

Roya Ravanbod

Education : BSc in Physiotherapy    Shahid Beheshti University, Faculty  
of Rehabilitation Sciences

MSc in Physiotherapy    Tarbiat Modares University, Faculty  
of Medical Sciences

PhD in Physiotherapy    Tarbiat Modares Medical University,  
Faculty of Medical Sciences

Postdoctoral Fellow of Physiotherapy, Tarbiat Modares University, Faculty of  
Medical Sciences, 2012-2014. Supervisor: Prof G. Giti Torkaman

Assistant Professor, Department of Physiotherapy, Faculty of Medical Sciences,  
Tarbiat Modares University, January 2014-now.

-Certified Kinesio Taping International Instructor, CKTI. Kinesio taping  
association international

**Award:** 10<sup>th</sup> Razi Research Festival on the Medical Sciences, Ministry of Health  
and Medical Education, Undersecretary for Research and Technology, The  
winner of the Best MSc Dissertation in Rehabilitation Sciences, Supervisor: Prof  
Giti Torkaman, Tehran, Iran, December 29, 2004

**Invention:** Joint Friction Assessment System, (JFAS), Registered by: Deeds and  
Properties Registration Organization of Iran. Registration Office for Companies  
and Industrial Property. Code: 65127-Date: 6.13.2010  
Iranian Research Organization for Science and Technology. Code: 415/000236-  
Date: 01.23.2011

Fellowship: Royal Free Hospital, *NHS* foundation Trust, Katherine Dormandy  
Haemophilia and Thrombosis Centre, London, United Kingdom, August-  
September 2003

-15 years,10 months of clinical experience in physiotherapy, 13 years,10  
months in a comprehensive haemophilia care center

## Publications

- 1- Effect of ergometric exercise on F-VIII coagulant activity in mild and moderate hemophilia-A. R.Ravanbod , G.Torkaman , M.R. Baghaipoor , F. NAD'Ali ,Iraninan Journal of Physiology and pharmacology, 2003-2004;7(2).
- 2- Effect of aerobic training on F-VIII activity in healthy young men . Rezaian ZS , Torkaman G , Nad-Ali F , Ravanbod R , et al . Iraninan Journal of Physiology and Pharmacology .10(1),1385
- 3- Effect of physical fitness on the coagulant activity of healthy young men. Z Rezaeian , G Torkaman , R Ravanbod , AA Pourfathollah. Pakistan Journal of Biological Sciences ;9(11):2032-2039 , 2006 .
- 4- Effects of ergometric exercise on F-VIII coagulant activity in mild and moderate haemophilia-A :A chance to reduce injective replacement therapy. R Ravanbod , G Torkaman , MR Baghaipoor ,F Nad-Ali . Pakistan Journal of Biological Sciences 9(15):1823-1827 , 2006
- 5- The measurement of rabbit's knee friction with a pendulum friction tester. Modares Journal of Medical Sciences, Volume 13, Number 1, Page 57-67 (11), January 2010
- 6- Short term effect of ACLT on knee joint biomechanics. Zahra Sadat Rezaeian, Giti Torkaman, Ali Esteki, Roya Ravanbod. 19th Annual Meeting of European Orthopedics researchSociety,Sep,2011.
- 7- Effects of low power laser therapy on articular cartilage biomechanics in an experimental model of osteoarthritis. Zahra Sadat Rezaeian, Giti Torkaman, Ali Esteki, Alireza Sabbaghian, Roya Ravanbod. Osteoarthritis Cartilage, 2011;19(1): S53–S236.
- 8-The effect of anterior cruciate ligament transection on biomechanical and histological properties of knee articular cartilage in rabbit. Zahra Sadat Rezaeian, Giti Torkaman, Alireza Sabbaghian, Roya Ravanbod. JRRS, 2012;8(2):17-26.

