

# CURRICULUM VITAE of LIDA MADEMLI

## PERSONAL DATA

---

Name: Lida Mademli  
Place of birth: Thessaloniki / Greece  
Tel. work: +30 2310 991061  
e-mail: [lmademli@phed-sr.auth.gr](mailto:lmademli@phed-sr.auth.gr)  
Position: Assistant Professor on Motion Analysis in Ageing,

## SUMMARY

---

Dr. Mademli is Assistant Professor in “Motion analysis in aging” at the Faculty of Physical Education & Sport Sciences of the Aristotle University of Thessaloniki, Greece. In 2007, she earned her PhD in Biomechanics from Sport University Cologne, Germany, while she received the “Toyota-Prize” award for the best doctoral dissertation completed in the Sport University Cologne for that year. In the past, she has also worked as research assistant at CERTH-ITI, participating in EU-funded projects. Her research interests include movement and exercise in senescence, balance control and fall prevention in aging, focusing in the analysis of dynamic stability control and the adaptation of neuromechanical properties of the musculoskeletal system in ageing and fatigue. Her involvement in these areas has led to the co-authoring of scientific publications in peer-reviewed journals, book and encyclopedia chapters that have received more than 500 citations, and more than 30 publications in peer-reviewed conference proceedings; from the latter, she has received three young investigator awards. She is reviewer for 8 journals, e.g. Journal of Biomechanics, Gait and Posture, PlosOne, etc.

## EDUCATION

---

10/1997-06/2002: University studies at the School of Physical Education and Sports Sciences of Aristotle University of Thessaloniki.  
06/2002: Diploma: 8,75 (first-class honour degree)  
10/2002-12/2007: Post graduate studies at the Institute of Biomechanics and Orthopaedics of the Sport University, Cologne.  
12/2007: Doctorate title: PhD in Biomechanics. Grade: Excellent (summa cum laude).  
Doctoral thesis: “Age related effects of muscle fatigue on the neuromuscular properties of the human system: consequences on dynamic stability control after sudden perturbations”.

## TEACHING ACTIVITIES (2011-PRESENT)

---

Indicative courses in the **Undergraduate** Studies Programme

- Exercise in Senescence (specialisation course)
- Exercise and Ageing (course of choice)
- Neuromuscular adaptations – Movement Analysis
- Gait Analysis
- Biomechanics
- Evaluation and analysis of muscle strength and power

Indicative teaching participation at courses in the **Postgraduate** Studies Programme

- Physical Activity and Exercise Programmes in Senescence, at Interdepartmental Master Graduate Program entitled "Human Performance and Health" of AUTH
- Muscular tissue adaptations, at Interdepartmental Master Graduate Program entitled "Human Performance and Health" of AUTH
- Neuromuscular adaptations and training control, at Interdepartmental Master Graduate Program entitled "Human Performance and Health" of AUTH

## **PARTICIPATION IN FUNDED RESEARCH PROJECTS**

---

- 2017: **German-Greek partnership to promote research and education in biomechanics and motor control related to aging**, a 3 year duration project funded by DAAD (German Academic Exchange Service)
- 2012: **Tendon plasticity in response to cyclic loading in senescence**, in frame of "1<sup>st</sup> ACTION: Supporting young researcher in rank of Lecturer" funded by the Research Committee of Aristotle University of Thessaloniki (Coordinator)
- 2008: **Unobtrusive Authentication Using ACTivity Related and Soft BIometrics (ACTIBIO)**, a three year Specific Target Research Project funded by the European Commission in frame of FP7- Information & Communication Technologies

## **INDICATIVE LIST OF PUBLICATIONS**

---

### **Peer reviewed journals**

1. SOTIRAKIS, H., HATZITAKI, V., MUNOZ-MARTEL, V., **MADEMLI, L.**, ARAMPATZIS, A. (2019) Center of pressure feedback modulates the entrainment of voluntary sway to the motion of a visual target. *Applied Sciences* (Switzerland) 9(19),3952
2. SOTIRAKIS, H., KYVELIDOU, A., **MADEMLI, L.**, STERGIU, N., HATZITAKI, V., (2016). Aging affects postural tracking of complex visual motion cues. *Experimental Brain Research* Sep; 234(9): 2529–2540
3. BOHM, S., **MADEMLI, L.**, MERSMANN, F., ARAMPATZIS, A. (2015). Predictive and Reactive Locomotor Adaptability in Healthy Elderly: A Systematic Review and Meta-Analysis. *Sports Medicine* Dec;45(12):1759-77
4. **MADEMLI L.**, ARAMPATZIS A. (2014). Old adults move with lower safety factor when walking at preferred velocity. *AGE, The official Journal of the American Aging Association*. Jun; 36(3): 9636
5. KELLIS, E., **MADEMLI, L.**, PATIKAS, D., KOFOTOLIS, N. (2014). Neuromuscular interactions around the knee in children, adults and elderly. *World Journal of Orthopaedics* Sep 18;5(4):469-85
6. THEODOROU A., PANAYIOTOU G., PASCHALIS V., NIKOLAIDIS MG., KYPAROS A., **MADEMLI L.**, GRIVAS GV., VRABAS IS. (2013). Stair descending exercise increases muscle strength in elderly males with chronic heart failure, *BMC Research Notes* 6:87
7. ULLRICH A., **MADEMLI L.**, ARAMPATZIS A. (2009). Effects of submaximal and maximal long-lasting contractions on the compliance of vastus lateralis tendon and aponeurosis in vivo. *Journal of Electromyography and Kinesiology* 19: 476–483
8. **MADEMLI L.**, ARAMPATZIS A. (2008). Mechanical and morphological properties of the triceps surae muscle-tendon unit in old and young adults and their interaction with a submaximal fatiguing contraction. *Journal of Electromyography and Kinesiology* 18: 89-98.

