## IARC MONOGRAPHS NEWS

November 2022 Issue No. 4

the IARC Nouveau Centre

A newsletter from the IARC Monographs programme



## *IARC Monographs* 50th anniversary



Our 50th anniversary year is coming to a close.

Since our last newsletter in July, we have published an online <u>photo</u> gallery that gives a glimpse of the history and evolution of the *IARC Monographs* programme since its creation in 1971.

On 17–21 October 2022, we jointly convened a scientific workshop in Lyon on <u>Epidemiological Bias Assessment in Cancer Hazard Iden-</u> <u>tification</u> in collaboration with the Division of Cancer Epidemiology and Genetics of the National Cancer Institute, USA (see page 3).

In a public webinar held on 2 November and moderated by Rodolfo Saracci, current and former Heads of the *IARC Monographs* programme discussed which *IARC Monographs* meetings have had the greatest impact on public health and cancer prevention, and what key changes to the programme were implemented under their leadership. The panellists were united in evoking how the programme has remained faithful to its origins and the inspiration of the first Head, the late Lorenzo Tomatis, and yet has effectively evolved and innovated in its quest to identify the preventable causes of cancer in humans.

Looking ahead, the panellists highlighted the need for the programme to rise to the challenges of the future in the next decades of its existence.

## **Call for Data**

ARC is interested in identifying studies that are relevant to the carcinogenicity of the agents that will be reviewed in each volume. This includes all pertinent cancer epidemiology studies, cancer bioassays, and mechanistic evidence in both exposed humans and experimental systems. Eligible studies should be published or accepted for publication in the openly available scientific literature. Relevant exposure data (particularly from low- and middle-income countries) that are or can be made publicly available are also requested. Please see the <u>IARC Monographs Preamble</u> for details of the types of study that may be reviewed.

The **Call for Data** and **Call for Experts** are announced approximately 1 year before the meeting on the <u>IARC Monographs website</u>.

Meeting 133: Anthracene, 2-Bromopropane, Butyl Methacrylate, and Dimethyl Hydrogen Phosphite

Meeting dates: 28 February–7 March 2023 Call for Data closing date: 28 January 2023 Call for Experts CLOSED 1 July 2022

#### Meeting 134: Aspartame, Methyleugenol, and Isoeugenol

Meeting dates: 6–13 June 2023 Call for Data closing date: 6 May 2023 Call for Experts CLOSED 6 September 2022

#### Meeting 135: Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS)

Meeting dates: 7–14 November 2023 Call for Data closing date: 7 October 2023 Call for Experts closing date: 28 November 2022

IARC encourages the participation of Representatives of national and international health agencies. If you are interested in serving as a Representative, contact us at <u>imonews@</u> <u>iarc.who.int</u>.

International Agency for Research on Cancer



## The Team

Introducing Dr Roland Wedekind and Ms Sandrine Ruiz



#### Where are you originally from?

RW: I am originally from Hamburg, Germany, but have been living in different places in Germany and France in the last few years.

SR: I am from Lyon.

#### How long have you been at IARC?

RW: I have been at IARC for 6 years. I started off in the Nutrition and Metabolism Section, working on dietary exposure biomarkers, particularly those for meat intake.

SR: I started working for the *IARC Monographs* programme in 1990.

#### What is your role in the IMO team?

RW: I am an exposure scientist. I serve as lead rapporteur for Section 1, Exposure Characterization, which describes the use of the agent, occurrence, and human exposure. In my role, I support the Working Group in all aspects of the writing of Section 1 and facilitate discussions during meetings.

SR: I am a documentalist and archivist. I prepare the reference databases for future monographs and work on digitalization of the old archives for past meetings.

## If you were to recommend one place in Lyon to visit, where would it be and why?

RW: I would recommend the riverbanks, or *quais*, which are a mix of public park, meeting place, and convenient shortcut by bike. You can walk along

the rivers without meeting any traffic and have a great view of the city. Depending on the time of day, it can be quite animated or very quiet, and I very much enjoy the atmosphere.



SR: I really enjoy taking the funicular train from St Jean in the old town up the hill to Fourvière and

walking back down through the gardens under the Basilica – a little trip through Lyon's history.



## Scientific Workshop on Key Characteristics-associated End-points for Evaluating Mechanistic Evidence of Carcinogenic Hazards

workshop convening experts in various disciplines (toxicology, cancer biology, epidemiology, and regulatory toxicology) who will examine and discuss issues related to the reporting and interpretation of results under the key characteristics (KCs) of carcinogens framework for the evaluation of mechanistic evidence.

The themes explored during the workshop will be: interpretation of end-points forming the evidence base for the KCs in exposed humans and in experimental systems; incorporation of data from emerging assays and biomarkers in the KCs; and integration of the mechanistic evidence as part of cancer hazard identification.



