

CURRICULUM VITAE

รองศาสตราจารย์ ดร.บุษบา ฤกษ์อำนาจโชค

Name : Mrs. Budsaba Rerkamnuaychoke

Position : Associate Professor

Nationality : Thai

Education :

Year	Major	Degree	University
1983	Genetics	B.Sc.	Chulalongkorn
1986	Genetics	M.Sc.	Chulalongkorn
1992	Molecular Oncology	D.M.Sc.	The University of Tokyo

Experiences

1991, March 3 - 10 : Asian Molecular Biology Organization (AMBO)

International Training Course : Detection and DNA aberrations in cancer cells course 1 “PCR-band analytical technique : PCR-SSCP analysis and direct sequencing of single allele “National Cancer Research Institute. Tokyo, Japan.

1994 -1995, December 12 - March 11 :

: Construction of DNA probes by chromosome microdissection. Nagasaki University School of Medicine, Japan. (Under NRCT - JSPS program, 1994)

1997, January 9 - March 24 :

: Molecular medicine. Nagasaki University School of Medicine, Japan. (Under NRCT-JSPS program, 1996)

1997, May 1 - June 16 :

: Interphase cytogenetics by fluorescence *in situ* hybridization (FISH). Children’s Cancer Research Institute, Vienna, Austria (Under The Thai-Austrian Cooperation in Science and Technology, 1997)

1997, September 1 - 12 :

: Radiation hazard prevention, level 2, group 17. Office of Atomic Energy for Peace, Thailand.



1998, September 3 - 4 :

: Training programme in thesis supervision as part of quality assurance : Prospects for Improving Quality in Postgraduate Education, Faculty of Graduate Studies, Mahidol University, directed by Professor Dr. Elwyn Thomas, Institute of Education, University of London.

1999, October 11 - 15 :

: Assessor training course ISO / IEC Guide 25, Siam City Hotel, Bangkok, Thailand, directed by United Kingdom Accreditation Service.

2000, October 23 - 27 :

: Hospital Accreditation Training for Facilitators and Quality Managers, group 8. The Empress Hotel, Bangkok, Thailand, directed by The Institute of Hospital Quality Development and Accreditation, Thailand.

2003, April 1 – 30 :

: Molecular cytogenetics Training. Institute of Pathophysiology. Karl- Franz University School of Medicine, Graz, Austria. (Under The Thai-Austrian Cooperation in Science and Technology, 2003)

2008, August 1 – October 30 :

: Molecular oncology Training. The Institute of Medical Science, The University of Tokyo. (Under JASSO

Position :

1992 – 1995

: Lecturer, Department of Pathology, Faculty of Medicine (Ramathibodi Hospital), Mahidol University

1995 – 1999

: Assistant Professor, Department of Pathology, Faculty of Medicine (Ramathibodi Hospital), Mahidol University

1995 – present

: Head of Human Genetics Unit, Department of Pathology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University

1996 – 1997

: Vice Secretary, Genetics Society of Thailand

1997 – 2007

: Secretary, Genetics Society of Thailand

1999 – present

: Associate Professor, Department of Pathology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University

- 2007 – present : Board, Genetics Society of Thailand
2010 – present : Chairman, Thai CML Laboratory Union Organization
(Thai-CLUB)
2010 – present : Chairman, Forensic DNA Network of Thailand (FDNT)
2011 – present : Vice President, Genetics Society of Thailand
1999 – present : Associate Professor, Department of Pathology,
Faculty of Medicine, Ramathibodi Hospital, Mahidol University

Research experience :

- : Chromosome study in human hematological malignancies.
- : Baseline frequency of sister chromatid exchange in Thais.
- : HLA antigens in SLE patients.
- : The introduction of c - *erbB* - 2 gene into factor dependent cell line.
- : Phosphatidylinositol - 3 (PI - 3) kinase in c - *erbB* - 2 signal transduction.
- : Detection of bcr /*abl* in Chronic Myeloid Leukemia.
- : Chromosome microdissection.
- : Fluorescence *in situ* hybridization (FISH).
- : Molecular forensic investigation by DNA typing and Mitochondrial DNA sequencing.
- : Comparative genomic hybridization (CGH)

Publications : (เรียงจากปัจจุบัน – อดีต)

