

**Reasoning of dissertation topic and competency of potential supervisor for admission into LSU biology doctoral studies with a participation of Tartu university 2025**

|                                  |                                    |
|----------------------------------|------------------------------------|
| <b>Area of research (title)</b>  |                                    |
| <b>Field of research (title)</b> |                                    |
| <b>Topic of research</b>         | <b>Biomedicine</b>                 |
| <b>Institution</b>               | <b>Lithuanian Sport University</b> |

**Potential supervisor**

|  |                      |                          |
|--|----------------------|--------------------------|
| <b>Pedagogical and scientific degree</b> | <b>Name, surname</b> | <b>Academic position</b> |
| PhD                                      | Gray, Stuart         | Research Fellow          |

**Short reasoning of proposed dissertation topic**

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| <b>Title</b>   |
| The effect of medium chain fatty acids on muscle function and metabolism across the lifecourse   |
| <b>Short research description (including aims and objectives) (maximum 1500 characters).</b>   |
| <u>Aim</u><br>The overall aim of this PhD project will be to assess the effects of medium chain fatty acids (MCFA) supplementation on muscle function and metabolism across the lifecourse.<br><br>This project will be linked to our current research grant “Effects of medium-chain fatty acids on metabolic health and muscle function during weight rebound after interruption of semaglutide treatment or caloric restriction in mice funded by the Lithuanian Research Council (P-MIP-24-209, 01.09.2024-30.06.2027, Budget: 199 023 EUR) and Dr. P. Minderis will be a second supervisor.<br><br>Our main aim will be to extend this research into human volunteers for a greater impact and relevance to human health. |