

## Benefits of BASES Laboratory Accreditation

In issue 65, Autumn 2020 of The Sport and Exercise Scientist, Prof Glyn Howatson FBASES, Drs Sarah Gilchrist, David Green and Rhys Thatcher FBASES highlight the benefits of BASES Laboratory Accreditation, expose myths and share some experiences to support the application process.

### **BASES Laboratory Accreditation – what’s in it for my institution?**

The BASES Laboratory Accreditation provides a quality assurance mark to clients, research funders and the wider community. It confirms that a laboratory has appropriately qualified staff who can conduct physiological assessment, ensuring that rigorous procedures are adhered to, and that all relevant ethical and safety procedures are in place. This article highlights the benefits of BASES Laboratory Accreditation, exposes myths and shares some experiences to support the application process.

### **Value of BASES Laboratory Accreditation**

According to UCAS there are 508 sport related courses provided by 138 higher education institutions (HEIs) in the UK that deliver sport and exercise related courses, conduct research and other sport and exercise support activity in physiology laboratories. When coupled with the number of high-performance, exercise and health facilities that routinely perform exercise testing, it is surprising that relatively few laboratories are able to demonstrate external recognition of their facilities and services. BASES Laboratory Accreditation offers a trusted quality assurance that the skills and services provided have undergone meticulous external inspection. Furthermore, BASES Laboratory Accreditation provides independent verification of quality assurance that can be used to support grant applications, student recruitment, methods in papers and reports.

#### **BASES Laboratory Accreditation provides independent recognition that:**

- Staff have the appropriate academic, professional and vocational qualifications
- Client/staff/student welfare and confidentiality are appropriately managed
- Appropriate consideration is given to governing the operating procedures and that suitable standards relating to health and safety are met
- Instruments are well maintained and are suitably valid and reliable
- A suitably fit and safe environment for the high standards of practice expected of a BASES Accredited Sport and Exercise facility.

Many laboratories that support teaching, conduct research and engage in client-facing consultancy will claim to uphold these principles but are not BASES accredited. This is somewhat surprising given that if their operations do adhere to these principles, then BASES Accreditation should be relatively straight forward to achieve. So, the question arises why don't these labs hold BASES Accreditation?

One concern is that BASES Laboratory Accreditation doesn't cater for the wide variety of exercise physiology laboratories within Higher Education and high-performance sport environments, which is categorically untrue. The current application process recognises the full range of activities that are performed across HEIs, specialist exercise and elite sports science facilities. Provided those activities are carried out to the expected standard, there is no reason that BASES Laboratory Accreditation cannot be achieved.

### **How does it work?**

An application detailing laboratory practices, equipment, and staff training (an example can be accessed on the BASES web pages) is required initially. Accompanying validity, reliability data and approaches to health and safety are useful additions to provide the assessor with an understanding of laboratory operations. Following this, a site visit is arranged to assess the laboratory set up, the relevant activities, and to assess operational competence of staff in a simple physiological assessment (usually a sub-maximal exercise test). Importantly, the visit is tailored to the applicant, however, successful applications have a strong rationale for their procedures to support laboratory users rather than simply “tick a box”. High quality laboratories display a clear link between fundamental practices (e.g. health and safety, maintenance of equipment, and data protection) and the day-to-day activities of the lab (e.g. research, athletic assessment, or clinical application). Dr Dave Green from the English Institute of Sport said “The process pushed us to think critically about our lab standards and encouraged a deeper understanding of the what, why, and how of laboratory management. We continue to review our practice for continued service delivery improvement, which has been catalysed by going through BASES Accreditation.”

### Top tips for a successful BASES Laboratory Accreditation application

- **Read the guidelines** and see examples of supporting documentation (<https://bases.org.uk/spage-organisations-laboratory-accreditation.html>)
- **Ask questions** of other accredited laboratories and of the Accreditation Panel – it’s an open-door policy! You will pick up a great deal from speaking with peers who manage well-run BASES Accredited Laboratories
- **Pre-accreditation** - If it’s your first time applying for laboratory accreditation, a pre-accreditation visit is a great opportunity to get insight on how to improve laboratory management and practice to be successful in gaining accreditation
- **Involve your staff.** The process is a good opportunity for the Laboratory Director to engage in reflective practice, galvanise, upskill and develop staff, share responsibilities and develop good practice and planning
- **Supporting information.** Ensure all supporting information and data support the application. Providing reliability data and examples of Health and Safety documents help build confidence in the laboratory with the Accreditation Panel. An example of supporting information is available on the [web pages](#).

**The BASES Lab Accreditation Review Group is chaired by Prof Glyn Howatson FBASES and includes Prof Andy Jones FBASES, Drs Sarah Gilchrist, David Green, Rhys Thatcher FBASES, Charles Pedlar FBASES and Jamie Pringle.**