News Bites from the UK Laboratory Industry

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What customers are being told about lab equipment

A recent conference for lab and science park managers offered insights on how labs are likely to develop in the next few years, UK spend on research and development, the new vogue for equipment sharing and how to procure autoclaves. GAMBICA's new Head of Lab Tech, Jacqueline Balian picks out the highlights.

All UK political parties have publicly vowed to increase UK R&D spending from the current 1.6% of GDP but the Conservatives have set themselves a target to reach 2.4% of GDP by 2027. This represents a near doubling of the current spend from £33bn to £62 bn per annum. They may have been spooked by the fact that two thirds of today's UK R&D spend is by private companies, half of which are headquartered overseas.

The spending will be channelled to areas covered by the four 'grand challenges' set out in the industrial strategy; the aging society, clean growth, data and AI and clean transport.

Equipment sharing in UK labs

Several different presenters covered the benefits of equipment sharing for university and science park labs. As well as reducing spend on kit, loaning of equipment was said to improve collaboration and innovation and take advantage of utilization rates, which are commonly as low as between 21% and 40%, to bring in much needed cash.

Kit Catalogue, a lab equipment sharing site set up by Loughborough University's Professor Rachel Thomson in 2012, is increasingly used by universities including UCL, Nottingham and the Open University and it is the relatively inexpensive and ubiquitous lab equipment such as fume cupboards and centrifuges which are most commonly loaned. In one case study, with only three customers a university lab managed to generate income of £1265 by lending fume hoods and £2,650 by lending centrifuges over three months.

Another online system which matches facilities with would-be borrowers, ClusterMarket, was also demonstrated. Co-founder Niklas Friedberg, was questioned about damage and liability issues and suggested that use of more specialist kit is often offered as a service – so that delicate equipment is operated only by an organisation's own technical staff. He had plenty of such contractual options available.

It was suggested to delegates that they might be able to get better deals on equipment by telling their suppliers that they would make access available to third parties. The rationale offered was that the manufacturers would want as wide a group as possible to become familiar with their equipment.

Procuring autoclaves

Imperial College in London is running a project to replace 10 ageing but heavily used autoclaves. Allison Hunter who is in charge of the work put considerable effort into defining the exact requirements and by pooling all the facilities, managed to reduce the overall number of autoclaves required from ten to seven.

She strongly advocated speaking to all the providers at the pre-tender stage.

"I had been using these autoclaves for years and I thought I knew all about them, but in fact I didn't. If we had got all the providers together early, we could have cut down considerably on the amount of time it took us to get the specification together. And we might have improved the nomenclature too which would have helped us with the tender assessment stage."

One of the things Alison had not anticipated was the need for softened water as the old autoclaves had subsisted happily (although with increasingly frequent break-downs) on London's hard water. However, the overriding consideration in awarding the contract was the availability of service engineers. Given their requirement to have no more than a few hours out of service, Imperial went for a company with 10 service engineers available in the UK and an SLA of one day. They also store some spares on site, and require their supplier, who is based overseas, to also have a store in the UK.

Allison was surprised by another paper at the conference given by Agilent which provided an analysis of the energy advantages of using autoclaves with round chambers indicating a 60% lower energy demand from round chambered autoclaves with a

consequent comparative annual running cost of £4560 for a round 430L chamber compared to £8400 for a 450L square chamber.

Maintaining laboratory support networks in Europe

With uncertainty about how we will function within Europe post Brexit, the Confederation of British Industry has been encouraging all trade associations to firm up relations with their European counterparts.

In the lab sector we are lucky to have Eurom II, which has active members from the French, German, Spanish, Italian and UK trade associations.

The group's last meeting in Paris during ForumLabo was well attended with many of the Chairs of the trade associations present in addition to a delegation from Jaima, the Japanese trade association interested in the scheduled ending of some Restriction of Hazardous Substances Directive (RoHS) exemptions which may have a disproportionate effect on the lab industry.

After some state-of-trade and political discussions, the group focussed on a couple of key issues for lab companies: the potential impact of the IVD Regulations; and the work on a common interface for lab equipment.

Initiatives in a number of different territories are beginning to try to open up interfaces to lab tech, in order to facilitate innovation and encourage SMEs to enter the market. A kick off meeting in the UK to discuss options is being held next month. If you are interested in being involved, please contact Jacqueline.balian@gambica.org.uk

IVDs and medical devices – a looming cost for lab tech companies?

The new IVD Regulations came into force in 2017 and while they have a transition period of up to five years for manufacturers, this could be five years of legal wrangling if pessimistic observers are correct.

The IVD Regulations do not require lab equipment such as pipettes and centrifuges to be considered IVD or medical devices, but there seems to be a move by some companies to try to differentiate their equipment for marketing purposes by having it assessed as IVD equipment and CE Marked. It is not yet clear how local medical regulatory agencies will view this and whether the next logical step, of making such equipment medical devices becomes accepted.

Classification of IVDs is important as it determines the level of involvement by a third party (the 'notified body') in assessing IVDs both pre- and post-market. This level of control is generally relative to the risk of an erroneous result from the assay. The bottom line is that classification as an IVD or medical device will have significant cost implications.

If you have views on the desirability of this outcome do let me know.

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