

Curriculum Vitae

PERSONAL PARTICULARS

Name: (Michael) Yiu-Kwong LEUNG
Date of birth: 2/20/1969
Gender: Male
Marital Status: Married
Nationality: Hong Kong SAR
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EDUCATION

1994 – 1998 Ph. D. in Biochemistry,
The Chinese University of Hong Kong
1992 – 1994 M. Ph. in Biochemistry,
The Chinese University of Hong Kong
1988 – 1991 B. Sc., 2nd Class Honor (Division I), Biology,
University of Hong Kong

AWARDS

Kam Ngan Stock Exchange Scholarship, The Chinese University of Hong Kong
1996/97
Visiting Fellowship Award, National Institute of Child Health and Human
Development, NIH 02/2002-06/2004

WORKING EXPERIENCE

06/2004 – Now Research Scientist, Molecular Biophysics and
Physiology, Rush University Medical Center

02/2002 – 06/2004 Visiting Fellow, Laboratory of Clinical Genomics,
National Institute of Child Health and Human
Development, National Institutes of Health

1/5/2000 – 2/4/2002 Research scientist, Institute of Chinese Medicine,
The Chinese University of Hong Kong

1999 – 2000 Post doc, Biochemistry Department,
University of Hong Kong

1992 – 1998 Graduate Assistant,
The Chinese University of Hong Kong

SKILLS

Protein skills: Protein purification, FPLC, HPLC (affinity, gel
filtration, ion exchange and reverse phase), preparative
column chromatography, membrane filtration, dialysis,
SDS-PAGE, Western blot, bacterial protein expression,
protein refolding, mammalian cell protein expression,
Biosensor (IASys) operation, and ELISA.

Immunology skills: Monoclonal antibody production, antibody purification,
antibody isotyping, enzyme-antibody conjugation,
sandwich ELISA development, immunohistochemical
staining, and isolation of murine immune cells (splenic
T-lymphocytes and B-lymphocytes, peritoneal
macrophage, and bone marrow cells), mixed
lymphocyte reaction.

Molecular Biology skills: Plasmid preparation, ligation, transformation, Genomic
DNA extraction, total RNA extraction, RT-PCR, PCR,
site-directed mutagenesis, manual and automated DNA
sequencing, microarray (Scanarray).

Virology skills: Flow cytometry, cell-cell fusion assay, viral-cell fusion
assay, infectivity assay and generation of pseudotyped

virus.

Cell Biology skills:	Transfection, reporter assay, cell counting (haemocytometer), fluorescent microscopy, cell cloning, cell proliferation assay, cAMP assay, IP3 assay and cell culture.
Carbohydrate skills:	Carbohydrate purification, carbohydrate composition analysis and TLC.
Transgenic skills:	Mouse transgenesis, transgene cassette construction, embryo culture, microinjection, and oviductal transfer.
Animal skills:	Mouse handling, ip injection, iv injection, and sc injection, tail blood withdrawal, and survival surgery.
Computer knowledge:	MS Office (Word, Excel, and Powerpoint), Adobe Photoshop, Sigma Plot, Chem Draw, and PubMed search.

PUBLICATIONS

Journal Articles

1. Liu C., Leung M.Y., Koon J.C., Zhu L.F., Hui Y.Z., Yu B., Fung K.P., 2006. Macrophage activation by polysaccharide biological response modifier isolated from *Aloe vera* L. var. *chinensis* (Haw.) Berg. *Int. Immunopharmacol.* (accepted).
2. Leung M.Y., Steinbach P. J., Bellan D., Baxendale V., Fechner P., Rennert O.M., Chan W.Y., 2006. Structure-function effect of a naturally occurring mutation in the Leucine-rich repeat of the luteinizing hormone receptor. *Mol. Endocrinol.* (Epub ahead of print).
3. Leung M.Y., Liu C., Koon J.C., Fung K.P., 2006. Review. Polysaccharide biological response modifiers. *Immunol. Lett.* 105:101-114.
4. Leung M.Y., Ho W.K., 2006. Production, characterization and applications of mouse anti-grass carp (*Ctenopharyngodon idellus*) growth hormone monoclonal

antibodies. *Comp. Biochem. Phys. B Biochem. Mol. Biol.* 143:107-15.

