

## CURRICULUM VITAE

### MUTHITA HIRUNSAI, Ph.D. (PHYSIOLOGY)

#### CONTACT ADDRESS

Affiliation Department of Biopharmacy, Faculty of Pharmacy,  
Srinakharinwirot University, Thailand.  
Telephone 037 395095 Ext. 21533 (Office)  
Fax 037 395096 (Faculty Office)  
E-mail muthita@g.swu.ac.th

**ACADEMIC POSITION** Associate Professor

**RESEARCH INTEREST** Skeletal muscle physiology  
Molecular mechanisms related to skeletal muscle  
atrophy/regeneration/fibrosis

#### PUBLICATIONS (\*Corresponding Author)

1. **Hirunsai M\***, & Srikuea R. Differential effects of cholecalciferol and calcitriol on muscle proteolysis and oxidative stress in angiotensin II-induced C2C12 myotube atrophy. *Physiol Rep* 12: e16011, 2024. (Impact Factor 2.5, Q2)
2. Srikuea R\*, **Hirunsai M**. TGF- $\beta$ 1 stimulation and VDR-dependent activation modulate calcitriol action on skeletal muscle fibroblasts and Smad signalling-associated fibrogenesis. *Sci Rep* 13: 13811, 2023. (Impact Factor 4.6, Q1 Top 10%)
3. **Hirunsai M\***, Srikuea R. Autophagy-lysosomal signaling responses to heat stress in tenotomy-induced rat skeletal muscle atrophy. *Life Sci* 275: 119352, 2021. (Impact Factor 6.780, Q1 Top 10%)
4. Srikuea R\*, **Hirunsai M**, Charoenphandhu N. Regulation of vitamin D system in skeletal muscle and resident myogenic stem cell during development, maturation, and ageing. *Sci Rep* 10: 8239, 2020. (Impact Factor 4.379, Q1 Top 10%)
5. **Hirunsai M\***, Srikuea R. Heat stress ameliorates tenotomy-induced inflammation in muscle-specific response via regulation of macrophage subtypes. *J Appl Physiol* 128: 612-626, 2020. (Impact Factor 3.531, Q1)

6. **Hirunsai M\***, Srikuea R. Differential effects of heat stress on fibre capillarisation in tenotomised soleus and plantaris muscles. *Int J Hyperthermia* 34: 432-441, 2018. (Impact Factor 3.589, Q1)
7. Srikuea R\*, **Hirunsai M**. Effects of intramuscular administration of  $1\alpha,25(\text{OH})_2\text{D}_3$  during skeletal muscle regeneration on regenerative capacity, muscular fibrosis, and angiogenesis. *J Appl Physiol* 120: 1381-1393, 2016. (Impact Factor 3.351, Q1 Top 10%)
8. **Hirunsai M\***, Yimlamai T, Suksamrarn A. Effect of 20-Hydroxyecdysone on Proteolytic Regulation in Skeletal Muscle Atrophy. *In Vivo* 30: 869-877, 2016. (Impact Factor 0.953, Q3)
9. **Hirunsai M**, Srikuea R, Yimlamai T\*. Heat stress promotes extracellular matrix remodelling via TGF- $\beta$ 1 and MMP-2/TIMP-2 modulation in tenotomised soleus and plantaris muscles. *Int J Hyperthermia* 31: 336-348, 2015. (Impact Factor 3.361, Q1)
10. Lohsiriwat S\*, **Hirunsai M**, Chaiyaprasithi B. Effect of caffeine on bladder function in patients with overactive bladder symptoms. *Urol Ann* 3: 14-18, 2011. (IF N/A, Q4)
11. Phuntuwate W, Rerksuppaphol S, Leelawittayanon T, Prangsaengtong O, **Hirunsai M**, Boonrod A, Wattanasirichaigoon S\*. Protective effect of N-acetylcysteine on endotoxin-induced intestinal permeability dysfunction. *Thai Pharm Health Sci J* 1: 19-25, 2006. (IF N/A, Q N/A)

**Note:** Impact factor and Quartile of the papers are assessed by Journal Citation Reports® and Scimago of the published years.

## INTERNATIONAL PRESENTATION

- **Hirunsai M\***, Srikuea R. Effects of cholecalciferol and calcitriol on skeletal muscle proteolysis in angiotensin II-induced atrophy in differentiated C2C12 cells. *Physiology* 38.S1: 5726896, 2023. American Physiology Summit 2023. April 20-23, 2023. Los Angeles, California, U.S.A.
- **Hirunsai M\***, Srikuea R. Whole body hyperthermia ameliorates inflammation via regulating pro-inflammatory but not anti-inflammatory macrophages in tenotomized rat skeletal muscle. *The FASEB Journal* 33: 868.864-868.864, 2019. Experimental Biology 2019. April 6-9, 2019. Orlando, Florida, U.S.A.

- **Hirunsai M\***, Srikuea R. Whole body hyperthermia enhances angiogenesis in tenotomized rat skeletal muscle. The FASEB Journal 31: 710.719, 2017. Experimental Biology 2017. April 22-26, 2017. Chicago, Illinois, U.S.A.

## **REVIEWERS**

- Life Sciences
- Scientific Reports
- BMC Complementary Medicine and Therapies

## **AWARD**

- Outstanding researcher award for using animals for scientific work (IAD Award) for the year 2018 by Institute of Animals for Scientific Purposes Development (IAD) and National Research Council of Thailand (NRCT).

**Research title:** Differential effects of heat stress on fibre capillarisation in tenotomised soleus and plantaris muscles.

April, 2024