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EXECUTIVE SUMMARY

The Director's Report reflects on the research work and related managerial activities accomplished during the past year. The main topics that were reported were as follows:

Scientific achievements

IARC produced the IARC Biennial Report 2020–2021, showcasing a selection of the work conducted during 2020–2021 by IARC scientists in collaboration with its global network of experts. The Director's Report starts with an overview of scientific achievements of the past year, followed by information about IARC publications and capacity building. Additional Key Performance Indicators are shown for 2021.

Some highlights of IARC's research are reported across the four Pillars: data for action, understanding the causes, from understanding to prevention, and knowledge mobilization (*WHO Classification of Tumours*, *IARC Monographs Programme*, *IARC Handbooks of Cancer Prevention*). Finally, IARC research at the intersection between coronavirus disease (COVID-19) and cancer is also underlined.

Cooperation, Partnerships and Strategic Engagement

The strengthened cooperation between IARC and the World Health Organization (WHO) is underlined, as showed by the development of an IARC-WHO joint workplan of action 2022–2023, focused on the WHO Global Initiatives. Selected high-level partnerships of the Agency are highlighted for the past year, as well as the specific actions taken last year to accelerate the Agency's resource mobilization efforts. Grants and contracts obtained over the past year are reported. The chapter ends with an update on IARC engagement under the Framework of Engagement with Non-State Actors (FENSA).

Management

In 2022, IARC embarked on an exciting new phase in its history with the implementation of its scientific strategy and the exciting move to the Nouveau Centre. The conceptual framework to assess progress toward the implementation of the new Medium-Term Strategy 2021–2025 is briefly described. In its continued effort to modernize IARC's administrative management systems, IARC joined forces with WHO and embarked on the implementation of a new Business Management System. Concurrently, IARC has devised an administrative transformation roadmap in support of the new Medium-Term Strategy 2021–2025, inter alia to further strengthen IARC's scientific IT capacity and data protection measures. Finally, information on IARC personnel is provided for the past year, as well as for IARC Working Groups and Programmes. The chapter concludes with an update on the Nouveau Centre.

Death of Dr Paul Kleihues, IARC Director Emeritus

It was with great sadness that IARC learnt of the death of the IARC Director Emeritus, Dr Paul Kleihues in March 2022: a short obituary appears on the IARC internet: <https://www.iarc.who.int/news-events/dr-paul-kleihues-21-may-1936-17-march-2022/> and an electronic book of condolences is available at: <https://datacollect.iarc.fr/redcap/surveys/?s=ATL8YYL94X8MYTD>

The Governing Council is invited to consider DRAFT Resolution GC/64/R17 as a tribute to Dr Kleihues.



1. INTRODUCTION

1. In 2021, representatives from IARC's Participating States gathered virtually for the second time for the Sixty-Third Session of IARC's Governing Council (17–18 May 2021). At this Session, IARC welcomed China as a new Participating State. The Governing Council also adopted its new Medium-Term Strategy, 2021–2025. This strategy aims to position IARC firmly as a global convener of scientific excellence in cancer prevention research, as well as a leading authority on global cancer prevention research.

2. Based on IARC's latest estimates, the global cancer burden in 2020 is estimated to have risen to 19.1 million new cases and 10 million deaths. One in five people worldwide will develop cancer during their lifetime. One in eight men and one in 11 women will die from the disease. By 2040, cancer incidence should reach 30.2 million new cases. Inequalities in the cancer burden and cancer risk factors disproportionately affect low- and middle-income countries (LMICs). Inequalities exist within countries, disproportionately affecting disadvantaged individuals, and social groups, and disparities will be amplified in the future. These inequalities drive the public health impact of cancer along with significant economic consequences. IARC's mission is more important than ever. IARC's cause is relevant. IARC's cause is important.

3. IARC's personnel once again demonstrated impressive and unwavering commitment and resilience this past year and I extend my most sincere thanks and recognition to all. Despite the challenges, the restrictions and the context, IARC's mission has continued. Key scientific achievements are presented in IARC's 2020–2021 Biennial Report, now available in PDF format. The report showcases a selection of the work conducted by IARC in collaboration with its global network of experts. It highlights several studies that show the long-term beneficial impact of preventive interventions, emphasizing the tremendous potential for prevention to invert the projected trends in cancer incidence and mortality.

4. This year, the report is accompanied by a webpage (<https://www.iarc.who.int/biennial-report-2020-2021web/>) highlighting IARC's key cancer data. Furthermore, to “green the blue”, IARC no longer provides paper copies of its Governance documents, and this Biennial Report 2020–2021 is the first to be fully electronic.

5. IARC continues to strengthen collaboration with the World Health Organization (WHO) to generate scientific evidence and share knowledge. 2021 drew to a close with some important strategic meetings with WHO. On 27 September 2021, French President Emmanuel Macron, WHO Director-General, and Professor Agnès Buzyn, appointed Executive Director of the WHO Academy, attended a groundbreaking ceremony for the Academy's future campus here in Lyon, and I was honored to be part of this historic event. The Academy will provide millions of people around the world with rapid access to the highest quality training courses in health. The Academy will be an essential platform for disseminating knowledge, and an important future partner for IARC, located next to the new building in Lyon-Gerland bio-district.

6. On 12 November 2021, IARC coordinated a high-level meeting between the Agency and WHO. The meeting was an opportunity to improve and accelerate coordination between IARC and WHO, and the outcome was the development of a collaborative work plan for 2022–2023 in line with both the WHO Thirteenth General Programme of Work 2019–2023 and IARC's Medium-Term Strategy 2021–2025.

7. This joint workplan promotes areas of cooperation that will enable coherent programme design, successful resource mobilization, and successful implementation of key global public health initiatives related to cancer.

8. IARC research supports WHO in many Global Initiatives. IARC is currently supporting the Global Strategy to Accelerate the Elimination of Cervical Cancer by providing key cancer data, scientific evidence, technical materials, and updates. IARC has been at the forefront of game-changing research to demonstrate the safety and efficacy of **a single dose of the HPV vaccine** to prevent infection with HPV types 16 and 18. IARC is also working to identify simplified alternatives for cancer screening in low- and middle-income countries (LMICs). To support the WHO Global Breast Cancer Initiative (GBCI), IARC has a wide range of research programmes, epidemiological studies, global cancer data and global goods that fit perfectly to support WHO in the implementation of efficient and cost-effective solutions. IARC's work also supports the WHO Global Initiative on Childhood Cancer, and the WHO Global Hepatitis Programme.
9. IARC's research at the intersection of COVID-19 and cancer has intensified in the last year. IARC developed the COVID-19 and cancer initiative: a building back better proposal (IARC-C19) which aims to provide the following over a four-year timeframe: i) a global platform to monitor national policies in the wake of the pandemic and their impact on cancer services and cancer outcomes, and ii) the evidence needed to support decision-making in cancer control, both during and after the pandemic.
10. A critical feature of IARC-C19 is the transfer, exchange and dissemination of knowledge to various stakeholders within IARC's Participating States. IARC will disseminate information to key stakeholders from policy makers to civil society organizations in collaboration with national stakeholders and academic partners. This is very much in line with IARC's mission: supporting a coordinated approach among networks of cancer experts and institutions worldwide, in close cooperation with WHO.
11. IARC also celebrated the 50th anniversary of the *IARC Monographs programme on the Identification of Carcinogenic Hazards to Humans*. The first ever meeting of the *IARC Monographs* took place on 13–17 December 1971 in Geneva, Switzerland, and the results were published with its distinctive orange cover as Volume 1 of the *IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man* in 1972.
12. IARC launched various initiatives to address gender equality, such as its first complete Gender Equality Plan which proposes new measures to be implemented at IARC that were fully endorsed by IARC's Scientific Council in February 2022. This year also sees the launch of IARC's very first Award for Women in Cancer Research. The objective of this prestigious annual award is to publicly recognize a woman who has made outstanding major scientific achievements in cancer research.
13. Considering the continued resource constraints, IARC will further prioritize activities to ensure that the Agency remains fit for purpose and sufficiently agile to effectively respond to the evolving operational cancer research environment. IARC will continue to provide sustainable and enabling conditions that foster a strong and well-defined organizational identity based on IARC's vision, mission, values, and priorities.
14. In 2022, IARC embarks on an exciting new phase in its history with the implementation and monitoring of our scientific strategy, and our exciting move to the "Nouveau Centre". I look forward to continuing our essential mission in cancer prevention research, and working to achieve a world where fewer people develop cancer.

2. SCIENTIFIC ACHIEVEMENTS¹

15. IARC produced the IARC Biennial Report 2020–2021, showcasing a selection of the work conducted during 2020–2021 by IARC scientists in collaboration with its global network of experts. This time, the Biennial Report has an associated webpage that highlights key cancer data and key figures on IARC during the 2020–2021 biennium.

16. The scientific highlights are arranged according to the four IARC Pillars, as spelled out in the Medium-Term Strategy priorities ([Document GC/63/6A](#)). IARC research at the intersection between COVID-19 and cancer is also highlighted.

2.1 Pillar I. Data for action

17. IARC launched Cancer Over Time in November 2021, a new subsite of the IARC Global Cancer Observatory (GCO). Cancer Over Time is a web-based platform that enables interactive visualizations of the trends in cancer-specific incidence and mortality rates in 60 countries over the past 65 years.

18. IARC, in collaboration with the Northern Ireland Cancer Registry, and the Union for International Cancer Control (UICC), as part of the International Cancer Benchmarking Partnership (ICBP SURVMARK-2), launched a new software called CanStaging⁺ to facilitate cancer staging worldwide.

19. IARC revealed both advances and inequities in progress in tackling the two leading causes of premature mortality worldwide. IARC reported uniform declines in premature death from cardiovascular disease and cancer in the high-income countries studied in this millennium. In the middle-income countries, progress was more mixed, with greater success evident in the control of cardiovascular disease. IARC found that Target 3.4 for NCDs is likely to be attained by 2030 in seven of the 10 high-income countries and two of the 10 middle-income countries studied.

20. IARC confirmed that the current epidemiological landscape of thyroid cancer is strongly suggestive of a large effect of overdiagnosis in many countries and settings worldwide. This confirmed the relevance of thyroid cancer overdiagnosis as a global public health problem.

21. New global, regional, and national liver cancer estimates from IARC in 2018 indicated that about 661 000 cases of hepatocellular carcinoma, about 123 000 cases of intrahepatic cholangiocarcinoma, and about 42 000 cases of other subtypes occurred worldwide. This study uncovered the distinct geographical patterns of incidence of the major subtypes of liver cancer. Incidence rates of hepatocellular carcinoma were highest in Eastern Asia, Northern Africa, and South-Eastern Asia. Incidence rates of intrahepatic cholangiocarcinoma were highest in South-Eastern Asia, Eastern Asia, Northern Europe, the Caribbean, Central America, and Oceania.

22. IARC showed that an estimated 741 000 new cases of cancer in 2020 were associated with alcohol consumption globally, and that even light to moderate drinking has a significant impact on the burden of cancer.

23. IARC estimated that almost 11 000 new cancer cases linked to alcohol and almost 5000 cancer deaths linked to alcohol could have been avoided in the WHO European Region in 2019 by doubling the current excise duties on alcoholic beverages. This represents 6% of new alcohol-attributable cancer cases and 6% of deaths linked to alcohol consumption in the region during that year.

¹ Please refer to the IARC Organizational Structure in [Figure 9](#) for list of acronyms.

2.2 Pillar II. Understanding the causes

24. IARC genome-wide DNA methylation study provided new evidence that aberrant epigenome profiles caused by environmental agents are early markers of oesophageal squamous cell carcinoma in nine countries with high incidence of this disease, including countries in Africa, Asia, and South America.
25. IARC showed no evidence of a mutational signature indicative of an unknown exogenous exposure capable of explaining the observed differences in oesophageal squamous cell carcinoma incidence rates. IARC highlighted that new research strategies and infrastructures that combine population-based and laboratory research at a global level are required to identify novel cancer risk factors.
26. IARC, in collaboration with Moi University in Kenya, the Kilimanjaro Clinical Research Institute, and the Malawi College of Medicine showed that alcohol consumption was a substantial contributor to the burden of oesophageal squamous cell carcinoma (ESCC) in East Africa, particularly among men, suggesting that a large fraction of these cancers could be prevented by cessation of alcohol consumption.
27. IARC, in collaboration with the United States National Cancer Institute, and partner institutions showed that higher levels of 2-hydroxy-3-methylbutyric acid, a biomarker of alcohol consumption, were associated with increased risk of hepatocellular carcinoma, pancreatic cancer, and liver disease mortality.
28. IARC, in collaboration with researchers from Imperial College London and the University of São Paulo (Brazil), found that higher consumption of ultra-processed foods in Europe was associated with higher five-year body weight gain in a dose–response manner, and with a higher risk of becoming overweight or obese.
29. IARC reported for the first time that the consumption of ultra-processed foods is associated with a higher risk of breast cancer in young women in Latin America. These findings will be instrumental to support public health policies.
30. IARC, in collaboration with Imperial College London, and partner institutions found that foods that require higher levels of greenhouse gas emissions or that require larger areas of land for their production are associated with higher rates of all-cause mortality, cause-specific mortality, and cancer incidence. Understanding the impact of diets on both population health and planetary health is crucial for the development of sustainable public health policies and to support the environment.
31. IARC and partner institutions provided strong evidence for a causal effect of fasting insulin levels on increasing risk of colorectal cancer. The findings suggest that pharmacological or lifestyle interventions that lower circulating insulin levels may be beneficial in preventing colorectal tumorigenesis.
32. IARC, in collaboration with the National Cancer Center Institute for Cancer Control, Japan, reported a possible role of coffee and coffee polyphenols in preventing colorectal cancer.
33. IARC, in collaboration with the N.N. Blokhin National Medical Research Centre of Oncology of the Russian Academy of Medical Sciences, provided robust evidence indicating that quitting smoking after diagnosis of lung cancer is associated with significant improvement in overall survival and disease-free survival among these patients.
34. IARC provided new evidence that epigenetic alterations associated with childhood cancer may be evident at birth, consistent with the notion that these changes may play a precursor role in the development of paediatric cancer.