9- Biotribological and Biomechanical Changes after Experimental Haemarthrosis in the Rabbit Knee. Ravanbod R, Torkaman G, Esteki A. Haemophilia Journal. Haemophilia 2011;17:124-133

10- Comparison between pulsed ultrasound and low level laser therapy on experimental haemarthrosis. Ravanbod R, Torkaman G, Esteki A. Haemophilia 2013;19(3):420-425

11- ویژگی‌های بیومکانیکی غضروف مفصلی تیبیا در مدل تجربی استئوآرتریت خرگوش. زهرا سادات رضائیان، گیتی ترکمان، علیرضا صباغیان، علی استکی، رویا روانبد، معصومه دادپی. پژوهش در علوم توانبخشی، دوره ۸ شماره ۲، ۱۳۹۱

12- تاثیر تمرینات مقاومتی با و بدون تحریکات الکترومغناطیس پالسی بر کلسیم، فسفر و آلکالن فسفاتاز تام و کورتیزول در بیماران هموفیلی شدید استئوپروتیک. بهروز پرهام پور، گیتی ترکمان، حمید هورفر، مهدی هدایتی، رویا روانبد. فصلنامه پژوهشی خون، جلد ۱۰، شماره ۱- (بهار ۱۳۹۲)

13- تاثیر تمرینات مقاومتی با و بدون تحریکات الکترومغناطیس پالسی بر قدرت عضلانی و تعادل بیماران هموفیلی شدید A- بهروز پرهام پور، گیتی ترکمان، حمید هورفر، مهدی هدایتی، رویا روانبد. پژوهش در علوم توانبخشی، دوره ۹، شماره ۲: ۱۳۹۲

14- Effects of short-term resistance training and pulsed electromagnetic fields on bone metabolism and joint function in severe hemophilia A patients with osteoporosis: A randomized controlled trial. Behrouz Parhampour, Giti Torkaman, Hamid Horfar, Mehdi Hedayati, Roya ravanbod. Clinical Rehabilitation, 2014;28(5):440-50

15- Experimental study on the role of intra-articular injection of MSCs on cartilage regeneration in haemophilia. Ravanbod R, Torkaman G, Mophid M, Mohammadali F. Haemophilia, 2015;21(5):693-701

۱۶- تأثیر تمرینات مقاومتی در ویژگی‌های فیزیکی مفصل مبتلا به همارتروز. بهروز پرهام پور، گیتی ترکمان، حمید هورفر، مهدی هدایتی، رویا روانبد. مجله بیومکانیک ورزشی، آذر ۱۳۹۴، دوره ۱، شماره ۲، صفحه های ۱۴-۵.

17- Comparative repair capacity of knee osteochondral defects using regenerated silk fiber scaffolds and fibrin glue with/without autologous chondrocytes during 36 weeks in rabbit model. Somaieh Kazemnejad, Manijeh Khanmohammadi, Sahba Mobini, Masoud Taghizadeh-Jahed, Sayeh Khanjani, Shaghayegh Arasteh,

Hannaneh Golshahi, Giti Torkaman, Roya Ravanbod, Hamed Heidari-Vala, Ali Moshiri, Mohammad-Naghi Tahmasebi, Mohammad-Mehdi Akhondi. Cell Tissue Res, 2016;364(3):559-572

18- Health care resource utilization and cost of care for haemophilia A and B patients in Iran. Zahra Gharibnaseri, Majid Davari, Abdolmajid Cheraghali, Peyman Eshghi, Roya Ravanbod, Ramin Espandar, Razieh Hantooshzadeh. Transfusion and Apheresis Science ,2016;54(1):122-126

19- Episodic replacement of clotting factor concentrates does not prevent bleeding or musculoskeletal damage – the MUSFIH study. Poonnoose P, Carneiro JDA, Cruickshank AL, El Ekiaby M, Perez Bianco RP, Ozelo MC, De Bosch N, Baghaipour M, Tien SL, Chuansumrit A, D'Amico EA, van Zyl A, Sabour A, Candela M, Ricciardi JBS, Ruiz-Sàez A, Ravanbod R<sup>1</sup>, Lam JCL, Jaovisidha S, Kavitha ML, Gibikote S, Shyamkumar N, Srivastava A; MUSFIH Study group. Haemophilia, 2017; 23:538-546

20- Insights into cryotherapy and joint bleeding: cryotherapy and hemophilia. Roya Ravanbod, Giti Torkaman, Mehdi Hedayati, Mohammad Esmaeil Zandi Nezhad. Blood Coagulation and Fibrinolysis 2017; 28:514-520.

