

# Curriculum Vitae



**Name** **Assoc. Prof. Dr. Chukiat Viwatwongkasem**  
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**Date of Birth** February 8, 1959.

**Place of Birth** Bangkok, Thailand.

**Marital Status** Married, has 2 daughters.

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## **Education**

1977	High School Student at Satriwitaya2, Bangkok
1981	B.Sc. (Mathematics), Khon Kaen University.
1984	M.Sc. (Biostatistics), Mahidol University.
2005	Ph.D. (Statistics), National Institute of Development Administration

## **Positions**

1982 – 1985	Educator, Faculty of Public Health, Mahidol University.
1985 – 1990	Lecturer, Faculty of Public Health, Mahidol University.
1990 – 1996	Assist.Professor, Faculty of Public Health, Mahidol University.
1996 – today	Assoc.Professor, Faculty of Public Health, Mahidol University.

## **Research Area of Interests**

- Theory of Statistics
- Biostatistical and Epidemiological Methods
- Meta-Analysis, Meta-Regression, and Multi-center Studies
- Mixture Models, Heterogeneity, Disease Mapping, and Applications
- Capture-Recapture Methods and Models
- Generalized Linear Models, Generalized Estimating Equations, and Mixed Models
- Survival Methods and Modelling

## **Editorial Board:**

- Open Access Medical Statistics (2010 – today)
- Journal of Disease and Health Risk DPC 8 (2007 - today)
- Journal of Public Health (2011-today)

## **Reviewer:**

- Computational Statistics & Data Analysis
- Statistical Papers
- Journal of the International AIDS Society
- Asia-Pacific Journal of Public Health

- Thailand Statistician
- Journal of Public Health

### Some Important Projects & Grants

Project No. /Year	Source	Investigator's Name	Project Title
DFG Bo.865/6-1, 6-2 /1998-2001	The German Research Foundation (DFG) in Co-operation with the National Research Council of Thailand (NRCT)	<b>PI</b> of German side: Dankmar Böhning  <b>PI</b> of Thai side: Chukiat Vivatwongkasem	A Biostatistical Investigation of Heterogenous Populations
DFG Bo 865/6-5, 6-6 (Phase II) /2002-2005	The DFG in Co- operation with the NRCT	<b>PI</b> of German side: Dankmar Böhning  <b>PI</b> of Thai side: Chukiat Vivatwongkasem	A Biostatistical Investigation and Modelling of Heterogenous Populations- the Two Sample Cases: A Profile Likelihood Mixture Approach
E(GE) 5/43 /2000-2002	The NRCT in Co- operation with the DFG	<b>PI</b> of Thai side: Chukiat Vivatwongkasem  <b>PI</b> of German side: Dankmar Böhning	A Comparison of Risk Difference Estimators in Multi-Center Studies under Baseline-Risk Heterogeneity
E(GE) 23/2546 (Phase II) /2003-2005	The NRCT in Co- operation with the DFG	<b>PI</b> of Thai side: Chukiat Vivatwongkasem  <b>PI</b> of German side: Dankmar Böhning	Minimum Mean Square Error Using the Simple Adjusted Proportion for Testing the Significance of a Common Effect Measure in Sparse Multi-Center Data
ASEM- DUO Fellowship Program in 2008	ASEM-DUO, Ministry of Education, Thailand,	<b>PI</b> of Thai side: Chukiat Vivatwongkasem  <b>PI</b> of UK side: Dankmar Böhning	Surveillance Methodology in the Field of Drug Dependency in Thailand - Using a Capture- Recapture Approach

