

Nahid Tafti

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EDUCATION

- 2013 - 2018** **Ph.D.** in Prosthetics and Orthotics, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran,
- 2010 - 2013** **MSc** in Prosthetics and Orthotics, University of Social Welfare and Rehabilitation Science, Tehran, Iran,
- 2006 - 2010** **BSc** in Prosthetics and Orthotics, Isfahan University of Medical Sciences, Isfahan, Iran,

CAREER SUMMARY

- 2016-2017** *Bayat Orthotics and Prosthetic Centre, Tehran, Iran (Part time)*
- 2018- Current** Prothetics and Orthotics Department, Hamadan University of Medical Sciences, Hamadan, Iran (*Full time*)

AFFILIATIONS AND MEMBERSHIPS

- 2015 - 2018** Member of Student Research Committee of University of Social Welfare and Rehabilitation Science, Tehran, Iran,
- 2018- CURRENT** Assistant Professor, Prothetics and Orthotics Department, Hamadan University of Medical Sciences, Hamadan, Iran

KEY ACHIEVEMENTS

- level 3 of innovation from Presidency of Islamic Republic of Iran National Elites Foundation

TEACHING EXPERIENCES

2018 – Current

- Lecturer: Department of Orthotics & Prosthetics, Hamadan University of Medical Sciences, Hamadan, Iran

RESEARCH

Research Interests:

- Application of Emerging Technologies in Prosthetics and Orthotics
- Diabetic foot care
- Evidence-Based Practice

Paper Publications:

- Hemmati F, Tafti N*, Nourouzi E, Turk SB, Karimi MT, Sharifmoradi K, et al. *Custom-Made Ethyl Vinyl Acetate Insoles with Arch Support Could Improve Static Balance in Diabetic Women with Neuropathic Foot*. Journal of the American Podiatric Medical Association. 2023;113(3).
- Norouzi E, Bagheri M, Alafchi B, Tafti N*. *Analyzing the Effect of Varus Forefoot Wedge in Addition to Arch Support on Self-Reported Pain, Function, and Quality of Life in Patients with Moderate Hallux Valgus: A Pilot Study*. JPO: Journal of Prosthetics and Orthotics. 2022.
- Seddighi M, Anbarian M, Tafti N. *The immediate effect of custom made insole on electeromyographuc activity of selected muscles of shin in obese children during walking*. Journal of Research in Exercise Rehabilitation. 2021;9(17):1-10.
- Ghadikolae MS, Sharifmoradi K, Karimi MT, Tafti N*. *Evaluation of a functional brace in acl-deficient subjects measuring ground reaction forces and contact pressure: A pilot study*. JPO: Journal of Prosthetics and Orthotics. 2020;32(2):142-8.

- Norouzi E, Bagheri M, Bani MA, Tafti N. *Comparison of the Effect of Custom-made Medial Arch Support Insole with and without Medial Sole Wedge on the Degree of Pain and Hallux Valgus by Digital Imaging Immediately and after Six Weeks of Use*. Arch Pharma Pract. 2020;11(S1):79-84
- Tafti N, Karimlou M, Mardani MA, Jafarpisheh AS, Aminian GR, Safari R. *Development and preliminary evaluation of a new anatomically based prosthetic alignment method for below-knee prosthesis*. Assistive Technology. 2020;32(1):38-46
- Tafti, N., Hemmati, F., Safari, R., Karimi, M. T., Farmani, F., Khalaf, A., & Mardani, M. A. (2018). *A systematic review of variables used to assess clinically acceptable alignment of unilateral transtibial amputees in the literature*. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 232(8), 826-840.
- Tafti, N., Turk, S. B., Hemmati, F., Norouzi, E., Sharifmoradi, K., Karimi, M. T., & Kashani, R. V. (2018). *Effect of wearing insole with different density on standing and walking plantar pressure distribution*. Journal of Mechanics in Medicine and Biology, 1950006.
- Safari, M. R. *, Tafti, N., Aminian, G., (2015). *"Socket Interface Pressure and Amputee Reported Outcomes for Comfortable and Uncomfortable Conditions of Patellar Tendon Bearing Socket: A Pilot Study"*. Assistive Technology, 27(1); 24-31
- Safari, M. R., Tafti, N. *, Soltani, R., (2013). *"Effect of "bad" and "good" socket fit on functional capability of below knee amputees"* Iranian Journal of War and Public Health, 5 (4) :51-60
- Tafti, N., Aminian, G., Soltani, R., Safari, M. R. *, (2013). *"Examining the effects of "bad" and "good" fitting conditions supracondylar PTB socket on interface pressure and comfort of unilateral transtibial amputees: Case Study"*. Iranian Journal of War and Public Health, 5(2); 46-56

