Tobacco Control, Screening, and Collaboration Are Priorities for IARC, Incoming Director Says

Peter Boyle, Ph.D., was elected director of the International Agency for Research on Cancer (IARC), part of the World Health Organization, based in Lyon, France. He takes office Jan. 1, 2004, for an initial term of 5 years. Since 1991, Boyle has been head of the Division of Epidemiology and Biostatistics at the European Institute of Oncology in Milan, Italy. He replaces Paul Kleihues, M.D., who is retiring after 10 years as IARC director.

What was the attraction of IARC?

I went to IARC for the first time to participate in a meeting in 1980. I was given a guided tour of the institute by Calum Muir and David Zaridze. Then I went back in January 1981 for a 3-week International Cancer Research Technology Transfer fellowship, funded by [the International Union Against Cancer]. That was the first time I saw how the institute worked. I was very fortunate in the same year to get an IARC research training fellowship and spend 10 months at IARC and 4 months in Boston at the Harvard School of Public Health. During that year, I saw the power and importance of large-scale, international collaboration. It was eye-opening. Then I came back from 1986 to 1991 to head up IARC’s SEARCH program, doing international collaborative cancer control studies on pancreatic cancer and adult and childhood brain tumors. Since that tour in 1980, I’ve always retained the desire to work at IARC. It’s an international environment that I enjoy very much. I feel very comfortable working in a central role facilitating collaboration.

In 1991 you went to Milan to build the European Institute of Oncology’s (EIO) Department of Epidemiology and Biostatistics in Milan. What have you accomplished there?

I was the first appointment at the new European Institute of Oncology. It was an honor and a source of great pleasure to work closely with Umberto Veronesi to help create and develop something new on the European scene and a center of the highest quality. I have an emotional attachment to the EIO. We’ve created an international program plus we have research that uses the data and patient information collected in this institute. The work is epidemiological in nature, but it is all focused on patients or persons at high risk for cancer. For example, with Nigel Gray, we wrote the agenda for a consensus meeting in 1996 and wrote tobacco recommendations for the European Commission that were voted into law last year. They went into effect
having outstanding clinicians at the institution. We have taken advantage of more clinical orientation than you is very collaborative with a little bit in 1994 and 2003, involved 200 cancer European Code Against Cancer, revised ration with 28 European countries. The with countries from all over Europe. Researchers. We ran a tobacco initiative with Central and Eastern European venture was to create a collaboration tion context. For example, an early the work has an international collabora-

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Early on, I decided strategically that I did not want to compete against the existing Italian epidemiology groups for the small amount of money available for epidemiology in Italy. I wanted to avoid competition and bring additional value (and funds) into Italy. So the majority of the work has an international collaboration context. For example, an early venture was to create a collaboration with Central and Eastern European researchers. We ran a tobacco initiative with countries from all over Europe. The European Cancer Atlas is a collabora-

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with 28 European countries. The European Code Against Cancer, revised in 1994 and 2003, involved 200 cancer scientists throughout Europe. Our work is very collaborative with a little bit more clinical orientation than you would get in the average research institution. We have taken advantage of having outstanding clinicians at the

In 1985, Europe Against Cancer set a goal to reduce cancer mortality in the European Union by 15% by the year 2000. You were lead author of the 2003 evaluation of the outcome. How did Europe do?

That goal was set against a backdrop of cancer phobia and increasing cancer incidence and mortality. We managed to achieve a 9% drop in mortality. More than 90,000 cancer deaths in the year 2000 were avoided through a series of public health actions, notably tobacco control and population screening for breast and cervical cancer. Also, for reasons we don’t completely understand, there’s been a continual decline in stomach cancer. Lung cancer went down in men, but not in women. Tobacco control in women was a failure. It’s one of our priorities now.

Is it important to set lofty goals?

I like NCI’s new plan [to eradicate suffering and death from cancer by 2015]. It makes people nervous, but increasingly cancer researchers in all fields are suddenly thinking about cancer prevention and patients. That’s a sea change. That’s a major contribution of the new plan. It’s going to change the mentality of even the most basic research scientists. There’s a lot we can do if we just focus on actually trying to do something for patients with cancer or those in whom the carcinogenic process is advancing.

Is IARC playing the role, worldwide, that you think it should?

I strongly believe that if IARC didn’t exist today, there would be a need to create it. There needs to be an organization with a central international role in cancer registration and basic epidemiology studies but increasingly in genetic studies, looking at gene–environment interactions. One that looks at some issues in prognosis of patients with cancer, unrelated to tumor characteristics, and looks at deprivation and poverty around the world as independent influences. We are going to have to be much more outward looking.

Where do you plan to take IARC?

I would like to see IARC have a central role in tobacco. We need to figure out how to stop people [from] smoking. How to prevent them starting. I’d like to introduce behavioral research into the agency. To create a tobacco program to look at issues such as how does taxation and pricing policy affect smoking. What are the elements that persuade people to smoke, and how can we change these? IARC has a role for creating a type of handbook, for example, that brings together the huge body of evidence from around the world on the impact of pricing policy and taxation on consumption. Today, if I want to know if pricing policy works, there is not a single source that can tell me if, and under what circumstances, it works. IARC could create that resource, useful for governments and tobacco-control workers worldwide.

Another huge area is screening, where the rapid development of exciting new technologies offers an amazing potential. We need to focus on how to evaluate new screening methods that have potential to find tumors early in asymptomatic individuals. Lung cancer screening is an example. We’ve got a very elegant and interesting screening technique in spiral

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CT. But the traditional way to evaluate it is to take a couple of hundred thousand people, screen half and not screen half, and count how many deaths occur over the years. We need better and more rapid ways to evaluate screening instead of waiting 10 to 12 years. That involves a huge search for biomarkers and intermediate endpoints, plus a potential role for statistical modeling and looking at old data sets to identify endpoints and key markers. It’s a challenge, and no group in the world can do it alone. We need to share ideas.

IARC receives voluntary contributions from the 16 WHO Member States. Does the agency have the funding it needs?

It would be very important to try and increase the funding base of IARC in view of the rapid developments taking place in knowledge about cancer and the possibilities to prevent it. We’re at a turning point, an exciting time for cancer research. We have the genome, an amazing understanding of the process of carcinogenesis, and we have the possibility to turn it into effective action and reduce incidence and mortality from cancer. I’d like IARC to be working with all the major partners, but have a central role in getting people with good ideas to work together to bring about changes. Antoine de Saint Exupéry (1900–1944), a French aviation pioneer born in Lyon, wrote that *La grandeur d’un métier est avant tout d’unir les hommes* (the greatness of a profession is above all to bring people together). Could be the IARC motto…

—Cori Vanchieri