YANG Yang (陽洋)

Curriculum Vitae

Faculty of Medicine
Macau University of Science and Technology
Avenida Wai Long, Taipa
Tel: +853 68032039
Email: yangyang1@must.edu.cn

EDUCATION BACKGROUND

2012.9 - 2017.6（Ph.D）Zhejiang University; School of Medicine
2015.11 - 2016.11（CSC joint Ph.D）University of Helsinki; Faculty of Medicine;
2008.9 - 2012.6（Bachelor）Shenyang Agricultural University; College of life science and technology

WORKING EXPERIENCE

2022.8 - present: Assistant Professor, Faculty of Medicine, Macau University of Science and Technology;
2021.1- 2022.7: Lecturer, School of Medicine, The Chinese University of Hong Kong, Shenzhen;
2017.9-2020.8: Postdoctoral researcher, University of Helsinki; Faculty of Medicine; STEMM, RPU

TEACHING EXPERIENCE

Courses taught:
--2022-2025 **Block-based integrated MBBS curriculum** including following blocks
MBBS101 Introduction to Medicine
MBBS105 Biomedical Science and Respiratory System
MBBS106 Biomedical Science and Cardiovascular System
MBBS107 Biomedical Science and Gastrointestinal System
MBBS201 Biomedical Science and Urogenital System
MBBS202 Biomedical Science and Musculoskeletal System
MBBS203 Biomedical Science and Central Nervous System
MBBS204 Biomedical Science and Head & Neck System
MBBS205 Biomedical Science and Hematology/Immunology System
MBBS206 Biomedical Science and Endocrine System

--2021-2022 Term1-MED1021 **Biochemistry and Organic Chemistry I**
--2020-2021 Term2-BME2001 **Anatomy/Physiology**
--2021-2022 Term1-MED1001 **Human Structure I**
--2021-2022 Term1-MED1101 **Human Function I**

REASEARCH INTERESTS

Effects of Mitochondrial protein homeostasis on metabolism and neurological diseases；
Neurodegenerative disease modeling and protective effects from Chinese medicine components；
Interdisciplinary interests: Collaborations with both clinical applications and Chinese medicine researches；
Combining research with biomaterial field;
Innovate novel technologies from multidiscipline.

PROJECT EXPERIENCE

- Teaching innovation grant, CUHKSZ (2021.9-2023.8): Using e-portfolio to promote cognitive engagement in first-year medical education program (host with Prof. TAM Siu Cheung)
- Guangdong Basic and Applied Basic Research Foundation (2021.10-2025.9): Mechanistic study of mitochondrial stress quality control protein Grpel2 regulating brown adipose tissue energy metabolism to alleviate depressive behavior in mice (host)
- Oral presentation "Tissue-specific effects of mitochondrial import proteostasis" 2019.11.11-15; Cold Spring Harbor, Asia，"Mitochondria and Metabolism in Health and Disease "conference；Suzhou，China
- Tissue-specific mitochondrial signaling and adaptations to mistranslation. ERC starting grant; (participated)
- Genetic causes of axon degeneration diseases (CMT2) and hereditary spastic paraplegia. Finland; (participated)
- Neuroprotective mechanisms of Triptolide combined with Reg-2 modified BMSCs on promoting microglia mediated cerebral ischemia recover; National Natural Science Foundation of China; 81671138; 2017; 650.000 (CNY); (participated)
- Neural repair mechanism of C16 peptide combined with Reg-2 modified BMSCs on post cerebral ischemia; Natural Science Foundation of China; 81571288; 2016; 570.000 (CNY); (participated)
- Effects of ferritin subunit transformation and FBXL5-IRP2-ferritin axis on iron aggregation on the surface of the central nervous system Natural Science Foundation of China; 81471169; 2015; 700.000 (CYN); (participated)
- Mechanism research on midbrain 5-HT neural circuit of postpartum depression; National Natural Science Foundation of China，81371493，2014，650.000（CNY）; (participated)

