aspects of health, such as control of mood, consciousness, temperature control, sleep or emotions. Even a small imbalance in these natural substances could have serious consequences, inducing fear, fatigue, depression or even causing death.

There is no evidence to date that toxins isolated from bacteria, venoms and plants, and having a lethal effect on living organisms, can have their toxicity increased by replacement of amino acid residues. There appears to have been an evolutionary selection for lethal toxins in particular organisms, giving the latter an advantage for survival. Therefore, for lethal toxins interacting at a specific cellular target, a limit has been reached which cannot be overcome by modifying the toxin. With bioregulators, this is not the case since these compounds are involved in modulating cellular activities. They do not have a single endpoint of function as neurotoxins do. The significance of this is that, while it is unlikely that research may lead to more toxic lethal agents, it may be possible to make more effective incapacitating agents. In this regard, examining the lethal dose of an incapacitating compound may not give an adequate representation of its potential as a toxic agent. A more significant indicator would be the effective dose at which it would act as an incapacitant.

Science and technology are closely interrelated, and it is certain that these trends are being monitored by those laboratories charged with research on novel toxic compounds. But there are