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From The Editor-In-Chief:

We just completed our 6th ISBioTech Spring Meeting, and it was a resounding success. And while the attendee numbers were up considerably, the more important aspects for me were that we had the “right” people, plus incredibly valuable content. Then what impressed me the most was the happiness and hopefulness I saw during the meals, receptions, and the banquet. We’ve been organizing these meetings for over 20 years, and I haven’t experienced anything like this since our earliest days in Williamsburg.

We hosted a large number of new firms and university spin-offs, which as we all know, provide the vast majority of the innovation. In addition, we had some of the top academics who are helping to spawn and fuel these new companies with truly revolutionary technologies and applications, as well as a smattering of big biopharmas that were testing the waters to see if they should dive in. The term “renaissance” was used repeatedly throughout the meeting to describe the overall feeling within the biologics industry after plodding so many years through the dark ages of lost capabilities, company closures, layoffs, and malevolent acquisitions.

Of particular interest were the many applications for adeno-associated viruses (AAV), plus the growing success of lentiviral gene vectors in applications such as chimeric antigen-receptor (CAR) T cells, which is a therapy widely rumored to contend for a Nobel Prize in Medicine. Induced pluripotent stem cell applications were also very popular, along with the use of tumor-infiltrating lymphocytes for cancer therapy. In addition, there appeared to be a growing number of *in vivo* applications for lentiviruses which have led many of the key participants in this field to agree that there should be a lentivirus reference material produced

for validating internal reference materials and assays.

Then of course there were the latest successes in applications based on baculovirus expression technology. While the licensed influenza vaccine is not yet the commercial success that many had hoped, it will simply take some time for physicians and pharmacies to change from the egg-based vaccines. And then when you consider that many individuals who are allergic to egg antigens have learned to live without annual flu vaccinations, this population will have to be convinced to change their behavior, which could take quite awhile. However, the HPV vaccine is doing quite well, plus a number of other tough vaccine applications, including Ebola, are well into development and clinical evaluation. The key is that baculovirus technology is so much faster and less expensive than egg-based vaccine production, and it will have to win out when we are faced with our next viral pandemic.

Of course, other major applications of baculovirus technology include the production of virus-like particles which can carry a multitude of antigens, as well as the production of AAV, where this technology appears to be far superior to the traditional methods. However, one somewhat dark note was the announcement that a plant-based rhabdovirus was discovered in the Sf9 cell line through massively parallel sequencing. Users of this cell line will have to show that they can effectively clear it from their products, and another possibility is the use of a rhabdovirus-free Sf9 cell line that was announced at the meeting.

Coupled with the incredible expansion of successful antibody applications, this meeting projected tremendous enthusiasm and hope for a host of biological products and the organizations that will support them.

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