۲۱- ارزیابی شاخص های نوین نوسانات وضعیتی در بیماران مبتلا به استئوآرتریت زانو. سید مهدی محسنی پور ، رویا روانبد گیتی ترکمان، نوشین بیات. مجله دانشگاه علوم پزشکی بابل، دوره نوزدهم، شماره ۷، تیر ۱۳۹۶، صفحه ۴۹-۴۲

22- The effects of pulsed ultrasound on postural sway in women with knee osteoarthritis: A Randomized Clinical Trial. Seyed Mehdi Mohsenipour, Roya Ravanbod, Giti Torkaman, Noushin Bayat. Journal of Research in Rehabilitation Sciences,2018;14(1):40-47.

23- Health status and quality of life in patients with severe hemophilia A: A cross-sectional survey. Majid Davari, Zahra Gharibnaseri, Roya Ravanbod, Abolfazl Sadeghi. Hematology Reports, 2019;11(2):39-42.

24- The effects of six-week resistance, aerobic and combined exercises on the pro-inflammatory and anti-inflammatory markers in overweight patients with

moderate haemophilia A: A randomized controlled trial. Behrouz Parhampour, Mehdi Dadgoo, Behnoosh Vasaghi-Gharamaleki, Giti Torkaman, Roya Ravanbod, Iraj Mirzaii-Dizgah, Mohammad Reza Baghaipour, Seyed Hassan Sanei. *Haemophilia*, 2019;25:e256-e266.

25- Economic Analysis of an Ambulatory Care Service Delivery Model for Hemophilia a Patients; A Cost Minimization Study. *Journal of Pharmaceutical Research International*, 2019;31(6):1-6.

26- The Effectiveness of Dry Needling on Dimensions and Elastic Modulus of the Nasolabial Fold due to Aging Process: An Uncontrolled before-after Clinical Trial Study. *Journal of Research I Rehabilitation Sciences*, 2019;15(1):20-27.

27- Low-Level Laser Therapy for Patients with Subacromial Impingement Syndrome: A Literature Review. *Journal of Research in Rehabilitatin Sciences*, 2020;15(6):361-366.

28- Assessment of Lower Extremity Muscle Strength in Diabetic Peripheral Neuropathy Patients Measured by Handheld Dynamometer. *Health Education and Health Promotion*, 2020;8(4):203-208.

29- Effects of short-term aerobic, resistance and combined exercises on the lipid profiles and quality of life in overweight individuals with moderate hemophilia A: A randomized controlled trial. *Med J Islam Repub Iran*, 2021;1;35-70.

30- Comparison of low level and high power laser combined with kinesiology taping on shoulder function and musculoskeletal sonography parameters in subacromial impingement syndrome: a Randomized placebo-controlled trial. *Physiotherapy Theory and Practice*, 2021, doi.org/10.1080/09593985.2021.1934926.

31- Immediate effects of footwear with vibration applied to the swing phase of the gait cycle on dynamic balance in patients with diabetic peripheral neuropathy. *Journal of Biomechnics*, 2021;128:110710. <https://doi.org/10.1016/j.jbiomech.2021.110710>.

## Independent Coursework and Workshops

1-Scientific ethics and writing lecture series. Department of physical therapy, faculty of medical sciences, Tarbiat Modares University. 10th September, 2006 to 20th February, 2007.