**PI** = Principal Investigator

## Some Recent and Selected Publications (Counted from 2002)

### Corresponding Author

1. Viwatwongkasem, C., Donjdee, K., Poodphraw, T. (2018). Profile Likelihood Tests for Common Risk Ratios in Meta-Analysis. **Open Journal of Statistics** **8**, 915-930.
2. Viwatwongkasem, C., (2016). EM Algorithm for Truncated and Censored Poisson Likelihoods. **Procedia Computer Science** **86**, 240-243.
3. Sae-tang, S., Srihera, R., Satitvipawee, P., Soontornpipit, P., Viwatwongkasem, C., (2016). Interval Estimation of Diagnostic Odds Ratio in Meta-Analysis by Means of Profile Likelihood. **Procedia Computer Science** **86**, 212-215.
4. Ujeh, C., Satitvipawee, P., Sillabutra, J., Soontornpipit, P., Kitidamrongsuk, P., Viwatwongkasem, C., (2016). Bootstrapping with R to Determine Variances of Mixture Model Estimates in Predicting Confidence Intervals for Population Sizes. **Procedia Computer Science** **86**, 216-219.
5. Donjdee, K., Kitidamrongsuk, P., Satitvipawee, P., Soontornpipit, P., Sillabutra, J., Viwatwongkasem, C., (2016). Some Tests Based on the Profile Likelihood Estimator for Testing Homogeneity of Diagnostic Odds Ratios in Meta-Analysis. **Procedia Computer Science**, 220-223.
6. Viwatwongkasem, C., Gunngam, W., Soontornpipit, P. (2015). Spatial Mapping of HIV Infection by Means of Mixture Models. **Advanced Mechanic and Materials** **781**, 599-603.
7. Viwatwongkasem, C., Satitvipawee, P., Jareinpituk, S., Soontornpipit, P. (2013). Mixture Models for Estimating the Number of Drug Users in Thailand 2005-2007. **Applied Mathematics** **4**, 1242-1250.
8. Viwatwongkasem, C., Kudngaongarm R, Chaisupamongkollarp S, Thamsoonthorn C, Naovaratsophon A, Sripanarattanakul S, Nipattasat P, Levorakharn S, Jareinpituk S, Satitvipawee P, Pakdethanakul C. (2013). Not Chewing food of Complete dentures of the Thai Elderly. **J Med Assoc Thai** **96 (Suppl.5)**, S171-S180.
9. Viwatwongkasem, C., Jitthavech, J., Böhning, D., Lorchirachoonkul, V. (2012). Minimum MSE Weights of Adjusted Summary Estimator of Risk Difference in Multi-Center Studies. **Open Journal of Statistics** **2**, 48-59.

10. เดือนคารา ตราชั้นต๋อง<sup>1</sup>, ชูเกียรติ วิวัฒนวงศ์เกษม<sup>2</sup> \*, เพียงจันทร์ โรจนวิภาต<sup>3</sup>, รัชณี แซ่ลี<sup>4</sup> (2555)  
การวิเคราะห์ระยะปลอดเหตุการณ์เพื่อประมาณค่าอัตราการเกิดลิ้มเลือดในหัวใจห้องบนซ้ายใน  
กลุ่มผู้ป่วยโรคลิ้มหัวใจไม่ครัดตีบที่มีและไม่มีภาวะการเต้นของหัวใจผิดจังหวะชนิด atrial  
fibrillation. **วารสารสาธารณสุขศาสตร์ ฉบับพิเศษ**, 93-108.
11. Soonklang, K., Viwatwongkasem, C., Satitvipawee, P., Busarawong, R., Srihera, R.  
(2010). Adjusted Estimator of the Sum of Misclassification Errors of Youden's Index  
in Sparse Data of a Diagnostic Study. **Thailand Statistician** **8** (2), 157-166.
12. Punyacharoensin, N. and Viwatwongkasem, C. (2009). Trends in three decades of  
HIV/AIDS epidemic in Thailand by nonparametric backcalculation method. **AIDS**  
**23**, 1143-1152.
13. Viwatwongkasem, C., Kuhnert, R., and Satitvipawee, P. (2008). A Comparison of  
Population Size Estimators under the Truncated Count Model with and without  
Allowance for Contaminations. **Biometrical Journal** **50**, 1006-1021.
14. Böhning, D. and Viwatwongkasem, C. (2005). Revisiting Proportion Estimates.  
**SMMR: Statistical Methods in Medical Research** **14**, 147-169.
15. Viwatwongkasem, C. and Böhning, W. (2003). A Comparison of Risk Difference  
Estimators in Multi-Center Studies under Baseline-Risk Heterogeneity.  
**Computational Statistics & Data Analysis**, **41** (3-4), 631-644.

