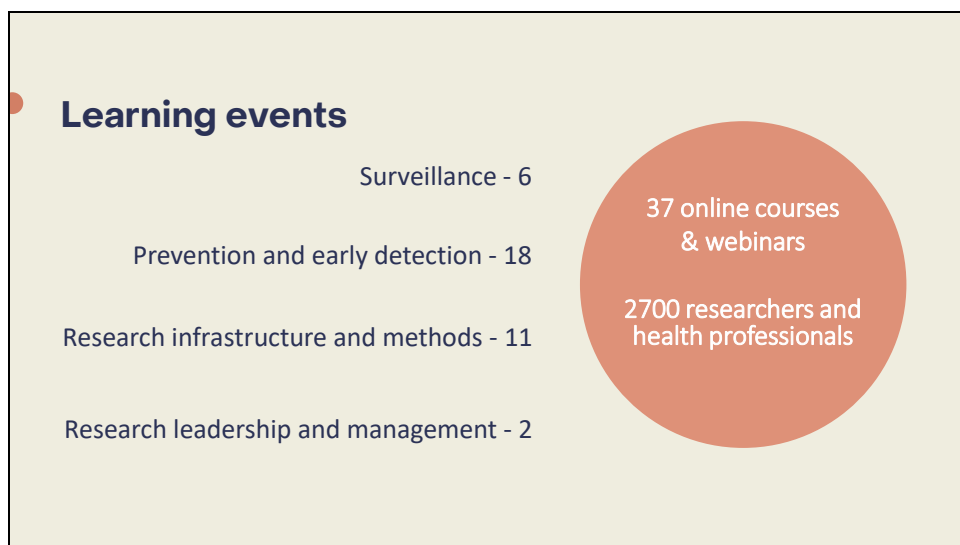


As one of its core functions, and since its inception, IARC has been holding courses globally to contribute to lifelong learning to improve theoretical and practical skills of cancer investigators, with emphasis on researchers from LMICs. These initiatives have also stimulated collaborations with IARC.

The specific aims of the IARC Courses Programme are as follows:

To stimulate research in cancer by developing individual and institutional expertise in areas of IARC competence through learning events (courses and webinars).

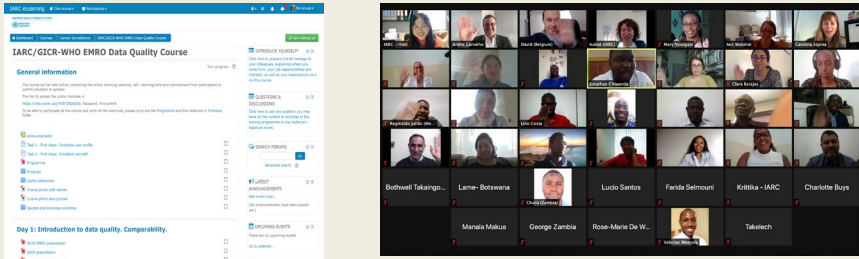
To bring IARC learning and teaching resources closer to their target audiences, by developing eLearning material and initiatives, including in various languages



During the reporting period, IARC has continued to organize learning events in areas of IARC competence, in particular targeting individuals and institutions in LMICs. In view of the global health crisis, courses were organized online and were redesigned to combine live sessions with facilitated self-learning. The IARC online teaching and learning infrastructure developed over previous years allowed to adapt rapidly to the situation and to offer tools for IARC Branches and their collaborators.

Overall, the Agency organized 37 courses and webinars which contributed to lifelong learning of around 2700 scientists and health professionals from many countries, in particular LMICs. The number of scientists and health professionals trained through IARC initiatives was comparable to the previous reporting period. This reflects IARC's sustained commitment to teaching, including through innovative methods and effective partnerships to meet the increasing demand for courses in LMICs.

Online courses - examples



The image shows two examples of online courses. On the left is a screenshot of the 'IARC/WHO EMRO Cancer Registry Data Quality Course' interface, which includes sections for 'General information', 'Day 1: Introduction to data quality, Comparability', and 'COURSE OBJECTIVES'. On the right is a Zoom meeting grid for the 'Cancer Screening in Five Continents CanScreen5 master trainers course for African countries', showing participants from various African countries like Botswana, Zambia, and South Africa.

