

Position Statement

THE NATURE AND CAPACITY OF AN EXERCISE PHYSIOLOGIST

Characteristics

An exercise physiologist is a scientist who can, in principle, be employed at a research level (i.e., generating new knowledge) or a non-research level (i.e., applying the existing scientific knowledge).

In the first case, an exercise physiologist can be employed at a research institution (university or research center), studying the functional and structural adaptations of the human body systems (cardiovascular, respiratory, musculoskeletal etc.) during acute or chronic physical activity (exercise, recreation, training) and in relation to specific environmental conditions (heat, altitude etc.), the age, the sex, and the health condition of the exercising person (in the case of the specific populations, it specializes to clinical exercise physiology).

He/She uses specialized analyzers (i.e., gas analyzers) and ergometers (cycle ergometer) connected with computers. The results of his/her studies are published in scientific journals and are presented at scientific conferences, thus offering new knowledge about the acute and chronic effect of exercise on human body, knowledge that can be utilized in the direction of health promotion and athletic performance enhancement.

In the second case, an exercise physiologist may be employed in a sports organization (federations, sports clubs) or a public or private ergometric center for the scientific monitoring of athletes, where he/she will monitor the training and performance of an athlete by conducting appropriate ergometric tests, using the same instruments as those mentioned above. He/She then assesses the results of the ergometric tests and correlates them with previous test results of the athlete, taking into account the phase of training and the athlete's history. He/She notifies scientists from other disciplines (such as physicians, exercise biochemists, coaches, physiotherapists and nutritionists-dietitians), who are responsible for the scientific support of the athlete, of the results of the ergometric tests and collaborates with them to achieve the desired improvement in the athlete's fitness and performance, while protecting the athlete's health through prevention of excessive fatigue, nutritional deficiencies and injuries.

Certification

According to the existing international standards and the characteristics of the capacity of exercise physiologist, the Hellenic Society of Biochemistry and Physiology of Exercise adopts the following criteria for characterizing one as an exercise physiologist.

1. A basic degree in Physical Education and Exercise Science or related biological science (i.e., Biology, Physiology, Biochemistry, Medicine) and
2. A master or doctoral degree in the field of exercise physiology and

3. Research activity in exercise physiology, including his/her participation as 1st or 2nd author at least in three (3) articles published in journals indexed in the Science Citation Index Expanded (SCIE) and
4. (a) A position in a recognized laboratory of exercise physiology as a researcher (post-doc) for at least two (2) years or (b) apprenticeship of at least two (2) years from a recognised physiologist or (c) laboratory experience of ergometric tests of at least two (2) years or (d) a combination of a, b and c.

The Society will award the title and certification of exercise biochemist following the examination of an application and relevant documentation, submitted by the applicant, by an expert committee and approval by the Society's Council. Certification is valid for five (5) years, and can be renewed following a new application. The Society reserves the right to modify the criteria in accordance with the progress made in sports science and relevant objective conditions.

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