#### Co-author

16. Sillabutra, J., Viwatwongkasem, C., Ujeh, C., Sae-tang, S., Donjdee, K.,  
Kitidamrongsuk, P., (2016). Bootstrapping with R to make generalized Inference for  
Regression Model. **Procedia Computer Science**. (To appear)
17. Soontornpipit, P., Viwatwongkasem, C., Taratep, C., Teerawat, W., Vanitchatchavan,  
P. (2016). Development of Electronic Surveillance Monitoring on Web Applications.  
**Procedia Computer Science**. (To appear)
18. Boonapai, S., Sillabutra, J., Viwatwongkasem, C., Rojanavipart, P., Satitvipawee, P.,  
Soontornpipit, P., (2016). E-assisted Nutrition Package for Hypertension Patients.  
**Procedia Computer Science**. (To appear)

19. Meesang, J., Soontornpipit, P., Viwatwongkasem, C., Kitidamrongsuk, P., Sillabutra,J., (2016). Data Flow Diagram for Developing Decision Support System of Acute Myocardial Infarction Screening Development of Impedance Tube System for Normal Incident Sound Absorption Measurement. **Procedia Computer Science**. (To appear) **Procedia Computer Science**. (To appear)
20. Kitidamrongsuk, P.,Jaroenpituk, S., Pattanasin, S., Viwatwongkasem, C., Soontornpipit, P., Sillabutra,J., Satitvipawee, P. (2016). Determinants of Impregnated Net Ownership and Utilization in Rural Community on the Thai-Myanmar Border in Prachuab Khiri Khan, Thailand. **Procedia Computer Science**. (To appear)
21. Böhning, D. and Viwatwongkasem, C. (2015). A Miscellaneous Note on the Equivalence of Two Poisson Likelihoods. **Biometrics & Biostatistics 6**: 1, 231-233.
22. Pensuwan, W., Viwatwongkasem,C., Satitvipawee, P., Soontornpipit, P., E-Referral System by Means of Decision Support System. (2015). **Applied Mechanics and Materials 781**, 587-590.
23. Soontornpipit, P., Viwatwongkasem,C., Satitvipawee, P., Pramnoi, P., Wattanaupong, A. (2015). Internet Cigarette and Tobacco Business (ICTB) Database for Domestic Markets in Thailand. **Applied Mechanics and Materials 781**, 133-136.
24. Auemaneekul, N., Silapasuwan, P., Sirichotiratana, P., Satitvipawee, P., Sompopcharoen, M., Viwatwongkasem, C., Sujirarat, D., (2015). The Impact of Cigarette Plain Packaging on Health Warning Salience and PerceptionS: Implications for Public Health Policy. **Asia-Pacific Journal of Public Health**, 1-12.
25. Böhning, D. Vidal-Diez,A., Lerdsuwansri,R., Viwatwongkasem, C., Arnold,M. (2013). A Generalization of Chao’s Estimator for Covariate Information. **Biometrics 69**, 1033-42.
26. Varitsakul, R., Sindhu, S., Sriyuktasuth, A., Viwatwongkasem, C., Dennison Himmelfarb,C.R. (2013). The Relationships between Clinical, Socio-demographic and Self-management: Factors and Complications in Thai Peritoneal Dialysis Patients. **Renal Society of Australasia Journal 9**, 85-92.
27. Pattanasin S., Satitvipawee, P., Wongklang W., Viwatwongkasem, C., Bhumiratana, A., Soontornpipit,P., Jareinpituk, S. (2012). Risk Factors for Malaria Infection