2- How to set up and run a cardiac rehabilitation and exercise training program workshop. Accredited by European board for accreditation in cardiology (EBAC) for 12 hours of external CME credits. 2008, University hospital, Inselspital, Bern 2008, Switzerland

3-Advanced training programme in cardiac rehabilitation and exercise training. Accredited by European board for accreditation in cardiology (EBAC) for 12 hours of external CME credits. 2008, University hospital, Inselspital, Bern 2008 , Switzerland

4-Exercise rehabilitation and long term management of heart failure patients, Accredited by European board for accreditation in cardiology (EBAC) for 12 hours of external CME credits. 27-29 Oct, 2011. University hospital, Inselspital, Bern, Switzerland

5-Mesenchymal stem cells: Isolation, purification and differentiation workshop ,2012. Royan Institute, reproductive biomedicine & stem cell research centre, Tehran, Iran

6- Exercise rehabilitation and long term management of heart failure patients, Accredited by European board for accreditation in cardiology (EBAC) for 12 hours of external CME credits. 19-21 Sep, 2013. University hospital, Inselspital, Bern, Switzerland

7- ICRS Focus Meeting, The Knee. 3-4 July, 2014, FIFA Auditorium, Zurich, Switzerland.

8- Kinesio Taping Course, KT1 & KT2, Defined by Kinesio Taping Association International, 18-19 Sep, 2014, Isfahan, Iran.

9- Kinesio Taping Course, KT3. Defined by Kinesio Taping Association International, 20 Sep, 2014, Isfahan, Iran.

10- 2<sup>nd</sup> ICRS Summit Meeting, The Aging Cartilage. 14-17 January 2015, Zermatt, Switzerland.

11-Dry Needling Workshop. International Instructor: Dr Ghazi Sarhan, Tarbiat Modares University, 26-27 Feb, 2015, Tehran, Iran.

12- Musculoskeletal MRI for Physiotherapists. Tehran University of Medical Sciences, 15 June, 2015, Tehran, Iran.

13-ICRS Focus Meeting- Rehabilitation and Return to Sport. 18-19 September,2015, FIFA Auditorium, Zurich, Switzerland.

14-Kinesio Taping Course, KT1 & KT2. Defined by Kinesio Taping Association International, 18-19 Nov, 2015, Tarbiat Modares University, Tehran, Iran.

15-Advanced Dry Needling Workshop. International Instructor: Dr Ghazi Sarhan, 20 Nov, 2015, Tarbiat Modares University, Tehran, Iran.

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15- Postgraduate clinical education in manual therapy, Mulligan concept, cervical and upper quadrant. International instructor: Dr Hussain Nasser, 12-13 July, 2016, Tarbiat Modares University, Tehran, Iran.

16- Postgraduate clinical education in manual therapy, Mulligan concept, lumbar and lower quadrant. International instructor: Dr Hussain Nasser, 14-15 July, 2016, Tarbiat Modares University, Tehran, Iran.

17- Top 30 combine manual trigger point therapy and dry needling course. Overall 37.5 hours practical education. David G Simon Academy, Switzerland. International instructor: Dr Ghazi Sarhan. 21-24 Feb 2017, Tarbiat Modares University, Tehran, Iran.

18- Spinal manual therapy course, Module I. Awarded 17 CPD points by Dubai health authority, Accreditation number 060/17. Manual concepts, Australia. 8-11 March, 2017. Dubai, UAE.

19- Spinal manual therapy course, Module II. Awarded 17 CPD points by Dubai health authority, Accreditation number 060/17. Manual concepts, Australia. 26-29 April, 2017. Dubai, UAE.

20- The McKenzie institute international. Center for postgraduate study in mechanical diagnosis and therapy. Part A: Lumbar spine, 28 hours study. International instructor MII: Georg Supp. 20-23 May, 2017, Tehran, Iran.

21- Co-teacher of Kinesio Taping course levels 1-2. Kinesio Taping Association International. Iranian physiotherapy association in collaboration with Tehran rehabilitation faculty. 10-11 August, 2017. Tehran, Iran.

22- The McKenzie institute international. Center for postgraduate study in mechanical diagnosis and therapy. Part A: Lumbar spine, 28 hours study. International instructor MII: Georg Supp. 31 Aug-3 Sep, 2017, Tehran, Iran.

23- Facial acupuncture cosmetic enhancement. 14 hours CPD course. FHT federation of holistic therapists, Jonathan Hobbs. 18-19 Sep, 2017, Tehran, Iran.

24- Musculoskeletal sonography. Level one. Sonoskills, 2-4 November 2017, Zagreb, Croatia.

