

# WAIS Research and Innovative Practice Policy



WESTERN AUSTRALIAN INSTITUTE *of* SPORT

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## POLICY

WAIS research and innovation will be aligned to the provision of evidence-based, innovative solutions to performance-driven questions. The goal of this effort will be to optimise and complement the daily training and competition environments, with a focus on performance outcomes for WAIS athletes and sport programs. Research studies conducted at WAIS will align with the WAIS strategic research priorities (see Figure 1 and 2).

## PURPOSE

This policy is presented to achieve the following:

- 1.1 To ensure WAIS research and innovative practice is safe and ethical.
- 1.2 To maximise the benefit of WAIS resource allocation into research and innovative practice.
- 1.3 To outline the formal procedures required to gain approval for conducting research studies and innovative practice at WAIS.
- 1.4 To serve as a reference for external parties seeking to engage WAIS and/or WAIS resources for research purposes.

## BACKGROUND

- 1.5 The gaining of new knowledge through research and the implementation of innovative practice is integral to high-quality service provision at WAIS.
- 1.6 The primary focus of WAIS resources is on providing high level services to athletes. As such, to maximise the return on the resources invested in research and innovation, WAIS requires a focused approach.

## DEFINITIONS

- 1.7 **Research:** Defined as, *‘Investigation or experimentation aimed at the generation of new knowledge, or the revision of accepted theories.’* Within this policy, the term research is used in relation to individual studies or collective research programs.
- 1.8 **Best Practice:** Defined as, *‘The implementation or application of procedures, systems or methods that are accepted as being most effective by world-class standards.’* Within this policy, the term best practice is used in relation to WAIS strategic projects.
- 1.9 **Innovation:** Defined as, *“novel solutions to important problems<sup>1</sup>”* or a *“change that creates a new dimension of performance<sup>2</sup>”*. *The aim is to provide an effective, novel solution to an identified performance or knowledge gap.’*

**Note:** Innovation is considered implicit in both WAIS strategic **projects** that implement or develop best practice, and in research **studies** or **programs** that creates new knowledge.

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<sup>1</sup> Satell G. (2017). Mapping Innovation: A Playbook for Navigating a Disruptive Age. McGraw-Hill.

<sup>2</sup> Peter F Drucker. In, Shaver E (2014). The Many Definitions of Innovation.

## RESEARCH

### STANDARDS

This policy applies to all research studies and programs seeking to utilise WAIS resources. Such resources include WAIS staff, coaches, athletes, finance, and/or infrastructure.

#### 1.10 Research Standards

- 1.10.1 All WAIS staff can make a proposal to conduct research under this policy.
- 1.10.2 Requests for WAIS involvement in research must be submitted via the WAIS research proposal (Form A).
- 1.10.3 Research requests will be assessed on the explicit criteria established in the research proposal.
- 1.10.4 Research proposals must be approved by the Performance Team Director (PTD); the WAIS Research Director (RD); if required, the WAIS Chief Medical Officer (CMO); and finally, the WAIS Chief Executive Officer (CEO).
- 1.10.5 All approved research studies must be documented on the WAIS research register.
- 1.10.6 Prior to the commencement of any research study, all proposals involving WAIS staff and or resources must provide formal ethics approval from the relevant Ethics Committee of the collaborating University partner, or from the Australian Institute of Sport (AIS) Human Ethics board. The clearance must consider that the research will be undertaken in the field, and likely off-site from the collaborating partner institution. The intended process of obtaining ethics clearance must be submitted as part of the research proposal.
- 1.10.7 An annual ethics audit of progress should occur through the approving ethics board, and evidence of this annual reporting should be kept by the chief investigator.
- 1.10.8 Outcomes from research studies must be presented to relevant WAIS staff, athletes, and where appropriate, to the wider community.
- 1.10.9 At the conclusion of a research study, any reports, publications, presentations, or written recommendations will be compiled and stored on the WAIS central research repository.