2.3 Pillar III. From understanding to prevention

35. IARC demonstrated, for the first time, **the efficacy of a single dose of human papillomavirus (HPV) vaccine in adolescent girls in India against persistent infection with HPV types 16 and 18**. Based on these findings, the United Kingdom Joint Committee on Vaccination and Immunisation (JCVI) has issued interim advice to reduce the number of doses of vaccine against HPV from two to one for girls younger than 15 years.
36. IARC developed and demonstrated, in collaboration with Professor Groesbeck Parham and his team in Zambia, a revolutionary new method to prevent cervical cancer. This new method uses a handheld battery-operated device to destroy precancerous cervical cells before they have a chance to develop into cancer.
37. IARC reported that 5% of the global burden of cervical cancer was due to HIV infection. Southern Africa accounted for 44% of cervical cancer cases attributable to HIV infection. 71% of the global burden of Kaposi sarcoma was due to HIV infection, with up to 93% of cancer cases due to HIV infection in Sub-Saharan Africa.
38. IARC showed that HIV infection and HIV-related immunosuppression had an amplifying effect on anal HPV16 infection in both men who have sex with men and men who have sex with women, highlighting the benefits of gender-neutral HPV vaccination before sexual debut over catch-up HPV vaccination.
39. Oropharyngeal cancer in men is reported to be the most common cancer caused by HPV infection in the USA. IARC, in collaboration with the University of Texas, and partners found that in the USA almost one million cases of oropharyngeal cancer in men could be prevented by 2100 if 80% of adolescents in the USA were adequately vaccinated against HPV by 2025.
40. IARC showed that occupational exposure to polycyclic aromatic hydrocarbons was modestly associated with an increased risk of lung cancer in both men and women. In addition, joint effects of occupational exposure to polycyclic aromatic hydrocarbons and smoking were present for squamous cell lung cancer both in men and women, and also for small cell lung cancer and adenocarcinoma in women.
41. IARC, in collaboration with scientists from the Brazilian Instituto Nacional de Câncer and the United States National Cancer Institute, estimated the potential benefits of large-scale lung cancer screening by low-dose computed tomography in Brazil, and reported that about 2500–3000 lung cancer deaths could be prevented by screening about 500 000 people.
42. IARC, the United States National Cancer Institute, and the Brown University School of Public Health (USA) published a new commentary about improving equity in lung cancer screening eligibility for Black individuals in the USA, which will require an understanding of the underlying causes of disparities, defining which disparities to eliminate, and developing new tools accordingly.
43. IARC reported larger survival deficit in women with HIV with non-metastatic breast cancer than HIV-negative women within the African Breast Cancer–Disparities in Outcomes (ABC-DO) study conducted in five countries in Sub-Saharan Africa. This study highlights the need for a better understanding of the reasons underlying this differential (e.g. biological mechanisms, health behaviors, detrimental interactions between HIV and breast cancer treatment, or higher background mortality associated with HIV), to inform strategies to reduce mortality in this group of patients.
44. ABC-DO treatment data from five sub-Saharan African countries has highlighted the extent of treatment abandonment. In an analysis of comprehensive cancer management in accordance with guidelines, in addition to the lack of any treatment among some breast cancer patients, among treated

women, treatment abandonment proportions were high in all countries. The results emphasize that early detection strategies will only reap expected survival gains if they are accompanied by new efforts to strengthen timely, appropriate and complete multimodal disease management.

45. IARC highlighted the improvements in breast cancer care that occurred in Morocco as a result of pragmatic policies and systematic planning by the Moroccan Ministry of Health.

46. IARC reported that 78.5% of non-cardia gastric cancer cases and 62.1% of cardia gastric cancer cases in China could be attributed to *H. pylori* infection. Population-based *H. pylori* mass eradication programmes through testing and treatment should be considered as a key strategy for gastric cancer prevention in China and other high-risk settings globally.

47. Taking the European Code against Cancer as a model, the World Code against Cancer served as a framework to develop Regional Codes, suited to the different regional epidemiological, socio-economic and cultural conditions. The Latin America and the Caribbean Code against Cancer is currently under development.

2.4 Pillar IV. Knowledge mobilization

48. IARC published the 5th Edition, volume 6, of the *WHO Classification of Tumours: Central Nervous System Tumours*. This WHO series is regarded as the gold standard for the diagnosis of tumours and comprises a unique synthesis of histopathological diagnosis with digital and molecular pathology.

49. IARC *Monographs* classified gentian violet, leucomalachite green, and CI Direct Blue 218 as *possibly carcinogenic to humans* (Group 2B) while leucogentian violet and malachite green are *not classifiable as to their carcinogenicity to humans* (Group 3).

50. IARC *Monographs* classified 1,2-diphenylhydrazine, diphenylamine, *N*-methylolacrylamide, and isophorone as *possibly carcinogenic to humans* (Group 2B) mainly on the basis of *sufficient evidence of carcinogenicity* in experimental animals. 1,1,1-Trichloroethane was evaluated as *probably carcinogenic to humans* (Group 2A) on the basis of *sufficient evidence of carcinogenicity* in experimental animals and *limited evidence of carcinogenicity* in humans (positive associations were seen for multiple myeloma). For all agents, there was *limited mechanistic evidence*.

51. IARC *Monographs* classified acrolein as *probably carcinogenic to humans* (Group 2A), and crotonaldehyde and arecoline as *possibly carcinogenic to humans* (Group 2B).

52. IARC *Monographs* evaluated opium consumption as *carcinogenic to humans* (Group 1) on the basis of *sufficient evidence* of cancer in humans. Opium consumption causes cancers of the larynx, lung, and urinary bladder. There is also *limited evidence* that opium consumption causes cancers of the oesophagus, pancreas, pharynx, and stomach. The Group 1 classification applies to all types of opium preparation and methods of consumption, but not to opium derivatives and opioids, which were not evaluated by the Working Group.

53. IARC published *IARC Handbooks of Cancer Prevention* volume 18: Evaluation of cervical cancer screening methods, reviewing and assessing all available studies of current methods for cervical cancer screening in terms of their effect on cervical cancer incidence and mortality.

54. The meeting for the *IARC Handbooks of Cancer Prevention* volume 19: Oral Cancer Prevention took place in December 2021. Oral cancer is highly prevalent in South-East Asia and is linked to chewing

smokeless tobacco products. This volume of the *IARC Handbooks* will help fight a major public health problem, and will fit into the WHO mission of tobacco control, feeding into the WHO Framework Convention on Tobacco Control.

2.5 IARC research at the intersection between COVID-19 and cancer

55. IARC found that two thirds of all population-based cancer registries surveyed reported disruptions to their operation during the early phases of the COVID-19 pandemic. Negative impacts were reported more commonly in countries with a low Human Development Index than in countries with a high Human Development Index.

56. IARC and partner institutions comprehensively assessed the impact of the COVID-19 pandemic on paediatric oncology diagnoses and reported that the estimated age-standardized incidence rates were markedly higher, overall and across diagnostic groups, in 2020 compared with 2015–2019. However, diagnostic processes, timeliness of diagnosis, and delivery of treatment were hardly affected during the COVID-19 pandemic, and the underlying reasons for the increase in incidence rates seen in this study remain speculative.

57. IARC and partners described how public health workers in Bangladesh leveraged electronic data systems to track the impact of the COVID-19 pandemic on cervical cancer screening programmes and to restart cancer screening services as rapidly as possible in less affected regions.

58. IARC investigated the impact of the COVID-19 pandemic on Biopreservation and Biobanking, and published a special issue in “Biopreservation and Biobanking”, vol 18, issue 6, 2020.

59. IARC developed the COVID-19 and cancer initiative: a building back better proposal (IARC-C19) which is detailed in [Document GC/64/6](#).

2.6 Report on Key Performance Indicators (KPIs)

2.6.1 Publications

60. A broader range of KPIs began to be reported in 2020. In addition to the productivity (number of IARC articles in 2021), these new KPIs highlight the influence of IARC research (h-index), international collaboration, and visibility.

These KPIs form the baseline for comparison going forward, and the evolution of these KPIs will be monitored during the period of the new Medium-Term Strategy 2021–2025.

61. **Productivity.** In 2021, IARC scientists published a total of **426 articles** in 187 journals, of which 350 (82%) were peer-reviewed papers*. The total number of articles and the proportion of peer-reviewed papers were quite similar to recent years (see [Table 1](#)).

**Records were retrieved via the Web of Science database, specifically from Science Citation Index and Emerging Sources Citation Index. Records were restricted to 2021 as the final publication year and records marked “Meeting Abstract” were removed prior to analysis.*

62. **Influence of research: citation index (h-index).** [Table 2](#) shows an h-index of 17 for IARC's 2021 output, meaning that 17 articles have been cited at least 17 times each, with an average citation count of 12.0 per article. The top 10 most cited articles published in 2021 are listed in the [Table 3](#).

63. Comparative data for the previous five years is also shown. The h-index for articles from 2017 to 2021 inclusive is 93, with an average citation rate of 50.7 per article.
64. **International collaboration.** Analysing the proportion of IARC's publications whose co-author affiliations include addresses in more than one country. Of the 426 total papers for 2021, 409 (96%) involved international collaboration, including a co-author affiliation from at least one other country. This percentage is in line with that of the last five years overall, 2017–2021, in which 1892 (93%) of 2026 total articles involved at least one other country affiliation.
65. **Visibility.** The Altmetric database tracks mentions of IARC research output in the news, social media, policy documents and other non-traditional sources of citation. It therefore complements traditional citation tracking from sources such as Web of Science and other databases in the scholarly ecosystem. [Figure 1](#) gives a snapshot of IARC's altmetrics profile for its 2021 output and *forms the baseline for comparison going forward*.
66. [Table 4](#) reported the number of visitors to the IARC websites in 2021. Among IARC research project websites, the Global Cancer Observatory (GCO) received the highest number of total visits in 2021.
67. [Figure 2](#) reported the number of visits to the IARC websites throughout 2021. The peak of 2684 visits (4 February 2021) is on World Cancer Day. The following web content was published: [IARC Press Release 294](#), [News item](#).
68. [Figure 3](#) reported the number of visits to the Monographs website in 2021. The chart indicates a steady level of interest in the Monographs website. No peak was observed.
69. [Figure 4](#) reported the number of visitors to the Global Cancer Observatory (GCO) website in 2021. The peak of 4430 visits (4 February 2021) is on World Cancer Day.
70. The most popular downloads from the IARC Publications website are presented in [Table 5](#).

2.6.2 Capacity building

71. In 2021, IARC hosted a total of 142 Early Career and Visiting Scientists (ECVS) through its Research Training and Fellowship Programme, out of which 83 were new arrivals.
72. As shown in [Table 6](#), the call for applications for IARC Postdoctoral Fellowships launched end 2020 led in 2021 to the award of seven fellowships to LMIC candidates, funded on the regular budget. Projects are in line with IARC's emerging priorities (Evolving cancer risk factors and populations in transition; Implementation research; Economic and societal impacts of cancer) or on the relation between cancer and COVID-19. These awards were granted after a selection process among 81 applications, 72 of which were eligible to be considered and 23 recommended for final selection.
73. One Return Grant of €10 000 was awarded to a former IARC Postdoctoral Fellow from China.

