Jamal Hammond Professor Paschal English 102 17 March XXXX

> Performance Enhancement through Biotechnology Has No Place in Sports

Opening sentences provide background for Hammond's thesis.

Thesis states the main point.

Hammond establishes his credibility by summarizing medical research.

Source is cited in MLA style.

The debate over athletes' use of performance-enhancing substances is getting more complicated as biotechnologies such as gene therapy become a reality. The availability of these new methods of boosting performance will force us to decide what we value most in sports—displays of physical excellence developed through hard work or victory at all costs. For centuries, spectators and athletes have cherished the tradition of fairness in sports. While sports competition is, of course, largely about winning, it is also about the means by which a player or team wins. Athletes who use any type of biotechnology give themselves an unfair advantage and disrupt the sense of fair play, and they should be banned from competition.

Researchers are experimenting with techniques that could manipulate an athlete's genetic code to build stronger muscles or increase endurance. Searching for cures for diseases like Parkinson's and muscular dystrophy, scientists at the University of Pennsylvania have created "Schwarzenegger mice," rodents that grew largerthan-normal muscles after receiving injections with a gene that stimulates growth protein. The researchers also found that a combination of gene manipulation and exercise led to a 35% increase in the strength of rats' leg muscles (Lamb 13).

Marginal annotations indicate MLA-style formatting and effective writing.

Source: Diana Hacker (Boston: Bedford/St. Martin's, 2007).

This paper has been updated to follow the style guidelines in the *MLA Handbook for Writers of Research Papers*, 7th ed. (2009).

Such therapies are breakthroughs for humans suffering from muscular diseases; for healthy athletes, they could mean new world records in sports involving speed and endurance—but at what cost to the integrity of athletic competition? The International Olympic Committee's World Anti-Doping Agency has become so alarmed about the possible effects of new gene technology on athletic competition that it has banned the use of gene therapies and urged researchers to devise a test for detecting genetic modification (Lamb 13).

Some bioethicists argue that this next wave of performance enhancement is an acceptable and unavoidable feature of competition. As Dr. Andy Miah, who supports the regulated use of gene therapies in sports, claims, "The idea of the naturally perfect athlete is romantic nonsense. . . . An athlete achieves what he or she achieves through all sorts of means—technology, sponsorship, support and so on" (qtd. in Rudebeck). Miah, in fact, sees athletes' imminent turn to genetic modification as "merely a continuation of the way sport works; it allows us to create more extraordinary performances" (Rudebeck). Miah's approval of "extraordinary performances" as the goal of competition reflects our culture's tendency to demand and reward new heights of athletic achievement. The problem is that achievement nowadays increasingly results from biological and high-tech intervention rather than strictly from hard work.

Better equipment, such as aerodynamic bicycles and fiberglass poles for pole vaulting, have made it possible for athletes to record achievements unthinkable a generation ago. But athletes Hammond uses specific evidence to support his thesis.

Opposing views are presented fairly.

"Qtd. in" is used for an indirect source: words quoted in another source.

Hammond counters opposing arguments.

themselves must put forth the physical effort of training and practice—they must still build their skills—even in the murky area of legal and illegal drug use (Jenkins D11). There is a difference between the use of state-of-the-art equipment and drugs and the modification of the body itself. Athletes who use medical technology to alter their bodies can bypass the hard work of training by taking on the powers of a machine. If they set new records this way, we lose the opportunity to witness sports as a spectacle of human effort and are left marveling at scientific advances, which have little relation to the athletic tradition of fair play.

Transition moves from the writer's main argument to specific examples.

Hammond develops the thesis.

Such a tradition has long defined athletic competition. Sports rely on equal conditions to ensure fair play, from regulations that demand similar equipment to referees who evenhandedly apply the rules to all participants. If the rules that guarantee an even playing field are violated, competitors and spectators alike are deprived of a sound basis of comparison on which to judge athletic effort and accomplishment. When major league baseball rules call for solid-wood bats, the player who uses a corked bat enhances his hitting statistics at the expense of players who use regulation equipment. When Ben Johnson tested positive for steroids after setting a world record in the 100-meter dash in the 1988 Olympics, his "achievement" devalued the intense training that his competitors had undergone to prepare for the event—and the International Olympic Committee responded by stripping Johnson of his medal and his world record. Likewise, athletes who use gene therapy to alter their bodies and enhance their performance will create an uneven playing field.

If we let athletes alter their bodies through biotechnology, we might as well dispense with the human element altogether. Instead of watching the 100-meter dash to see who the fastest runner in the world is, we might just as well watch the sprinters mount motorcycles and race across the finish line. The absurdity of such an example, however, points to the damage that we will do to sports if we allow these therapies. Thomas Murray, chair of the ethics advisory panel for the World Anti-Doping Agency, says he hopes, not too optimistically, for an "alternative future . . . where we still find meaning in great performances as an alchemy of two factors, natural talents . . . and virtues" (qtd. in Jenkins D11).

^A Unless we are willing to organize separate sporting events and leagues—an Olympics, say, for athletes who have opted for a boost from the test tube and another for athletes who have chosen to keep their bodies natural—we should ask from our athletes that they dazzle us less with extraordinary performance and more with the fruits of their hard work. A vivid example helps the writer make his point.

Conclusion echoes the thesis without dully repeating it.

Works Cited

Works cited page uses MLA style.

 Jenkins, Sally. "The First Item in a Pandora's Box of Moral Ambiguities." Washington Post 4 Dec. 2004: D11. Print.
Lamb, Gregory M. "Will Gene-Altered Athletes Kill Sports?" Christian Science Monitor 23 Aug. 2004: 12-13. Print.
Rudebeck, Clare. "The Eyes Have It." Independent [London]. Independent News and Media, 27 Apr. 2005. Web. 28 Feb. 2006.