IARC-WHO EMRO Cancer Registry Data Quality Course

Cancer Screening in Five Continents
CanScreen5 master trainers course
for African countries

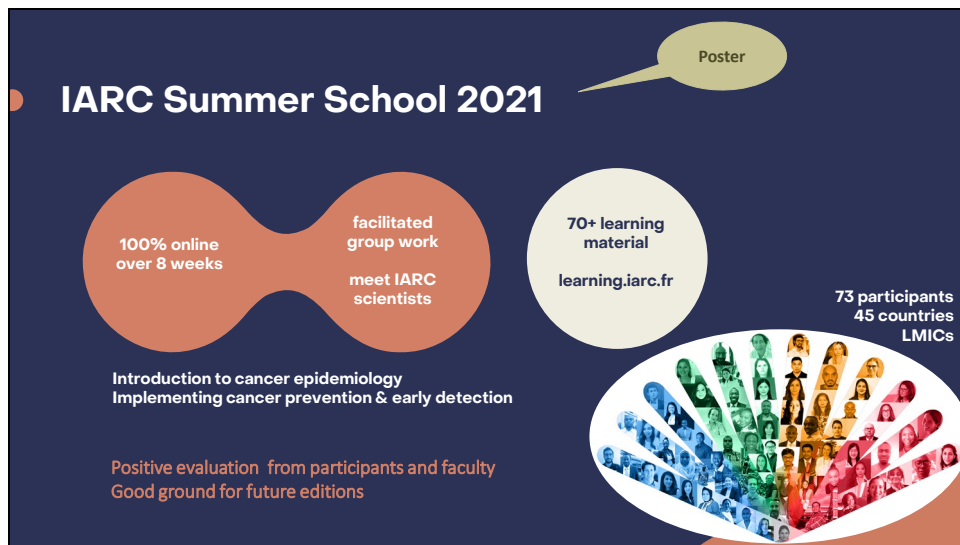
Several courses have been associated with collaborative research projects, where IARC is transferring skills needed to conduct the projects and to enable the subsequent implementation of the research findings in the countries concerned. Courses were either organized jointly between a scientific Branch and LCB or were primarily organized by a scientific Branch with the support of LCB (course design, creation of dedicated online learning space for the course, development of online activities, guidance on conducting online activities, etc...). Different course models were designed, according to needs and lasted between a few days to several months.

Examples:

Organized as part of GICR by the CSU Branch in partnership with WHO EMRO, a Data Quality Course was organized online over four days to build the capacity to assess the cancer registry data across the four data quality dimensions and identify best practices for enhancing data quality in the participating registries. Twenty staff working on an operational population-based cancer registry in one of the Eastern Mediterranean countries benefited from the course, which was taught by CSU staff, GICR regional hub experts and regional GICRNet trainers who had previously attended a trainers masterclass on the topic. The course blended self-study (materials and assignments available from a dedicated online learning space) and live online sessions (interactive lectures, Q&A sessions, exercises, group work in online breakout rooms). The course was positively evaluated by participants and faculty and will contribute to improve the quality of cancer registries data in the region, a key component of the comprehensive cancer control planning.

Co-organized by the Early Detection, Prevention and Infections (EPR) and LCB Branches, the CanScreen5 (Cancer Screening in Five Continents) master trainers course for African countries aimed at training selected master trainers in implementing, monitoring, evaluation, and continuous quality improvement of a cancer screening programme. Due to the pandemic the initial design of a blended approach, combining short eLearning and a 3½-day face-to-face session at IARC was revised and adapted to have a stronger online eLearning component for seven months: dedicated online learning space; pre/post-course test; four online self-learning modules (see below – learning resources); six interactive live sessions; three assignments. A total of 32 participants from 17 African countries were trained. They have become part of the CanScreen5 network and have initiated the process of sharing

information and data from their respective cancer screening programmes. The data is being checked, validated and uploaded to the project web portal (<https://canscreen5.iarc.fr>). These master-trainers will in turn train different levels of health providers in their country/region. Subsequent similar courses were organized targeting English and Spanish speaking countries from Latin America and the Caribbean.



Conducted since 2005, the IARC Summer School aims to improve the methodological and practical skills of cancer researchers and health professionals worldwide. In 2021, for the first time, it was conducted fully online, providing new challenges and opportunities.

In redesigning the modules “Introduction to Cancer Epidemiology” and “Implementing Cancer Prevention and Early Detection” for online delivery, the Scientific co-directors and the Learning and Capacity Building Branch (LCB) paid particular attention to keep the key elements of IARC Summer School: an international and multi-cultural learning environment, an interactive and practical programme and multiple opportunities to build a network and to encourage international collaboration in cancer research.