- Among Rubber Tappers Living in a Malaria Control Program Area in Southern Thailand. **Southeast Asia J Trop Med Public Health** **43**, 1313-1325.
28. Pukpobsuk, N., Panpakdee, O., Maneesriwongul, W., Viwatwongkasem, C., Ingsathit, A. (2012). Development and Psychometric Properties of the Thai Health-Related Quality of Life Instrument for Dialysis Patients. **Pacific Rim International Journal of Nursing Research** **16** (2), 154-168.
29. Wongkongkam, K., Thosingha, O., Riegel, B., Ruangsetakit, C., Viwatwongkasem, C. (2012). Factors Influencing the Presence of Peripheral Arterial Disease among Thai Patients with Type 2 Diabetes. **European Journal of Cardiovascular Nursing** **11**, 70-76.
30. Pokpalagon P., Hanucharunkul, S., McCorkle, R., Tongprateep, T., Patoomwan, A., Viwatwongkasem, C. (2012). Comparison of Care Strategies and Quality of Life of Advanced Cancer Patients from Four Different Palliative Care Settings. **Pacific Rim International Journal of Nursing Research** **16** (4), 326-342.
31. Apinuntavech, S., Viwatwongkasem, C., Tipayamongkhogul, M., Wichaidit, W., Sangthong, R. (2012). Consequences and Associated Factors of Youth Gambling. **J Med Assoc Thai** **95 Suppl** (6), s21-s29.
32. Deesawat, C., Boonshuyar, C., Chansatitporn, N., Viwatwongkasem, C., Termsirikulchai, L. (2012). A Multilevel Study of Smoking among Youths in School at Buriram Province. **J Med Assoc Thai** **95 Suppl** (6), s78-s86.
33. ชนิดา ธรรมสุนทร, รมณีย์ ชัดเงางาม, อัญชลี เนาวรัตน์โสภณ, สมชัย ชัยศุกรมงคลตาก, ชูเกียรติ วิวัฒน์วงศ์เกษม, สมศักดิ์ ศรีพนารัตนกุล, ประพนธ์ นิพัทธศักดิ์, สายทิพย์ ลิขรรณันต์, สุทธิ เจริญพิทักษ์, ปรรารถนา สถิตย์วิภาวี, นวีวรรณ ภักดีธนากุล (2555). การทดสอบความตรงและความเที่ยงของแบบสอบถามฉบับแรกจากการใช้พื้นที่ชุมชน ฉบับภาษาไทยเพื่อวัดความพึงพอใจของผู้ป่วยที่ใส่ฟันเทียมทั้งปาก. **วิทยาสารทันตแพทย์** **62** (2), 53-64.
34. สุภวรรณ สายสุด, พิมพ์พรรณ ศิลปสุวรรณ, ชูเกียรติ วิวัฒน์วงศ์เกษม, เพ็ญพิศ สุวรรณอำไพ (2555) การสัมผัสเอสเบสตอส แบบแผนความเชื่อด้านสุขภาพที่มีต่อพฤติกรรมกรรมการป้องกัน และภาวะสุขภาพของพนักงานอยู่ซ่อมรถยนต์ **Journal of Health Science** **21** (1): 31-43.

