

**Name** Ao-Lin Allen Hsu

**Current Positions** Professor, School of Medicine

Dean, Office of Graduate Student Affairs

Director, Research Center for Healthy Aging

China Medical University

Photo

**Telephone** +886-4-2205-3366 ext 1631

**E-mail** [alhsu@mail.cmu.edu.tw](mailto:alhsu@mail.cmu.edu.tw)

**E-Portfolio Website** [http://webap.cmu.edu.tw/TchEportfolio/index\\_1/alhsu](http://webap.cmu.edu.tw/TchEportfolio/index_1/alhsu)

**Personal Website**

## Education

MS in Chemistry, National Taiwan University, Taiwan (1996)

PhD in Medicinal Chemistry and Pharmaceutics, University of Kentucky, KY, USA (2000)

Postdoc in Biochemistry and Biophysics, UCSF, California, USA (2000-04)

## Expertise

Molecular Genetics; *C. elegans* Animal Model

Aging and Longevity Regulation; Sarcopenia;

Age-related Cognitive Decline

## Research Interests

The main focus of our laboratory is to understand the biology of aging at the cellular and molecular level by investigating the genetic, environmental, and pharmacological factors that influence the rate of aging and longevity in model organisms.

## Selected Grants:

1. Regulation of longevity by inter-organ communication signals in and out of intestine (3/3). MOST 109-2628-B-010-012 ( 2020-08-01 ~ 2021-07-31)
2. Elevating Taiwan *C. elegans* core facility and service towards a National Core Facility for Biopharmaceuticals (2/3). MOST 109-2628-B-010-012 ( 2020-05-01 ~ 2021-04-30)
3. Taiwan-Singapore Aging and Cancer Overseas Science and Technology Innovation Center (2/3). MOST 108- 2911-I-039-301 (2019-11-01 ~ 2020-10-31)

## Selected Publications

1. **Hsu AL**, Murphy C, and Kenyon C. (2003) "Regulation of aging and age-related disease by DAF-16 and Heat-shock factor." *Science*. 300(5622): 1142-1145.
2. Chiang WC, Ching TT, Lee HC, Mousigian C, and **Hsu AL\***. (2012) "HSF-1 regulators DDL-1/2 link insulin-like signaling to heat-shock response and modulation of longevity." *Cell*. 148(1-2): 322-334.
3. Sural S, Liang CY, Wang FY, Ching TT, and **Hsu AL\***. (2020) "HSB-1/HSF-1 pathway modulates histone H4 in mitochondria to control mtDNA transcription and longevity." *Science Advances*, 6(43): eaaz4452

## Selected Patents

1. C. Kenyon, J. Apfeld, A. Dillin, D. Garigan, **A.L. Hsu**, J. Lehrer-Graiwer, and C. Murphy, "Eukaryotic Genes Involved in Adult Lifespan Regulation", US Patent No.: 7,794,957