

## **CURRICULUM VITAE**

**R. R. W. M. Surangika Imanthi Wadugodapitiya (Ph.D, M. Phil, B.PT)**  
Senior Lecturer (Grade II)/ Physiotherapy, Faculty of Allied Health Sciences,  
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### **Educational qualifications**

1. Ph.D. in Biomechanics (2020)  
Graduate School of Health Sciences, Niigata University, Japan (April 2016 – March 2020)  
Ph.D dissertation:  
A study on stiffness of the joint capsule and collateral ligaments of the knee using strain ultrasound elastography
2. M.Phil. (2015)  
Faculty of Medicine, University of Peradeniya, Sri Lanka (June 2011- March 2015)  
M. Phil dissertation:  
Functional motor disability in children with cerebral palsy; effectiveness of low dose botulinum toxin treatment and physiotherapy
3. Bachelor of Physiotherapy (2007)- First class pass  
Rajiv Gandhi University of Health Sciences, Bangalore, India (2002-2007)

### **Teaching experience**

1. From 2017 to 2019  
Teaching Assistant (surface anatomy) for the Department of Radiological Technology, Niigata University, Japan
2. From 2015 to date  
Dept. of Physiotherapy, Faculty of Allied Health Sciences, University of Peradeniya, as a Senior Lecturer (Grade II)
3. From 2009 to 2015  
Dept. of Physiotherapy, Faculty of Allied Health Sciences, University of Peradeniya, as a Lecturer
4. From May 2007 – August 2009  
Dept. of Physiotherapy, Faculty of Allied Health Sciences, University of Peradeniya, as a Temporary Lecturer

### **Clinical experience**

Serve as a Physiotherapist in the outpatient unit at the Department of Physiotherapy, Faculty of Allied Health Sciences, University of Peradeniya, Sri Lanka (from 2008 to till date)

## Awards and grants

1. Japanese Government (Mombukagakusho) full scholarship to follow Ph. D in Niigata University, Japan (from April 2016 to March 2020)
2. Travel grant, Graduate School of Health Sciences, Niigata University, Japan for the 13th International Symposium on Advanced Science and Technology in Experimental Mechanics (13th ISEM'18). Kaohsiung, Taiwan (2018)
3. Travel grant, Graduate School of Health Sciences, Niigata University, Japan for 8<sup>th</sup> World Congress of Biomechanics, Dublin, Ireland (2018)
4. Travel grant, international research Centre, University of Peradeniya, Sri Lanka for Neuroaxis 2013, Delhi, India (2014)

## Research interests

1. *In-vivo* analysis of elastic properties of soft tissues
2. Use of strain ultrasound elastography in routine clinical setting
3. Evaluation of the outcomes of treatment methods used to people/children with disability
4. Falls preventions in TIA and minor strokes

## Publications

### Full papers

1. **Wadugodapitiya, S.**, Sakamoto, M., Kaito, S., Morise, Y., Tanaka, M. and Kobayashi, K., (2019). In Vivo Stiffness Characteristics of the Medial Collateral Ligament with Varying Knee Flexion Angles using Strain Ultrasound Elastography. *Advanced Experimental Mechanics*, 4:147-152.
2. Kondo, T., Sakamoto, M., Kobayashi, K. and **Wadugodapitiya, S.**, (2019). A Dynamic Method of Measuring the Length of the Patellar Tendon using Cine Magnetic Resonance Imaging. *Advanced Experimental Mechanics*, 4:157-162.
3. Wadugodapitiya, S., Sakamoto, M., Kaito, S., Morise, Y., Tanaka, M. and Kobayashi, K., (2019). Ultrasound elastographic assessment of the stiffness of the anteromedial knee joint capsule at varying knee angles. *Bio-Medical Materials and Engineering*, 30(2): 219-230. doi: 10.3233/BME-191046
4. **Wadugodapitiya, S.I.**, Weerasinghe, V.S., Suraweera, H.J. and Kudagammana, S.T., (2015). A descriptive study on the assessment of functional motor disability in children with cerebral palsy. *International Journal of Physiotherapy*, 2(4): 640-645.
5. Harpreet Singh and **Surangika Wadugodapitiya**, (2015) Genu Recurvatum in stroke patients - etiology based treatment. *Physiotimes*, 6(4):22-24.

6. Ishanka weerasekara., **Surangika Wadugodapitiya.**, Esther Liyanage, Thusharika Dissanayak, Indrajith Liyanage, Dulan Kodikara and Shyama Banneheka., (2014) Influence of English on academic performance of Physiotherapy students. International journal of multidisciplinary research and development; **1**(7):169-172.