1. Hutspardol S, Pakakasama S, Kanta K, Nuntakarn L, Anurathapan U, Sirachainan N, Songdej D, Sawangpanich R, Tiyasirichokchai R, **Rerkamnuaychoke B**, Hongeng S. [Interphase-FISH screening for eight common rearrangements in pediatric B-cell precursor acute lymphoblastic leukemia.](#) Int J Lab Hematol. 2013 Aug;35(4):406-15. doi: 10.1111/ijlh.12031. Epub 2012 Nov 28.
2. Sornmayura P, **Rerkamnuaychoke B**, Jinawath A, Euanorasetr C. [Human epidermal growth-factor receptor 2 overexpression in gastric carcinoma in Thai patients.](#) J Med Assoc Thai. 2012 Jan;95(1):88-95.
3. Piwkham D, Gelfond JA, **Rerkamnuaychoke B**, Pakakasama S, Rebel VI, Pollock BH, Winick NJ, Collier AB 3rd, Tomlinson GE, Beuten J. [Multilocus Association of Genetic Variants in MLL, CREBBP, EP300, and TOP2A with Childhood Acute Lymphoblastic Leukemia in Hispanics from Texas.](#) Cancer Epidemiol Biomarkers Prev. 2011 Jun;20(6):1204-12. Epub 2011 Apr 14.

4. Siriboonpiputtana T, Jomsawat U, Rinthachai T, Thanakitgosate J, Shotivaranon J, Limsuwanachot N, Polyorat P, **Rerkamnuaychoke B**. [Y-chromosomal STR haplotypes in Central Thai population](#). Forensic Sci Int Genet. 2010 Apr;4(3):e71-e72. Epub 2009 Jul 19.
5. Shotivaranon J, Chirachariyavej T, Leetrakool N, **Rerkamnuaychoke B**. [DNA database of populations from different parts in the Kingdom of Thailand](#). Forensic Sci Int Genet. 2009 Dec;4(1):e37-8. Epub 2009 Apr 28.
6. Jootar S, Pornprasertsud N, Petvises S, **Rerkamnuaychoke B**, Disthabanchong S, Pakakasama S, Ungkanont A, Hongeng S. [Bone marrow derived mesenchymal stem cells from chronic myeloid leukemia t\(9;22\) patients are devoid of Philadelphia chromosome and support cord blood stem cell expansion](#). Leuk Res. 2006 Dec;30(12):1493-8. Epub 2006 Jul 12.
7. **Rerkamnuaychoke B**. T Rinthachai. Shotivaranon J. Jomsawat U. Siriboonpiputtana T. Chaiatchanarat K, Pasomsub E, Chantratita W [2006]. Thai population data on 15 tetrameric STR loci-D8S1179, D21S11, D7S820, CSF1PO, D3S1358, TH01, D13S317, D16S539, D2S1338, D19S433, vWA, TPOX, D18S51, D5S818 and FGA. Forensic Science International Journal 158 (2-3) : 234-237
8. Hongeng S, Parapakpenjun S, Pakakasama S, **Rerkamnuaychoke B**. Pornkul R [2005]. Secondary Burkitt lymphoma in a retinoblastoma patient with 13q deletion syndrome. *Pediatr Blood Cancer*. (published on line ahead of the journal)
9. Poeaim S, **Rerkamnuaychoke B**, Jesdapatarakul S, Campiranon A [2005]. Chromosome alterations in colorectal cancer in Thai patients. *Cancer Genet Cytogenet*. 160 : 152-159.
10. **Rerkamnuaychoke B**. T Rinthachai. Shotivaranon J. Jomsawat U. Siriboonpiputtana T. Chaiatchanarat K, Pasomsub E, Chantratita W [2005]. Thai population data on 15 tetrameric STR loci-D8S1179, D21S11, D7S820, CSF1PO, D3S1358, TH01, D13S317, D16S539, D2S1338, D19S433, vWA, TPOX, D18S51, D5S818 and FGA. *Forensic Sci Int*. (published on line ahead of the journal)
11. Hongeng S., S. Petvises, S. Worapongpaiboon, **B Rerkamnuaychoke**, S. Pakakasama, S. Jootar [2003] Generation of CD3+ CD56+ cytokine-induced killer cells and their *in vitro* cytotoxicity against pediatric cancer cells. *International Journal of Haematology* 77 : 175 – 179