74. As described in the IARC Director's report to the 63rd session of the Governing Council in 2021 and in the IARC Medium-Term Strategy 2021–2025, it was decided to discontinue the IARC Senior Visiting Scientist Award. In view of the limited resources of the Agency and of its capacity building mission, 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. The proposal was presented to the Scientific Council in 2022, which supported the plans and recommended some flexibility in the duration of the Mid-Career Visiting Scientist Awards, with an average of six months but varying from three to 12 months depending on the specific project. A resolution is presented at this session of the Governing Council [see DRAFT Resolution GC/64/R4], to authorize the conversion of the 12-month Senior Visiting Scientist Award into shorter Mid-Career Visiting Scientist Awards, to be funded from the Special Account for Undesignated Contributions.

75. The IARC Courses Programme enhances research capacity of the global research community, in particular in LMICs, through lifelong learning opportunities in the areas of the Agency's expertise.

76. In 2021, and as shown in [Table 7](#), the Agency organized 21 training courses and webinars targeting researchers and health professionals from many countries, in particular LMICs. It is to be noted that in view of the global health crisis, most courses were organized online in 2021. Courses were redesigned to combine live sessions with facilitated self-learning, and lasted between a few days (e.g. Cancer Registration: Principles and Methods) to several months (e.g. IARC Summer School cf. below).

77. With the COVID-19 crisis, the IARC Summer School in Epidemiology aiming to improve the methodological and practical skills of cancer researchers and health professionals was entirely redesigned and conducted 100% online in 2021. The priority was to maintain what makes the course so unique: fostering international collaboration, offering multiple opportunities for interactions, as well delivering high-quality multidisciplinary lectures and practical activities to facilitate the learning process of participants. A blended learning approach was adopted: four weeks of self-paced activities (recorded lectures and assignments punctuated by 2/3 live sessions and networking events), followed by two weeks of daily live sessions, and group work activities. Two modules were held "Introduction to Cancer Epidemiology" and "Implementing Cancer Prevention and Early Detection", with the participation of 73 cancer researchers and health professionals from over 45 countries, in vast majority from LMICs. The material of the Summer School 2021 has been shared widely via the IARC Learning portal (<https://learning.iarc.fr>). The feedback from participants and the assessment from the course directors and main players of this edition will provide a good ground for the design of future editions of the IARC Summer School and other similar events, to make sure that, when permitted, potential onsite components of courses will be even more focused on practical and networking aspects.

78. As a key complement to live events, IARC continued to produce self-learning resources, including the two following examples.

79. Developed by the Environment and Lifestyle Epidemiology (ENV) and the Learning and Capacity Building (LCB) Branches, the Cancer Prevention Europe programme on the European Code Against Cancer (ECAC) launched in 2021, proposes eLearning modules on each of the 12 recommendations from the ECAC, as well as a 13th module on the ECAC methodology. In addition, a series of 12 shorter modules were launched later in the year and entitled "Latest evidence, myths, and controversies" on cancer prevention.

These modules focus on the latest evidence that has emerged since the 4th edition of the European Code Against Cancer was published in 2014, and tackles 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.

80. As part of the World Cancer Report Updates Learning Platform launched in 2020, with the support of, and in collaboration with, the European Society for Medical Oncology, four live webinars provided the opportunity to around a thousand researchers and health professionals to exchange with international experts in cancer research for cancer prevention. Four eLearning modules were created from former webinars recordings, including short video teasers, quizzes, questions and answers and certificates (<https://learning.iarc.fr/wcr/>).

81. The above-described resources are available through the IARC Learning Portal, which attracts a growingly increasing audience (<https://learning.iarc.fr/>).

3. COOPERATION, PARTNERSHIPS AND STRATEGIC ENGAGEMENTS

3.1 Cooperation with WHO

3.1.1 Thematic cooperation

82. Close collaboration between IARC and WHO is critical to successful delivery of respective mandates and has been strategically identified as a priority in IARC's Medium-Term Strategy 2021–2025 as well as in the [World Health Assembly Resolution 70.12](#) (2017). IARC and WHO have complementary functions and mandates to advance cancer control globally. In that regard, and as part of broader strategic activities, the IARC Statute places emphasis on cancer research, while WHO has the mandate in cancer control to support policy formulation and implementing programmes towards effective global cancer control. This pathway of research into policies and programmes is the basis for the complementary relationship between IARC and WHO.

83. On 12 November 2021, IARC coordinated a high-level meeting between the Agency and WHO. The meeting was an opportunity to improve and accelerate coordination between IARC and WHO, and the outcome was a joint workplan of action plan for 2022–2023 in line with both the WHO Thirteenth General Programme of Work 2019–2023 and the IARC Medium-Term Strategy 2021–2025.

84. This workplan proposes three core elements to further strengthen collaboration: (i) creation of mechanisms to improve **sharing of information and knowledge** with a strong focus on the WHO Global initiatives; (ii) identification of a set of **priority projects co-designed between WHO and IARC** to be implemented in the next two years; and (iii) creation of **governance mechanisms** with the setting up of committees for implementation, joint communication and resource mobilization activities.

85. Priority activities and projects are organized into: (i) global goods, (ii) leadership, and (iii) country support in line with the WHO Programme of Work. The proposed activities are a subset of multiple areas of collaboration that have been already identified and are selected because of their potential to be developed through shared resource investments, as well as their scale, scope and potential impact. Broader activities will be routinely updated and included in quarterly discussions. In addition, it is envisioned that IARC and WHO will strengthen coordination in producing joint peer-reviewed publications beyond the global goods.

86. IARC plays an instrumental role in the WHO Cervical Cancer Elimination Initiative by providing data and recommendations to support the implementation of effective vaccination, screening, treatment of precancerous cervical lesions and other cancer control policies for different settings.

87. The *IARC Handbooks of Cancer Prevention* volume 18: "Evaluation of Cervical Cancer Screening Methods" was released on 11 November 2021. The evaluation from *IARC Handbooks* volume 18 has been used as a basis to update the WHO *Guideline for Screening and Treatment of Cervical Pre-Cancer Lesions for Cervical Cancer Prevention*.

88. IARC supports the WHO Breast Cancer Initiative by providing research findings and global goods in different settings to support the implementation of effective screening and treatment strategies.

89. IARC contributes to the Global Initiative for Childhood Cancer by building capacity in cancer registries to collect and disseminate reliable data on childhood cancer worldwide sustainably.

90. A report entitled "Childhood Cancer: Inequalities in the WHO European Region" has been jointly developed by WHO HQ, WHO-EURO, IARC, and international partners, and was launched on 15 February

2022. The report makes recommendations on the key steps that are likely to have the greatest impact in reducing inequalities across the Region. This new report will be of value to decision-makers and politicians from all countries within the Region looking to address existing inequalities in childhood cancer care through targeted improvement activities.

91. IARC continues to support the WHO Global Hepatitis Programme and strives to measure how infections with hepatitis viruses contribute to the worldwide burden of liver cancer and liver cirrhosis, by using the vast set of data collected through cancer registry networks worldwide.

92. A report entitled “The effect of occupational exposure to solar ultraviolet radiation on malignant skin melanoma and non-melanoma skin cancer: a systematic review and meta-analysis from the WHO/ILO Joint Estimates of the Work-related Burden of Disease and Injury” was released on January 2022, in which IARC was acknowledged for its technical contribution.

93. WHO contributed a chapter on obesity and cancer for a WHO EURO Report on Obesity.

94. IARC and WHO-EURO have implemented a programme on cancer prevention, registration and early detection.

3.1.2 Communication/liaison

95. Increased coordination with WHO communications teams in Geneva and WHO EURO helped to provide higher visibility to IARC research and contribution during key global events, lectures, and Initiatives such as the Global Strategy to Accelerate the Elimination of Cervical Cancer, the Global Initiative on Breast Cancer, and the Global Childhood Cancer Initiative.

96. IARC marked European Week Against Cancer, which occurs in the final week of May each year, with a focus on the European Code Against Cancer.

97. IARC marked Bladder Cancer Awareness Month, which is observed in May each year, by a series of videos presenting IARC's research on biomarkers of early detection method for bladder cancer.

98. IARC was represented at the Science Summit at the 76th session of the United Nations General Assembly (UNGA76), on 14 September 2021, aiming to raise awareness of the role and contribution of science for the attainment of the United Nations Sustainable Development Goals (SDGs).

99. For the sixth consecutive year, IARC joined with the wider international cancer research community to celebrate World Cancer Research Day on 24 September, and to highlight the critical role of research by scientists worldwide in addressing the global cancer burden.

100. IARC marked Breast Cancer Awareness Month in October 2021 with a series of videos, tweets, and infographics focusing on the Agency's work to understand and tackle the global burden of breast cancer.

101. IARC launched the IARC Cervical Cancer Image Bank website, to accelerate innovation and ensure the quality of machine learning algorithms for the early detection of cervical pre-cancer and cancer. The launch of this new image bank, on 17 November 2021, marked the first anniversary of the launch of the WHO Global Strategy to Accelerate the Elimination of Cervical Cancer as a Public Health Problem.

102. IARC scientists met online on 13–14 December 2021 with colleagues from WHO and the International Atomic Energy Agency (IAEA) for the third annual IAEA–IARC–WHO consultation to discuss

the methodology of the integrated mission of the Programme of Action for Cancer Therapy (imPACT) Reviews, and to strategize more broadly beyond the imPACT Review programme.

103. To mark Cervical Cancer Awareness Month in January 2022, IARC highlighted research projects to tackle the global burden of this cancer type, supporting the WHO Global Strategy to Accelerate the Elimination of Cervical Cancer by providing key evidence, technical materials, and updates for policy-makers, programme managers, and experts implementing the strategy.

104. To mark World Cancer Day on 4 February 2022, IARC and partners launched the new World Code Against Cancer Framework, an online platform that will promote cancer prevention globally and the development of Regional Codes Against Cancer.

105. To mark the International Day of Women and Girls in Science on 11 February 2022, IARC showcased a selection of recent videos that highlight the work of some of the female IARC scientists doing research on cancer prevention.

106. On the occasion of the International Childhood Cancer Day on 15 February 2022, IARC highlighted a wide range of research initiatives related to childhood cancer (cancer registry development, environmental and lifestyle causes of childhood cancer, classification of paediatric tumours), supporting the WHO Global Initiative for Childhood Cancer and helping to establish and strengthen the information systems that are needed to improve the survival of children with cancer, especially in countries with limited resources.

107. Dr Bente Mikkelsen, Director, NCDs, Division of UHC/Communicable and NCDs, WHO HQ, was invited by IARC on 24 February 2022 to give a virtual presentation entitled "Cancer Prevention and Control in the SDG Era: Progress, Priorities, and Actions".

108. On the occasion of World Obesity Day on 4 March 2022, IARC summarized some of the ways in which individuals and policy-makers can reduce the impact of obesity on the global burden of cancer.

109. IARC marked Colorectal Cancer Awareness month in March with a series of video interviews showcasing IARC research projects on colorectal cancer. IARC highlighted the importance of screening for colorectal cancer, as well as to promote healthy lifestyle habits that can decrease a person's risk of developing colorectal cancer.

110. IARC marked International Women's Day 2022 on 8 March by introducing Ms Caroline Garcia, a French professional tennis player, as the newest Friend of IARC. She joined other exceptional women among the Friends of IARC in supporting cancer research and in helping IARC raise awareness about the importance of cancer prevention.

111. IARC was invited as an observer to the Sixty-ninth session of the Scientific Committee of the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) scheduled to be held from 9 to 13 May 2022 in Vienna.

112. A Standard Operating Procedure (SOP) (https://events.iarc.who.int/event/46/attachments/110/483/GC60_13_CoordinationWHO.pdf and https://events.iarc.who.int/event/46/attachments/110/484/GC60_13_Corr1.pdf) between IARC and WHO is in place which focuses on communication between the *Monographs* and the *Handbooks* programmes and WHO HQ. This SOP can be used as a reference for communication of other programmes of mutual interest.

113. As per our SOP, the *IARC Monographs* evaluation, volume 130 (1,1,1-Trichloroethane, 1,2-Diphenylhydrazine, Diphenylamine, N-Methylolacrylamide, Isophorone) has been cleared by WHO prior to the online publication of *Monographs* evaluations by The Lancet Oncology.

114. As per our SOP, the list of agents proposed to be evaluated by the Working Groups have been cleared by WHO for the upcoming *Monographs* meetings: 131 (Cobalt Metal (without Tungsten Carbide) and Cobalt (II) Salts, Weapons-Grade Tungsten (with Nickel and Cobalt) Alloy, and Antimony Trioxide; 2–18 March 2022), 132 (occupational exposure as a firefighter; 7–21 June 2022), and 133 (anthracene, 2-bromopropane, butyl methacrylate, and dimethyl hydrogen phosphite; 28 February–7 March 2023).

115. Several remote meetings have been put in place between WHO and IARC throughout 2021–2022 to discuss planned evaluation by IARC of other agents of mutual interest.