25- Nice shoulder course rehab 2018. June 1 to 2, 2018. Nice, France

26- The McKenzie institute international. Center for postgraduate study in mechanical diagnosis and therapy. Part D: Advanced cervical and thoracic spine & extremities- Upper limb, 28 hours study. International instructor MII: Georg Supp. 28<sup>th</sup> June- 1<sup>st</sup> July, 2018, Tehran, Iran.

27- 28<sup>th</sup> European society for surgery of the shoulder and the elbow congress, EUSSERehabilitation, 18 European CME credit, 21-22 September 2018, Geneva, Switzerland.

29- The shoulder: from anatomy & kinesiology foundations to clinical evaluation & treatment solutions. Prof. Donald Newmann, Jo Gibson. 14-16 December 2018, Rome, Italy.

30- Fascial distortion model, module 1. Thorsten Fischer. 3-5 February 2019, Tehran, Iran.

31- Hawkgrip (Instrument Assisted Soft Tissue Mobilization) workshop levels 1 and 2. Ghazi Sarhan. 11-12 July 2019, Tehran, Iran.



32- The European Congress of Shoulder & Elbow Rehabilitation. 13-14 December 2019, s-Hertogenbosch, The Netherlands.

33- The Shoulder: Theory & Practice. Course Tutor: Jeremy Lewis (PhD, FCSP), 21-22 February 2020, Dubai, UAE.

### Congresses and Meetings

- Lecturer in Iranian Orthopaedic Surgeon Congress, Tehran  
S.Sheikh-ol-eslam, R.Ravanbod, P.Javid, M.R.Baghaipoor. New findings on Rifampicin synoviorthesis
  
- Lecturer in the 14<sup>th</sup> congress of Iranian heart association in collaboration with British cardiac society, 23-26 Nov 2004, Tehran, Iran, Exercise and thrombosis
  
- Lecturer in the 15<sup>th</sup> congress of the Iranian heart association in collaboration with the French society of cardiology and the French society of thoracic and cardiocascular surgery, 31 Oct- 3<sup>rd</sup> Nov,2006, Return of sympathovagal balance after exercise
  
- Member of the executive committee of the 19<sup>th</sup> Iranian physiotherapy congress, 13-15 May,2008, Tehran, Iran
  
- Invited Speaker in von Willebrand Disease, Hemophilia and Rare Bleeding Disorders, 29-31 January,2014,Kish Island,Iran. Arthropathy in Haemophilia
  
- Invited Speaker and a member of the physiotherapy and cardiac rehabilitation executive committee in the second Cardiovascular Joint Congress and 19<sup>th</sup> congress of the Iranian heart association, 25-28 Feb 2014, Tehran,Iran. Exercise in Heart Failure
  
- Invited Speaker in The Nurse and Hemophilia Scientific and Teaching Country Conference, Koodakan Mofid Hospital in Collaboration with

Ministry of Health and Medical Education, 18<sup>th</sup> of February, 2015, Tehran, Iran. The role of Nursing in Daily Activities, Exercise, and Physiotherapy in Patients with Hemophilia

- Invited Speaker 3<sup>rd</sup> Iranian Cardiovascular Joint Congress, Iranian Society of Cardiac Surgeons in Collaboration with Iranian Heart Association, 4<sup>th</sup> of March, 2015, Tehran, Iran. ECG for Physiotherapists
- Invited Speaker in World Hemophilia Day, Thrombosis and Haemostasis Research Centre in Collaboration with Ministry of Health and Medical Education, 17-18 April, 2015, Tehran, Iran. Cartilage Repair in Patients with Hemophilia
- Invited Speaker in 4<sup>th</sup> Workshop vWD, Hemophilia and rare Bleeding Disorders. 27-28 May 2015, Istanbul, Turkey. Insights into Synovial Joint in Hemophilia

- دبیر علمی اولین همایش جامع کشوری فیزیوتراپی در هموفیلی و بیماری های خونریزی دهنده. پاتوفیزیولوژی تخریب مفصل در هموفیلی و آثار درمانی اولتراسوند و لیزر در آرتروپاتی هموفیلی. ۹-۱۱ دی ۱۳۹۴

- سخنران مدعو کنگره بین المللی ترومبوز و هموستاز ایران. درمانهای موجود در آرتروپاتی هموفیلی. چهارم الی ششم مرداد ۱۳۹۶، تهران ، ایران.