## Conference presentations

1. **Surangika Wadugodapitiya**, Makoto Sakamoto, Masaei Tanaka, Yuta Sakagami, Yusuke Morise, Koichi Kobayashi. In vivo stiffness measurement of the collateral ligaments of the knee using strain ultrasound elastography. International conference on advanced technology in experimental mechanics, Niigata, Japan. 7-11<sup>th</sup> October 2019.
2. **Surangika Wadugodapitiya**, Makoto Sakamoto, Masaei Tanaka, Yusuke Morise, Yuta Sakagami, Koichi Kobayashi. Evaluation of stiffness characteristics of the soft tissues around the knee joint as an outcome parameter in physical therapy using strain ultrasound elastography. 13<sup>th</sup> International society of physical and rehabilitation medicine world congress, Kobe, Japan. 9-13<sup>th</sup> June 2019. Presentation no P1-140.
3. **Surangika Wadugodapitiya**, Makoto Sakamoto, Masaei Tanaka, Yuta Sakagami, Yusuke Morise, Koichi Kobayashi. In vivo elastic characteristics of the medial collateral ligament with varying knee flexion angle. 13<sup>th</sup> International Symposium on Advanced Science and Technology in Experimental Mechanics (13<sup>th</sup> ISEM'18). Kaohsiung, Taiwan. 30<sup>th</sup> Oct – 2<sup>nd</sup> Nov 2018. Presentation no A07052.
4. Tatsuya Kondo, Makoto Sakamoto, Koichi Kobayashi, **Surangika Wadugodapitiya**. A dynamic measuring method of length of the patellar tendon using cine magnetic resonance imaging. 13<sup>th</sup> International Symposium on Advanced Science and Technology in Experimental Mechanics (13<sup>th</sup> ISEM'18). Kaohsiung, Taiwan. 30<sup>th</sup> Oct – 2<sup>nd</sup> Nov 2018, Presentation no A07065.
5. Makoto Sakamoto, **Surangika Wadugodapitiya**, Yusuke Morise, Koichi Kobayashi, Kaito Sugita, Masaei Tanaka. Stiffness of the knee joint capsule using ultrasound elastography. The Japan Society of Mechanical Engineers, Japan. 09<sup>th</sup>-12<sup>th</sup> Sep 2018. doi.org/10.1299/jsmemecj.2018.J0240104
6. **Surangika Wadugodapitiya**, Vajira weerasinghe, padmini Dahanayake, RGL Shiroma, Hilary Suraweera, Thushara Kudagammana, Tharaka Dassanayake. Outcome of functional motor disability in ankle dorsiflexion in children with cerebral palsy following low dose botulinum toxin A injection. Annual meeting of Japanese Society of Clinical Neurophysiology, Odaiba, Japan. 8–9<sup>th</sup> Nov 2018. Presentation no P1-15-07.
7. **Surangika Wadugodapitiya**, Makoto Sakamoto, Kaito Sugita, Yusuke Morise, Masaei Tanaka, Koichi Kobayashi. Evaluation of stiffness of anteromedial knee joint capsule by ultrasound real-time elastography. 8<sup>th</sup> World Congress of Biomechanics, Dublin, Ireland. 7-12<sup>th</sup> July 2018. Presentation no 1082.
8. Yusuke Morise, Kaito Sugita, **Surangika Wadugodapitiya**, Kiyoko Kazama, Yuji Tanabe, Koichi Kobayashi, Makoto Sakamoto. Three-dimensional joint articulating motion of metacarpophalangeal joint of the thumb. 8<sup>th</sup> World Congress of Biomechanics, Dublin, Ireland. 7-12<sup>th</sup> July 2018. Presentation no 2161.
9. **S.I. Wadugodapitiya**, V.S. Weerasinghe, H.J. Suraweera, S.T. Kudagammana, Improvement in gait pattern in children with diplegic cerebral palsy following low dose botulinum toxin injection

and physiotherapy in Sri Lanka: 4th Asia-Oceanian Conference of Physical and Rehabilitation Medicine (AOCPRM 2014), Bangkok, Thailand. 11 – 13<sup>th</sup> Dec 2014. Abstract book, pg 247.

10. **S.I. Wadugodapitiya**, V.S. Weerasinghe. Relationship between parameters of motor functions in children with cerebral palsy: 4th Asia-Oceanian Conference of Physical and Rehabilitation Medicine (AOCPRM 2014), Bangkok, Thailand. 11 – 13<sup>th</sup> Dec 2014. Abstract book, pg 246.
11. Priyadarshani, N.S.N., Rajini, S.R.D., Rajiya, M.B.F., Thiagarajah, U., Weerakkody, W.H.M.P., Wickramasinghe T.B., **Wadugodapitiya, S.I.** & Tennakoon, S. Practice of home ergonomics among rural and urban women of Matale, Sri Lanka: Peradeniya University International Research Sessions 2014 (i PURSE), Abstract book, pg 254.
12. **Wadugodapitiya, S.I.**, Weerasinghe, V.S. & Dassanayake, T.L (2013). Assessment of functional motor disability in children with Cerebral Palsy: Neuroaxis 2013, Delhi, India. 30<sup>th</sup> Sep 2014. Abstract book, pg 59.
13. **Wadugodapitiya, S.I.**, Weerasinghe, V.S., Suraweera, H.J., Kudagammana, S.T. & Dassanayake, T.L., (2012). Outcome of functional motor disability in ankle dorsiflexion in children with cerebral palsy following low dose botulinum toxin A injection: 3rd Biennial Conference of the South Asian Association of Physiologists (SAAP3), Abstract Book, pg 105.

#### **Resource personnel**

- Conduct lecture demonstrations on “Rehabilitation of children with cerebral palsy” in community based rehabilitation programs organized by the Secretariat office Central Province, Sri Lanka.
- Curriculum Development, B.Sc. in Physiotherapy External degree program- 2012/2013
- Curriculum Development, B.Sc. in Physiotherapy in the Faculty of Allied Health Sciences, University of Peradeniya, Sri Lanka (2011/2012)