

**In Vivo Sciences and Veterinary Pathology –
Lifescience Advisory Council Workstream
Meeting at ABPI on 13th January 2011**

Attendees

John Holton (JH), Tina Sawyer (TS), Caroline Sudworth (CDS) - Cogent SSC
Lisa Jarvis (LJ), Liz Pridgeon (LP) - Lantra
Sarah Jones (SJ), Rebecca Lumsden (RL), Louise Leong (LL) - ABPI
Lesley Earl (LE) - Huntingdon Life Sciences (HLS)
Cheryl Scudamore (CS) - Royal Veterinary College (RVC)

The following briefing was provided prior to the meeting in order to set the scene:

At the first LAC, quick wins were identified around the *in vivo* and veterinary pathology areas.

Of key importance is working in partnership with R&D industries, education providers, and professional and skills bodies, to deliver clear workstreams that meet industry need.

Key areas that have been identified by industry to date are:

1. Technical Training at level 4 and above that embeds animal technologies with the science that supports the R&D environment;
2. Postgraduate level training for graduate entrants into R&D Pharmaceutical and Contract Research Organisations (CROs);
3. Below level 4, there are a number of areas that could be linked to animal technologies, but focus more on the animal care topics supported by academic understanding of the key R&D best practice concepts;
4. Professional recognition for the sector, through Institute of Animal Technology (IAT), as part of the Society of Biology at all levels;
5. The level of funding received by universities for such courses – can we highlight more effectively the strategically important and vulnerable status of *in vivo* courses?

There has already been some work done in these areas by a number of bodies to date, and where we (Cogent) have engaged in that activity. These are summarised below:

6. Working Higher Bioscience Foundation Degree – some employers have raised the need for modules relating to animal technologies for this environment;
7. TechLife 2020 also raised the issue of relevant training through a number of training routes, and a request that we work in partnership with professional and other skills bodies;
8. Postgraduate CPD provision at the University of Manchester and Liverpool, and the Royal Veterinary College (RVC);
9. Placements in partnership with the RVC ORBIS Programme, Royal Society of Chemistry and now with the Society of Biology.

It is now proposed that the LAC being to link these concepts together to ease collaboration and management of the delivery solutions. There are also other areas for collaboration with Lantra, the IAT and the ABPI that we could engage with:

10. The development of a Life sciences Higher Level Apprenticeship that may contain a R&D animal technology pathway;
11. Lantra Animal Technology Industry Group also has established a group representing the specific animal care and technology needs for R&D, where Cogent is represented along with the professional bodies (IAT, part of Society of Biology);
12. ABPI Animal Technology Group has also influence and could be utilised to establish wider partnerships and political influence.

A meeting between Cogent, Lantra and the ABPI is now proposed to cover these topics as collaborative areas and succinct delivery.

Objectives of this meeting:

1. Membership of Working Group
2. Conclude priorities for effective in vivo/veterinary pathology workstream
3. Collaborative agreement across groups for One Voice
4. HE and Technician Training covered
5. Disseminate minutes to LAC

Minutes

The meeting began with introductions, followed with John Holton describing the role of Cogent SSC as the new lead for Life Sciences, and the programme relating to the Life Science Advisory Council (LAC) and the potential expansion of the National Skills Academy for Process Industries (NSAPI) into the Bioscience area.

The first LAC was first held in December 2010 (with all attendees having representation at that meeting) and minutes for the meeting will be disseminated following this meeting. Following the first LAC, a consultation document will be released that maps out the priority areas. There were also quick wins identified and include:

- Management and Leadership BIA programme that will be advanced by NSAPI;
- Apprenticeships – developing the Scottish Model into the England and a meeting with SEMTA will take place shortly; This also includes the development of a Higher Level Apprenticeship and Foundation Degrees to support this pathway;
- The accreditation of Degrees with the Society of Biology – a meeting has been arranged;
- In Vivo and Veterinary Pathology.

The area of in vivo and veterinary pathology was for discussion today. The group raised awareness of the work done around the area of undergraduate in vivo and veterinary pathology through the Office of Life Science (OLS).

Lesley Earl suggested that we discuss a clear definition around in vivo science – what exactly do we mean by the term? Sarah Jones noted the 2008 “In vivo sciences in the UK” report and provided the attendees with a hard copy; Cheryl Scudamore also suggested we look at specific training pathway, recognising that some is generic, but some is specific and may be cross sector and at different levels. NOS and NVQ pathways are not well known throughout the industry as a whole.

Lantra have also been looking at NOS and training for animal technologists up to level 3, and the animal technology group want to go further up the skill level in the R&D area. This work also maps into the Institute of Animal Technology (IAT) work, who have been working towards a greater workplace delivery mode.

It was suggested that we start with the 2007/8 BERR/ABPI report, and the work of Clive Page through the OLS. There has been some movement in the HE sector, but there needs to remain a push on HEFCE to maintain the employer co-funded Additional Student Numbers (ASNs). Lesley Earl questioned Cheryl Scudamore about the needs from industry for small animal surgical skills, but the area is specialist and the numbers are small but vital (cost versus benefit to providers was raised in relation to Migration as they are all brought in from outside the UK). Cheryl Scudamore raised the need for pathology skills, which have a skills gap from the education supply chain, including the subject areas of chemistry, pharmacology, toxicology and pathology.

A clear definition of what we mean by “in vivo sciences” was agreed by all as an output for the group. In addition, this could be expanded to cover “veterinary pathology” specifics and levels of skill need (JH).

The priority short term recommendations from the ABPI report (pages 6 and 7) were presented by Louise Leong.