35. เพ็ญรุ่ง วรรณดี, พิมพ์พรรณ ศิลปสุวรรณ, ชูเกียรติ วิวัฒน์วงศ์เกษม, ประรณนา สติชัยวิภาวี (2555) ลักษณะงาน ความเสี่ยงในการทำงาน และความสามารถในการทำงานของพยาบาลวิชาชีพ ที่มีต่อการจัดการความปลอดภัยของผู้ป่วยในโรงพยาบาลชุมชน วารสารวิทยาลัยพยาบาลบรมราชชนนี กรุงเทพ 28 (1), 23-35.
36. Sujirarat, D., Silpasuwan, P., Viwatwongkasem, C., Sirichothiratana, N. (2011). Factors Affecting Failure to Quit Smoking after Exposure to Pictorial Cigarette Pack Warnings among Employees in Thailand. **Southeast Asian J Trop Med Public Health** 42, 134-141.
37. Silpasuwan, P., Upalabat, S., Viwatwongkasem, C., Boonyamalik, P., Sujirarat, D., (2011). Violence Recidism among Thai Juvenile Delinquents. **Asia Journal of Public Health** 2, 13-19.
38. Chaiviboontham, S., Viwatwongkasem, C., Hanucharurnkul, S., McCorkle, R. (2011). Symptom Clusters in Thais with Advanced Cancer. **Pacific Rim International Journal of Nursing Research** 15 (4), 265-277.
39. Get-Kong, S., Hanucharurnkul, S., Corkle, M.R., Viwatwongkasem, C., Junda, T., Ittichaikulthol, W. (2010). Symtom Experience, Palliative Care, and Spiritual Well-Being among Thais with Advanced Cancer. **Pacific Rim International Journal of Nursing Research** 14 (3), 219-234.
40. Rawdaree, P., Deerochanawong, C., Peerapatdit, T., Tongtang, N., Suwanwalaikorn, S., Khemkha, A., Benjasuratwong, Y., Boonyavarakul, A., Chetthakul, T., Leelawattana, R., Ngarmukos, C., Viwatwongkasem, C., Pratipanawatr, T., Kosachunhanun, N. (2010). Efficacy and Safty of Generic and Original Pioglitazone in Type 2 Diabetes Mellitus. **J Med Assoc Thai** 93 (11), 1249-1255.
41. พิมพ์พรรณ ศิลปสุวรรณ กรรณิกา คูประสิทธิ์ ชูเกียรติ วิวัฒน์วงศ์เกษม ชัชวาล ศิลปกิจ (2553) ลักษณะงาน ความโกรธ ความอ่อนล้าทางอารมณ์ ที่มีความสัมพันธ์กับความผิดพลาดในการปฏิบัติงานของพยาบาลวิชาชีพ **Journal of Nurses' Association of Thailand North-Eastern Division** 28 (2), 56-63.



42. Sopajareeya, C., Viwatwongkasem, C., Lapvongwatana, P., Hong, O., Kalampakorn, S. (2009). Prevalence and Risk Factors of Low Back Pain among Nurses in Thai Public Hospital. **J Med Assoc Thai** **92** (7), s93-s99.
43. Monkong, L., Pongpanich, S., Viwatwongkasem, C., Chantavanich, S., Wongpiromsarn, Y., and Katz, L.S. (2009). The effectiveness of program developed from cognitive-experiential self-theory and life skills technique on adolescent coping with stress. **Nepal Med Coll J** **11** (4), 225-228.
44. Jareinpituk, S., Viwatwongkasem, C., Kalampakorn, S., Promthert, S.S., Satitvipawee, P. (2009). Prevalence Estimation of Breast Cancer Screening Methods among Northeastern Women in Thailand. **Journal of Public Health**, **39** (3), 271-282.
45. Auayporn, M., Rojanavipart, P., Viwatwongkasem, C., Chaiwerawattana, A., Hancharoen, K. (2009). Exploring Breast Cancer Data to Find the Risk Factors for Distant Metastasis: Register Data, the National Cancer Institute of Thailand. **J Public Health** **39**, 173-183.
46. สุภาวดี เข้มชุม พิมพ์พรรณ ศิลปสุวรรณ ชูเกียรติ วิวัฒน์วงศ์เกษม (2552) ประสิทธิภาพของโครงการป้องกันการเกิดอาการปวดเมื่อยกล้ามเนื้อ กรณีศึกษาในกลุ่มจักสานกระจูด บ้านทะเลน้อย จังหวัดพัทลุง **Journal of Public Health Nursing** **23**, 45-61.
47. พิมพ์พรรณ ศิลปสุวรรณ พรทิพย์ ฟิ่งศักดิ์ ชูเกียรติ วิวัฒน์วงศ์เกษม (2552) ปัจจัยที่มีอิทธิพลต่อความสุขจากการทำงานของพยาบาลวิชาชีพในหน่วยปฐมภูมิศูนย์สุขภาพชุมชนชนประเทศไทย **Journal of Nursing Science Chulalongkorn University** **21**, 70-82.
48. Silpasuwan, P., Ngoenwivatkul, Y., Viwatwongkasem, C., Satitvipawee, P., Sirichotiratana, N., Sujirarat, D. (2008). Potential Effectiveness of Health Warning Labels among Employees in Thailand. **J Med Assoc Thai**, **91** (4), 551-558.
49. พนิดา สังฆจันทร์, ปรีชา ลอเสีรวานิช, วิทยา อยู่สุข, สุทธินันท์ ฉันท์ธนกุล, ชูเกียรติ วิวัฒน์วงศ์เกษม (2551). ผลของการสัมผัสรังสีแม่เหล็กไฟฟ้าจากฐานส่งสัญญาณย่อยโทรศัพท์เคลื่อนที่ต่อพฤติกรรมทางประสาทของพนักงานขายศูนย์การค้า. **Thai Journal Toxicology** **23**, 175-180.