The workshop will be held in Lyon, France, on 25–28 July 2023. Proceedings from the workshop will be subsequently published as a report on the *IARC Monographs* website.

#### **Request for Observer status**

Please contact IARC at <u>kc\_workshop@iarc.who.int</u> for further information.





# An IARC–NCI Scientific Workshop on methods to assess potential biases in human cancer studies

uman cancer studies have formed a crucial part of the evidence base for *IARC Monographs'* evaluations since the <u>very first volume</u>, when strong positive associations were noted between lung cancer and underground haematite mining, and between bladder cancer and exposure to 4-aminobiphenyl, benzidine, and 2-naphthylamine.

From the beginning, *IARC Monographs* Working Groups have recognized that cancer epidemiology studies, like all observational studies, may be subject to potential biases that must be carefully considered before interpreting positive associations as causal. Since the publication of Volume 30 in 1982, the *Monographs* Preamble has used the phrase "chance, bias, and confounding" to encapsulate challenges in interpreting the human cancer evidence. Working Groups have used these descriptors for the past 40 years in rigorously evaluating whether there is sufficient<sup>1</sup> or limited<sup>2</sup> evidence



regarding cancer in humans<sup>3</sup> for agents evaluated by the Monographs programme.

Recently, new approaches to evaluating the direction and magnitude of biases have been described in the scientific literature. To make these developments easily accessible to Working Groups and others conducting cancer hazard identification, the *Monographs* programme and the National Cancer Institute's Division of Cancer Epidemiology and Genetics jointly convened a <u>scientific workshop</u> bringing together global experts in cancer epidemiology and statistical methodology to develop a toolkit of methods to evaluate bias and confounding in cancer epidemiology studies.

On 17–21 October 2022, <u>37 scientists from 12 countries</u> met in Lyon to discuss these methods and, using as examples four agents recently evaluated by the *IARC Monographs* programme, demonstrated how these methods can be applied to support cancer hazard identification. The workshop materials will result in the publication of a new volume in the authoritative IARC Scientific Publications series *Statistical Methods in Cancer Research*. The series includes the landmark publications authored by Norman Breslow and Nicholas Day – *Volume I: The analysis of case–control studies* and *Volume II: The design and analysis of cohort studies*. Publication of the volume is expected in early 2024.

#### Mary Schubauer-Berigan

<sup>2</sup> For *limited* evidence, a positive association is credible, but chance, bias, and/or confounding **cannot** be ruled out with reasonable confidence.

<sup>&</sup>lt;sup>1</sup> For *sufficient* evidence, a positive association is seen in the body of evidence and chance, bias, and confounding **can** be ruled out with reasonable confidence as an explanation for the findings.

<sup>&</sup>lt;sup>3</sup> A conclusion of *inadequate* evidence or *evidence suggesting lack of carcinogenicity* may also be reached.

## **Call for Experts**

Working Group Members are responsible for all scientific reviews and evaluations developed during the *IARC Monographs* meeting. The Working Group is interdisciplinary and comprises subgroups of experts in the fields of: (1) exposure characterization; (2) cancer in humans; (3) cancer in experimental animals; and (4) mechanistic evidence.

IARC selects Working Group Members on the basis of expertise related to the subject matter and relevant methodologies, and absence of conflicts of interest. Consideration is also given to diversity in scientific approaches and views, as well as demographic composition. Self-nominations and nomination of women and of candidates from low- and middle-income countries are particularly encouraged.

### **Nomination of Agents**

or each new volume of the *IARC Monographs*, IARC selects the agents for review from those recommended by the most recent <u>Advisory Group Report</u>, considering the availability of pertinent research studies and current public health priorities. IARC encourages the general public, the scientific community, national health agencies, and other organizations to nominate agents for review in future *IARC Monographs* volumes.

If you would like to nominate an agent, please complete the <u>online form</u> (one agent per form) and the accompanying WHO Declaration of Interests.

## Published in 2022

#### IARC Monographs



#### March 2022: Volume 129

Gentian Violet, Leucogentian Violet, Malachite Green, Leucomalachite Green, and CI Direct Blue 218

Available from: https://publications.iarc.fr/603



August 2022: Volume 130

1,1,1-Trichloroethane and Four Other Industrial Chemicals

Available from: https://publications.iarc.fr/611

### The Lancet Oncology

Demers P, DeMarini D, Fent K, et al. (2022). Carcinogenicity of occupational exposure as a firefighter. *The Lancet Oncology*. 23(8):985–86. <u>Published online 1 July 2022</u>

Karagas M, Wang A, Dorman DC, et al. (2022). Carcinogenicity of cobalt, antimony compounds, and weapons-grade tungsten alloy. *The Lancet Oncology*. 23(5):577–78. <u>Published online 7 April 2022</u>



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