

facilities and personal protective equipment should be worn. To further reduce the risk of pathogen diffusion, an exhalation port that generates round-the-tube airflow and a viral-bacterial filter interposed between the mask and the exhalation port should be used.⁶

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Abolishing the law of gravity

I read with interest the cost-utility analysis of abolishing the law of gravity by Claude Cyr and Luc Lanthier.¹ Their conclusion that microgravity might be the solution to the health care crisis in Canada is intriguing.

As the International Space Station moves us closer to the possibility of colonizing space, it is becoming increas-

ingly important to understand the effects of altered gravity on mammalian reproductive physiology. There is evidence that hypo- and hyper-gravity induce changes in male and female reproductive processes.² Findings from studies using a variety of experimental conditions to simulate hypogravity raise questions about whether reproduction is possible when gravity is reduced.

Studies using the Holton hindlimb suspension model, which provides a practical way to simulate the major physiologic effects of hypogravity, are providing evidence that hypogravity might exert pronounced effects on male reproductive processes and reduce the rate of implantation during early pregnancy in rats. Moreover, the cardiovascular deconditioning, bone demineralization and decrease in red blood cell concentration associated with hypogravity might affect the ability of female rats to sustain their pregnancies. Similar findings from experiments during space flights raise questions about whether early pregnancy can be sustained in humans when gravity is reduced.² Additional research is needed to fill in the gaps in our knowledge about reproductive physiology under conditions of hypo- and micro-gravity.

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I read with interest the article by Claude Cyr and Luc Lanthier on the beneficial

effects of abolishing the law of gravity.¹ However, I see one small problem with the plan. Although abolishing gravity might prolong life, it will certainly not prevent death. If people die before 3 am or after 7 am (i.e., when the microgravity environment is in place) their bodies will start to deteriorate. Methane gas, which is lighter than air, will form and the bodies will eventually start to float. If they float high enough, the stratosphere will eventually become clogged with bodies, which will obliterate the sun. The lack of sunlight will affect the corn and barley crops, driving up the price of good whiskey. This would be economically disastrous. In addition, it would be difficult to bury a floating body, as it would tend to float out of the grave and drift off, especially if the burial was not held for a couple of days after death. Failure to correct for this variable might destroy the entire plan, good as it is.

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Correction

The phrase “which began to study risk factors for breast cancer among women in 1989” should have been omitted from the abstract of a Research article in the Jan. 29 issue.¹

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