The learning material developed before and during the IARC Summer School was shared with the participants and also published on the IARC Learning Portal to benefit the research community globally.

Please see related poster.

IARC learning portal
Single access point to a wide variety of learning and teaching resources

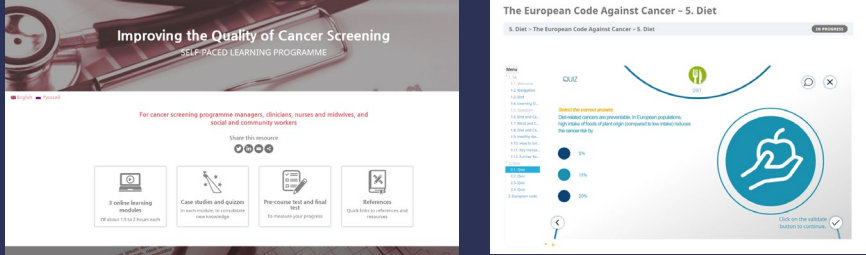


learning.iarc.fr 1,500+ accounts created since Nov 2019 Page

Launched in 2019, the IARC Learning portal is the entry door to thematic learning platforms (Biobanking, Cancer Prevention and Early Detection and World Cancer Report Updates). It also links to the IARC WebTV, including the Summer School video channel, as well as to the websites of other IARC-led projects with learning material on Cancer Surveillance and on the Exposome (Human Exposome Assessment Platform).

IARC Learning attracts a growingly increasing audience. Since November 2019, 1,554 persons (1,423 in 2020–21) have created an account on the portal to freely access learning resources.

Learning resources – examples



The image shows two examples of self-paced learning resources. On the left is a screenshot of a website titled 'Improving the Quality of Cancer Screening' with the subtitle 'SELF-PACED LEARNING PROGRAMME'. It features a navigation menu with four items: '3 self-paced modules', 'Case studies and quizzes', 'Pre-course test and final test', and 'References'. On the right is a screenshot of a quiz interface titled 'The European Code Against Cancer - 5. Diet'. It shows a progress bar at the top, a list of questions on the left, and a large circular graphic on the right with a hand holding a leaf, representing a diet. Below the graphic, there are four colored circles (blue, green, red, blue) and a 'Click on the correct button to continue.' prompt.

Quality of Cancer Screening
learning.iarc.fr/edp

ECAC 4th & Latest evidence, myths, and controversies

As a key complement to live events, IARC continued to produce self-learning resources.

A new self-paced learning programme on cancer screening and early diagnosis, was launched in the framework of the CanScreen5 project. The resource was translated into Russian and will be soon available in Spanish (<https://learning.iarc.fr/edp/resources/pgm-cancer-screening/>).

As part of the Cancer Prevention Europe consortium, 13 self-learning modules on the European Code Against Cancer, 4th edition (<https://learning.iarc.fr/edp/cpe/>) were developed. In addition, a series of 12 shorter modules were launched in November 2021 and entitled “Latest evidence, myths, and controversies” on cancer prevention, focus on the latest evidence that has emerged since the 4th edition of the European Code Against Cancer was published in 2014, and tackle some myths and controversies related to the topics addressed by the 12 recommendations of the European Code Against Cancer, 4th edition. The resources are being translated into French Spanish, Hungarian and Polish.

World Cancer Report Updates Poster

learning resources and events
selected content from the 2020 World Cancer Report
developments in cancer research for cancer prevention

5 live webinars
1100+ researchers and health professionals from 116 countries to exchange with international experts

4 e-learning modules
video, quizzes, questions and answers, certificates

learning.iarc.fr/wcr



As part of the IARC Learning Portal, and with the support of and in collaboration with the European Society for Medical Oncology, IARC launched the World Cancer Report Updates learning platform.

This provides learning resources and opportunities related to selected content from the 2020 World Cancer Report, as well as developments in cancer research for cancer prevention (<https://learning.iarc.fr/wcr/>).

Five live webinars provided the opportunity to 2 008 researchers and health professionals from 140 countries to exchange with international experts. Four e-learning modules were created from the webinar recordings, including short video teasers, quizzes, questions and answers, certificates.

Please see related poster.