## Invited papers

17. LICHTWARK GA., CRESSWELL AG., KER RF., REEVES ND., MAGANARIS CN., MAGNUSSON SP., SVENSSON RB., COUPE C., HERSHENHAN A., ELIASSON P., NORDEZ A., FOURÉ A., CORNU C., ARAMPATZIS A., MOREY-KLAPSING G., **MADEMLI L.**, KARAMANIDIS K., VAGULA MC., NELATURY SR. (2013). Commentaries on Viewpoint: On the hysteresis in the human Achilles tendon. *Journal of Applied Physiology* 114 (4):518-520. doi:10.1152/jappphysiol.01525.2012 (Invited letter to the Editor)
18. ARAMPATZIS A., KARAMANIDIS K., **MADEMLI L.**, ALBRACHT K. (2009). Plasticity of the Human Tendon to Short- and Long-Term Mechanical Loading. *Exercise & Sport Sciences Reviews*. 37(2):66-72 (Invited review paper)
19. ARAMPATZIS A., **MADEMLI L.** (2012), Tendon in Encyclopedia of Exercise Medicine in Health and Disease, Frank C. Mooren (ed.), DOI 10.1007/978-3-540-29807-6, © Springer-Verlag Berlin Heidelberg, p. 843-849 (Chapter in Encyclopedia)

## Book chapters (invited)

20. **MADEMLI L.**, MOREY, G., (2015), *La marcha humana y la Carrera (Human gait)* in BIOMECÁNICA BÁSICA, Aplicada a la actividad física y el deporte, Perez Soriano, P. & Llana Belloch, S. (ed.), ISBN:978-84-9910-180-4. BIC: WSD, Editorial Paidotribo, Les Guixeres, Badalona (España) P. 401-423
21. MOREY, G., **MADEMLI L.** (2015), *Dinámica (Dynamic analysis)* in BIOMECÁNICA BÁSICA, Aplicada a la actividad física y el deporte, Perez Soriano, P. & Llana Belloch, S. (ed.), ISBN:978-84-9910-180-4. BIC: WSD, Editorial Paidotribo, Les Guixeres, Badalona (España). P. 131-148
22. MOREY, G., **MADEMLI L.** (2015), *El calzado deportivo (The sport shoe)* in BIOMECÁNICA BÁSICA, Aplicada a la actividad física y el deporte, Perez Soriano, P. & Llana Belloch, S. (ed.), ISBN:978-84-9910-180-4. BIC: WSD, Editorial Paidotribo, Les Guixeres, Badalona (España). P 351-362

## Indicative publications in conference proceedings:

1. ZOGRAFOS-MANOS A, GEORGIADOU A, GROUIOS G, HATZITAKI V, **MADEMLI L.** (2019) The effect of anthropometric characteristics on stability limits during anteroposterior sway at three different frequencies. 27<sup>TH</sup> INTERNATIONAL CONGRESS ON PHYSICAL EDUCATION & SPORT SCIENCE, 10-12 MAY, KOMOTINI
2. GEORGIADOU A, ZOGRAFOS-MANOS A, GROUIOS G, HATZITAKI V, **MADEMLI L.** (2019) The effect of anthropometric characteristics on static balance and stability limits. 27<sup>TH</sup>. INTERNATIONAL CONGRESS ON PHYSICAL EDUCATION & SPORT SCIENCE, 10-12 MAY, KOMOTINI
3. ΠΑΠΑΒΑΣΙΛΕΙΟΥ Α., ΜΠΑΣΑ Ε., ΧΑΤΖΗΤΑΚΗ Β., **ΜΑΔΕΜΛΗ Α.**, ΠΑΤΙΚΑΣ Δ. (2019). Αξιολόγηση σταθερότητας σε δίσκο ισορροπίας: μεταβλητότητα δεικτών του κέντρου πίεσης, 3ο Διεθνές Συνέδριο Αθλητικών Επιστημών Φυσικής Αγωγής και Αθλητισμού ΣΕΦΑΑ ΑΠΘ, 1—3 Μαρτίου Θεσσαλονίκη.
4. MAVRIDI D., EKIZOS2 A., SANTUZ A., **MADEMLI L.** (2018). The effect of surface type on visually guided postural tracking of motion cues with different complexity, 8th congress of Greek Society of Biomechanics (ELEMBO), 1-2 September, Thessaloniki
5. NIKOLAKOUDI F., **MADEMLI L.**, (2015). Analysing the effect of asymmetric training on muscle architecture and force production capacity of the plantar flexors muscles. In Proceedings of Oral Presentations of the 23rd International Congress of Physical Education & Sport, 15-17 May, Komotini, Greece
6. **MADEMLI L.**, ARAMPATZIS A., (2014), Lower safety factor for old adults during walking at preferred velocity. In: Proceedings of the 19th Annual Congress of the ECSS, July, Amsterdam, Netherlands
7. **MADEMLI L.**, (2011) Άσκηση και αποφυγή πτώσεων στην τρίτη ηλικία. Συνέδριο Αθλητικής Επιστήμης, Έρευνα και εφαρμογές στην Αθλητική Επιστήμη, Athens. (invited).
8. KARAMANIDIS K., **MADEMLI L.**, ARAMPATZIS A., (2010), Muscle weakness and dynamic stability control after forward falls in the elderly. In: Proceedings of the 6<sup>th</sup> World Congress on Biomechanics (WCB) 2010, August, Singapore, Asia – Singapore. (invited).