

# Our Future is Now!

SUSAN LECLAIR

One could say that the 19th century was marked by great advances in fact. Science made enormous strides in understanding the workings of nature. From Pasteur to Darwin, issues of how life arose and continues to change were the stuff of meetings, journals, and great debate. The twentieth century continued that work but its history is marked more by issues of humanity rather than science. From the slaughter of Armenian Christians in 1915 to the demonstrations for civil rights exemplified by the solitary and anonymous man standing in front of a Chinese tank in Tiananmen Square, the last century was more focused on broad issues affecting how civilizations work with each other and with their people. Now, as we move into the twenty-first century, there are clear signs that this time, our time, may be concerned with issues of individuality and individual decision making.

Whether we look to stem cell research, genetic testing, or insurance coverage, the focus is now on the individual. It is the individual's choice that will cause both the controversy to occur and the consensus to be built. What will be the role of the health professions in this century? Will they sit by and say nothing allowing their individual members to stand alone? Or will they participate, knowing that individual members may not support the position created by the majority? Said another way—what is the role of the individual health professional? Should they be in the forefront of considered debate or not? Many in our own profession would shy away by saying that these issues are beyond the scope of the clinical laboratory.

But—is that so? True, stem cell research is exactly that—research. At the present time, the majority of the clinical laboratorians does not work in research and, as a consequence, some would say that this is not our concern. However, the implications of this research will be seen and performed by clinical laboratorians. Who will provide the testing to determine if a condition is suitable for stem cell therapy? We will. Who will determine if the stem cell therapy is initially successful? We will. Who will monitor the long term consequences of the therapy? We will.

For over fifty years, the state and federal governments of the United States have mandated presymptomatic testing for certain genetic diseases. Who currently performs the tests to determine if a newborn has PKU or sickle cell? We do. Ah, but these tests provide information which can be used prophylactically to correct or mitigate the condition. But what of the other

tests for situations less hopeful? Who now performs the test to determine if a child has the gene which inevitably will bring the devastation of Huntington's Chorea? We do. There is as yet no cure, no successful treatment. Who will perform the tests to determine the subset of cardiac disease a child might have upon reaching adulthood. We will. Who will be performing the tests that determine if a person gets a job or keeps health insurance by virtue of the presence or absence of a single gene? We will.

DNA fingerprinting by such methods as Restriction Fragment Length Polymorphism (RFLP) or Short Tandem Repeat (STR) is becoming more and more common. Witness the number of television programs that highlight it. Who will perform the DNA fingerprinting of persons who have been found guilty of a crime? We or someone like us will. And, that you say, is well and good for they are guilty. After the sentence of the court is completed, should that DNA profile remain available to police so that, for every crime, this person is considered a suspect until proven innocent? Who will perform the DNA fingerprinting of the person who has been accused but not yet brought to court? We will. Who will perform the DNA fingerprinting of the child whose parents want this information in case of the unthinkable? We will. Who should have access to that information? And for how long? Should the DNA taken when a child is three years old be used by the authorities fifty years later?

As we enter this new century still carrying the burdens of the past, should we take up the cause of the individual? While it is our individual civic duty to speak out on issues appropriate to the body politic, is it our special duty to speak out on issues that are of scientific or medical concern? As individuals and as a profession, must we continue explain to an ever increasingly scientifically illiterate society the strengths and limitation of laboratory testing? As individuals and as a profession, must we create and champion a process by which individual clinical laboratory professionals choose whether to practice in a facility that supports these types of tests? Let us use our meetings and our journal for the great debate that must occur in this century for our profession. Regardless of the answers to these questions, we believe that, as individuals and as a profession, we must make these decisions before someone else decides for us or worse, we and those who follow us come to think of us as having been poor stewards of our profession.

Susan Leclair is Editor-in-Chief of *Clinical Laboratory Science*.