In the last years, and in particular related to the development of the e-learning infrastructure and learning resources, there has been an evolution in the way LCB has worked with some scientific branches, moving from the provision of advice and support to a training project management role. LCB has indeed contributed to some of the branches' initiatives where there is a training component embedded within a broader project and has collaborated with scientific Branches for the development and running of projects.

This has in general started by collaborative support and evolved into the preparation of a joint proposal. If granted, resources are shared for the organisation of training events and the development of learning resources, with LCB playing a particular role in project management.



Besides the Canscreen5 and CPE projects described above, a good example of such collaborations has been the EU-funded Human Exposome Assessment Platform project, which started in January 2020 for five years.

Building on the success of the former B3Africa project, IARC has been part of the project consortium coordinated by the Karolinska Institute, Stockholm, Sweden, with the IARC LCB and NME/LSB Branches leading the Education and Dissemination work package.

The work includes a learning needs assessment, the design of the knowledge and information-sharing plan, the setup and maintenance of project's websites and social media (which are available through the IARC Learning Portal – <https://heap-exposome.eu/>), the organization of webinars series and workshops, as well as the development of learning material.

Please see related poster.



During the reporting period, IARC continued to organize and successfully run initiatives that both stimulated capacity building for research on cancer globally and contributed to developing local expertise in cancer epidemiology and prevention, particularly in LMICs.

The shifts initiated in the previous years were amplified, in emphasis, towards the increasing use of online learning and the development of eLearning resources, close liaison with IARC scientific Branches for advice and coordination, as well as developing partnerships with external organizations sharing the same dedication to capacity building in order to leverage additional support to training initiatives.

In the coming years the focus of LCB will be to:

- conduct a review of both the IARC Learning strategic directions and technical infrastructure;
- identify resources to consolidate the IARC Learning portal and to increase the production/publication of eLearning material in English and other languages;
- stimulate and support the organization of webinar series, with recorded sessions and material posted on the IARC website for free access;
- monitor the use of eLearning resources;
- identify funding resources to continue to run the IARC Summer School on a regular basis, as well as to set-up online courses expanding its target audience;
- develop more specialized and advanced modules in areas of IARC competence; and
- pursue collaboration with and support to Branches for the design, development, organization and/or evaluation of education and training materials, courses or programmes.

Thank you

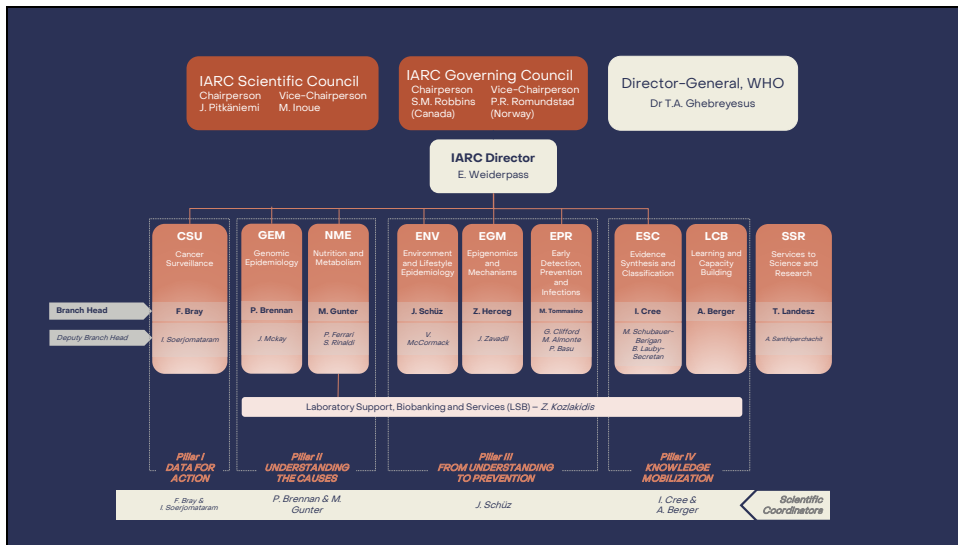
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Questions to the Scientific Council

Comments and suggestions on the activities, achievements and emphasis for the future

Feedback on the planned Mid-career Visiting Scientist Awards

Advice on seeking additional resources



● Learning and Capacity Building Branch

IARC Research Training and Fellowship Programme

IARC Courses Programme



IARC Regular Budget
Extra budgetary resources