

MINISTRY OF EDUCATION AND RESEARCH
"BABEȘ-BOLYAI" UNIVERSITY OF CLUJ-NAPOCA
INSTITUTE OF DOCTORAL STUDIES
FIELD: SPORT SCIENCE AND PHYSICAL EDUCATION

**SPORTS SCIENCE AND HUMAN MOTOR SKILLS –
FROM INTERDISCIPLINARITY TO PRACTICE
THROUGH RESEARCH**

Candidate: Associate Professor Dr. Maria Cristina MAN

"1 Decembrie 1918" University of Alba Iulia

CLUJ NAPOCA

2025

SUMMARY OF THE HABILITATION THESIS

The habilitation thesis entitled “*SPORTS SCIENCE AND HUMAN MOTOR SKILLS – FROM INTERDISCIPLINARITY TO PRACTICE THROUGH RESEARCH*” was developed in the broader context of the field of Sports Science and Physical Education and reflects the scientific, professional, and academic activity carried out since 2015, the year I obtained the title of Doctor in Physical Education and Sports, with the thesis “*Contributions to optimizing training in athletics – the mountain running event – through the influence of altitude training.*”

The structure of the habilitation thesis includes three main parts: scientific, professional, and academic achievements; career development plans; and the bibliographic references used. The first part details the most significant achievements after obtaining the doctoral title, grouped into three essential areas (scientific, professional, and academic), all aimed at developing the fields of physical education, sports performance, and human motor science. These contributions highlight a constant concern for promoting interdisciplinarity and innovation in university physical education and competitive sports activities.

The second part presents the career development plan across the three dimensions: academic, scientific, and professional. The third part is dedicated to the bibliography, which supports the entire scientific approach and reflects the complexity and depth of the theoretical and applied frameworks underlying the presented contributions.

SCIENTIFIC, PROFESSIONAL, AND ACADEMIC ACHIEVEMENTS

➤ *Doctoral Thesis*

The thesis titled “*Contributions to optimizing training in athletics – the mountain running event – through the influence of altitude training*” was publicly defended in 2015, within IOSUD – “Babeş-Bolyai” University of Cluj-Napoca, Faculty of Physical Education and Sports, receiving the doctoral diploma (O.M.E.C.Ş Series J no. 0012994 based on ministerial order no. 4643 of 30.07.2015).

➤ *Postdoctoral Research Activity*

Since 2015, following the completion of my doctoral studies at “Babeş-Bolyai” University, I have conducted research at “1 Decembrie 1918” University of Alba Iulia, Faculty of Physical Education and Sports. The research focused primarily on the relationship between sports performance, motor skill optimization, and the impact of targeted interventions on the harmonious development of the human body. The research was applied both in performance

Maria Cristina Man

Sports science and human motor skills – from interdisciplinarity to practice through research

sports and in educational settings to support balanced physical development. Results materialized in scientific publications, academic presentations, implemented motor programs, and integration of findings into teaching activities.

I served as grant director in a European project (*Digitization and Research – European Athletics*), was a member of two CNFIS-FDI projects, and received international recognition through 30 citations in Web of Science-indexed journals. Editorial activity includes 6 ISI articles with $IF \geq p$, 3 books published in A2-ranked publishers, 2 book chapters in A1-ranked publishers, and 10 articles in international journals. Research dissemination was achieved through conferences, workshops, and scientific symposia.

Professionally, I contributed to organizing 9 conferences (4 international, 5 national), including as keynote speaker. I published articles in renowned journals (*Frontiers in Nutrition*, *IJERPH*, *BRAIN*), conducted training sessions for coaches, developed teaching materials, and held leadership roles in national and international organizations (Vice President of the Romanian Athletics Federation, Balkan Athletics Association). I also coordinated institutional research projects, evaluated doctoral theses, and participated in national commissions (National Olympiad in Theoretical Sports Training). I contributed to curriculum development by publishing teaching materials and introducing new subjects into the bachelor's and master's programs of the Faculty of Law and Social Sciences – Department of Physical Education and Sports, “1 Decembrie 1918” University of Alba Iulia.

As a coach, I have guided athletes to win medals nationally and internationally, using scientifically validated and innovative training methods.

CAREER DEVELOPMENT PLANS

Professional, scientific, and academic development plans are grounded in over 10 years of university teaching experience and 25 years of performance sports activity within the “Mica Romă” Blaj Sports Club and the Alba County Athletics Association. This dual expertise – both theoretical and practical – has shaped a complex professional profile oriented toward performance, innovation, and knowledge transfer in sports education.

Teaching activities will continue to focus on modern, interactive methods aligned with contemporary educational demands. Key objectives include active student engagement, the development of critical thinking, and expanding international collaboration.

Scientific activity will be enhanced through participation in interdisciplinary research projects, studies on technology in sports, and publications in high-impact journals. National and international conferences will be organized, and new research directions in related fields will be promoted.

Maria Cristina Man

Sports science and human motor skills – from interdisciplinarity to practice
through research

Institutionally, the vision includes attracting external funding, increasing international visibility of research, and fostering a performance- and mentorship-oriented academic culture.

This thesis validates a professional and academic trajectory shaped by rigorous research, quality education, and dedicated involvement in performance sports. The proposed vision supports the modernization and internationalization of the field of Sports Science and Physical Education, significantly contributing to its development in Romania and beyond.