

## **Expansion of the special interest group in the topic of Clinical Exercise Physiologist**

The governing Council of the Hellenic Society of Exercise Biochemistry and Physiology, decided the constitution of the Special Interest Group in the topic of Clinical Exercise Physiology. The need for the constitution of this group, as well as the perspective of its progression in Greek territory are explained below. Moreover, for the colleagues that are interested in the development and the prospective of the topic, online connection with European and American scientific Societies that have developed the topic of Clinical Exercise Physiology is available. We call the colleagues scientists, the postgraduate students and the undergraduate students to be informed and to participate actively in this interesting perspective of the development of Clinical Exercise Physiology in Greece.

Sincerely,

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### *1. The objective that clinical exercise physiology deals with*

Clinical Exercise Physiology deals with the study of the mechanisms related to the reduced ability for exercise and with the investigation of alternative approaches for the increase of physical efficiency in a wide population that suffers from a chronic disease. The research in clinical exercise physiology aims in the investigation of the effect of the seriousness of the disease in the ability for exercise and the symptoms that restrict it, but in parallel, also investigates the effect of systematic exercise in the intensity of the symptoms occurring with exercise. The aim of the specialty "Clinical Exercise Physiology" is the improvement of the quality of life and the reduction of the morbidity of the chronically ill patients.

### *2. Evolution of the objective of clinical exercise physiology internationally*

The American Society of Physiology in the re-edition and expansion of the issues of the 'Handbook of Physiology' (recalled Comprehensive Physiology) published new chapters that deal with Exercise In Health and Disease with two thematic issues: i) Section I. *Fundamentals of Exercise Physiology*, Section II. *Exercise Impairment in Chronic Disease*. In parallel, societies of sport science, such as the American College of Sports Medicine and the British Association of Sports & Exercise Sciences, have introduced groups of special interest in Clinical Exercise Physiology. Moreover, the need for the evolution of the field is recognized by many academic institutions abroad, that have introduced academic studies in the division of Clinical Exercise Physiology.

### *3. Development of the objective in Greece*

Both in undergraduate and postgraduate level, in the Departments of Physical Education and Sport Science of Athens, Thessaloniki, Komotini, Serres and Trikala there are lessons dealing with physiology of exercise and the systematic training in patients with chronic diseases (heart, respiratory and renal failure, as well as metabolic syndromes). At least in two Departments of Physical Education and Sport Science of the country, practical exercise of the students of specialties in "Exercise and Health" is carried out in hospitals and therapeutic units for patients with chronic diseases, applying programs of therapeutic exercise in patients. In the Institution of Physical Performance and Rehabilitation (IPPR) of the Centre for Research and Technology Thessaly (CERETETH), a laboratory of Clinical Exercise Physiology has developed, that exclusively deals with programs of therapeutic exercise in

clinical populations. Moreover, both in university and private clinics of the country, there are programs of therapeutic exercise (aerobic or with resistance) for patients with chronic diseases, such as in the A' Respiratory Clinic of the University of Athens, where it operates a Unit of Respiratory Rehabilitation (<http://www.appc.gr/index/units/apokatastasi>)

#### *4. Aims of the establishment of the special interest group*

According to the constitution of the Society and the means of accomplishment of the Society's aim, the aims of the establishment of the special interest group in clinical exercise physiology are listed below:

- a) To establish the appropriate conditions for fruitful discussions in exercise and health topics and to promote the field of Clinical Exercise Physiology.
- b) To formulate scientific position statements in issues related to therapeutic applications of exercise in Greece.
- c) To formulate new research techniques and methodological approaches in studies related to clinical exercise physiology.
- d) To contribute in the establishment of lessons of clinical exercise physiology in postgraduate programs and to the organization and functioning of postgraduate programs specialized in clinical exercise physiology.
- e) To organize as part of the annual conference of the Society, educational workshops and to teach techniques and methods of exercising patients in young scientists.

#### *5. The first steps for the establishment of such a group*

The first steps are positive, if we consider that 8 out of the 23 abstracts (35%) in the current conference were focused in topics of clinical exercise physiology. Moreover, encouraging is the fact that a significant part of the members of the Society is scientifically occupied with the objective of clinical exercise physiology and that there is also increment in the associate members who show strong interest in the perspective of applying exercise as a therapeutic tool. This last point seems to have wide in students of the Departments of Physical Education and Sport Science and of other Departments, that look for new perspectives in the field of patients' treatment.

#### *6. Need for the constitution of the special interest group*

The quality of life consists basic concern for human in all developed societies. There is a consistent effort regarding the better treatment of chronic diseases in order the quality of patient's life to maintain in satisfactory level. The aim is not only the improvement but also the maintenance of the existing situation, given the fact that the patients with chronic diseases are under an overall declining process. This is reflected to the increase of the rehabilitation centers for chronic diseases and to the increasingly greater awareness in issues regarding the health and the disease. The area of clinical exercise physiologist consists an essential tool that can benefit the patients with chronic diseases through programs of therapeutic exercise in rehabilitation centers, improving their quality of life. For that reason the better organization through a special interest group of scientists that deal with issues of clinical exercise physiology and a space where one will be able to share opinions and experiences, is considered necessary.

#### *7. International bodies that deal with the objective*

The American College of Sports Medicine (ACSM). Consists the largest organization of health sciences worldwide with more than 20.000 members in USA and worldwide in total. It provides certificate for the specialty of Clinical Exercise Physiologist after exams and completion of specific teaching hours.

[http://www.acsm.org/AM/Template.cfm?Section=ACSM\\_Registered\\_Clinical\\_Exercise\\_Physiologist](http://www.acsm.org/AM/Template.cfm?Section=ACSM_Registered_Clinical_Exercise_Physiologist)

Clinical Exercise Physiology Association (CEPA).

This association constitutes a supplemental body of knowledge and support of the science of Clinical Exercise Physiology of the American College of Sports Medicine. CEPA is an autonomic body, however it works under the American College of Sports Medicine's support. Its aim is to promote the knowledge and progress of the science of Clinical Exercise Physiology for the improvement of the quality of life of patients with chronic diseases.

<http://www.acsm-cepa.org/i4a/pages/index.cfm?pageid=1>

The British Association of Sport and Exercise Sciences. In its official website there is information related to the area of Clinical Exercise Physiology and an interesting forum for discussion and seeking of answers in questions related to the area of Clinical Exercise Physiology.

<http://www.bases.org.uk/Clinical-Exercise-Physiology>

The Center of Exercise Physiology online works aiming at the providing of academic scholarships, professional knowledge and the development of forms of cooperation in the area of Exercise Physiology. Its aim is the support of the professionals exercise physiologists in USA, as well as worldwide. Moreover, in this website there is online publication of the scientific e-magazine of professionals of exercise physiology for free.

[http://www.exercisephysiologists.com/\\_\\_\\_](http://www.exercisephysiologists.com/)