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I was not expecting President Barack Obama to mention science and technology in his inaugural speech. But he actually did. When he promised to “restore science to its rightful place, and wield technology’s wonders to raise health-care’s quality and lower its cost,” I was impressed.

British Prime Minister Gordon Brown echoed, in his address to the University of Oxford on February 27, 2009, that science is a key element to Britain’s recovery from the economic downturn; therefore, he would not let science become “a victim of the recession.”

All sounds good—especially in this chilly time of global financial meltdown. The rest, of course, is for all scientists and engineers to wait and see.

Here and there, now and then, many scientific research programs and funding schemes have been drastically reduced in size and in volume, or have even been completely cut off. As such, how to “restore science” so that science will not become “a victim of the recession” demands not only verbal and moral support but more importantly, financial investment and research funding. Susan Hockfield, President of Massachusetts Institute of Technology (MIT), is absolutely right about it: “Above all, scientists must convince the public, the Congress, and the Obama administration that funding research that cuts across the life, physical, and engineering sciences is a vital investment in human health, environmental well-being, and economic prosperity.” She wrote this in her editorial “The Next Innovation Revolution” for the *SCIENCE* magazine, coincidentally on February 27, 2009.

In that editorial, Susan promotes biomedical science in particular because she believes that innovations in this research field will provide “new opportunities emerging at the convergence of the life sciences with the physical sciences and engineering” and, therefore, is worthy of additional education and research funding. I couldn’t agree more. In fact, this has already been a trend of research evolution in academia for more than two if not three decades. According to Susan, there was a significant increase in PhD’s in bioengineering and biomedical engineering between 1996 and 2006, from 220

up to 525, graduating from major universities in the USA alone. And, as counted by Susan, there are one-third of about 400 engineering faculty members engaging in the life-sciences research at MIT today.

In retrospect, the IEEE Circuits and Systems Society (CASS) had started to initiate, support and promote the merge of some CASS traditional areas with bioengineering, biotechnology, and biosciences since the beginning of the new trend of engineering research evolution, and has been standing behind these promising changes and developments. Great efforts and encouraging progress notwithstanding, as vivid examples the CASS established the Biomedical Circuits and Systems (BioCAS) Technical Committee in 2003, followed by the Life-Science Systems and Applications (LiSSA) Technical Committee in 2005, as initiatives towards all kinds of bio-CAS research and the like. Moreover, a new journal, the *IEEE Transactions on Biomedical Circuits and Systems*, technically co-sponsored by the IEEE Engineering in Medicine and Biology Society, was established in 2007.

A new eye-catching title caught my attention: “A Wake-Up Call for the Engineering and Biomedical Science Communities” by Jie Chen, Stephen Wong, Joseph Chang, Andrew Yang, Pau-Choo Chung, Huai Li, Ut-Va Koc, Fred Prior, and Robert Newcomb. In it, they said “With the burst of Information Technology (IT) bubble at the beginning of this century, people are looking for the next wave of technology in which to invest. While we believe that biomedical applications and systems are this next stage, unfortunately, the engineering and bioscience communities are unprepared for the many challenges. ... The aim of the article is to serve as a wake-up call for more engineers to participate in crucial life-science application and systems research.” Given the aforementioned background, I hereby enthusiastically endorse this timely article to the present issue of our *Circuits and Systems Magazine*. Hopefully, this promotion and all our future joint endeavors will, to say the least, contribute to “wield technology’s wonders to raise health-care’s quality and lower its cost.”

A handwritten signature in black ink, appearing to read "G. Chen". The signature is fluid and cursive, written in the bottom right corner of the page.