



Genetic Testing in Professional Football: Perspectives of Key Stakeholders

Page 1: Introduction

Due to advancing technology, genetic testing is now being employed to assess athletic ability. The following **anonymous** survey is being conducted to give an insight into the perspectives of key stakeholders regarding genetic testing in professional football. Specifically, the survey aims to assess each individual's opinions and beliefs, alongside their current knowledge and interest in further education regarding the influence of genetics on performance and injury.

The survey requires you to answer short multiple-choice questions based on your beliefs and opinions in relation to genetics and sport.

We estimate the survey will take you approximately 10-15 minutes to complete.

This study forms part of a PhD project (The Football Gene Project) and will reveal to what extent genetic testing in professional football is currently used, wanted, or opposed. Additionally, the study will also uncover the current knowledge of individuals working in professional football in regards to the effect of genetics on sporting ability and whether additional education is desired or necessary.

As a result of your participation, your opinions will contribute towards if, or what, approach could be implemented in order to ensure key stakeholders within professional football have sufficient knowledge of the latest evidence, regarding the use of genetic tests to improve performance and/or decrease risk of injury.

For any questions or feedback, please feel free to contact Alex McAuley (Principal Investigator) at: alex.mcauley@mail.bcu.ac.uk

Alternatively, you can also contact the project supervisors:

- Dr Adam Kelly: adam.kelly@bcu.ac.uk
- Dr Ian Varley: ian.varley@ntu.ac.uk

By ticking the box below, you confirm that:

- You are **over 18 years old**
- You have read the above information sheet and are aware of what the survey involves

- You are aware that if you have a complaint you can contact: Faculty Academic Ethics Committee (FAEC), Faculty of Health, Education and Life Sciences, Birmingham City University, Westbourne Road, Birmingham B13 3TN, Email: HELS_Ethics@bcu.ac.uk

1. I confirm the above and agree to complete the survey. * Required

☐ Yes

Page 2: Demographic

2. Which of the following best describes your primary job role? * *Required*

- ☐ Athlete
- ☐ Coach
- ☐ Doctor
- ☐ Nutritionist
- ☐ Performance Analyst
- ☐ Physiotherapist
- ☐ Sport Scientist
- ☐ Strength and Conditioning Coach
- ☐ Other

2.a. If you selected Other, please specify:

3. Which age range do you belong to? * *Required*

- ☐ 18-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55-64
- ☐ 65+

4. To which gender identity do you most identify? * *Required*

- ☐ Male
- ☐ Female
- ☐ Transgender Male
- ☐ Transgender Female
- ☐ Gender Variant/Non-Conforming

- ☐ Prefer not to say
- ☐ Other

4.a. If you selected Other, please specify:

5. What level of football do you currently work/play at? * Required

- ☐ Senior
- ☐ Youth/Academy

5.a. Which division is your club currently playing in?

- ☐ 1st Division (i.e., Premier League, La Liga, Serie A)
- ☐ 2nd Division (i.e., EFL Championship, Segunda Division, Serie B)
- ☐ 3rd Division (i.e., EFL League 1, Segunda Division B, Serie C)
- ☐ 4th Division (i.e., EFL League 2)
- ☐ Non-league (i.e., National League, Tercera Division, Serie D)
- ☐ Recreational
- ☐ Other

5.a.i. If you selected Other, please specify:

5.b. What level of football do you currently work/play at?

- ☐ Category 1 academy
- ☐ Category 2 academy
- ☐ Category 3 academy
- ☐ Category 4 academy
- ☐ Non-academy

- ☐ Grassroots
- ☐ Other

5.b.i. If you selected Other, please specify:

Page 3: Awareness

6. In your opinion, to what extent are **genetics responsible** for the following: * *Required*

	Largely	Moderately	Slightly	No influence	Unsure
Strength	☐	☐	☐	☐	☐
Power	☐	☐	☐	☐	☐
Endurance	☐	☐	☐	☐	☐
Technical ability	☐	☐	☐	☐	☐
Decision making	☐	☐	☐	☐	☐
Resilience	☐	☐	☐	☐	☐
Personality	☐	☐	☐	☐	☐
Injury	☐	☐	☐	☐	☐