Book Publication:

- *Content Compilation:* Tafti, N. (2015). Upper Limb Kinesiology. Tehran, Ghalam Elm.
- *Translation:* Tafti, N. and M. J. Nouri (2022). Biomechanics of lower limb prosthetics. Isfahan, Farhang Pajohan Danesh.

Presentations:

- Tafti N, Safari R, *The determinant factors affecting stump-socket interface pressure amount and distribution*. 10th National Iranian Congress of Orthotics and Prosthetics; 2012; Tehran: Iranian Scientific Association for Orthotics & Prosthetics (ISAOP).
- Tafti N, Safari R, Aminian GR, Rezasoltani P, *Socket Interface Pressure and Amputee Reported Outcomes for Comfortable and Uncomfortable Conditions of Patellar Tendon Bearing Socket: A Pilot Study*. 11th National Iranian Congress of Orthotics and Prosthetics; 2013; Tehran: Iranian Scientific Association for Orthotics & Prosthetics (ISAOP).
- Tafti N, *Prosthetics and orthotics intervention based on ICF model*. 1st International and 12th National Iranian Congress of Orthotics and Prosthetics; 2016; Tehran: Iranian Scientific Association for Orthotics & Prosthetics (ISAOP).
- Tafti N, Safari R, Mardani MA, Aminian GR, Karimlou M, *Application of Lower Limb Anatomical Landmarks for Quantification of Optimum Unilateral Transtibial Prosthetic Alignment* 1st International and 12th National Iranian Congress of Orthotics and Prosthetics; 2016; Tehran: Iranian Scientific Association for Orthotics & Prosthetics (ISAOP)
- Tafti N, Ghadikolaee MS, Sharifmoradi K, Karimi MT. *Evaluation of a functional brace in ACL-deficient subjects measuring ground reaction forces and contact pressure: A pilot study*. In: Sadeghi E, editor. 2nd international and 13th Iranian Congress of Orthotics and Prosthetics; Isfahan 2019

- Tafti N, Turk SB, Hemmati F, Norouzi E, Sharifmorad K, Karimi MT, et al. *Effect of wearing insole with different density on standing and walking plantar pressure distribution*. In: Sadeghi E, editor. 2nd international and 13th Iranian Congress of Orthotics and Prosthetics; Isfahan2019.
- Tafti N. *Rehabilitation of Patients with Multiple Sclerosis by Means of Neuroprostheses: the New Insights*. In: Rasa AR, editor. 4th Avicenna Congress of Neurorehabilitation2020.
- Tafti N, Safari R, Karimlou M, Mardani M, Aminian G. *Development and preliminary evaluation of a new anatomically based prosthetic alignment method for below-knee prosthesis*. 23th annual congress of physical medicine and electro diagnosis2020.

External Grants:

