

60 SECONDS WITH...

THOMAS CHATTAWAY

On Chairing the Biopharmaceutical School

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THOMAS CHATTAWAY

Thomas Chattaway is a Senior Life Sciences Consultant and has expertise in providing innovative solutions for patient needs and addressing manufacturing challenges. He has over 20 years' experience leading biotechnology-based product and process development projects and has worked in various countries serving customers in the pharmaceutical, biotech, medical device and health care industries.



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First, maybe you could tell us a little about your background and how you came to end up working in the biopharmaceutical industry.

I studied Engineering first and did a PhD in Biotechnology, then spent the first third of my career in industrial biotechnology. I then moved into biopharmaceuticals, where the technology was quite similar, although at a smaller scale and with GMP and regulatory constraints added. After this, I became an independent consultant supporting Biopharma and Biotech companies in the various aspects of CMC drug development as well as manufacturing.

How have you witnessed the industry change over your career, and how do you predict it to evolve going forward?

When I started my career, biotechnology was still relatively in its infancy, with the first biotech products (recombinant insulin, TPA etc.) just being marketed and cell culture technology finding its way. In fact, traditional pharma companies were often doubtful of the future of biopharmaceuticals, let alone of the preponderant part they play today.

What has been incredible is the medical needs met by biopharmaceuticals, both the breadth of diseases addressed and the improvements enabled and, of course, the extraordinary science that goes with this!

What is a strange paradox, is that despite such medical progress, the manufacturing technology remains relatively conservative compared with other industries, embracing incremental rather than disruptive innovation. As an illustration, the regulators are advocating continuous manufacturing almost harder than the industry. I think one might see massive improvements for ATMPs (cell and gene therapies) where current COGs are not sustainable.

Why do you believe Big Pharma are becoming increasingly more interested in the biopharmaceutical industry?

The first reason is the shift in the industry from primary to secondary, specialised care, where biologics have a natural position. The second is the innovation deficit which affects small molecules much more than biologicals. Coupled with the progress in science, this makes biologicals much more natural and accessible leads.

Thirdly, biologicals have become more 'accessible', in terms of the technology to make them, analyse them and understand them, and this goes with a more predictable regulatory landscape.

Do you believe that new industry entrants have sufficient knowledge and skills to work in this evolving industry?

Yes and no... The biopharmaceutical industry is relatively unique in requiring such a broad range of disciplines to bring a product to market. So new entrants need to become conversant with this range, as well as applying more specialised knowledge and even deepening it.

As an example science and engineering graduates (even pharmacists) usually know very little about GMPs or regulatory matters. This must be learnt in the work-place. So the ability to learn from others and work with them is as important as the ability to apply what you have learned, and to further it.

How does the Biopharmaceutical School help to address this?

It seems to me it can help in two ways. First, this course covers a wide breadth of topics. Recent entrants to the industry will be able to consolidate core knowledge, as well as fill in the gaps in less familiar areas.

Second, the course is also a really good platform for networking and sharing experience, as well as making contacts for the future. This is important in what remains a relatively small industry.

The Biopharmaceutical School is a 3-day course taking place in London 3-5 December 2019.

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