### PROCESS

#### 1.11 Process Flow for Undertaking Research (Figure 3)

- 1.11.1 The research idea is generated by the service provider and/or external collaborator before being discussed with the appropriate sport program and associated coaches.
- 1.11.2 The research idea is then proposed and discussed at a relevant PET meeting. If the idea is thought to be appropriate by the PET, a research proposal will then be generated (Form A).
- 1.11.3 The research proposal is written by the primary investigator (i.e., the service provider and/or collaborator), which is then provided to the relevant PTD and the RD.
- 1.11.4 The RD and the PTD will review and discuss the research proposal.

- 1.11.5 At this point, if a research study review is deemed necessary by the WAIS CMO, or an external review is required (due to limited internal expertise), the RD will engage the appropriate feedback.
- 1.11.6 Once reviewed, the RD provides any proposal feedback to the primary investigator.
- 1.11.7 If amendments are required, the primary investigator will provide a revised protocol directly to the RD.
- 1.11.8 Once satisfied with the research protocol, the RD will provide a final recommendation to the PTD, who will sign off on the study (Form B).
- 1.11.9 A recommendation will then be made by the RD to the WAIS CEO. Final research study approval will be granted by the WAIS CEO.
- 1.11.10 Once approved by the WAIS CEO, the research study will be logged on the WAIS research register.
- 1.11.11 Prior to commencing any data collection, evidence of formal institutional ethics clearance must be provided by the primary investigator to the RD.

## STAFF ALLOCATION AND EXPECTATIONS

- 1.12 WAIS staff undertaking research as part of the WA HPSRC will be afforded a research allocation as part of their workload (**Figure 4**). Clarification of staff expectation includes:
  - 1.12.1 Research Director:
    - 1.12.1.1 Oversee process and administration issues for student.
    - 1.12.1.2 Oversee budget and funding.
    - 1.12.1.3 Research program oversight and direction.
    - 1.12.1.4 Oversee the collaborative link with the relevant university and supervisors of that student.
    - 1.12.1.5 Provide input into the scientific design and study integrity (where relevant).
    - 1.12.1.6 Oversight of student link with WAIS science staff and sport program contact.
  - 1.12.2 Research Advisor:
    - 1.12.2.1 Blend academic and practical input into relevant research questions.
    - 1.12.2.2 Contribute to research approach, design, and method.
    - 1.12.2.3 Contribute to data analysis and interpretation.
    - 1.12.2.4 Contribute to writing and communication of proposals and relevant research outcomes.
    - 1.12.2.5 Ensure scientific integrity of the research study.
  - 1.12.3 Sport program contact (which might also be the research advisor):
    - 1.12.3.1 Contribution to relevant research questions.
    - 1.12.3.2 Assistance in data collection (where needed).
    - 1.12.3.3 Conduit to coach and program.
    - 1.12.3.4 Integration of student work integrated learning (nominal 8 h) into the aligned sport program.
  - 1.12.4 Performance Team Director:
    - 1.12.4.1 Review, discuss, and sign-off submitted proposals with PET/RD.
    - 1.12.4.2 Incorporate the research FTE of WAIS staff into their overall workload.
    - 1.12.4.3 Oversee that staff FTEs are maintained.

- 1.12.4.4 Integrate research students into the PET culture of WAIS.

## INNOVATIVE PRACTICE

### STANDARDS

This policy applies to all innovative approaches undertaken outside of the servicing scope of practice.