Recommendation 5: Develop a small number of programmes are taught up to Masters level that are focussed upon in-vivo skills. This was discussed through OLS and is still outstanding. The Post

Graduate Masters has now turned into a 4-year undergraduate masters degree, with the 4th year being a focused to practical training to gain the home office license with an industry secondment – this route is to attract new entry routes at A-level to graduation and is being undertaken by Clive Page at Kings College London. HEFCE may add co-funded ASNs for the final year industry placement, but this is not guaranteed, nor are the industry secondments. University funding and placements are the main barriers – the LAC could help address this **(JH)**.

Caroline Sudworth is also to contact Fraser Murray at Manchester University about the post graduate courses **(CDS)**.

Recommendation 6: Research Councils and industry to work together to increase the number of CASE awards that use modern in-vivo techniques and **Recommendation 7:** Employers of toxicologists and research funders should work together to support the MRC's proposed toxicology/drug safety training programme.

PhD and Masters funding needs to be addressed due to the new funding climate following budget reforms affecting these areas – it was suggested that BBSRC and MRC should be invited along **(CDS and JH)**.

Recommendation 8: Lantra should: help employers communicate demand for animal technology roles; improve knowledge and understanding of animal technology careers; set up an animal technology training providers forum; help employers leverage funding and maximise the potential of the EU labour market.

Lantra noted the lack of provision at level 4 NVQ due to this being dropped by the awarding body, with the majority of training now facilitated by IAT and private providers. The Higher Level Apprenticeship (HLA) option may allow a pathway for R&D scientific animal technology to be addressed, and could bring in the EU framework future proofing, and ensuring GLP demonstration. Home Office modules 1-4 are currently available. NACWO directives may stipulate qualification level and practical skill insurance to demonstrate industry validity.

Numbers remain an issue – can we pull together modules and in house training though the Working higher Foundation Degree and HLA? Flexible CPD provision is required. Apprenticeship funding and that through Growth Innovation Fund may help deliver some of this. The GIF may also help employers access the supporting funding. EU maximisation has not yet begun **(CDS to liaise with Working Higher and Lantra)**.

In addition a number of the long-term recommendations were reviewed.

Recommendation Point 10 HEFCE should ask their advisory group on SIVS subjects to consider whether the in-vivo related subjects require some particular protection and support.

SIVS status for Bioscience/Biomedical Science Degrees –Caroline Sudworth suggested that if HEFCE SIVS funding remains in play, that there is an option to develop a specific QAA Benchmark Statement that would cover “in vivo sciences” rather than the current bioscience and biomedical science statements. Skills for Justice have led by example developing this with industry for Forensic Science degrees. This could then be used to identify the relevant HE courses that could attract SIVS funding. This needs to put this to LAC and then to HEFCE to see if this is worthwhile pursuing **(JH and CDS)**.

Recommendation 12: Industry, vet schools and relevant funders should develop a structured national programme to support veterinary pathologist training at graduate and intern level. Veterinary pathology is usually funded by supporting veterinary industries rather than the pharmaceuticals sector – this sector is attracting the trained professionals, with professionals entering the veterinary sector as opposed to the life science sector. The group raised the question of joint funding to be flexed to stabilise this? The Wellcome Trust has been approached through a Masters Level programme, however flexible modules are not available for this postgraduate training pathway. A consortium approach is welcomed, but there is no funding available for post graduate training. Should the SSCs collaborate with HEIs etc to lobby for this? **(JH)**

Recommendation 13: The Home Office should fully implement its simplification plan related to operation of the animals to deliver an efficient and effective environment for the use of animals in science.

Universities have raised issues about the timings of the home office license requirements which run Jan-December, with the academic cycle running Sept – August, requiring a licence to be paid for a 2 year period rather than just one. There needs to be a joined up approach.

The international market for training was also raised as a potential route to increasing numbers on courses, aiding long term provision and sustainability. The expectations from industry were raised, and the reasons why UK PLC would help develop such courses when international markets would benefit from this. This could also affect the potential funding stream for any work undertaken. Clarity would be required for partners, including risks, potential benefits and future funding streams (**LAC**).

The group suggested we look to others and learn from their experiences – the Open University Certificate of Nuclear Professionalism was raised as an example of opportunity. There is an opportunity for a blended learning approach to improve flexibility of delivery. Feedback is now required from industry about what is required (**LAC**).

It was agreed that clear dissemination routes need to be addressed, with these minutes being agreed and sent out for wider feedback, through an open network (**CDS and Group Members**).

Caroline Sudworth to talk to ABPI, Lantra, ABPI and Lesley Earl regarding the Apprenticeship from SEMTA and specific requirements that have been raised by the sector, and understand the specifics that industry has raised which the Semta model does not yet address. This should be done as soon as possible (**CDS, Lantra, LE, ABPI**).

Membership expansion was also discussed to ensure we have full coverage. It was decided that the following organisations should be invited to feedback:

- MRC and BBSRC
- SoB and/or IAT
- BIA
- Wellcome Trust

Sarah Jones also included the OLS In Vivo Group, which included:

- Industry – GSK, Home Office, AZ, Pfizer, HLS, Covance, Eli Lilly, IAT
- British Physiological Society
- Universities of Bristol, Strathclyde, Leeds, King College London

John Holton then described the role of a High Level Group that steers the LAC and lobbies for the sector. Nigel Brooksby will chair the Life Science Skills Strategy Board which will meet end Q1 2011 – members will be high level and can “make things happen” at Government level, and will look to ensure the LAC delivers. One example is the response to the Growth Review documentation that ensures joined up working.

Any other business – a review of the meeting outcomes were clarified and agreed.

John Holton thanked all the attendees and the ABPI for hosting the meeting.

15:30 Meeting close