116. Dr Tamás Landes, Director of Administration and Finance, continued to be the IARC focal point for general management, business operations, and legal matters. He continued to take active part in the WHO network of Directors of Administration and Finance, as well as on the WHO Staff Health Insurance Global Oversight Committee. He is also invited as an observer to the Business Management System (new ERP) Programme Board meetings.

117. Following many years of difficulties to recruit and retain a Staff Physician, IARC has agreed with WHO to recruit and share a Staff Physician based full time in IARC and working 50% of the time for IARC. The Physician will support the WHO Academy when it is set up in Lyon. Recruitment is ongoing and scheduled for completion before the end of April 2022.

3.1.3 *WHO Academy and the Global Health Hub in Lyon*

118. French President Emmanuel Macron, WHO Director-General Dr Tedros Adhanom Ghebreyesus, and Professor Agnès Buzyn, the appointed Executive Director of the WHO Academy, attended a groundbreaking ceremony on 27 September for the Academy's future campus in Lyon, and Dr Elisabete Weiderpass was part of this historic event.

119. The Academy will provide millions of people around the world with rapid access to the highest quality training courses in health. The Academy will be a key lifelong learning platform to accelerate the implementation of evidence-based health practice and policy, and an important future partner for IARC. The Agency therefore continued to contribute to the planning of the Academy through participation in several work streams and to relevant activities of the WHO Academy.

120. The Comprehensive Learning Programme on Screening, Diagnosis and Management of Cervical Precancer has therefore been developed by a consortium of WHO HQ and the six Regional Offices coordinated by the IARC Early Detection, Prevention and Infections (EPR) Branch. The Managing Infrastructure for Medical Research Learning Programme was also selected and is led by the NME/LSB Branch.

3.2 Strengthened partnerships

121. Selected representative high-level partnerships of the Agency are highlighted below.
122. IARC continued to strengthen its collaboration with Centre Léon Bérard, scientifically but also through public events like the one on diet and cancer organized on 19 October 2021.
123. IARC hosted a delegation of seven members of the Special Committee on Beating Cancer, an organ of the European Parliament, on 3 November 2021. This meeting focused on the linkages between the IARC Medium-Term Strategy and the European Beating Cancer plan released on 3 February 2021.
124. Cancer Prevention Europe, a consortium of organizations coordinated by IARC, launched the second part of its multilingual online learning programme on cancer prevention during the 14th European Public Health Conference.
125. The Agency continued building a strong collaborative global network with strategic partners. In 2021-early 2022, the Agency signed five Memoranda of Understanding (MoU) with the Charité University Hospital Berlin, Department of Urology, Berlin, Germany, the Royal College of Pathologists, London, UK, the Cancer Genomics Consortium/Compendium of Cancer Genome Aberrations, Portland, Oregon, USA, the Caribbean Public Health Agency, Newtown, Trinidad and Tobago, the Indian Council of Medical Research (ICMR)/National Centre for Disease Informatics and Research (NCDIR), and the Association for Molecular Pathology, Rockville, MD, USA.
126. In addition, the Agency has renewed one MoU with the National Cancer Center, Republic of Korea.

3.3 Strategic engagement highlights

127. The European Commission issued two ambitious plans – the Europe's Beating Cancer Plan and the European Cancer Mission – to save three million lives from cancer by 2030. IARC played a key role in both these initiatives, and concluded, in a new report on cancer prevention developed with European partners as part of the European Union Innovative Partnership for Action Against Cancer (iPAAC) Joint Action, that strong support and collaboration are essential for preventing cancer.
128. IARC, in collaboration with the University of South Carolina, the Danish Cancer Institute, City of Hope, Memorial Sloan Kettering Cancer Center, the Mayo Clinic, and intramural investigators at the United States National Cancer Institute (NCI), have been awarded an important research grant by NCI to facilitate the collaborative research activities of the International Lymphoma Epidemiology Consortium (InterLymph). The consortium brings together lymphoma studies and data sets from around the world in order to better understand etiological risk factors related to lymphomas, as well as multiple myeloma. IARC will take over as the InterLymph data coordinating centre (DCC), a key component of the consortium.
129. Dr Ann Olsson, a scientist in the IARC Environment and Lifestyle Epidemiology (ENV) Branch, received an award from the European Network for Smoking and Tobacco Prevention (ENSP) for her innovative proposal to prevent cancer among workers who have the highest risk of disease.
130. In the context of the French Presidency of the Council of the European Union, IARC participated in the European Cancer Meeting of the French National Cancer Institute on 3–4 February 2022, aimed to increase cooperation in cancer research.

131. IARC is a proud partner of the *Lancet* Commission on Women and Cancer. Dr Isabelle Soerjomataram, Deputy Head of the Cancer Surveillance (CSU) Branch at IARC, is a co-chair of the Commission, together with Dr Ophira Ginsburg of the United States National Cancer Institute and Dr Verna Vanderpuye of the National Centre for Radiotherapy, Oncology, and Nuclear Medicine at Korle-Bu Teaching Hospital in Ghana. These researchers are working together with multidisciplinary commissioners from around the globe on the Commission Report, which is scheduled to be launched on International Women's Day 2023.

132. IARC has continued to further solidify its data protection framework and data security measures over the last year, aiming to apply best in class standards at IARC, inter alia through the following actions:

- Two external data protection consultants conducted a comprehensive gap and impact analysis, and wrote a recommendation report containing recommended measures to be taken to further solidify IARC's data protection framework and data security measures;
- IARC established a comprehensive Register of Records of Data Processing Activities (ROPA) for all scientific and non-scientific data processed at IARC;
- The IARC Data Protection Policy, focussing on the processing of personal data for scientific purposes, was finalized and published on IARC's public website;
- IARC worked closely with WHO to review and advice on WHO's Data Protection Policy;
- IARC set up a Data Steward Network, in which appointed Data Stewards from each Branch take part, connecting science, data governance and IT;
- IARC created a Data Protection General Awareness training which will be mandatory for all personnel;
- IARC established a permanent Data Protection Officer position;
- IARC continues to collaborate with the European Commission, the European Data Protection Supervisor, several networks of International Organizations, data protection authorities and data protection officers of our collaborators to find long-term solutions to enable data sharing with IARC.

3.4 Resource Mobilization highlights

133. IARC Resource Mobilization strategy highlights four main sources of funding for the Agency. The following specific actions have been taken since the previous Director's Report to accelerate the resource mobilization.

134. One of the objectives of the Agency is to increase the number of Participating States. The Secretariat created a priority list of potential countries and has approached a few of them over the last 12 months:

- a. **Portugal.** A political crisis due to the collapse of the government coalition put a stop to the discussions the Secretariat was holding with the Portuguese Minister for Science, Technology and Higher Education. The Secretariat is still discussing with Portuguese scientists but the new Portuguese government will only be announced in April 2022. The Secretariat will then explore possibilities on how to re-start those negotiations.

- b. **Czech Republic.** As the Czech Republic is now part of the trio-presidency of the EU with France and Sweden, it seemed quite opportune to try and convince them to become an IARC Participating State. IARC Director had an opportunity to meet with Czech Health Minister, Vlastimil Válek, during the European Cancer Days organized by INCa in Paris on 4 February 2022. The discussion went well and the Czech Minister seems interested.
- c. **Saudi Arabia.** While the discussions with the Minister of Health were quite advanced, a new Minister, Fahad bin Abdurrahman Al-Jalajel, was appointed in October 2021. IARC has not been able to obtain a meeting with the newly appointed Minister. Thanks to the active engagement of Dr Samar Jaber Alhomoud, the current chairperson of IARC Ethics Committee, the Secretariat is trying to find another way. We have recently reached out to the Secretary General of the Saudi Health Council, Dr Nahar M. Al Azemi and should be able to hold a meeting with him soon.
- d. **Luxembourg.** Luxembourg is on IARC priority list to become a Participating State. It is one of the few Western European countries not yet part of IARC. Due to its economic wealth, the statutory contribution should be less of a problem than for upper-middle-income countries. Moreover, the relationship with Luxembourg is intensifying. IARC has just been commissioned by the Duché de Luxembourg to assist them with their breast and colorectal cancer screening programmes. Discussions have also taken place with the consul of Luxembourg based in Lyon. A request for a meeting has been sent to the Luxembourg Ambassador based in Paris.
- e. **Kazakhstan.** While discussions are still on-going with Kazakhstan, the civil unrest of January 2022 has considerably delayed the negotiations. The Secretariat is now trying to re-start those discussions.

135. It is worth noting that the current environment is not very conducive for Ministries of Health to explore the possibility to become an IARC Participating State. Over the last two years, those Ministries have been at the forefront of the COVID-19 crisis and their budgets have been spent in sanitary relief crisis activities. Moreover, the cost-benefit analysis done by the potential countries regarding their IARC membership does not seem to play in IARC's favor. Being part of the United Nations system, IARC was created on the idea of providing free and universal access to its research. That is why IARC largest and most reputed programmes are completely open source. This is the case for the Global Cancer Observatory, the Monographs, the Handbooks or the World Cancer Report. A membership to IARC means the possibility to help advanced cancer research globally, with a focus on LMICs. Unfortunately, countries that could become IARC Participating States want specific return on investment for their contribution. As they do have access to open source IARC publications, they tend to believe that becoming an IARC Participating State is not worth the investment. The Secretariat is now working on an analysis of what countries can gain being an IARC Participating State (internationalization of their research, shaping the world cancer prevention research agenda, etc.) to strengthen its argument when discussing with a potential new member.

136. The second objective of the Resource Mobilization strategy is to increase the proportion of direct funding received by the Agency. Important steps have been taken in this regard:

- a. The Secretariat has created a portfolio of research projects for which funds need to be mobilized. As the audience for such LMIC projects differ from the traditional audience of IARC, it was necessary to ensure projects could be written in a non-technical language, with a focus on the expected results and outcomes. A template was also created to ensure some consistency in the way IARC communicates its needs to potential donors.
- b. The Secretariat worked on a matchmaking exercise to identify bilateral donors and Non-State Actors (NSA) that may be interested in such research projects either because of their focus on health and/or noncommunicable diseases or because of their geographic focus.
- c. More than 100 philanthropic organizations have been contacted over the last two years. The Secretariat has had interesting rounds of discussions with approximately ten of them. Some promising discussions were held with major philanthropic organizations from the Middle East, namely: Al Jalila Foundation (they might be interested in funding a project on childhood cancers) and Alwaleed Philanthropies (they could be interested in funding a code against cancer for the Middle East region). There are also on-going discussions with Bristol-Myer Squibb Foundation, especially for their African programmes. They could be interested in funding a cervical cancer screening research project in sub-Saharan Africa. Finally, we are now finalizing an agreement with the Mark Foundation, a US-based entity. They will fund one of IARC Fellows for the next two years and we are now discussing the possibility of a more long-term agreement on the fellowship as well as direct funding of specific research projects.
- d. The Secretariat continues working with its current NSA, namely ESMO (they have renewed their partnership agreement with IARC for the year 2021–2022), Terry Fox Foundation (we are now discussing the possibility to expand our relationship, not only for them to fund a Fellow but also to explore funding for the Summer course or the Leadership course) as well as CRUK and the Sociedade Beneficente Israelita Brasileira Albert Einstein.
- e. The notoriety and public image of IARC remain very low and the Agency might not be that attractive for NSA to partner with. However, a lot of improvements have been made to support fundraising through more active and engaging communication. For example, the “Friends of IARC” network has been opened to influent celebrities beyond the cancer research ecosystem. The Secretariat is trying to use this network of “Friends of IARC” to enhance its image towards a different target audience. This is the reason why IARC has nominated the following persons to be part of its “Friends” network: Dr Christine Friedenreich (a former Chairperson of IARC Scientific Council) but also Professor Véronique Trillet-Lenoir (member of the EU Parliament and rapporteur of the BECA plan), as well as Ms Caroline Garcia (well-known French professional tennis player). These nominations not only help with the gender balance of the Friends of IARC group but they will also help in reaching out to the general public of the EU members of parliament and enhance IARC visibility.

137. The third objective is to work on innovative resource mobilization activities, mostly for the Nouveau Centre fundraising campaign. The detailed explanation of the three-pronged fundraising campaign launched by the Secretariat can be found in [Document GC/64/7](#).

138. The Secretariat has been able to secure a very large donation from a major donor (€1 million) as well as a substantial voluntary contribution from Norway (approximately €143 000). The Secretariat has contracted an expert consulting agency, iPHIL Group, to help in reaching out to High Net-Worth Individuals. The absence of IARC's own network of influent persons plus the inability to find a proper budget to invest in such an operation has made this assignment for the consulting firm impossible to deliver on. Nevertheless, on its own, IARC is currently discussing with high potential donors from the Middle East, but nothing has been concluded yet.