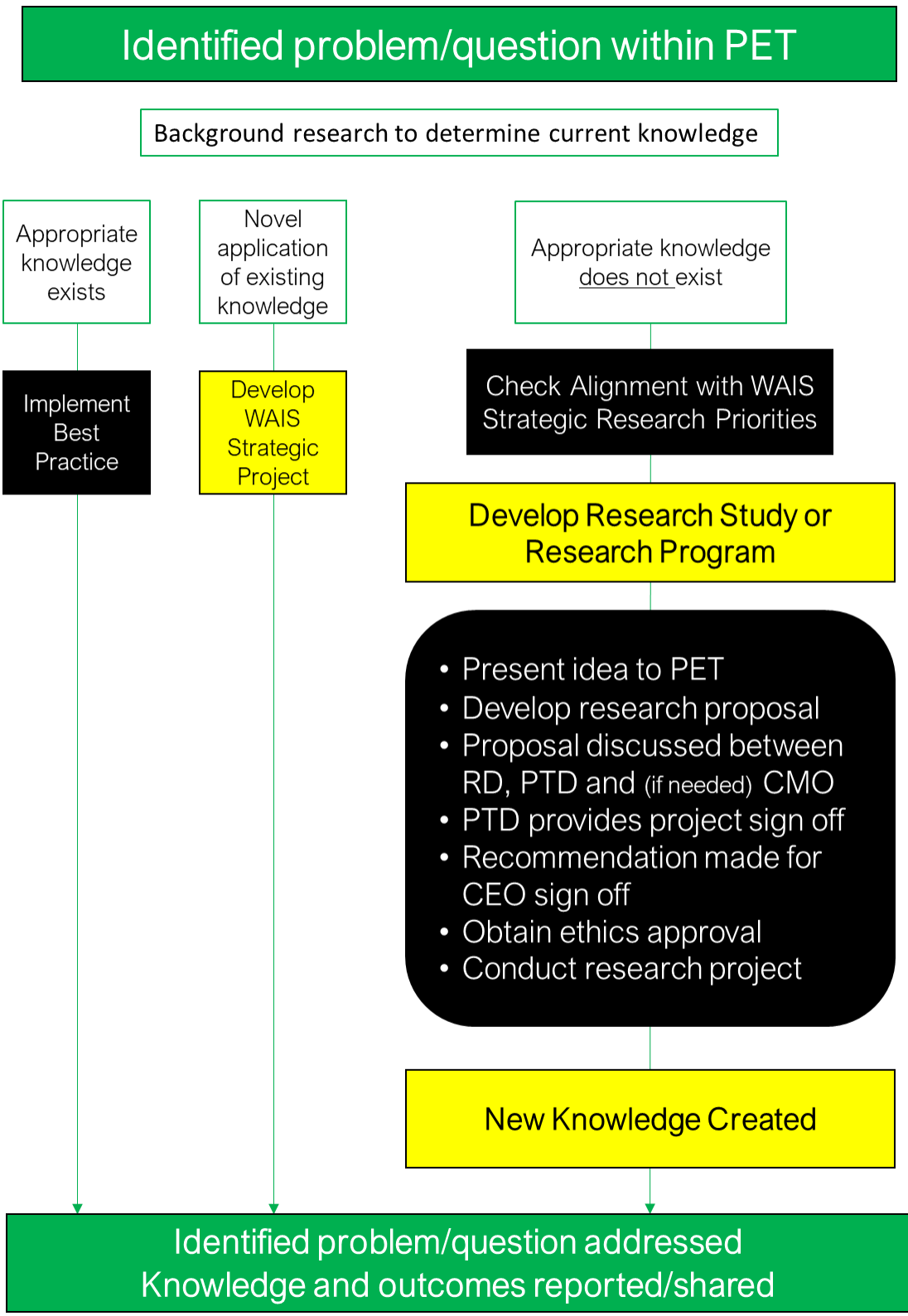
#### 1.13 Innovation Standards

- 1.13.1 All WAIS staff can make a proposal to undertake innovative practice, outside typical scope of practice, under this policy.
- 1.13.2 Requests for a new innovative practice, beyond the typical scope of servicing practice, must be socialised across the PED, and a written proposal submitted via the WAIS innovation proposal (Appendix C).
- 1.13.3 Innovation requests will be assessed on the explicit criteria established in the innovation proposal.
- 1.13.4 Innovation proposals must be approved by the Performance Team Director (PTD), and if required, the WAIS Chief Medical Officer (CMO).
- 1.13.5 All approved innovation projects must be documented in the innovations folder on DMS.
- 1.13.6 Outcomes from the innovation project must be recorded on DMS, and presented to relevant WAIS staff and athletes.