- Nahid Tafti (Principle Investigator), Mohammad Reza Safari (Co-investigator), Student Research Committee of University at Social Welfare and Rehabilitation Science, “*Analyzing the Effects of Perceived Good and Poor Fit of PTB Socket on Locomotion Capability Index in Unilateral Below Knee Amputees*”,
- Reza Vahab Kashani (Principle Investigator), Nahid Tafti (Co-investigator), Deputy of Research and Technology at University of Social Welfare and Rehabilitation Science, “*Analyzing the effects of two pairs of insoles with different densities on standing balance and plantar pressure of diabetes*”
- Nahid Tafti (Principle Investigator), Deputy of Research and Technology, Hamadan University of Medical Sciences, “*Evaluation of method and systems for prosthetic alignment: A systematic review*”
- Nahid Tafti (Principle Investigator), Deputy of Research and Technology, Hamadan University of Medical Sciences, “*Evaluation of the proper characteristics of gait initiation in unilateral transtibial amputees: A systematic review*”
- Nahid Tafti (Principle Investigator), Deputy of Research and Technology, Hamadan University of Medical Sciences, “*Design and production of the lace up neoprene sock for wearing medical insole*”
- Nahid Tafti (Principle Investigator), Deputy of Research and Technology, Hamadan University of Medical Sciences, “*Investigating the effect of entrepreneurship training on the employment rate of rehabilitation bachelor's graduates in the Hamadan Rehabilitation Faculty*”
- Nahid Tafti (Principle Investigator), Deputy of Research and Technology, Hamadan University of Medical Sciences, “*The automation machine for the production of hospital specific splints with a mechanical scanning mechanism*”
- Nahid Tafti (Principle Investigator), Deputy of Research and Technology, Hamadan University of Medical Sciences, “*Evaluating The immediate Effect of Using Two density Insoles with Lateral Wedge Embedded inside a Novel Neoprene Sock on Pain, Quality of Life, and Biomechanical Parameters of the Knee Joint During walking in the Elderly with Medial Compartment Knee Osteoarthritis*”
- Ensieh Pourhoseingholi (Principle Investigator), Nahid Tafti (co-investigator), Deputy of Research and Technology, Hamadan University of Medical Sciences, “*Comparison the efficacy of newly designed hinged Ankle Foot Orthosis with solid Ankle Foot Orthosis on center of mass fluctuation in hemiplegic Cerebral Palsy patients*”
- Ensieh Pourhoseingholi (Principle Investigator), Nahid Tafti (co-investigator), Deputy of Research and Technology, Hamadan University of Medical Sciences, “*Investigating the efficacy of new articulated AFO on biomechanical parameters in gait of multiple sclerosis*”

Student supervisions:

- Sajad Bayat Tork, MSc, Co-supervisor, “*Comparison the effect of foot orthosis fabricated with 2 methods of CAD-CAM and hand casting on plantar pressure distribution in patients with type 2 diabetes*”, 2018
- Ehsan Norouzi, MSc, Co-supervisor, “*Comparing the effects of custom made insoles with medial arch support, with and without the medial sole wedge on pain intensity and the amount of hallux valgus deformity by means of digital photography immediately and after six weeks of usage*”, 2019
- Amir Reza Seddighi, PhD, Co-supervisor, “*The longtime effect of using custom made insole on comfort level and plantar pressure characteristics of obese children during walking and running*”, 2021
- Ehsan Ebrahimipour, PhD, Co-supervisor, “*The acute effect of using lateral wedge insoles socks on pain and some biomechanical parameters during stair negotiation in the elderly with knee osteoarthritis*”, 2023

Patent:

- Tafti N, kelayeh MRS, Mardani MA, Jafarpisheh AS, Karimlou M, Aminian G, inventors; *laser instrument for prosthetic alignment with respect to anatomical landmarks*. Iran patent 91256. 2017.
- Tafti N, kelayeh MRS, Mardani MA, Jafarpisheh AS, Karimlou M, Aminian G, inventors; *laser instrument to examining horizontal level of ASIS landmarks*. Iran patent 92149. 2017.
- Norouzi, E., & Tafti, N. (2018). Iran Patent No.: A. B. 3/00.
- Norouzi, E., Turk, S. B., Firouzabadi, M. D., & Tafti, N. (2018). Iran Patent No.: A. F. 5/01.
- Tafti, N., Turk, S. B., & Norouzi, E. (2018). Iran Patent No.: A61F.
- Tafti N, Kelayeh MRS, Mardani MA, Jafarpisheh AS, Karimlou M, Aminian GR, inventors *Method and system for aligning a prosthetic device*. USA2020
- Kiani A, Tafti N, inventors *Graded knee extension joint*. Iran2021.

SKILLS

IT skills: MS office including Word, Excel, PowerPoint, Publisher; SPSS, EndNote,
Languages: Farsi (native), English (intermediate)