139. The in-kind donation part of the campaign has helped IARC secure some equipment for the Nouveau Centre. The Secretariat has convinced several furniture companies to give some of their products for free to equip the Nouveau Centre. For example, Office Concept has given all the tables for all the ground floor meeting rooms while Cider has donated all the furniture for the reception area. Similarly, Haworth is providing all the furniture for the conviviality space on the first floor. Another company Froilabo has donated one –80-degree fridge and has promised to give another one prior to the move. The Secretariat is also in the last phase of negotiation with five other companies for in-kind donations for the Nouveau Centre. By March 2022, a little less than €200 000 worth of equipment have been given to IARC for the Nouveau Centre project. It will increase in the next few months when the agreements in negotiation phase will be finalized.

140. During the 63rd session of the Governing Council, IARC launched its first-ever fundraising operation targeting private individuals. The Secretariat created a web-based platform that allow people to write their name, or that of a loved one, onto the glass doors of the Nouveau Centre in exchange of an affordable donation (minimum €50). As of mid-March 2022, a little less than €50 000 have been raised from around 400 donors. This is a good result for a first attempt at mobilizing resources from the general public, even though the projections were higher, counting on a more active engagement from IARC's network. While the majority of donors are from France due to the high level of activation of the campaign in Lyon and its surrounding area (press conference, numerous visits of the construction site with chambers of commerce and association of industries, etc.), it is worth mentioning that Japan has the second highest number of donors thanks to the engagement of our colleagues from the National Cancer Centre who have promoted actively the campaign through their networks.

141. The Secretariat will continue its efforts to receive more donations during the year 2022, targeting more specifically the large and mid-size companies from Lyon and its surrounding area with the help and support from local partners like the CCI (Chamber of Commerce and Industry of Lyon Metropole).

3.4.1 Voluntary contributions to IARC (grants and contracts)

142. Voluntary contributions to IARC are obtained mainly through competitive research grants from national and international funding agencies and increasingly through direct funding requests. The success in obtaining peer-reviewed funding is an external indicator of the overall quality of the research at the Agency.

143. These contributions represent a substantial component of the Agency's overall funding to successfully implement its programmes and the Medium-Term Strategy (MTS). This income supplements the investment made by Participating States through assessed contributions.

144. As part of the objective to increase competitive funding, IARC Secretariat is screening permanently more than **130 funders** and has posted on its intranet Resource Mobilization pages **331 funding opportunities** in 2021 for IARC colleagues to consider.

145. Funding opportunities available to IARC under the Horizon Europe, EU4Health and Cancer Mission programmes have also been closely monitored throughout the year. As a first in IARC's history, a direct funding has been awarded to IARC by the European Commission - Structural Reform Support (DG REFORM) to "Improve cancer care coordination and screening in Latvia and Slovakia".

146. The number of new grant applications and funding requests submitted in 2021 reached a **total of 245** ([Table 8](#)). This reflects the commitment of the Agency's scientists to secure sufficient extrabudgetary funds to conduct the research defined within the MTS.

147. The Agency signed extrabudgetary contracts amounting to a total value of **€36.18 million in 2021; of which €19.04 million was attributed to IARC**. The large proportion of the total value of signed contracts going to IARC collaborators indicates that IARC's participation in projects can bring benefits to a wide network of institutions and organizations at national levels.

148. Overall, the figures on extrabudgetary contracts represent a notable achievement given the increasingly competitive nature of research funding, the restrictions faced by the Agency in terms of eligibility for funding sources, and the pandemic situation leading to the shift of funders' priority toward COVID-19 research projects.

149. Voluntary Contribution (grants and contracts) expenditure in 2021 was **€13.11 million**. This represented approximately 36% of the overall combined expenditure from Regular Budget and Voluntary Contributions ([Figure 5](#)).

150. About 93% of contributions came from the following **14 funders**, as shown in [Figure 6](#).

- Bill & Melinda Gates Foundation (BMGF, USA),
- National Institutes of Health/National Cancer Institute (NIH/NCI, USA),
- Institut National Du Cancer (INCa, France),
- World Cancer Research Fund International (WCRF, UK),
- World Health Organization – Headquarters (WHO HQ, CH),
- Cancer Research UK (CRUK, UK),
- European Commission - Research and Innovation (EC RTD, BE),
- Vital Strategies (Vital, US),
- St Jude Children's Research Hospital (STJUDE, USA),
- European Research Council (ERC, BE),
- Healthy Ireland - Department of Health (IE-MOH, IE),
- International Hundred K+ Cohorts Consortium (IHCC, USA),
- Karolinska Institute (KI, SE),
- National Institutes of Health/ National Institute of Dental and Craniofacial Research (NIH/NIDCR, USA).

3.4.2 Implementation of the Framework of Engagement with Non-State Actors (FENSA) at IARC

151. During its 60th session in May 2018, the IARC Governing Council reviewed the “Recommendations from the Governing Council Working Group on the implementation of FENSA” ([Document GC/60/17](#)) and noted the “IARC-Specific Guide on Engagement with Non-State Actors” prepared by the GC Working Group. Following [Resolution GC/60/R17](#), the Secretariat is requested to annually report on IARC engagement under FENSA as part of the Director's Report.

152. During the course of 2021, IARC has prepared the implementation of the simplified procedure as the default procedure for the assessment of engagements with Non-State Actor (NSAs) to be conducted by IARC FENSA focal points, following the recommendation from the WHO Due Diligence and Non-State Actors (DAN) Unit. The second edition of the “IARC-Specific Guide on Engagement with Non-State Actors”, effective from 1 September 2021 and updated with the FENSA simplified procedure approach, provides guidance to IARC personnel on the implementation modalities of FENSA at IARC.

153. WHO and IARC are aligned in their approach of implementing FENSA, using two levels of due diligence and risk assessment, by distinguishing between low-risk simplified procedures and standard procedures prior to engaging with NSAs.

154. The identification of risk factors does not automatically exclude the possibility of engaging with NSAs. Determination of whether a potential conflict of interest exists is made taking into account the specificities of the project at stake. The risks are balanced against the expected benefits for IARC, also considering the foreseeability of the risk.

155. Under the simplified procedure, due diligence and risk assessment are conducted by the Resource Mobilization and Management Office (RMO) on potential donors and project partners related to resources (competitive grants and direct funding), and self-assessment or due diligence and risk assessment on NSAs under other types of engagement (technical collaboration, participation, evidence, and advocacy) is carried out by the Director of Administration and Finance with the support of the IARC Ethics and Compliance Officer.

156. Under the standard procedure, complex cases and those potentially presenting a higher reputational risk are referred to WHO DAN Unit for their assessment and recommendations.

157. In August 2021, IARC also contributed to the report presented to the 150th session of the WHO Executive Board by providing information on the implementation of FENSA at IARC ([Document EB150/38](#)). The information provided also highlighted the challenges encountered at IARC in this regard, mainly in terms of workload, timelines, donor recognition and strategic positioning.

158. In 2021, IARC applied the low-risk simplified procedure for **467 NSAs** with whom IARC engaged either through funding applications and contribution agreements (454 NSAs) or through other types of engagement (13 NSAs). Internal due diligence evaluations and risk assessments were conducted to screen for potential reputational risks, by scrutinizing the NSAs' legal status, governance and sources of funding. From 1 September 2021, information was gathered from the documentation submitted by the NSAs (ByLaws, Governance, financial reports) and complemented by various publicly available sources such as reports and media. Reference has been made to the WHO Register of Non-State Actors when information on the entity was available.

159. In 2021, IARC applied the standard procedure for one complex engagement with an NSA. The WHO CRE/DAN Unit has also provided guidance through a training held for IARC on 3 February 2021, and recommendations through informal phone discussions.

160. IARC maintains its own Due diligence Register where it keeps profiles of all the NSAs it has engaged with since January 2017 (more than 1070 profiles had been uploaded by the end of 2021). IARC also maintains an NSA Register in which 271 NSAs have a complete set of FENSA-relevant documentations, including Tobacco and Arms Disclosure (TAD) forms signed by NSAs (IARC has collected 225 TADs in 2021).

161. Despite its inherent challenges, FENSA provided the Agency with the opportunity to further expand its engagement with NSAs, including the private sector, and to increase transparency and accountability, inter alia towards WHO Member States and IARC Participating States.

4. MANAGEMENT

4.1 Conceptual framework to assess progress in the implementation of the new Medium-Term Strategy 2021–2025

162. To monitor and evaluate the implementation of the IARC Medium-Term Strategy (MTS) 2021–2025, a dedicated working group was set up in 2021 with members of the governance of IARC (Governing Council and Scientific Council). This working group defined the evaluation methodology and framework for the MTS 2021–2025 with support from the WHO Evaluation Office. The ambition of the approach is to assess the Agency's progress in attaining the strategic objectives defined for 2021–2025 and the MTS impact pathway to address the global cancer burden.

163. Inspired by the UN results-based management methodology, the MTS evaluation framework is built according to the "IOOI" model, to cover Inputs, Outputs, Outcomes, and Impacts. This methodology analyses the programme as a value chain and considers the achievements for public health impacts. This MTS evaluation framework includes key performance indicators (KPI) and some case studies, to highlight dimensions considered as critical for the success of IARC's mission.

164. The methodology and the planning for the evaluation of the implementation of the MTS, as well as the architecture of the evaluation framework and the KPIs to assess progress in the implementation of the MTS are detailed in [Document GC/64/13](#).

4.2 Modernizing IARC's administrative systems

165. In its continued effort to modernize its administrative management systems, IARC joined forces with WHO and embarked on the implementation of a new Business Management System. IARC's current Enterprise Management System (ERP) is out of date, requiring time and resource intensive manual entries, leading to inefficiencies, risk of errors and demotivation of staff. As IARC's currently outdated system will be decommissioned by the supplier by the end of the biennium, IARC explored alternative ERP solutions to modernize its administrative management systems in support of IARC's new Medium-Term Strategy 2021–2025. The best value for money solution has been identified by joining forces with WHO and transition together to a new ERP solution, coined as the new Business Management System (BMS). This will allow IARC and WHO to jointly simplify its processes and adapt its rules applying best in breed solutions available. The implementation of the new BMS will take two years with an expected go live date on 1

January 2024. The new system will be seamless, more user friendly and intuitive, simpler to use, reduce the risk of manual entries, provide business intelligence and analytical tools for improved resource planning, and integrate all existing IT systems, enabling them to communicate with each other.

166. Concurrently, IARC has devised an administrative transformation roadmap in support of the new Medium-Term Strategy 2021–2025, inter alia to further strengthen IARC's scientific IT capacity and data protection measures. These important investments during the biennium 2022–2023 will pave the way for IARC to become a truly modern organization fit for the 21st century, as mandated by Participating States in the IARC Medium-Term Strategy for 2021–2025.

167. Resolution GC/54/R18, from May 2012, authorizes the Director to use the unbudgeted assessments of new Participating States towards the activities of the Agency. In order to support its Medium-Term Strategy for 2021–2025, IARC needs to modernize its administrative management system; this can be achieved by joining WHO's new Business Management System project, and by further strengthening IARC's data protection mechanisms as well as its scientific data management systems. The Governing Council is invited to note the use of the unbudgeted assessment within DRAFT Resolution GC/64/R2. The Director will report on the use of these funds in future Director's Reports.

4.3 Personnel

168. As of **31 March 2022**, there were a total of **373** personnel, **231** staff members and **142** Early Career and Visiting Scientists (ECVS), contributing to the activities at the Agency. For comparison, the number of personnel at the Agency in **2019, 2020 and 2021 was 358, 366 and 345, respectively**.

169. The ECVS include 12 Master's students and 7 Continuing Professional Development Trainees, 23 Doctoral students, 64 Postdoctoral Scientists (of whom 8 are Fellows covered by the Learning and Capacity Building Branch (LCB) regular as well as external budget (CwC UK), and 6 are former Fellows extended by the Branch's external budget), 24 Visiting Scientists, and 12 Senior Visiting Scientists.

170. Of the **205** fixed-term staff, a decrease of **17** compared to 2021, **87 (42.44%)** are Professional staff, a *decrease of 11, (41 men; 46 women)* and **118 (57.56%)** are General Service Staff, a *decrease of 6 (32 men; 86 women)*; in addition, there are **26** temporary staff members, an *increase of 10*. Of the **87** Professional staff, **15 (increase of 1)** are in the support services. This compares to 2021, **222** fixed-term staff, **98 (44.15%)** were Professional staff (**47 men; 51 women**), and **124 (55.85 %)** were General Services (**34 men; 90 women**); in addition, there were **16** temporary staff members.

171. The number of staff positions on the regular budget has decreased, with a total of 153.20 approved staff posts in 2021–2022 funded through the assessed contributions of Participating States, compared with 154.20 posts in 2021.

172. Staff categories by funding sources are indicated in [Figure 7](#). 33% of staff from the General Services and 25% of Professional staff are covered by the regular budget.

