# IARC MONOGRAPHS NEWS

April 2022 Issue No. 2

A newsletter from the IARC Monographs programme

## Introducing the winner of the logo-design competition: Amélie Labaume



I work as a graphic designer and multimedia consultant in the Learning and Capacity Building Branch (LCB) where I design, illustrate, and manage e-learning projects.

After obtaining two master's degrees (Political Science, and English Literature and Civilization) and spending 2 years in the USA as an exchange student, I decided to change direction and study graphic design and web development. I arrived at IARC in 2019 as an intern in the LCB team, helping with the organization of the IARC Summer School. I returned in 2020 for a second internship, working on various e-learning projects. I absolutely loved my time at IARC so applied for a full-time consultancy job. I am delighted to now be a member of the amazing LCB team.

When designing the logo for the 50th anniversary, I wanted to depict the international reach of the *IARC Monographs* and to include the iconic orange colour. My simple but meaningful design comprises an open book, knowledge beams, and the Earth, symbolizing the *IARC Monographs'* global endeavour to identify carcinogens and advance cancer prevention.

### **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</u> <u>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 closing date: 1 July 2022

Meeting 132: Occupational Exposure as a Firefighter

Meeting dates: 7–14 June 2022

Call for Data closing date: 6 May 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 imonews@iarc.fr.

International Agency for Research on Cancer





## Results of *IARC Monographs* Meeting 131: Cobalt, Antimony Compounds, and Weapons-Grade Tungsten Alloy

Meeting held remotely on 2–18 March 2022

The results of the recent *IARC Monographs* evaluation of the carcinogenicity of cobalt metal (without tungsten carbide or other metal alloys), soluble cobalt(II) salts, cobalt(II) oxide, cobalt(II,III) oxide, cobalt(II) sulfide, other cobalt(II) compounds, trivalent antimony, pentavalent antimony, and weapons-grade tungsten (with nickel and cobalt) alloy (WGTA), have now been published in *The Lancet Oncology*.

Antimony is used in flame retardants, lead-acid batteries, lead alloys, plastics, brake pads, clutch discs, glass and ceramics, and as an ammunition primer in explosives. Some pentavalent antimony compounds are used to treat leishmaniasis. Cobalt is used in the manufacture of cutting and grinding tools, in pigments and paints, coloured



glass, medical implants, electroplating, and in lithium-ion battery production. WGTA (tungsten, 91–93%; nickel, 3–5%; and cobalt, 2–4%) is used in armour-penetrating munitions. Military personnel and civilians can be exposed via metal aerosols generated during firing or impact, or injury with embedded fragments.

The Working Group classified trivalent antimony as *probably carcinogenic to humans (Group 2A)* based on *limited* evidence for cancer in humans (for lung cancer), *sufficient* evidence for cancer in experimental animals, and *strong* mechanistic evidence in human primary cells and in experimental systems. Cobalt metal and soluble cobalt(II) salts were classified as *probably carcinogenic to humans (Group 2A)* based on *sufficient* evidence in experimental animals and *strong* mechanistic evidence in human primary cells. Cobalt(II) oxide and WGTA were classified as *possibly carcinogenic to humans (Group 2B)* based on *sufficient* evidence in experimental animals. Cobalt(II,III) oxide, cobalt(II) sulfide, other cobalt(II) compounds, and pentavalent antimony were each evaluated as *not classifiable as to its carcinogenicity to humans (Group 3*).

A summary of the results has been published in *The Lancet Oncology*.

The IARC Monographs lists of classifications are available by agent and by organ site on the IARC Monographs website.

### IARC Monographs at 50

s readers of the first issue of this newsletter will know, the *IARC Monographs* programme is continuing its 50th anniversary celebrations in 2022 with a number of special events.

#### IARC Monographs at 50 logo

In January 2022, we announced the winning entry in our in-house competition to design a 50th anniversary logo (see page 1).



#### Interview: Dr Benedetto Terracini

Dr Benedetto Terracini was a participant in the very first *IARC Monographs* meeting in December 1971. Read the interview on page 4.

We would be delighted to hear from previous Working Group members who would like to share their memories of the first 50 years of the *IARC Monographs*.

### Scientific workshop: *Evaluating impacts of bias in human cancer evidence*

In October 2022, the *IARC Monographs* programme is convening a scientific workshop to develop a new volume in the authoritative IARC Publications series, *Statistical methods in cancer research*, the fourth and last volume in which was published more than 30 years ago. The series includes the landmark publications authored by Norman Breslow and Nicholas Day – <u>Volume I: *The analysis of case–control stud-ies* and <u>Volume II: *The design and analysis of cohort studies*</u>. Experts participating in the workshop will gather and distil modern advances in interpretation and statistical methods to assess the impact of bias (including its direction and magnitude) in observational cancer epidemiology studies and demonstrate with examples how these methods can be used to support cancer hazard identification.</u>

#### **Photo exhibition**

A display of photos illustrating the history and evolution of the *IARC Monographs* is planned for later this year.