6.a. Please feel free to comment further *Optional*

Page 4: Utilisation

7. Are you or have you ever been at a **club or organisation** that have used genetic testing to:

	* Required	
	Yes	No
aid performance	☐	☐
mitigate injury risk	☐	☐

7.a. Please feel free to comment further *Optional*

8. Have you ever utilised genetic testing **in the past** to:

	* Required	
	Yes	No
aid performance	☐	☐
mitigate injury risk	☐	☐

8.a. Please feel free to comment further *Optional*

9. Would you consider utilising genetic tests **in the future** to:

	* Required	
	Yes	No
aid performance	☐	☐

mitigate injury risk



9.a. Please feel free to comment further *Optional*

Page 5: Implementation

10. Genetic testing is **beneficial** and has great utility in sport: * *Required*

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
Currently	☐	☐	☐	☐	☐
In the Future	☐	☐	☐	☐	☐

10.a. Please feel free to comment further *Optional*

11. Genetic testing in sport **should be used** for the following: * *Required*

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
Talent identification/selection	☐	☐	☐	☐	☐
Athlete development/training	☐	☐	☐	☐	☐
Injury risk/prevention	☐	☐	☐	☐	☐

11.a. Please feel free to comment further *Optional*

12. In your opinion, to what extent do the following factors **limit** the implementation of genetic testing in sport? * *Required*

	Largely	Moderately	Slightly	No influence	Unsure
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Cost	☐	☐	☐	☐	☐
Time	☐	☐	☐	☐	☐
Knowledge/inability to interpret results	☐	☐	☐	☐	☐
Fear of data privacy issues	☐	☐	☐	☐	☐
Culture/tradition	☐	☐	☐	☐	☐
Ethical issues	☐	☐	☐	☐	☐
Media reaction	☐	☐	☐	☐	☐

12.a. Please feel free to comment further *Optional*

13. How much would you **expect to pay** for the following: * *Required*

	£0	£1-£25	£26-£50	£51-£75	£76-£100	£101-£150	£151-£200	£201-£250
Genetic test	☐	☐	☐	☐	☐	☐	☐	☐
Consultancy to analyse & interpret results (per hour)	☐	☐	☐	☐	☐	☐	☐	☐
Genetic counselling session to explain results (per hour)	☐	☐	☐	☐	☐	☐	☐	☐
Education/training for staff, players, parents (per hour)	☐	☐	☐	☐	☐	☐	☐	☐

13.a. Please feel free to comment further *Optional*

14. In your opinion, who should be allowed to **access and/or use genetic information** on athletes? (Please select all that apply) * *Required*

- ☐ Athlete
- ☐ Genetic testing company
- ☐ National government
- ☐ Parents
- ☐ Scientific staff
- ☐ Sports club
- ☐ Sport league/association
- ☐ Anyone athlete consents for data sharing

14.a. Please feel free to comment further *Optional*

15. To what extent have the following sources of information **influenced your opinions** regarding genetic associations and genetic testing in sport? * *Required*

	Mostly	Largely	Moderately	Slightly	No influence
Scientific journal articles/conferences	☐	☐	☐	☐	☐
Professional sport organisations	☐	☐	☐	☐	☐
Television or press advertisement	☐	☐	☐	☐	☐
Online videos	☐	☐	☐	☐	☐

Social media	☐	☐	☐	☐	☐
Word of mouth	☐	☐	☐	☐	☐
Celebrity endorsement	☐	☐	☐	☐	☐

15.a. Please feel free to comment further *Optional*

Page 6: Education

16. In your opinion, do you think **you have sufficient knowledge** of the relationship between genetics and performance/injury risk to make an informed decision on whether genetic testing should take place within your club? * *Required*

☐ Yes

☐ No

16.a. Please feel free to comment further *Optional*

17. In your opinion, do you think **other key stakeholders** at your club/organisation have sufficient knowledge of the relationship between genetics and performance/injury risk to make an informed decision on whether genetic testing should take place within your club? * *Required*

☐ Yes

☐ No

17.a. Please feel free to comment further *Optional*

18. In your opinion, is genetic research **communicated effectively** to athletes and coaches for them to make informed decisions regarding genetic testing? * *Required*

☐ Yes

☐ No

18.a. Please feel free to comment further *Optional*

19. In your opinion, are **educational workshops** required at your club regarding genetic research in sport?
* *Required*

- ☐ Yes
☐ No

19.a. Please feel free to comment further *Optional*

20. In your opinion, is the **regular opportunity** to speak to a genetic specialist or the addition of a genetic consultant at your club required? * *Required*

- ☐ Yes
☐ No

20.a. Please feel free to comment further *Optional*

21. Would you personally be **interested in learning more** about the contribution of genetics to sporting performance/injury risk and the validity of genetic testing? * *Required*

- ☐ Yes
- ☐ No

21.a. Please feel free to comment further *Optional*

22. If you would like to add any **additional information** that you feel is important, please use the space below. *Optional*

Thank you for completing the survey.