173. The total evolution of staff positions funded by the regular budget since 2015 to date is reported in [Table 9](#) and in [Figures 8](#) by types of position. The number of staff positions funded by the regular budget has decreased since 2015 ([Figure 8a](#)), the number of temporary positions has increased in 2022 ([Figure 8b](#)), and the number of Professional staff has decreased these last years ([Figure 8c](#)).

174. As noted above, the Agency has slightly more women than men in Professional staff positions (**52.88%** as of **31 March 2022**). At the senior level (P4 and P5 and above), the proportion of women is significantly *lower* (**41.18%** P4, **11.12%** P5 and above).

175. Overall, IARC staff members come from **35** different countries worldwide, as first nationality with a total of 55 nationalities represented at the Agency. Of the staff on fixed-term contracts, **94.64%** are from Participating states (**194 out of 205**).

176. The period since the last Governing Council session has been characterized mostly by the resignation of several staff members, as reported below.

Ms Marie-Pierre CROS, LY4, MCA, Research Assistant

Mr Christopher JACK, P3, SSR/ITS, Informatics Officer

Dr Reza SALEK, P2, NME, Scientist (bioinformatics)

Dr Kayo TOGAWA, P3, ENV, Scientist

Mr Bruno AMARA, LY3, SSR/ASO, Maintenance technician

Dr Blanca Iciar INDAVE RUIZ, P2, ESC, Systematic Reviewer

Mr Didier LOUIS, LY4, SSR/ASO, Procurement Assistant

Internal transfers:

Dr Filip MEHEUS, P3, CSU, Heath Economist

Ms Angkana SANTHIPRECHACHIT, P5, SSR/BFO, Administrative and Finance Officer

Ms Julie BUGUET, LY5, SSR/HRO, Assistant (human resources)

Fixed-term appointments:

Dr Federica MADIA, P4, ESC, Scientist (Senior Toxicologist)

Ms Charu MEHTA, P5, SSR/BFO, Administration and Finance Officer

4.4 IARC Groups and learning programmes

177. The IARC Equity and Diversity Advisory Group (EDAG) was established in 2020 to focus on institutional challenges of inclusion and diversity and IARC and provide the Director with specific, concrete recommendations on how to implement equitable practices.

178. In response to a recently implemented request from the European Commission on grant applications, EDAG was mandated to draft a gender equality, diversity and inclusive strategy and plan action for IARC. The purpose of the IARC Diversity and Inclusion Strategy is to have a layout of the policies and action plans aimed at ensuring that individuals or groups of individuals within the Agency are not treated differently or less favorably on the basis of gender, race, disability, religion or belief, sexual orientation or age.

179. In March 2021, EDAG organized an online Open Forum at IARC and several themes have been discussed (childcare, funds for maternity/paternity leave, hiring practices, and increasing awareness in IARC).

180. In May 2021, EDAG and the Staff Association hosted the first LGBTQ+ event at IARC with a “virtual happy hour” for LGBTQ+ staff and friends. The intention was to create an informal gathering and safe space for LGBTQ+ staff to share their experiences on working at IARC and living in Lyon generally.

181. In November 2021, EDAG and the Human Resources Office/IARC learning team have organized a 1.5-hour workshop on implicit bias. Professor John Antonakis (Faculty of Business & Economics University of Lausanne, Switzerland) examined to what extent subtle biases—with respect to sex, age, ethnicity, or other factors—can enter in evaluation decisions and how they affect career progression or other outcomes.

182. EDAG celebrated IARC's 5th Respectful Workplace Day on 2 December 2021 in collaboration with the Respectful Workplace Initiative team. The focus of the day was reinforcing IARC's commitment to a safe and respectful working environment.

183. In March 2022, EDAG launched the very first annual "IARC Women in Cancer Research Award". The IARC Award for Women in Cancer Research will acknowledge and reward outstanding women who have made a significant contribution to this field.

184. In the framework of the Quality of Work Life (QWL) work plan, efforts were dedicated to highlight IARC's commitment to respectful environment in collaboration with Respectful Workplace initiative and EDAG. Emphasis was placed on encouraging harmonious collaboration and diversity by measures to reduce biases at individual and organizational level, promoting policies such as Policy on Preventing and Addressing Abusive Conduct (PAAC).

185. There were no candidates for the elections in the Staff Association Committee (SAC) which was therefore dissolved as of June/July 2021. As a result, there will be no SAC statement this year.

186. As part of the Learning and Development (L&D) Framework implementation, the overall participation rates in various types of online L&D activities reached 76% of the personnel in 2021. The transition from face-to-face trainings to trainer-led online learning sessions, webinars ensured the continuity of learning and development activities during the COVID-19 pandemic. A total of 31 webinar sessions were advertised and organized internally by HRO-ETR during 2021 and completed by 431 participants, as reported in [Table 10](#).

187. The compliance rate for the two online mandatory trainings administered and monitored through ilearn (WHO global learning platform recently adapted by IARC) was above 80% at the end of 2021. A specific cybersecurity mandatory training package was introduced with the aim of raising awareness of fundamentals of cybersecurity, and phishing prevention. Two online mandatory trainings aim to equip IARC personnel with specific guidance, tools and techniques on how to identify and react on cybersecurity threats.

188. During 2021 several mental health and psychosocial support trainings were put in place to support the personnel in dealing with psychosocial issues related to confinement and the pandemic. The staff-counsellor-led, individual, and group-based online sessions were facilitated by WHO Staff Health & Wellbeing team in collaboration with IARC Medical Services both in English and French languages. In addition, individual coaching sessions were provided to support supervisors and their teams in strengthening interpersonal relationships, effective communication, and teamwork.

189. The implementation of Research Leadership extensive 40-hour online training programme aims to reinforce strategic leadership culture at IARC by enhancing research management and leadership skills of IARC management. In 2022, the training programme will be extended to external cancer researchers and scientists from various research institutions/organizations contributing to the Agency's efforts in strengthening partnership.

4.5 Update on the Nouveau Centre

190. A detailed update on the Nouveau Centre and the Nouveau Centre fundraising campaign is provided in [Document GC/64/7](#).

191. Several types of fundraising for the Nouveau Centre have been designed and are currently implemented. The Secretariat has created a three-pronged strategy with the following streams:

- Major gifts from High Net-Worth Individuals and IARC Participating States.
- In-kind donation to provide equipment for the Nouveau Centre (furniture, audio-video and lab equipment).
- Marketing campaign including a crowdfunding platform focusing on private individuals and donations from Non-State Actors.

192. These different actions taken by the Secretariat and their results are discussed in Document [GC/64/7](#).

ANNEXES

Tables and Figures are listed in order of appearance in the text.

Table 1: Total article output and percentage of peer-reviewed papers

Year	Peer-reviewed articles	Reviews	Other	Total
2017	291 (83%)	25	36	352
2018	284 (81%)	37	30	351
2019	292 (79%)	43	36	371
2020	387 (82%)	43	40	470
2021	350 (82%)	41	35	426

Table 2: IARC h-index for 2021 and for five-year period (2017–2021)

	2021 output	Five-year output (2017–2021)
Number of articles	426	2026
Sum of the times cited	4901	102736
Average citations per item	12.0	50.7
h-index	17	93

Table 3: IARC top 10 most cited articles published in 2021

Reference	Total times cited (as of 17 March 2022)
Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, et al. Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. <i>CA-Cancer J Clin.</i> 2021;71(3):209-49.	3130
Louis DN, Perry A, Wesseling P, Brat DJ, Cree IA, Figarella-Branger D, et al. The 2021 WHO Classification of Tumors of the Central Nervous System: a summary. <i>Neuro-Oncology.</i> 2021;23(8):1231-51.	290
Ferlay J, Colombet M, Soerjomataram I, Parkin DM, Pineros M, Znaor A, et al. Cancer statistics for the year 2020: An overview. <i>Int J Cancer.</i> 2021;149(4):778-89.	211
Vandenberg O, Martiny D, Rochas O, van Belkum A, Kozlakidis Z. Considerations for diagnostic COVID-19 tests. <i>Nat Rev Microbiol.</i> 2021;19(3):171-83.	183
Stelzle D, Tanaka LF, Lee KK, Khalil AI, Baussano I, Shah ASV, et al. Estimates of the global burden of cervical cancer associated with HIV. <i>Lancet Glob Health.</i> 2021;9(2):E161-E9.	53
Bray F, Laversanne M, Weiderpass E, Soerjomataram I. The ever-increasing importance of cancer as a leading cause of premature death worldwide. <i>Cancer.</i> 2021;127(16):3029-30.	43
Mullins N, Forstner AJ, O'Connell KS, Coombes B, Coleman JRI, Qiao Z, et al. Genome-wide association study of more than 40,000 bipolar disorder cases provides new insights into the underlying biology. <i>Nature Genet.</i> 2021;53(6):817-+.	41
Clifford GM, Georges D, Shiels MS, Engels EA, Albuquerque A, Poynten IM, et al. A meta-analysis of anal cancer incidence by risk group: Toward a unified anal cancer risk scale. <i>Int J Cancer.</i> 2021;148(1):38-47.	40
Pilleron S, Soto-Perez-de-Celis E, Vignat J, Ferlay J, Soerjomataram I, Bray F, et al. Estimated global cancer incidence in the oldest adults in 2018 and projections to 2050. <i>Int J Cancer.</i> 2021;148(3):601-8.	34
Rumgay H, Shield K, Charvat H, Ferrari P, Sornpaisarn B, Obot I, et al. Global burden of cancer in 2020 attributable to alcohol consumption: a population-based study. <i>Lancet Oncol.</i> 2021;22(8):1071-80.	26

Figure 1: Altmetric database summary report of IARC 2021 output

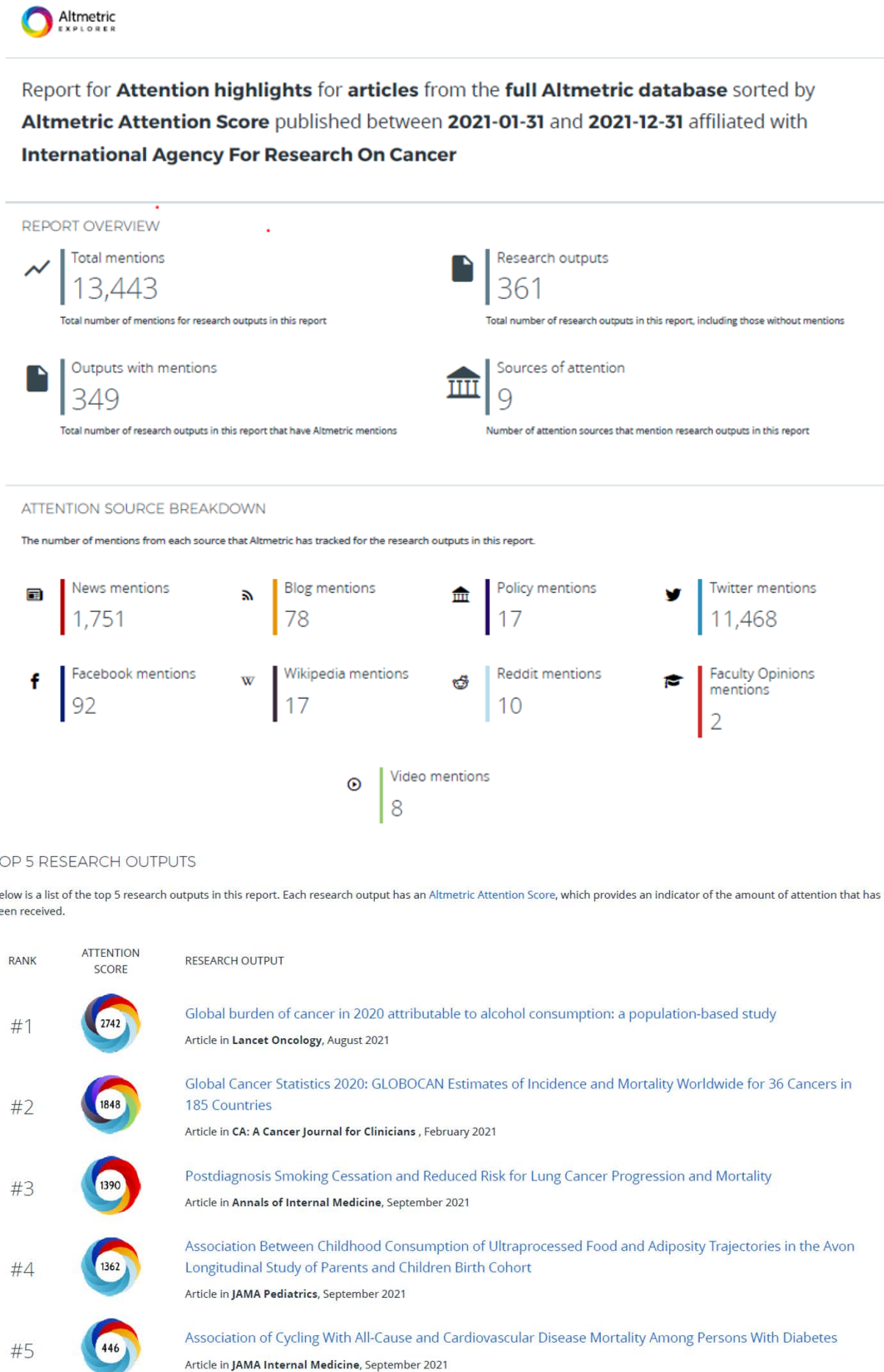


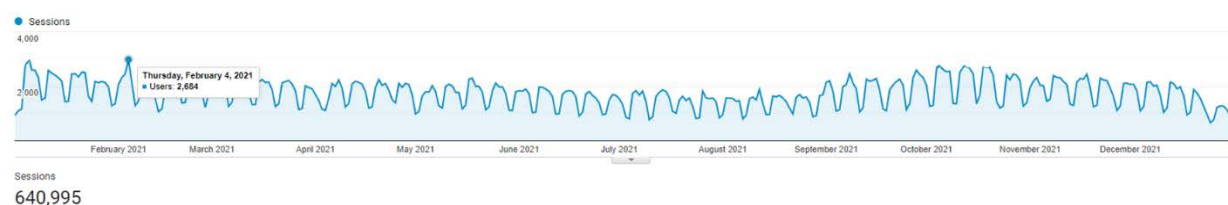
Table 4: Visitors to IARC websites in 2021 (in brackets corresponding figures in 2020)

