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**”Ethics and the Challenges  
of the Potential Use of  
Genetic Technology in Sport ”**

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# Summary of Effort, Talent & Fair Play

- Sport is a rule-governed enterprise
- Action against the rules is cheating
- Should there be a rule against genetic doping?
  
- The answer, though not unchallenged – has been “yes.”
- However important practical and ethical problems remain

# Winning the Genetic Lottery

Is it fair to compensate for those who have lost the genetic lottery from a sport perspective but still wish to compete in elite sport by enhancing themselves through genetic doping?

- Hannson asks "Why not allow gene doping?"
- Wouldn't it be fair to adjust for natural inequalities - a variant of the fair innings argument applied to Sport?
- To answer this question we need to discuss the important concepts in sport & ethics

# important conceptual distinctions about contested concepts

- natural and unnatural (artificial);
- One point of sporting contests is to measure difference
- Puzzle: we have allowed naturally occurring genetic differences to affect sport outcomes (natural talent).
- However, we will not allow the potentially fairer (at least of access) genetic equalization that would occur through enhancement. Do we have good grounds?

# important conceptual distinctions about contested concepts

Ethical foundation of anti-doping efforts  
such as:

- preventing avoidable harm;
- (paternalism)
- performance enhancement;
- a vision of sport and how gene doping fits within this context.
- Sport for humans not humans for sport
- contested

# sport exhibits values

- leadership must choose which values will be endorsed because sport can be used for many ends
- important unanswered questions of social value: equity of access; implications of genetic therapy for those who currently live with disease or disability; specific sport oriented issues around the treatment of injury through genetic modification.

# Connections with other forms of enhancement

- e.g. Laser eye surgery

# Connections with other forms of enhancement

- LASIK for sport performance enhancement is used in some sports.

# Comparison with rules against doping

- One point of having anti-doping rules is to limit the risks athletes need to undertake in order to participate in their sports.

# Comparison with rules against doping

- How much risk is too much?
- difficult definitional issues arise.

# Comparison with rules against doping

- consistency and credibility.
- anti-doping code - "analogous" substances and methods, prohibited, operate in same general way

# distinction between “enhancement” and “repair.”

- distinction between “enhancement’ and “repair” long been discussed in the literature of sport performance enhancement.
- Restorative and additive distinction –Fost;
- Medical use (therapy treatment) and enhancement

# distinction between “enhancement” and “repair.”

1. Incidental improvement
2. For the purposes of enhancement

# Public Use & Social considerations

- Common Public Use -

# Leadership

- leadership. actively seeking out the frontiers of doping and trying to stop new techniques before they become established and have an effect

# Leadership

- Things that would be acceptable elsewhere are not acceptable in sport.
- Challenge is where we are to draw the line.
- Problem in any case of attempted regulation.
- black is permissible, and white is not; but then what about gray?

As a practical matter, we draw lines in the gray zones to some extent arbitrarily, and with an eye to various practical conveniences. But this does not stop us from permitting black and banning white.

# privacy issues & access to genetic information

Genetic information especially private  
Indicative of our identities in a very special  
way.

- puzzle - genetic makeup is not necessarily indicative of action and performance.
- Traditionally we have measured people by what they can do – genetic information offers the prospect of evaluating people on the basis of what their genetic makeup says they might do.

# social questions

- maintaining privacy of personal genetic information vs. the potential role of the sport community becoming a wedge used to drive greater general access to genetic information. e.g. usa athlete

# Conclusions

Without moral support, sport will not be able to preserve its humanizing influence and contribute to human dignity because it will not be able to resist pressure to exceed human limits.

If sport recognizes and respects its own inner rules, thus seeing and accepting these limits, in the long run it will master this situation by recognizing it as an issue rooted in moral premises.

# Conclusions

Sport stands on a constant threshold, its worldwide success and record breaking does not release it from the obligation to examine its own deepest premises and limits.

Gene modification and improving humans

- Enhancements or improvements
- What counts as an enhancement? (for what) (what is the reference point?)

# Conclusions

- Broader social questions
- Sport confronts these problems first – sport is on the cutting edge of expanding the range of the humanly possible and athletes and the sport system are always looking to go further and extend the boundaries.
- But if sport faces the problems first sport will also follow social trends and consensus as it develops.
- at a decision point.

# Conclusions

- Who makes choices about the potential genetic improvements or enhancements?
- Sport is leading by saying we will regulate – we will attempt to stop genetic enhancement for the purpose of sport. In answer to the questions We can – should we? Sport answers “no” we should not.
- Is that answer contested – yes,
- Is it arbitrary – no.
- But it is the first shot in a debate that will grip our communities and potentially shape who we are – and what we become.