

Mahmoud Shaaban Mohamed

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CURRENT POSITION

Lecturer

Zoology Department- Faculty of Science

Assiut University

Assiut 71516, Egypt

Google Scholar: <https://scholar.google.com.eg/citations?user=9B6GfVQAAAAJ&hl=en>

EDUCATION

2015 – 2018 Kanazawa University, Japan

PhD in Molecular and Cellular Biology

Thesis topic “Probing the Spatial-temporal Properties of the Nuclear Pore Complex”

2012 – 2014 Yuan Ze University, Taiwan

M.Sc. in Biotechnology and Bioengineering

Thesis topic “Isolation, identification and serum-free culture of mouse intestinal stem cells”

2004 – 2008 Assiut University, Egypt

B.Sc. in Biological Sciences "Zoology" with honors

Graduation Thesis topic “Free radicals, oxidative stress and antioxidants”

PUBLICATIONS

- Lim KS, Kodera N, Wang H W, **Mohamed MS**, Hazawa M, Kobayashi A, Yoshida T, Hanayama R, Yano S, Ando T, Wong RW, High-speed AFM reveals molecular dynamics of human influenza A hemagglutinin and its interaction with exosomes, *Nano Letters*, July 2020.
- **Mohamed MS**, Hazawa M, Kobayashi A, Guillaud L, Watanabe-Nakayama T, Nakayama M, Wang H, Kodera N, Oshima M, Ando T, Wong RW, Spatiotemporally tracking of nanobiofilaments inside the nuclear pore complex core, *Biomaterials*, 256:120198, 2020.
- Lim KS, **Mohamed MS**, Wang H, Hartono, Hazawa M, Kobayashi A, Voon DC, Kodera N, Ando T, Wong RW. Direct visualization of avian influenza H5N1 hemagglutinin precursor and its conformational change by high-speed atomic force microscopy, *Biochim Biophys Acta*, S0304-4165(19)30049-2, Feb, 2019.
- Hazawa M, Lin DC, Kobayashi A, Jiang YY, Xu L, Dewi FRP, **Mohamed MS**, Hartono, Nakada M, Meguro-Horike M, Horike SI, Koeffler HP, Wong RW, ROCK-dependent phosphorylation of NUP62 regulates p63 nuclear transport and squamous cell carcinoma proliferation, *EMBO Reports*, (1), pp. 73-88, Jan, 2018.
- **Mohamed MS**, Kobayashi A, Taoka A, Watanabe-Nakayama T, Kikuchi Y1, Hazawa M, Minamoto T, Fukumori Y, Kodera N, Uchihashi T, Ando T, Wong RW, High-Speed Atomic Force Microscopy Reveals Loss of Nuclear Pore Resilience as a Dying Code in Colorectal Cancer Cells, *ACS Nano*, 11(6), pp. 5567-5578, June, 2017.
- Mahmoud MH, Badr G, Badr BM, Kassem AU, **Mohamed MS**, Elevated IFN-alpha/beta levels

in a streptozotocin-induced type I diabetic mouse model promote oxidative stress and mediate depletion of spleen-homing CD8+ T cells by apoptosis through impaired CCL21/CCR7 axis and IL-7/CD127 signaling, *Cell Signaling*, (10), pp. 2110-9, Oct, 2015.

- **Mohamed MS**, Chen Y, Yao CL, Intestinal stem cells and stem cell-based therapy for intestinal diseases, *Cytotechnology*, 67(2), pp.177-89, Mar, 2015.
- **Mohamed MS**, Chen Y, Yao CL, A serum-free medium developed for in vitro expansion of murine intestinal stem cells, *Biotechnology Journal*, 9(7), pp. 962-70, Jul, 2014.
- Yao CL, Lin YM, **Mohamed MS**, Chen JH, Inhibitory effect of ectoine on melanogenesis in B16-F0 and A2058 melanoma cell lines, *Biochemical Engineering Journal*, 78, pp. 163-169, Sep, 2013.

PATENT

"Sample preparation method for observation of organelles by high-speed atomic force microscopy"
Patent code: P180015135, Kanazawa University, Japan, Nov 2017.

HONORS & ACADEMIC AWARDS

Best Presentation Award in Biotechnology meeting, Formosa University, Taiwan, 2013.
Student Presentation Award, The 55th Annual Meeting of the Biophysical Society of Japan, 2017.
Student Presentation Award, The 35th Biochemical Annual Meeting, Kanazawa University, 2017.

CONFERENCE PRESENTATIONS

"High-speed atomic force microscopy visualization of the nuclear pores dynamics in cancer cells"
The 54th Annual Meeting of the Biophysical Society of Japan, Tsukuba, Japan, Nov 2016.

"Nuclear Pore Selective Barrier Dynamics as Revealed by High-Speed Atomic Force Microscopy in Colorectal Cancer Cells" ASCB/EMBO, Philadelphia, USA, Dec 2017.

"Loss of Nuclear Pore Selective Barrier Revealed by High-Speed Atomic Force Microscopy in Colorectal Cancer Cells" The 55th Annual Meeting of the Biophysical Society of Japan, Kumamoto, Japan, Sep 2017.

"Loss of Nuclear Pore Selective Barrier Revealed by High-Speed Atomic Force Microscopy in Colorectal Cancer Cells" The 35th Biochemical Annual Meeting, Kanazawa University, June 2017.