Website	Total visitors	Average visitors/day	Total visits	Average visits/day
www.iarc.who.int	485 201 (437 173)	1329 (1197)	640 995 (571 930)	1756 (1567)
IARC Publications	301 196 (288 726)	825 (718)	395 530 (377 211)	1083 (1030)
Monographs	220 557 (221 318)	604 (748)	343 012 (340 454)	939 (933)
Global Cancer Observatory	540 369 (413 936)	1480 (1134)	934 557 (707 039)	2560 (1937)

Visitor: A user that visits a given site. The initial session by an individual user during any given date range is considered to be an additional visit and an additional visitor. Any future sessions from the same user during the selected time period are counted as additional visits, but not as additional visitors.

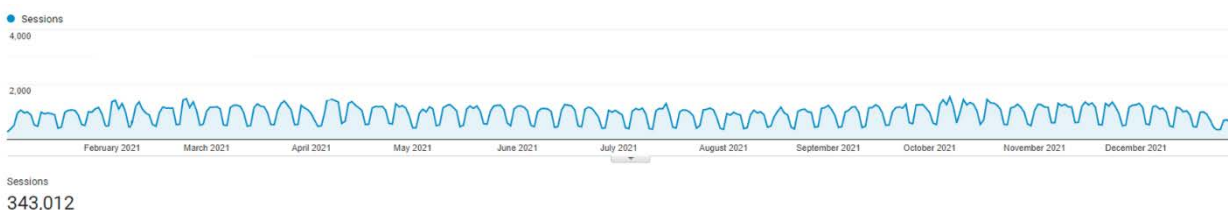
Visit: The number of times a visitor has been to the site (number of individual sessions initiated by all visitors). If a user is inactive on the site for 30 minutes or more, any future activity will be attributed to a new session.

Figure 2: Number of visitors to the IARC website in 2021



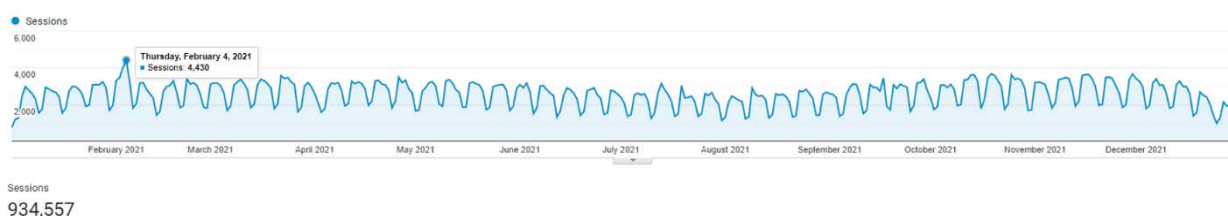
The peak of 2684 visits (4 February 2021) is on World Cancer Day. The following web content was published: [IARC Press Release 294](#), [News item](#).

Figure 3: Number of visitors to the IARC Monographs website in 2021



The chart indicates a steady level of interest in the Monographs website. No peak was observed.

Figure 4: Number of visitors to the Global Cancer Observatory (GCO) website in 2021



The peak of 4430 visits (4 February 2021) is on World Cancer Day.

Table 5: Most popular downloads from the IARC Publications website ranked by 2021 data and corresponding figures in 2020

Item	2021	2020
Scientific Publication 163: Molecular Epidemiology: Principles and Practices	94 823	61 348
IARC Handbooks of Cancer Prevention Volume 8: Fruit and Vegetables	70 481	31 073
Cancer Epidemiology: Principles and Methods	57 886	29 862
Monographs Volume 71: Re-evaluation of Some Organic Chemicals, Hydrazine and Hydrogen Peroxide (Part 1, Part 2, Part 3)	48 148	45 060
Monographs Volume 108: Some Drugs and Herbal Products	39 072	21 293
Monographs Volume 82: Some Traditional Herbal Medicines, Some Mycotoxins, Naphthalene and Styrene	37 699	31 038
Technical Publication 45: Colposcopy and Treatment of Cervical Precancer	34 099	43 387
Technical Report 10: Manual for Cancer Registry Personnel	33 315	35 087
Scientific Publication 161: Air Pollution and Cancer	27 513	61 348
Le cancer dans le monde 2003	27 185	50 685
Monographs Supplement 7: Overall Evaluations of Carcinogenicity: An Updating of IARC Monographs Volumes 1–42	23 645	25 001
Monographs Volume 79: Some Thyrotropic Agents	22 660	21 844

Table 6: Education and Training – IARC Fellowships

Year	No. of IARC Fellowships awarded ^a	No. of Fellows from LMICs
2014	21 (13 + 8)	12
2015	22 (10 + 12)	13
2016	17 (7 + 10)	10
2017	14 (7 + 7)	12
2018	7 (0 + 7)	6
2019*	7 (7 + 0)	7
2020	9 (2 + 7)	9
2021	9 (7 + 2)	9

^a Post-doctoral fellowships (new + second year renewals), including IARC-Australia and IARC-Ireland Fellows in 2014–2015

*Since 2019, only candidates from LMICs have been eligible to apply

Table 7: Education and Training – IARC Courses

Year	No. courses organized	No. different countries	No. courses in LMICs	No. participants
2013	15	7	8	566
2014	17	14	12	576
2015	24	14	11	647
2016*	36	23	19	1410
2017	32	16	15	1324
2018	26	14	11	763
2019	28	18	15	1083
2020*	16	Online		868
2021	21	Online		1851

* Figures differ slightly from those presented in a previous Director's report to the Governing Council, as some additional data were received after its conclusion.

Table 8: Extrabudgetary funding

Year	Number of applications	Number of signed contracts	Total value of signed contracts ^a (in Euros)	Value attributed to IARC (in Euros)	Voluntary contribution expenditure ^b (in Euros)
2017	193	65	38 931 975	11 855 145	11 357 348
2018	204	68	20 987 750	9 183 834	13 362 692
2019	236	81	41 488 350	12 408 032	14 365 018
2020	236	94	20 072 571	12 337 370	13 017 438
2021	245	101	36 179 741	19 037 426	13 110 514

^a The figures show total budgets of all grants signed irrespective of whether IARC is coordinating the studies or not.

^b Voluntary contribution expenditure as reported in the IARC Financial Report and Financial Statements, which includes amount passed through to partners for IARC coordinated projects.

Figure 5: Percentages of expenditure on Regular Budget and Voluntary Contributions

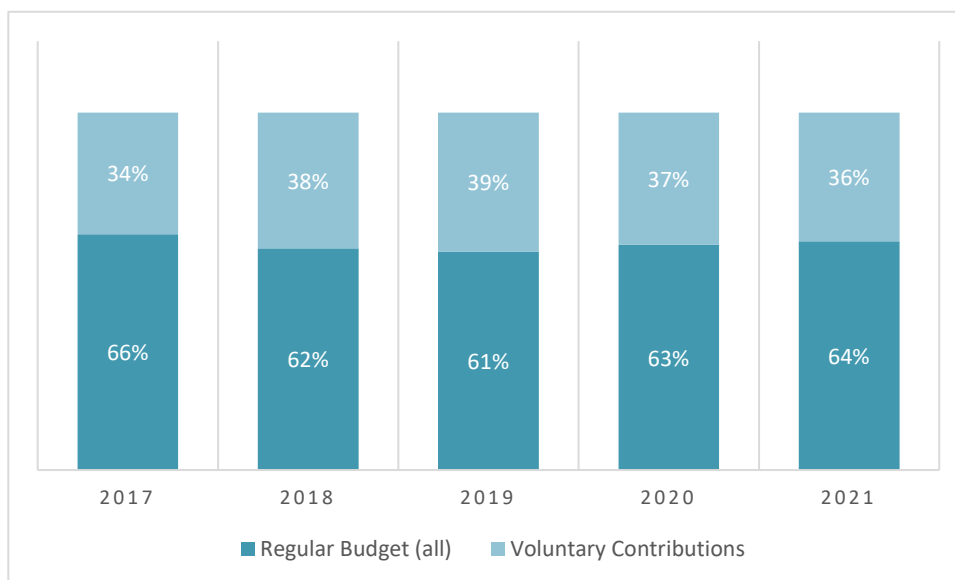


Figure 6: Value of contracts signed in 2021 and top 14 funders (amount in million euros)



Figure 7: Staff categories by funding sources

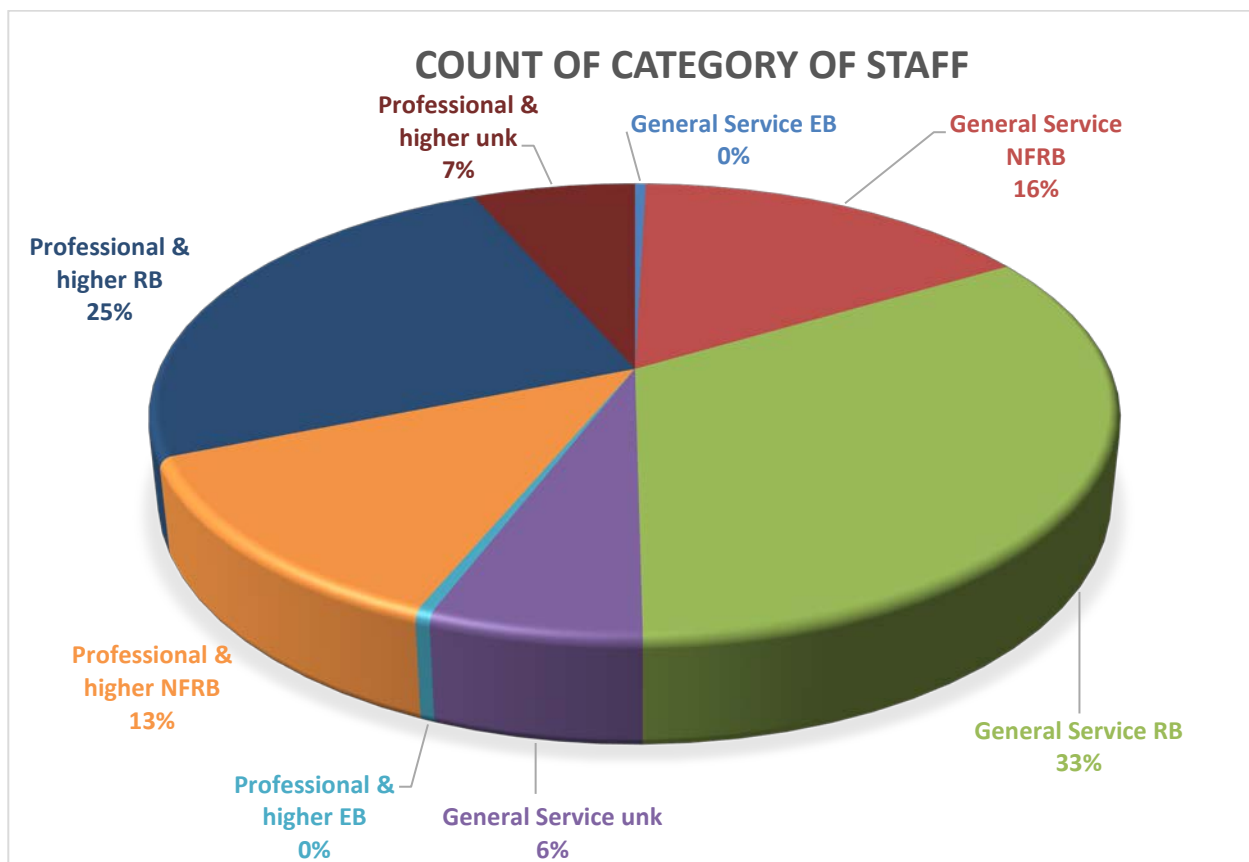


Table 9: Evolution of staff positions since 2015 to date

Year	Total Staff	P Total	P Male	P Female	GS Total	GS Male	GS Female	Fixed Term	Temporary	RB Funded
2015	228	99	45	54	120	30	90	219	9	158.28
2016	235	103	49	54	118	29	89	221	14	158.2
2017	241	106	48	58	125	32	93	231	10	158.2
2018	237	102	49	53	131	33	98	233	4	158.8
2019	249	106	50	56	134	38	96	240	9	158.8
2020	240	103	50	53	129	35	94	232	8	154.2
2021	238	98	47	51	124	34	90	222	16	154.2
2022	231	87	41	46	118	32	86	205	26	153.2