### PROCESS

#### 1.14 Process Flow for implementing an new innovative practice (Figure 5)

- 1.14.1 New service delivery innovation, outside typical scope of practice, is conceived.
- 1.14.2 Responsible service staff initiates discussion with the sport program (if not conceived in partnership), the PET/PTD and the Performance Services Community of Practice to raise awareness, seek existing knowledge, and confirm viability/relevance of the proposed innovation.
- 1.14.3 If at this stage, if the innovative approach is determined to be unviable or unnecessary, no further action is taken, and the idea is discontinued.
- 1.14.4 If the idea is deemed viable across the teams consulted, a short, written proposal is developed (Appendix C), which outlines the innovation's background, rationale, and proposed process.
- 1.14.5 Where relevant, the short proposal will consider ethical implications, a risk analysis, and a cost:benefit assessment inclusive of a detailed budget.
- 1.14.6 Innovation proposals will then be sent for a formal sign off by the sport program and PET via the PTD.
- 1.14.7 If the proposed innovative approach requires invasive procedures or is medically sensitive, the WAIS CMO will be sent the short proposal for input and approval.
- 1.14.8 Once the appropriate approvals have been sought and documented, the innovation will be logged in the innovations folder on DMS.
- 1.14.9 At the conclusion of the innovation, reporting on outcomes will be logged with the original proposal.



**Figure 1. Decision tree for implementing best practice, undertaking WAIS strategic projects, or conducting research studies/programs at WAIS.**

# Western Australian High Performance Sport Research Centre

## Our Mission

To provide high performance sport programs with evidence-based, innovative solutions to performance-driven questions via uncompromised high quality research

## Our Vision

To be a world-class, innovative high performance sport science research center

## Our Objectives

1. To undertake multidisciplinary, collaborative sport science research that provides evidence-based solutions to performance-driven questions with the aim of improving current practice to enhance athlete performance
2. To build relationships between the Western Australian Institute of Sport (WAIS) and all relevant local, national and international partners, in order to maximise our collective knowledge and resources for the benefit high performance sport in Australia
3. To translate and integrate scientific research findings into the daily training environment of high performance sport programs

## Our Strategic Research Priorities

To achieve our objectives, the research conducted through the WA High Performance Sport Research Centre will align with the following strategic research priorities:

Enhancing athlete performance in competition

Augmenting the daily training environment

Generating knowledge in performance nutrition

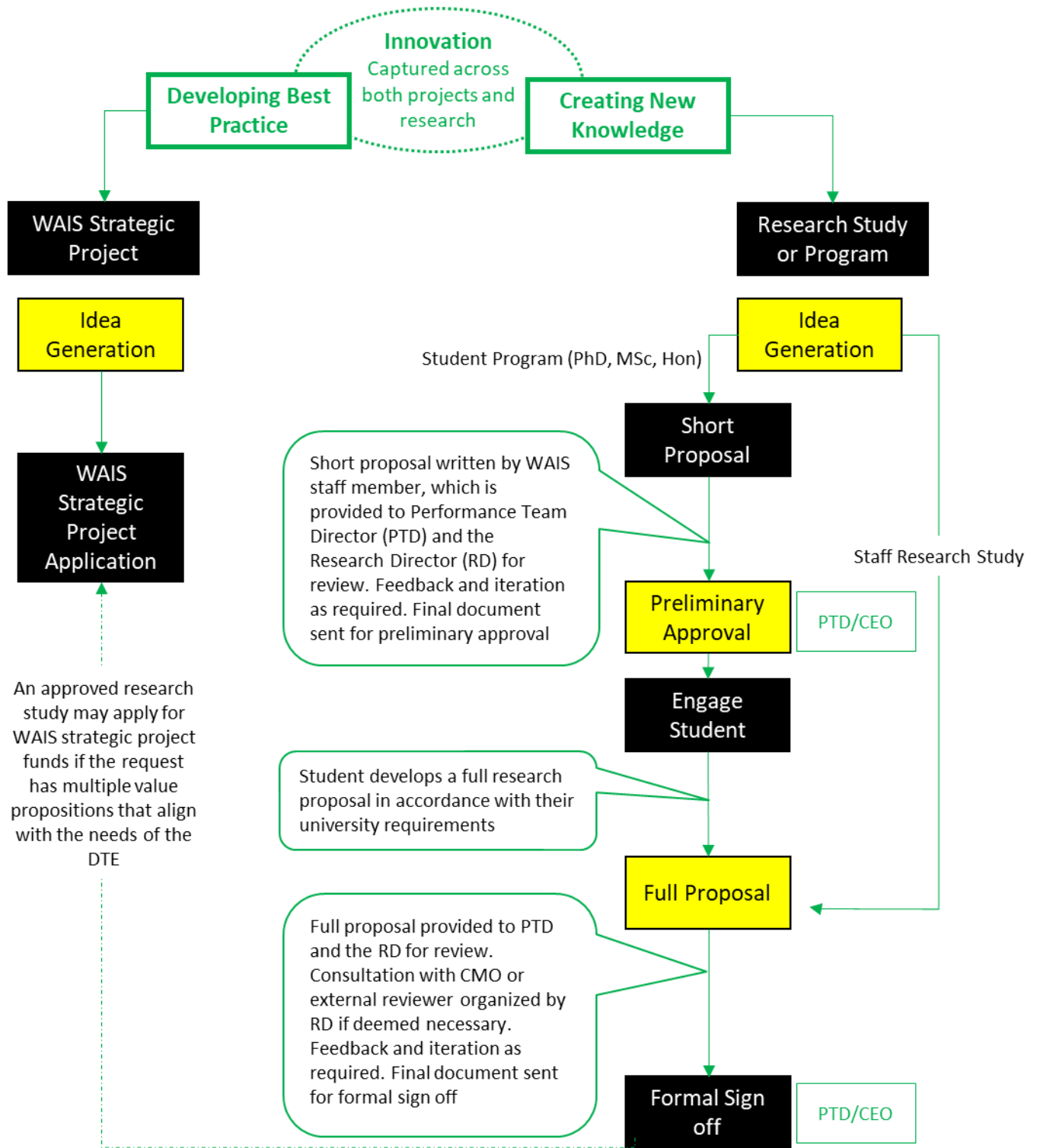
Leveraging sports technology and engineering