#### Webinar: IARC Monographs - past, present, and future

In this webinar, scheduled for later in 2022, current and former Heads of the *IARC Monographs* programme will gather to discuss their views on 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 Team**

Introducing Dr Nate DeBono (top photo) and Dr Yann Grosse (bottom photo)

#### Where are you from?

NDB: I am originally from Windsor, Ontario, a small automotive-manufacturing city in the Great Lakes region of Canada bordering the USA.



YG: I was born in Metz, a historic French city with 150 000 inhabitants, near the borders of Luxembourg, Belgium, and Germany.

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

NDB: I am celebrating my 1-year anniversary.

YG: I joined the *IARC Monographs* team in 1997.

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

NDB: I am an epidemiologist providing expertise for the "Cancer in humans" section, and serve as Lead Rapporteur during meetings.

YG: A toxicologist specializing in animal carcinogenicity, I am in charge of the "Cancer in experimental animals" section and regularly act as Responsible Officer overseeing meeting organization.

Recommend one place in Lyon to visit: where would it be and why?

NDB: A special place to me is the Jardin des Curiosités, Saint-Just, a small park with the best view of the city and an ideal picnic spot.



YG: The Café du Gros Caillou, La Croix-Rousse, to enjoy a Saturday morning coffee facing the Alps and the Lyon skyline.



## The *IARC Monographs* at their inception: meet Professor Benedetto Terracini

The editorial board of the *IARC Monographs* newsletter were delighted to have the opportunity to interview Professor Benedetto Terracini, who participated in the very first *IARC Monographs* meeting

Professor Terracini was working on carcinogenicity testing of chemicals such as nitroso compounds, polycyclic aromatic hydrocarbons, and DDT, and had experience in assessing carcinogenesis studies for WHO Expert Committees, when he was invited to participate in the first official *IARC Monographs* meeting in 1971 in Geneva,

Switzerland (and the preparatory meeting held in Lyon, France, at which he was Rapporteur). His rich memories of this meeting were nicely captured in a <u>lecture</u> delivered (in English) to master's students at the University of Turin in February 2022. Professor Terracini recalled discussions on the contribution of animal testing to cancer prevention and the complexi-

ties faced by the experts in seeking accu-

rate terms to categorize the relevance of scientific findings to public health in terms of proof (ranging from inadequate to convincing) that an agent could cause cancer in humans. He also explained that Volume 1 of the *IARC Monographs* was intended to verify the feasibility of producing monographs on substances of different chemical groups.

Professor Terracini noted the need for impartial and transparent evidence-based scientific evaluations provided by a reliable and independent institution for use beyond the expert milieu, for example, for the protection of workers and those exposed in the environment.

Professor Terracini acknowledged the great impact that the *IARC Monographs* programme has had on his professional career, notably as a driving force motivating him to establish a

"Remember s
that preventing
cancer is more
ethical than letting
people develop cancer
and curing it a

cancer epidemiology unit at his university, access of his students to IARC training fellowships, and participation in international case-control studies on head and neck cancers (coordinated by Albert Tuyns). He offered some advice for people currently engaged in cancer research or considering a career in cancer-prevention research: (i) remember that preventing

cancer is more ethical (and cheaper) than letting people develop cancer and curing it; (ii) do not underestimate the results of experimental studies; (iii) (quoting Dr Rodolfo Saracci) when evaluating scientific literature, be both impartial and non-neutral; and finally (iv) if you conclude that "further research is needed", clarify whether the available evidence is sufficient to implement preventive measures, despite irrefutable causal proof not having been found.

IARC MONOGRAPHS

### **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

March 2022: Volume 129 Gentian Violet, Leucogentian Violet, Malachite Green, Leucomalachite Green, and Cl Direct Blue 218 Available from: https://publications.iarc.fr/603

### Have your name inscribed at the heart of cancer research

Take part in the fundraising campaign for the IARC Nouveau Centre building



International Agency for Research on Cancer



150 cours Albert Thomas 69372 Lyon CEDEX 08 France Tel: +33 (0)4 72 73 84 85



Email: <u>imonews@iarc.fr</u> Web: <u>https://monographs.iarc.who.int/</u> Copyright © 2022 International Agency for Research on Cancer, All rights reserved.