Figure 8: Evolution of all staff types since 2015

Figure 8a: Staff funded on the Regular Budget

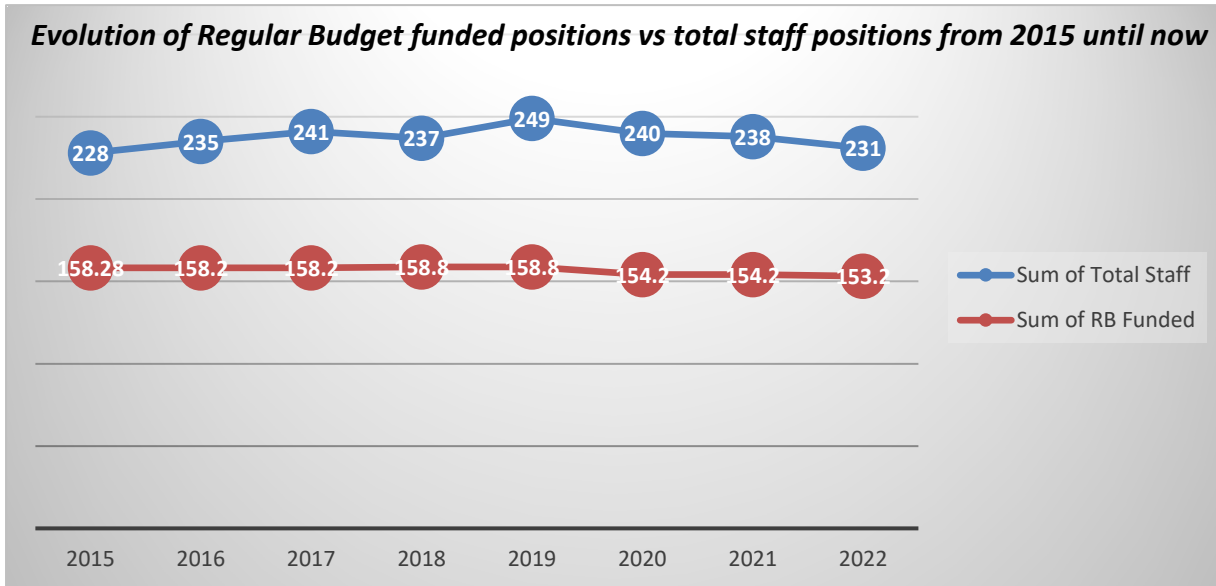


Figure 8b: Temporary versus Fixed-Term staff

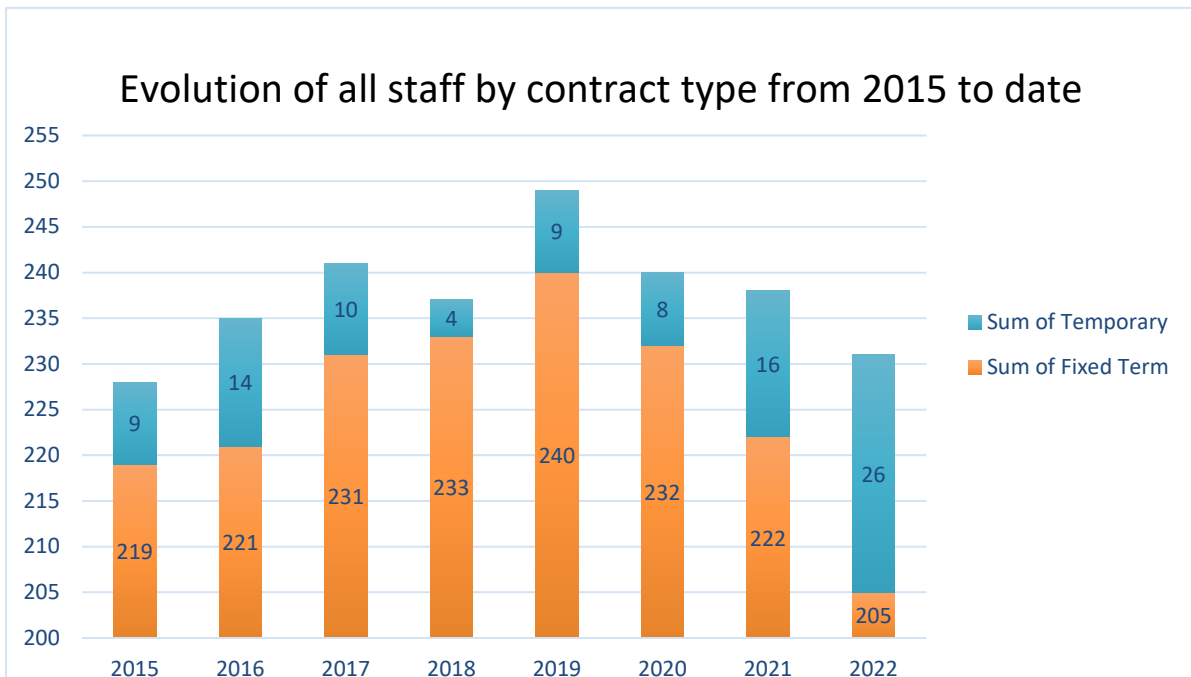


Figure 8c: General Services (GS) versus Professional (P) staff

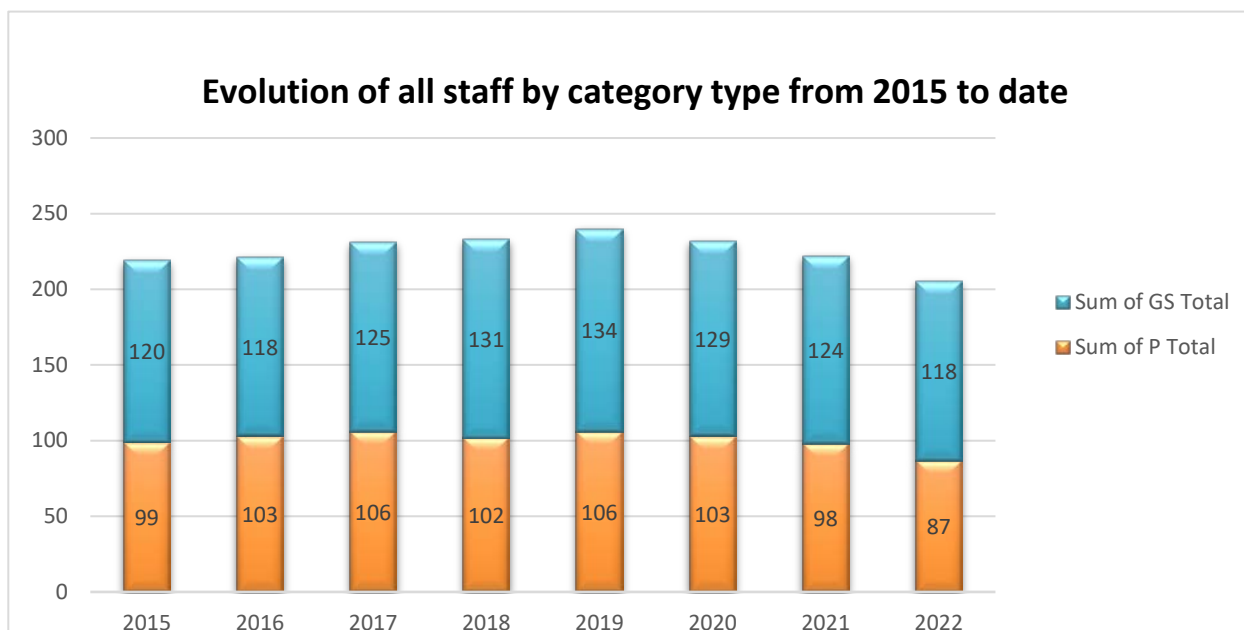
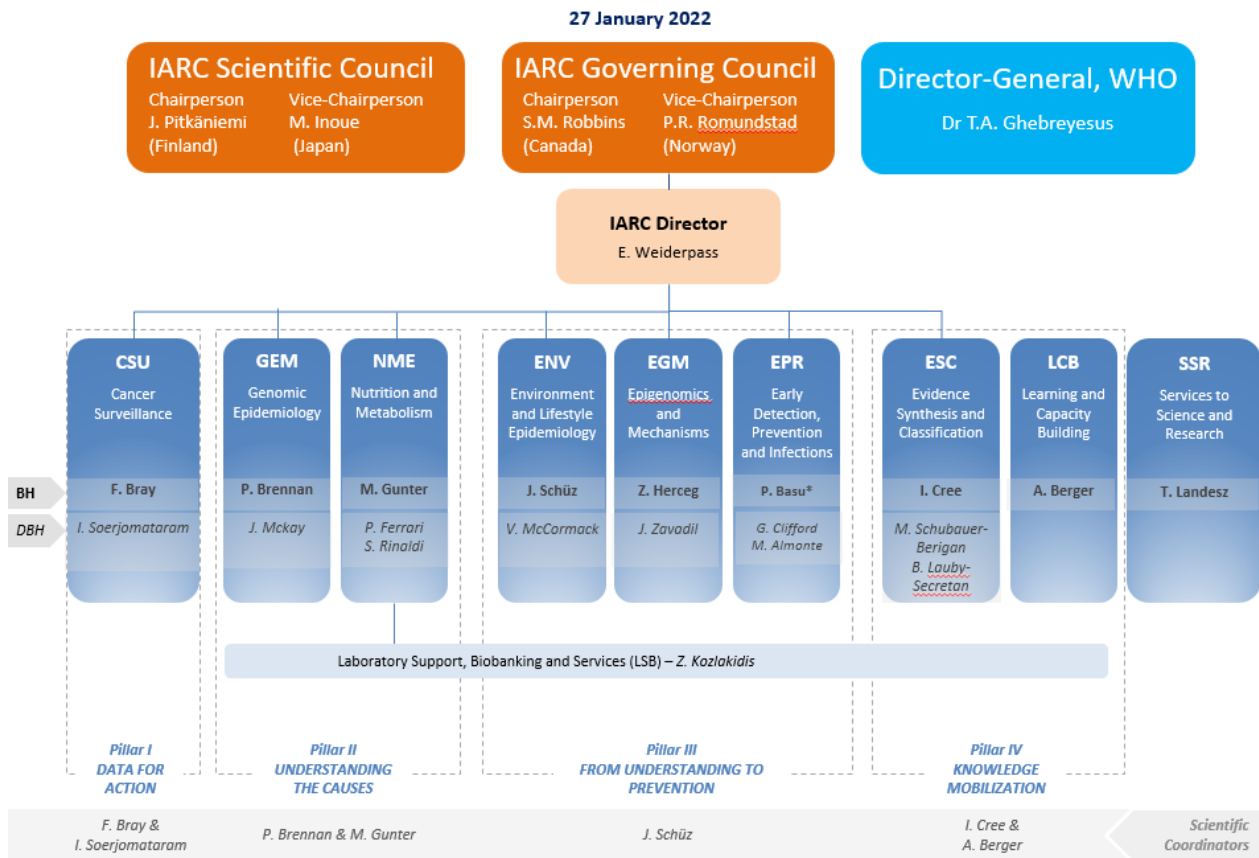


Table 10: Webinar sessions organized in 2021

Type of training	No. of training session	No. of participants	
		Staff members	ECVS
Core competencies training	19 (16)	185 (156)	72 (56)
Job-specific training	10 (6)	66 (32)	79 (53)
Managerial and leadership training	2 (6)	29 (66)	0 (0)
Total	31 (28)	280 (254)	151 (109)

Figure 9: IARC Organizational Structure



BH = Branch Head (* Acting Branch Head)
DBH = Deputy Branch Head