## Poster Presentations

1-Effect of ergometric exercise on factor VIII coagulant activity in patients with mild and moderate hemophilia A R.Ravanbod, G.Torkaman, M.R. Baghaipoor, F. NAD'Ali. Abstract available on CD-ROM:CD026 , Supplement to the Journal of Thrombosis and Haemostasis , July 2003 , Birmingham ,UK. ( ISSN 1740 3340 )

2- New findings on Rifampicin synoviorthesis .S.Sheikh-ol-eslam, R.Ravanbod, P.Javid, M.R.Baghaipoor. Poster Presentation , 26<sup>th</sup> International Congress of Hemophilia , 2004 Thailand

3- Factor X and Brucellosis. M.R.Baghaipoor, G. Rastegar-lari, K.Sadegian, R.Ravanbod. Poster presentation , 26<sup>th</sup> International Congress of hemophilia, 2004, Bangkok, Thailand

4- Hemophilia in Iran. M.R.Baghaipoor, G. Rastegar-lari, K.Sadegian, R.Ravanbod. Poster presentation , 26<sup>th</sup> International Congress of Hemophilia, 2004 ,Bangkok, Thailand

5- Effect of physical fitness on coagulant activity of F-VIII in healthy young men . Rezaian Z, Torkaman G, Nad-Ali F, Gooshe B, Broumand MA, Poorfathallah AA . Oral Presentation. 4<sup>th</sup> International Congress of the Iraninan Society of Cardiac Surgeons .Nov 2005 Tehran , Iran

6- Help the joints biomechanics . Ravanbod R, Torkaman G, Estaki A, Javid P, et al. Poster presentation , Haemophilia 14 ( Suppl 2 ) :81-82 , 2008, Istanbul,Turkey

7- Inflammatory markers and atherosclerosis. Ravanbod R, Torkaman G, Goosheh B, Fallahi F, Hedayati M, Rezaeian Z. 3th Iran-Arab (Middle East) Cardiovascular Congress. Poster presentation. 12-15 March 2009, Kish, Iran

8- The effects of Pulsed ultrasound and low level laser therapy on joint friction and biomechanical parameters of articular cartilage in experimental haemarthrosis model. Ravanbod R, Torkaman G, Esteki A. Poster presentation, XXX International congress of the world federation of haemophilia, 2012, Paris, France

۹- بررسی تاثیر تمرین درمانی بر کاهش گشتاور اداکسیون زانو در بیماران مبتلا به استئوآرتریت کمپارتمان داخلی زانو. مطالعه مروری سیستماتیک. سید مهدی محسنی پور، رویا روانبد، گیتی ترکمان. بیست و هفتمین کنگره فیزیوتراپی ایران، ۱۵-۱۷ اردیبهشت ۱۳۹۵.

۱۰- : مطالعه مروری سیستماتیک. سید مهدی محسنی پور، رویا روانبد، گیتی ترکمان. ۲۷-۲۵ آبان ۱۳۹۵.

11- A Patient Level Simulation Model. Z Gharibnaseri, M Davari, A Cheraghali, P Eshghi, R Ravanbod, R Spendar. Value in Health;19(7):A398, 2016.

12- Cost-Utility of Prophylaxis VS. On-Demand Treatment In Severe Haemophilia A Patients. Z Gharibnaseri, M Davari, A Cheraghali, P Eshghi, R Ravanbod, R Spendar. Value in Health;19(7):A591,2016.

### Webinars

1-Low back pain-Return to activity. The McKenzie Institute International. Georg Supp, Richard Rosedale. April 2020.

### Booklets

- Joint care and exercises booklet , prepared by the hemophilia chartered physiotherapists association , Translated to Persian by : Roya Ravanbod

- Challenges-Choices-Decisions booklet . Prepared by Canadian Hemophilia Society A guide on orthopedic surgery for people with hemophilia, Translated to Persian by Roya Ravanbod