[Letter to the Editor]

by Jan Verhoeven ARCNL, Amsterdam DOI: 10.1051/epn/2016102

In defence of basic research

n EPN 46/5&6 the Opinion Column by Jo Hermans stresses the value of basic research. The message is that fundamental research may not always look useful, but that unexpected - and often extremely useful - applications emerge much later. Indeed, it is impossible to predict the pay-off of fundamental research.

I completely agree. However, this message is delivered to the wrong audience. We physicists must relentlessly deliver this message to politicians and other decision makers, and to the public at large. And we should put it in a language that is understood by laymen, however difficult that may be for scientists. We should write in popular newspapers and magazines, and we should not be afraid to overdo things or even sound alarming: 'Curtailment of fundamental research threatens future technological development'. Make it a Wake-up call. And use additional examples, especially cases where basic research has applications in medicine. For instance, the development of particle accelerators, combined with research into radiation damage performed decades ago, formed the basis for proton therapy, which saves healthy tissue while killing cancer cells. Other examples can be found in Angela Bracco's Feature NUCLEAR PHYSICS FOR MEDICINE (EPN 46/3, p. 26-30).

So: come on, you European physicists: shake off your shyness and deliver this message in simple language to those who determine where the money goes. ■