Improving Athlete Health and Wellbeing

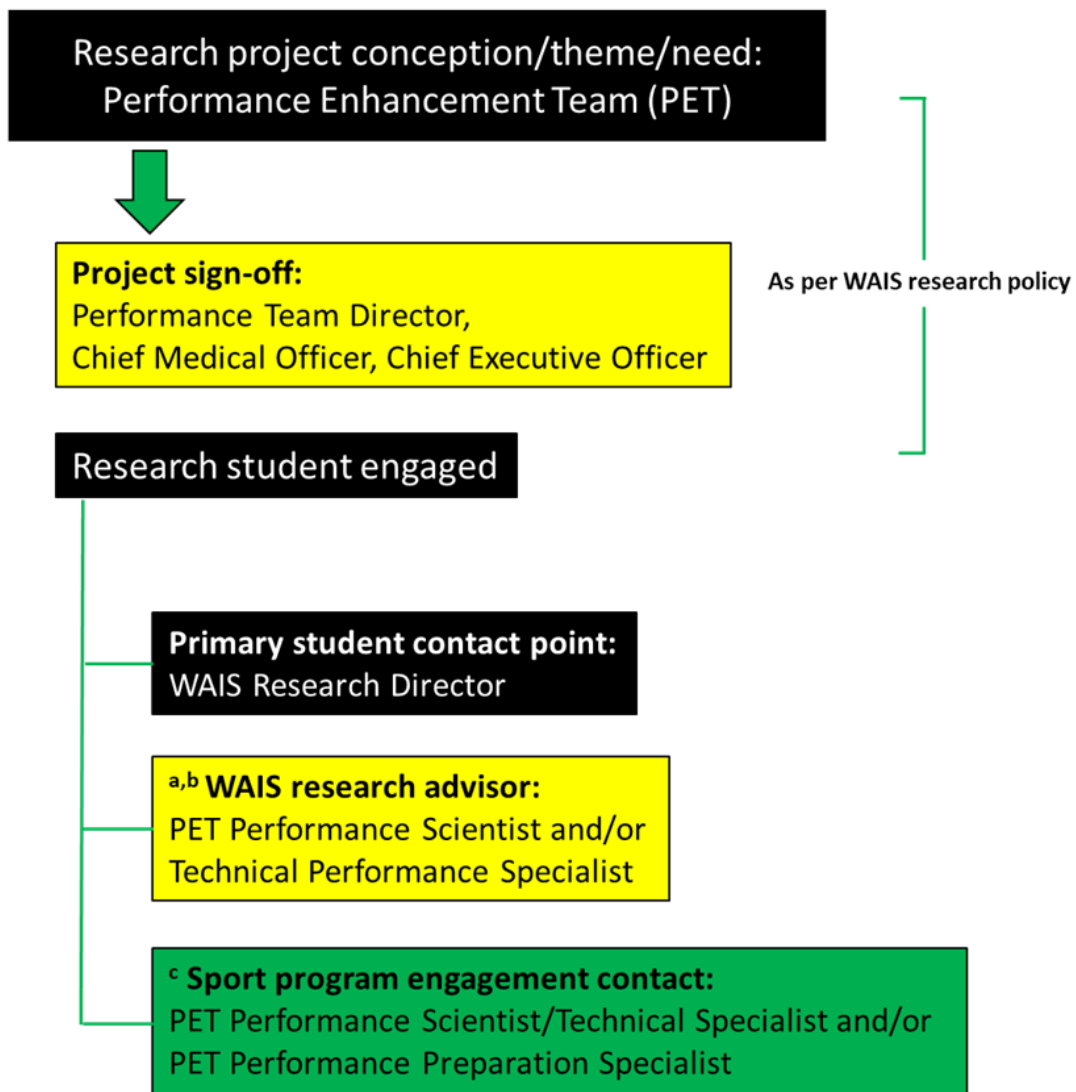
Enriching our understanding of sports performance