12. Sangkitporn S., C. Mitrakul, **B. Rerkamnuaychoke**, Y. Sutivigit, S. Sangkitporn (2002) Hb G makassar [beta 6 : Glu - Ala] in a Thai family. Journal of the Medical Association of Thailand Journal of the Medical Association of Thailand 85 : 577 – 582
13. Hongeng S., A. Chuansumrit, P. Hathirat, **B. Rerkamnuaychoke**, W. Chaisiripoomkere, S. Jootar (2002) Case report: full chimerism in nonmyeloablative stem cell transplantation in a beta-thalassemia major patient (class 3 Lucarelli). Bone Marrow Transplantation. 30 : 409 - 410
14. Hongeng. S, S. Petvises, **B. Rerkamnuaychoke**, S. Worapongpaiboon, P. Tardtong, S. Apibal, A. Ungkanont (2001) Letter to the editor : Host origin of marrow mesenchymal stem cells following allogeneic cord-blood stem-cell transplantation. International Journal of Hematology. 74 : 235 – 256
15. **Rerkamnuaychoke, B.**, W. Chantratita, U. Jomsawat, J. Thanakitgosate, T. Ruangvithayanon, P. Rojanasunan. (2001) Database of nine tetrameric STR loci- D3S1358, vWA, FGA, D8S1179, D21S11, D18S51, D5S818, D13S317 and D7S820 in Thai population. Forensic Science International. 119 : 123 – 125
16. Chantratita W., **B. Rerkamnuaychoke**, U. Jomsawat, J. Thanakitgosate, T. Ruangvithayanon, P. Rojanasunan. (2001) Thai population data on tetrameric STR loci- D3S1358, vWA, FGA, TH01, CSF1PO, D5S818, D13S317 and D7S820. Forensic Science International 115 : 113 – 115
17. Sangkitporn, **B. Rerkamnuaychoke**, S. Sarasophona, R. Parinayok, P. Niamrot, A. Apilugsanachit, S. Sangkitporn, S. Ajjimakorn. (2000) Preliminary report on detection of chromosomes 21, X and Y in uncultured amniocytes by using fluorescence in situ hybridization (FISH). Bulletin of the Department of the Medical Science 42 : 20 – 27
18. **Rerkamnuaychoke, B.** (2000) Radiation and chromosomal aberration. Nuclear Review 15 : 23 - 29
19. Sarasophona S., K. Promsawat, **B. Rerkamnuaychoke**. (2000) Determination of sex chromosome by fluorescence *in situ* hybridization technique. Journal of the Medical Association of Thailand 83 (suppl. 1) : S89 – S94
20. **Rerkamnuaychoke, B.**, W. Chantratita, U. Jomsawat, J. Thanakitgosate, N. Patanasak, P. Rojanasunan. (2000) Comparison of DNA extraction from blood stain and decomposed muscle in STR polymorphism analysis. Journal of the Medical Association of Thailand 83 (suppl. 1) : S82 – S88
21. **Rerkamnuaychoke, B.**, W. Chantratita, U. Jomsawat, J. Thanakitgosate, P. Rojanasunan. (2000) Forensic identification by DNA fingerprinting and mitochondrial DNA typing. Journal of the Medical Association of Thailand 83 (suppl. 1) : S49 – S54