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51. Silpasuwan, P., Viwatwongkasem, C., Phalee, P., Kalampakorn, S. (2006). Evaluating Occupational Health Nursing Units in Bangkok Textile Factories. **AAOHN: American Association of Occupational Health Nurses** **54**, 69-74.
52. Sujirarat, D., Charupoonphol, P., Thipayamongkolkul, M., and Viwatwongkasem, C. (2005). Relationship between Nuisance and Health Problems around Industrial Estates. **Journal of Public Health**, **35** (3), 175-185.
53. Silpasuwan, P., Ngoenwiwatkul, P., Viwatwongkasem, C., Satitvipawee, P., and Sirichotiratana, N. (2005). Assessment of the Health Warning Labeling on Cigarette Packages among Factory Workers. **Journal of Public Health**, **35** (3), 186-196.
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55. Böhning, D., Sarol, J., Rattanasiri, S., Viwatwongkasem, C., and Biggeri, A. (2004). A Comparison of Non-iterative and Iterative Estimators of Heterogeneity Variance for the Standardized Mortality Ratio. **Biostatistics**, **5**(1), 61-74.
56. Vorapongsathorn, T., Taejaroenkul, S., and Viwatwongkasem, C. (2004). A Comparison of Type I Error and Power of Bartlett's Test, Levene's Test, and Cochran's Test under Violation of Assumptions. **Songklanakarin Journal Science and Technology** **26**, 537-547.
57. Satitvipawee, P., Rawdaree, P., Indrabhakti, S., Ratanasuwan, T., Getn-germ, P. and Viwatwongkasem, C. (2003). No Effect of Garlic Extract Supplement on Serum Lipid Levels in Hypercholesterolemic Subjects. **J Med Assoc Thai**, **86** (8), 750-757.
58. Satitvipawee, P., Suparp, J., Podhipak, A., and Viwatwongkasem, C. (2003). Can Garlic Extract Supplement Lower Blood Pressure in Hypercholesterolemic Subjects? **Journal of Public Health**, **33** (1), 18-26.

59. Böhning, D., Malzahn, U., Dietz, E., Schlattmann, P., Viwatwongkasem, C., Biggeri, A. (2002). Some general points in estimating heterogeneity variance with the DerSimonian-Laird estimator. **Biostatistics**, **3** (4), 445-457.
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### **Books**

1. Pimpan Silpasuwan, Chukiat Viwatwongkasem , and Vason Silpasuwan (1995). *Research Methods in Health Sciences Research*.
2. Chukiat Viwatwongkasem (1996). *Computer Application in Health Sciences Research: Using SPSS*.

### **Summary**

Chukiat Viwatwongkasem is an associate professor of Biostatistics at Mahidol University, Faculty of Public Health, in Thailand. He is an recognized expert and has got a lot of experience more than 30 years in teaching biostatistical methods, theory of statistics, meta-analyses and multi-center studies, mixture models and applications, capture-recapture modeling, generalized linear and mixed models (GLM and GLMM models), GEE models, survival methods and modeling. Also, he produces over 60 publications in peer-reviewed journals in both the theoretical and applied biostatistics and public health sciences. He has been a statistical consultant and an invited speaker to talk on a variety of statistical methods and his research works.

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