**Figure 2.** High Performance Sport Research Centre mission, vision, objectives, and strategic research priorities.





**Figure 3.** Process map for the nomination of a WAIS research study.



**Weekly Time Commitment:**

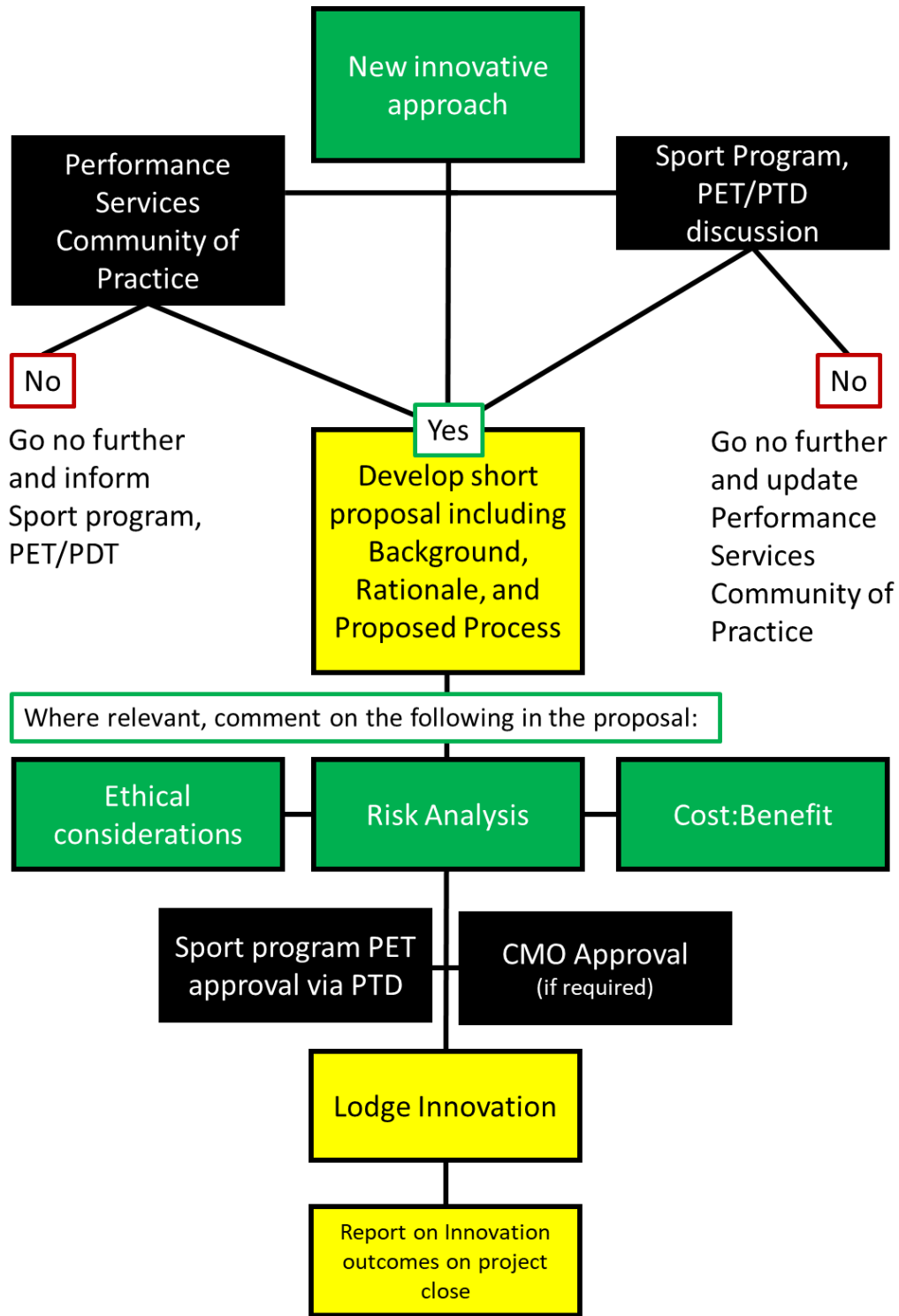
<sup>a</sup> Meeting: 60 min (0.03 FTE)

