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SUBJECTS NEEDED



FOR ANTI-DOPING RESEARCH



Project title: Development of a prototype blood-based test for exogenous erythropoietin activity based on transcriptional profiling.

Principal investigator: Dr. Jim Rupert, School of Human Kinetics, U.B.C.

Co-investigator: Dr Matt Fedoruk, School of Human Kinetics, U.B.C.

Co-investigator: Dr Don Mackenzie, Human Kinetics, Allen McGavin Sports Med. Clinic, U.B.C.

The UBC School of Human Kinetics is looking for subjects to take part in a World Anti-Doping Agency supported study on the use of human blood RNA levels to detect doping with erythropoietin (EPO). The goal of the study is to characterize and quantify RNAs that could be used as a test for EPO.

We are looking for athletes between 19 and 40 years of age, non-smokers, who are capable of performing strenuous exercise testing, such as VO_2 max (running or cycling) or cycling a simulated 20K time-trial ride. Para-athletes are welcome if the appropriate testing equipment can be located.

There are three separate, but related experiments. You can participate in one or all, but preference will be given to subjects willing to participate in more than one. Each study entails providing blood samples (maximum 3 mls; 1 tsp) that will be used as a source of RNA.

- 1) Gene expression in response to exercise. Subjects will provide blood sample before and after (immediately and daily for a week) after a strenuous exercise session.
- 2) Gene expression changes during the day. Subjects will provide blood sample every four hours from 6:00 am to 10:00 pm. Subjects will be asked to refrain from strenuous training/racing on the sampling day and during the preceding week.
- 3) Gene expression changes across the menstrual cycle. Subjects will provide a blood sample every four days for 28 days across one complete menstrual cycle and a well as a record of training/racing and general health over the duration.

If you, or someone you know, meet all of the above criteria and would like to learn more about the study, please contact Dr. Rupert or Dr. Fedoruk at:

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