

Cellular Physiological Chemistry

1. Staffs and Students (April, 2009)

Professor	Ikuo Morita	
Associate Professor	Ken-ichi Nakahama	
Junior Associate Professor	Hiroshi Fujita, Takahiro Sato	Takako Hase,
Assistant Professor	Kotaro Kato	
Tokuninn Assistant Professor (GCOE)	Olga Safronava	
Tokuninn Assistant Professor	Masako Akiyama	
Graduate Student	Bhattacharjee Rajib, Praween Wayakanon	Yoko Aoi,
Research Student	Jinying Wang, Jizhong Yuan, Atsuko Taki, Taro Koshiishi,	Nakalekha Chalida, Jun-ichi Tsugawa, Noriko Sudo, Li Xiang Lan
Professor (Nano Medicine DNP)	Mayumi Abe	
Assistant Professor (Nano Medicine DNP)	Motohiro Komaki,	Tomoko Yoshida

2. Purpose of Education

For undergraduate students. We have some classes in biological chemistry for the third grader. In these classes, the students should understand basic biochemistry and physiology under healthy/diseased conditions.

For graduate students. These students can choose the one of themes in our lab. These students are expected to solve the problems by themselves. However, appropriate suggestions will be given by at least three supervisors whenever you want.

3. Research Subjects

- 1, Regulatory mechanism of angiogenesis and application to regenerative medicine
- 2, Bone remodeling and cell communication
- 3, Inflammation under hypoxic conditions (epigenetic control of gene expression)
- 4, Life of gap junction

4. Publications

Original Article

1. Tsuchiya T, Nakahama K, Asakawa Y, Maemura T, Tanaka M, Takeda S, Morita M and Morita I. The reduction in pigment epithelium-derived factor is a sign of malignancy in ovarian cancer expressing low-level of vascular endothelial growth factor. *Gynecological Endocrinology*, 25(2): 104-109, 2009
2. Bhattacharjee R, Kaneda M, Nakahama K, Morita I. The steady-state expression of connexin43 is maintained by the P13K/Akt in osteoblasts. *Biochem. Biophys. Res. Commun.*, 382:440-444, 2009
3. Safronova O, Pleumsampant S, Nakahama KI, Morita I. Regulation of chemokine gene expression by hypoxia via cooperative activation of NF-kappaB and histone deacetylase. *Int. J. Biochem. Cell Biol.*, 2009
4. Kaneda M, Nomura SM, Ichinose S, Kondo S, Nakahama K, Akiyoshi K, Morita I. Direct formation of proteoliposomes by in vitro synthesis and cellular cytosolic delivery with connexin-expression liposomes. *Biomaterials*, 30:3971-3977, 2009
5. Wang J, Ohno-Matsui K, Yoshida T, Shimada N, Ichinose S, Sato T, Mochizuki M, Morita I. Amyloid-beta up-regulates complement factor B in retinal pigment epithelial cells through cytokines released from recruited macrophages/microglia: Another mechanism of complement activation in age-related macular degeneration. *J. Cell Physiol.*, 220(1): 119-28, 2009
6. Safronova O, Pleumsampant S, Nakahama K, Morita I. Regulation of chemokine expression by hypoxia via cooperative activation of NF- κ B and histone deacetylase. *Int. J. Biochem. Cell Biol.*, 41:2270-2280, 2009
7. Nishida Y, Shibata K, Yamasaki M, Sato Y, Abe M. A possible role of vimentin on the cell surface for the activation of latent transforming growth factor- β . *FEBS Letter*, 583(2):308-312, 2009
8. LP. Lefter, S.Dima, M.Sunamura, T. Furukawa, Y.Sato, M.Abe, M.Chivu, I. Popescu, and A. Horii. Transcriptional

- silencing of ETS-1 efficiently suppresses angiogenesis of pancreatic cancer. *Cancer Gene Therapy*, 16(2):137-148, 2009
9. Yakushiji F, Fujita H, Suzuki H, Joukyu R, Yasuda M, Terayama M, Nagasawa K, Ohwada A, Taniguchi K, Fujiki K, Shimojyo M and Kinoshita H. Glutest Neo Super-a new handheld blood glucose meter-corrects for the effects of the hematocrit values in both hematocrit-adjusted samples and samples obtained from anemic patients. *Diabetes Technology & Therapeutics*. 11:369-372. 2009