<sup>b</sup> Reading, editing, critiquing: 60 min (0.03 FTE)

<sup>c</sup> Project engagement\*: 60 min (0.03 FTE)

\*Testing/lab/servicing supervisory, data collection, etc.

**Figure 4.** WAIS staff research allocation and student point of contact.



**Figure 5.** Process map for the nomination of a new innovative practice.

# Appendix A: WAIS Research Proposal (Form A)

*Please keep this document to a maximum of 6 pages*

## 1. Study Title

Provide a brief, succinct title for this research.

## 2. Primary Investigator Details

Title, name, organisation, phone number and email address.

## 3. Research Team Members

Name, institution, and email address of each research team member.

## 4. Study Overview (200 words maximum)

Provide a brief synopsis of the study.

## 5. Aims of the Study

State the specific aims of the research in bullet points using plain language.

## 6. Performance Barrier to be addressed

Detail the WAIS identified performance barriers this research addresses. How does this research align with the WAIS strategic research priorities?

## 7. Impact Statement (150 words maximum)

Provide a compelling statement of the impact that this study will have.

## 8. Background Review and Justification (1 page maximum)

Detail the relevant literature and use this to justify the study.

### 9. Detailed Research Methods (3 pages maximum)

Please address the following headings:

- Participants (sample size justification)
- Ethics Approval / process
- Experimental Overview and Design
- Experimental Procedures
- Statistical Analyses

### 10. Study Deliverables and Measures of Success

Deliverable	Measure of Success	Delivery date

### 11. Timeline of Activity

Provide an estimated timeline of significant milestones in bullet points.

### 12. Budget

Please provide a detailed budget. Include all sources of funding and expected contributions.

### 13. Signatures

Signed:	Date:
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### 14. References

# Appendix B: WAIS Research Sign Off (Form B)

## 1. Study Title

## 2. Study Summary

## 3. WAIS Resource Requirement

Funding:	
Staffing:	
Infrastructure:	

## 4. Performance Team Director Signature

## 5. WAIS CEO Signature

# Appendix C: WAIS Innovation Proposal

## 1. Title

## 2. Background/Rationale/Justification

## 3. Proposed Process

## 4. Additional Considerations

Ethics:

Risk Analysis:

## 5. Detailed Budget

Costs:

Cost:Benefit Justification:

## 6. Performance Team Director Signature

## 7. WAIS CMO Signature (if required)

## REVIEW AND REVISION

This policy, and all related appendices, will be reviewed as it is deemed appropriate.

Policy review will be undertaken by the WA High Performance Sport Research Centre Director and any revisions approved by the Chief Executive Officer.

### Revision History

Date	Version	Reviewed by	Changes made
21 November 2022	2.0	WA High Performance Sport Research Centre Director	Policy updated

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