5. Leung M.Y., Ho W.K., 2006. Substitution of serine for non-disulphide-bond forming cysteine in grass carp (*Ctenopharygodon idellus*) growth hormone improves the *in vitro* oxidative refolding properties of bacterial expressed grass carp growth hormone. *J. Biochem. Mol. Biol.*, 39, 150-157.
6. Salameh W., Choucair M., Guo T.B., Zahed L., Wu S.M., Leung M.Y., Rennert O.M., Chan W.Y., 2005. Leydig cell hypoplasia due to inactivation of luteinizing hormone receptor by a novel homozygous nonsense truncation mutation in the seventh transmembrane domain. *Mol. Cell Endocrinol.*, 229, 57-64.
7. Wu S.M., Baxendale V., Chen Y., Pang A.L., Stitely T., Munson P.J., Leung M.Y., Ravindranath N, Dym M, Rennert OM, Chan WY., 2004. Analysis of mouse germ-cell transcriptome at different stages of spermatogenesis by SAGE: biological significance. *Genomics*, 84, 971-981.
8. Leung M.Y., Al-Muslim O., Wu S.M., Aziz A., Inam S., Awadh M., Rennert O.M., Chan W.Y., 2004. A novel missense homozygous inactivating mutation in the fourth transmembrane helix of the Luteinizing Hormone receptor in Leydig Cell Hypoplasia. *Am. J. Med. Genet.*, 130, 146-153.
9. Leung M.Y., Liu C., Zhu L.F., Hui Y.Z., Yu B., Fung K.P., 2004. Chemical and biological characterization of a polysaccharide biological response modifier from *Aloe vera* L. var. *chinensis* (Haw.) Berg. *Glycobiology*, 14, 501-510.
10. Dogulu C.F., Kansu T., Leung M.Y., Baxendale V., Wu S.M., Ozcuc M., Chan W.Y., Rennert O.M., 2003. Evidence for genetic susceptibility to thrombosis in idiopathic intracranial hypertension. *Thromb. Res.*, 111, 389-395.
11. Lui C.H., Tam K. H., Leung M. Y., Lau J. Y., Chan J. K., Chan V. S., Dallman M., Cheah K.S., 2003. Mammary gland-specific secretion of biologically active immunosuppressive agent cytotoxic-T-lymphocyte antigen 4 human immunoglobulin fusion protein (CTLA4Ig) in milk by transgenesis. *J. Immunol. Methods*, 277, 171-183.
12. Ho W.K., Meng Z.Q., Lin H.R., Poon C.T., Leung Y.K., Yan K.T., Dias N., Che A.P., Liu J., Zheng W.M., Sun Y., Wong A.O., 1998. Expression of grass carp

growth hormone by baculovirus in silkworm larvae. *Biochim. Biophys. Acta.*, 1381, 331-339.

13. Leung M.Y., Fung K.P., Choy Y.M., 1997. The isolation and characterization of an immunomodulatory and anti-tumor polysaccharide preparation from *Flammulina velutipes*. *Immunopharmacology*, 35, 255-263.
14. Leung M.Y., Baxendale V., Wu S.M., Chan W.Y., Rennert O.M. Novel genetic heterogeneity at mutational hot-spot of hLHR activating mutation; polymorphism or mutation. *J. Med. Genet.* (submitted).

Poster and Abstract

1. Leung M.Y., Baxendale V., Wu S.M., Rennert O.M., Chan W.Y., 2003. A novel polymorphic site at the activating mutation hot-spot (TM VI) of the Luteinizing Hormone receptor in Familial male-limited precocious puberty. The 53rd Annual Meeting of The American Society of Human Genetics. Poster.
2. Wu S.M., Baxendale V., Chen Y., Leung M.Y., Ravidranath N., Dym M., Rennert O.M., Chan W.Y., 2002. Elucidation of the Transcriptome of Germ Cells at Different Stages of Spermatogenesis in Mice Using SAGE. The 3rd International Symposium on Current Technologies for Gene Expression Analysis. Poster.
3. Wu S.M., Al-Muslin O., Leung M.Y., Aziz A., Inam S., Awadh M., Rennert O.M., Chan W.Y., 2002. A Novel Mutation In TM IV Of The Luteinizing Hormone/Chorionic Gonadotropin Receptor In A Patient With The Severe Form of Leydig Cell Hypoplasia. The Endocrine Society's 84th annual meeting. Poster.
4. Ho W. K., Cheung H.K., Tsang W. H., Dias N., Poon C.T., Leung Y. K., Lou H., Lin H. R., 1996. Fish Growth Hormone: A target for development of biotechnology in Hong Kong. Asia Pacific Society of Bioscientists 2nd International Symposium and Workshop.

Society Memberships

1. American Society for Microbiology (Maryland branch)

2. International AIDS Society
3. International Society for Interferon and Cytokine Research