Selected Publication

1. R Huang, X Chen, R Zhang, **Y Yang***, Y Peng*, Q Sun*, Hydroxycinnamic Acids in Chicory: Implications for Gut Health and Ulcerative Colitis Mitigation, Food Science and Human Wellness 2025, https://doi.org/10.26599/FSHW.2025.9250617
2. S Konovalova, R T-Muñumer, P Manjunath, X Liu, S Baral, K Fatima, M Holopainen, J Kvist, J Rajendran, **Y Yang**, M Varjosalo, R Käkelä, P Somerharju, H Tyynismaa, Small mitochondrial protein NERCLIN regulates cardiolipin homeostasis and mitochondrial ultrastructure, Proceedings of the National Academy of Sciences USA, July 18, 2023, 120 (30) e2210599120
3. Neupane, N.; Rajendran, J.; Kvist, J.; Harjuhaahto, S.; Hu, B.; Kinnunen, V.; **Yang, Y**.; Nieminen, A.I.; Tyynismaa, H. Inter-organellar and systemic responses to impaired mitochondrial matrix protein import in skeletal muscle. Commun Biol 2022, 5, 1060.
4. Döhla, J., Kuuluvainen, E., Gebert, N., Amaral, A., Englund, J. I., Gopalakrishnan, S., Konovalova, S., Nieminen, A. I., Salminen, E. S., Torregrosa Munumer, R., Ahlqvist, K., **Yang, Y**., Bui, H., Otonkoski, T., Käkelä, R., Hietakangas, V., Tyynismaa, H., Ori, A. & Katajisto, P. Metabolic determination of cell fate through selective inheritance of mitochondria, Nature Cell Biology. Feb 2022, 24, 2, p. 148-+ 27 p.
5. G Liu; C Jiang; X Lin; **Y Yang**. Point-of-care detection of cytokines in cytokine storm management and beyond: Significance and challenges. View, 20210003.
6. Long B; Siqi H; Wenchao X; Liang L; **Yang Y**; Robertus Wahyu N; Yimin F; Orlando R. Self-assembled networks of short and long chitin nanoparticles for oil/water interfacial super-stabilization, ACS Sustainable Chem. Eng. 2019, 7, 7, 6497–6511.
7. Konovalova S, Liu X, Manjunath P, Baral S, Neupane N, Hilander T, **Yang Y**, Balboa D, Terzioglu M, Euro L, Varjosalo M & Tyynismaa H. Redox regulation of GRPEL2 nucleotide exchange factor for mitochondrial HSP70 chaperone Oct 2018, In: Redox biology. 19, p. 37-45 9 p.
8. Cooper. H*, **Yang Y***, Ylikallio. E, Khairullin R, Woldegebriel R, Lin. K, Euro. L, Palin. E, Wolf. A, Trokovic R, Isohanni. P, Kaakkola. S, Auranen. M, Lonnqvist. T, Wanrooij. S, Tyynismaa. H. ATPase-deficient mitochondrial inner membrane protein ATAD3A disturbs mitochondrial dynamics in dominant hereditary spastic paraplegia. Hum Mol Genet. 2017 Jan 31. doi: 10.1093/hmg/ddx042. (Co-first author)
9. **Yang Y**, Hu Z, Du X, Davies H, Huo X, Fang M. miR-16 and Fluoxetine Both Reverse Autophagic and Apoptotic Change in Chronic Unpredictable Mild Stress Model Rats. Front Neurosci. 2017 Jul 25;11:428. doi: 10.3389/fnins.2017.00428. eCollection 2017.
10. **Yang Y**, Gao K, Hu Z, Li W, Davies H, Ling S, Rudd JA, Fang M. Autophagy upregulation and apoptosis downregulation in DAHP and triptolide treated cerebral ischemia. Mediators Inflamm. 2015; 2015:120198.
11. **Yang Y**, Marong Fang, Xiaoxue Du, Zhiying Hu. Lucky gene 5-HTTLPR and postpartum depression: A systematic review. Neuroendocrinology Letters Volume 38 No. 5 2017.
12. Li W, **Yang Y**, Hu Z, Ling S, Fang M. Neuroprotective effects of DAHP and Triptolide in focal cerebral ischemia via apoptosis inhibition and PI3K/Akt/mTOR pathway activation. Front Neuroanat. 2015 Apr 22; 9:48.
13. Hu Z, **Yang Y**, Gao K, Rudd JA, Fang M. Ovarian hormones ameliorate memory impairment, cholinergic deficit, neuronal apoptosis and astrogliosis in a rat model of Alzheimer's disease. Exp Ther Med. 2016 Jan; 11(1):89-97.
14. Du X, Huo X, **Yang Y**, Hu Z, Botchway BOA, Jiang Y, Fang M. miR-124 downregulates BACE 1 and alters autophagy in APP/PS1 transgenic mice. Toxicol Lett. 2017 Oct 5;280:195-205.

15. Bai S, Hu Z, **Yang Y**, Yin Y, Li W, Wu L, Fang M. Anti-Inflammatory and Neuroprotective Effects of Triptolide via the NF-κB Signaling Pathway in a Rat MCAO Model. Anat Rec (Hoboken). 2016 Feb;299(2):256-66. doi: 10.1002/ar.23293.
16. Liu X, Zhang Y, **Yang Y**, Lin J, Huo X, Du X, Botchway BOA, Fang M. Therapeutic Effect of Curcumin and Methylprednisolone in the Rat Spinal Cord Injury. Anat Rec (Hoboken). 2018 Apr;301(4):686-696. doi: 10.1002/ar.23729. Epub 2017 Nov 28.
17. Qin Y, Hu W, **Yang Y**, Hu Z, Li W, Fang M. Neuroprotective Effect of DAHP via Antiapoptosis in Cerebral Ischemia. Behav Neurol. 2018 Jun 19;2018:5050469. doi: 10.1155/2018/5050469. eCollection 2018.
18. Hu Z, Du X, **Yang Y**, Botchway BOA, Fang M. Progesterone and fluoxetine treatments of postpartum depressive-like behavior in rat model. Cell Biol Int. 2019 May;43(5):539-552. doi: 10.1002/cbin.11123. Epub 2019 Mar 19.