Biomedical and clinical research is the main source of clinical practice of physicians throughout the world. Their results are the basis of diagnostic and therapeutic decisions. This research, mainly driven in developed countries, is widely based on advances in technology that are becoming more expensive, making it so that academic institutions are unable to fund this research. This means that the substantial financial support of pharmaceutical and device industries became crucial. However, this direct relationship seems to generate some issues, disrupting public and physician trust in biomedical research. This is a major bias and forces us to ask some questions about the escalating clinical costs, the rapid evolution of new forms of treatment despite a lack of evidence, and the gap between the efforts spent in the development of new sophisticated devices and that spent in translating some basic scientific discoveries into innovative therapies.

We think that these issues are due to the direct financial relationship between the 2 sides that have different ethics: biomedical research and industry. What we need is a funding system that allows indirect support by pharmaceutical and device companies through a world financial intermediary. The aim is to create a double-blind funding system of biomedical research that maintains the support of industry and preserves the researcher’s independence. This global funding system may eventually help researchers from every country have the best access to research money.

Despite our poor involvement in early stage investigations, the results of biomedical and clinical research remain the primary source of knowledge by which we—as doctors in a developing country—reach decisions with our patients. The integration of clinical expertise and our particular social values with an evidence-based approach guides our clinical practice and decision making. This research, mainly driven in developed countries, has widely benefited from the development of technology and seems so expensive that governments are unable to fund this enterprise alone. This means that the substantial financial support of pharmaceutical and device industries became crucial over the past few decades. In the United States, biomedical research is approximately 65% financed by industry.\(^1\) This collaboration between researchers and industry has led to the discovery of vast numbers of drugs and medical devices with enormous benefits to patients and the field of medicine around the world.

However, one of the consequences of this partnership is an exponential growth of new technology in medical care. This evolution creates economic growth and value for many developed countries,\(^1\) but it also generates escalating clinical costs for developed and developing countries. For example, in orthopedic surgery, we are sometimes bombarded with new products and surgical techniques that are quickly adopted despite of a lack of evidence that they are better than traditional ones.\(^2\) The evolution of products and techniques is so rapid that we are unable to assess the long-term benefits of new forms of treatment.

Moreover, some questions should be asked about the escalating cost of these new techniques—for a given disease, the new solution is nearly always more expensive than the old one. Is this unavoidable? We’re not sure. On the other hand, analysts have shown that innovative products appear too rarely, and there are many copies of the same concept on the market.
There is a wide gap between the efforts spent developing new sophisticated devices and those spent in translating some basic scientific discoveries into innovative therapies. For example, our expectations as orthopedic surgeons in using molecular biology and knowledge of the human genome to accelerate bone healing or to repair cartilage are not yet satisfied. However, we are witnessing the explosion of new prostheses and several other instrumentations. This disappointment may change our perception of industrial involvement in research funding, and our trust in biomedical research may be disrupted by economic interests.

Over the past decade, debates and commentaries concerning the increased financial interaction between industry and researchers have drowned the scientific literature and have led to 2 main problems that erode public trust in biomedical research. The first is that interaction promotes conflicts of interests, which has required severe regulation from scientific institutions and policy makers. The second is that industry-funded studies can be biased; they are more likely to report positive results than independently funded studies. It is a critical dilemma—financial support of research by industry is unavoidable and vital for advancing medical care, but it is crucial that the researcher’s judgments remain independent to eliminate commercial bias. The problem is due to the direct financial relationship between the 2 sides that have different ethics. What is the solution?

We need to think about a funding system of biomedical and clinical research that allows indirect support by pharmaceutical and device companies through a world-financial intermediary. This could be a sort of world bank of biomedical research funds in which money comes from the compulsory contribution of world companies. Submitted proposals of basic or clinical research projects would be reviewed and eventually approved by a scientific committee to allow their financing, including researchers’ fees, via this intermediary financial institution. When basic research or clinical trials solve problems, the contribution of each company would have to be considered an investment giving the right to transfer patents and intellectual properties. The long-term benefits could be substantial.

It would be impossible for us to offer a detailed plan for translating this idea into a concrete initiative—that is the task of legislators and policy makers. The aim is to create a double-blind funding system of biomedical research that maintains the support of industry and preserves the researcher’s integrity and independence. Moreover, this global funding system may eventually help researchers from every country have the best access to research money. This could be a source of “the pluralism of ideas and the diversity of approaches that are necessary for innovation.”

As Lo recently said: “This is an area in which key interests may be aligned: the public seeks effective new therapies, academia wishes to translate basic discoveries into treatments, and industry wishes to develop new products.” We believe that scientists and industrialists, with this proposed form of an indirect funding system, would be able to summon their efforts to confront these serious challenges and generate relevant evidence that can be used in decision making.

REFERENCES