

JOB DESCRIPTION

JOB TITLE Senior Biomechanist- Performance Rehabilitation**SALARY** £43,329**GRADE** ES**HOURS** 22.5 hours per week (0.6FTE - 3 days per week)**LOCATION** Bisham Abbey, Marlow**ROLE SUMMARY**

This role offers an exciting opportunity for a highly qualified and experienced biomechanist to take a lead role in the development and delivery of biomechanics within the Performance Rehabilitation team at Bisham Abbey. The post holder will be integrated with the multidisciplinary team and provide detailed biomechanical support to assess and enhance the understanding of athlete movement throughout their rehabilitation journey. There will be an expectation to engage in strategic project work, aligned with the Performance Rehabilitation mission of supporting optimal rehabilitation across the high-performance system.

The role will deliver and develop biomechanical rehabilitation services, including the implementation, processing, and dissemination of 3D motion capture assessments in an applied high-performance environment, enabling engagement across a diverse range of stakeholders through effective communication and visualisation. We are looking for an individual with a proven track record in developing and delivering biomechanical services within rehabilitation and return to performance contexts.

KEY RESPONSIBILITIES

- Collaboratively integrate within a diverse range of human performance and athlete health practitioners employing an inter-disciplinary approach to optimise delivery.
- Work closely and collaboratively with performance support teams across Olympic and Paralympic sport, the UKSI, BOA and BPA to provide an integrated rehabilitation service which meets the unique needs athletes, sports, and the UK High Performance Sport System (HPS).
- Provide access to world-leading biomechanical diagnostics and expertise, to support rehabilitation planning of complex injuries.
- Develop methods that safely optimise movement re-training through insights and feedback.
- Ensure the maintenance, calibration and quality control of biomechanical testing equipment and the health and safety procedures.
- Develop valid and reliable biomechanical assessment protocols both in the laboratory and the field.
- Implement standardised biomechanical processes to capture and maintain a comprehensive, indexed, and secure database of work conducted with athletes and practitioners.
- Evaluate a diverse range of data to prioritise, direct, and manage systems, projects, and research to accelerate approaches to performance rehabilitation.
- Support the longitudinal biomechanical tracking of athlete rehabilitation.
- Support learning and development across the HPS through collaboration and the sharing of knowledge, experience, and expertise

ROLE DIMENSIONS

REPORTS TO	Human Performance Lead – Performance Rehabilitation
DIRECT REPORTS	N/A
BUDGET ACCOUNTABILITY	N/A

KEY RELATIONSHIPS

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| <ul style="list-style-type: none"> • Performance Rehabilitation Team • UKSI Athlete Health Leads • Clinical Lead (Performance Rehabilitation) | <ul style="list-style-type: none"> • UKSI Biomechanics Team • World Class Programme Coaches • UKSI Athlete Health network |
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PERSON SPECIFICATION

COMPETENCY AREA	ESSENTIAL / DESIRABLE	ASSESSED BY
Qualifications		
Degree in sports science specialising in biomechanics, or equivalent qualification in a related subject.	Essential	Sight of certificates
Postgraduate qualification specialising in biomechanics, or in a related subject area.	Essential	Sight of certificates
Successful completion of a PhD or working towards a PhD in Sports Biomechanics, or a related subject area.	Desirable	Application Interview
Experience		
Experience in the provision of biomechanics support to Olympic / Paralympic / Elite sport athletes and coaches.	Desirable	Application Interview
Demonstrated ability to capture, interrogate and report valid laboratory and field based biomechanical data to improve performance and or assess injury mechanics.	Essential	Application Interview
Demonstrated experience of strategic planning, implementation and monitoring of biomechanics support to elite athletes.	Essential	Application Interview
Demonstrated ability to analyse a range of sports in relation to their biomechanical needs (e.g. using first principles, phase analysis, deterministic modelling etc.).	Essential	Application Interview
A verifiable record of working within an inter-disciplinary team in the delivery of biomechanics support to elite athletes.	Essential	Application Interview
Experience capturing, interrogating and reporting force, pressure, and 3D motion data.	Essential	Application Interview

COMPETENCY AREA	ESSENTIAL / DESIRABLE	ASSESSED BY
Experience capturing, interrogating and reporting inertial measurement and EMG data.	Desirable	Application Interview
Knowledge and skills		
An understanding of the needs of elite athletes and coaches in a high-performance environment, and the UK Sport High Performance System.	Essential	Interview
Ability to formulate and apply inverse / forward dynamics to quantify specific athlete movement strategies.	Essential	Application Interview
A good understanding and experience of computer programming e.g., using MatLab, Labview, Visual 3D, Python etc.	Essential	Application Interview
Ability to develop and apply computer simulation in sport.	Desirable	Application Interview
Experience of applying biofeedback methods to retrain movement strategies.	Desirable	Application Interview
A thorough understanding of how biomechanics can be effectively integrated into high performance programmes.	Essential	Interview
Ability to communicate complex data and problems in terms that are easily understood by a wide range of audiences.	Essential	Interview
Excellent presentation and communication skills that can motivate behavioural change to have a positive impact on movement adaption / performance.	Essential	Interview
Skill in fostering productive relationships and trust with a range of stakeholders and people.	Essential	Interview
Ability to work independently and take strategic accountability for projects.	Essential	Interview
Data management skills.	Essential	Interview
Project management skills.	Desirable	Interview
Have developed a specific technical expertise in biomechanics that adds value to the UKSI. This expertise can cover the full spectrum of data capture, management, analysis or feedback or could be in a specific area of biomechanics delivery.	Desirable	Application Interview
May be required to work with athletes under 18 (DBS check required)	Yes	

All UKSI practitioners are expected to engage with and support training and professional development in anti-doping, i.e., UKAD Accredited Advisor Certification, safeguarding and GDPR. Practitioners are also expected to adhere to all UKSI policies and procedures and show commitment to promoting and supporting equality, diversity, and safeguarding within sport.

END OF JOB DESCRIPTION