22. **Rerkamnuaychoke, B.,** W. Chantratita, U. Jomsawat, J. Thanakitgosate, P. Rojanasunan. (2000) Paternity testing by PCR-based STR analysis. Journal of the Medical Association of Thailand 83 (suppl. 1) : S55 – S62
23. **Rerkamnuaychoke, B.,** U. Jomsawat, N. Maneesri, A. Apilugsanachit, N. Pattanasak. (2000) BCR/ABL rearrangement in Philadelphia chromosome negative CML patients. Journal of the Medical Association of Thailand 83 (suppl. 1) : S70 – S75
24. **Rerkamnuaychoke, B.** (1999) PCR and its use in genotyping. Thai Genetics Newsletter 19 : 4 - 10
25. **Rerkamnuaychoke, B.,** C.M. Hattinger, P.F. Ambros. (1999) Interphase cytogenetics of hepatoblastoma by fluorescence *in situ* hybridization. Mahidol Journal 6 : 77-80
26. Hongeng, S., S. Pakakasama, A. Chuansumrit, **B. Rerkamnuaychoke,** P. Nitiyanunt, U. Suthutvorut, A. Ungkanon, P. Hathirat. (1998) Allogeneic bone marrow transplantation in an osteopetrosis patient : first report in Thailand. Asian Pacific Journal of Allergy and Immunology 16 : 193-198
27. **Rerkamnuaychoke, B.,** J. Thanakitgosate, W. Purisa. (1998) Length polymorphism of the CGG repeats in FMR 1 gene in normal Thais. Ramathibodi Medical Journal 21 : 79-84
28. **Rerkamnuaychoke, B.,** U. Jomsawat, , N. Maneesri, A. Apilugsanachit, R. Parinayok. (1998) BCR/ABL rearrangement detection in bone marrow and peripheral blood of CML patients. Ramathibodi Medical Journal 21 : 20-27
29. **Rerkamnuaychoke, B.,** S. Sarasophona, N. Maneesri, A. Apilugsanachit, S. Chuncharunee. (1998) BCR/ABL detection by fluorescence *in situ* hybridization (FISH) in interphase nuclei. Ramathibodi Medical Journal 21 : 28-35
30. Hathirat P., A. Chuansumrit, S. Singhapakdi, S. Pakakasama, C. Okartcharoen, **B. Rerkamnuaychoke,** S. Apibal, S. Hongeng. (1998) Extended intrathecal (IT) tripple chemotherapy without both brain radiation (RT) and intermediate dose methotrexate (IDM) in low risk B cell precursor childhood ALL. Proceedings of American Society of Clinical Oncology 17 : 2082
31. **Rerkamnuaychoke, B.,** N. Niikawa. (1997) Chromosome microdissection of 1q42-qter. Ramathibodi Medical Journal 20 : 249-253
32. Punyammalee, B., S. Manoromana, W. Purisa, S. Chariyalertsak, **B. Rerkamnuaychoke.** (1997) Association of mdrl gene expression with other prognostic factors and clinical outcome in human breast cancer. Journal of The Medical Association of Thailand 8 (Suppl.1) : 162-173
33. **Rerkamnuaychoke, B.,** (1996) Microdissection of chromosome : review. Ramathibodi Medical Journal 19 : 114-119

34. Coelho, K.- E. F. de A., M. Egashira, R. Kato, M. Fujimoto, N. Matsumoto, **B. Rerkamnuaychoke**, K. Abe, N. Harada, H. Ohashi, Y. Fukushima, and N. Niikawa. (1996) Diagnosis of four chromosome abnormalities of unknown origin by chromosome microdissection and subsequent reverse and reverse painting. American Journal of Medical Genetics 63 : 468 - 471
35. **Rerkamnuaychoke, B.** (1995) Chromosome microdissection. Thai Genetics Newsletter 15 : 12 – 16
36. **Rerkamnuaychoke, B.,** D. Kangwanpong, S. Jootar, and C. Puranakanittha. (1995) Detection of BCR / ABL fused gene in CML : A preliminary report. Southeast Asian Journal Tropical Medicine and Public Health 26 (supplement 1) : 197 – 200
37. Yamanashi, Y., Y. Fukui, **B. Wongsasant,** Y. Kinoshita, Y. Ichimori, K. Toyoshima, and T. Yamamoto. (1992) Activation of *Src* - like protein - tyrosine kinase *Lyn* and its association with phosphatidylinositol 3 - kinase upon B - cell antigen receptor mediated signaling. Proceedings of The National Academy of Sciences, U.S.A. 89 : 1118 – 1122
38. **Wongsasant, B.,** S. Matsuda, and T. Yamamoto. (1991) Active c - *erbB* - 2 induces short - term growth of FDC - P2 cell after IL - 3 depletion. Biochemical and Biophysical Research Communications 181 : 981 - 988
39. Inoue, K., **B. Wongsasant,** T. Akiyama, and K. Toyoshima. (1991) Human c - *fgf* Induces a Monocyte - Specific Enzyme in NIH3T3 Cells. Molecular and Cellular Biology 11 : 6279 – 6285
40. **Wongsasant, B.,** and M. Sasaki. (1991) Electroporation method. In : Protocol of Molecular Biological Tecniqe pp. 219 - 223. Shujusha company, Japan
41. Atichantakarn, V., B. Punyammalee, **B. Wongsasant,** and S. Jootar. (1986) Acute Nonlymphocytic Leukemia with a Translocation (1;3) (p36;q21) in a XYY man. Cancer Genetics and Cytogenetics 21 : 79 - 83