
BIOGRAPHICAL SKETCH

NAME Kukiat Tudpor	POSITION TITLE PT, PhD
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EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	YEAR	FIELD OF STUDY
Khon Kaen University	BSc	2002	Physical Therapy
Mahidol University	MSc	2004	Physiology
Radboud University Medical Center	PhD	2014	Medical Sciences
Harvard Medical School	Postdoctoral Fellow	2015	Nephrology

A. POSITIONS AND HONORS

- 01-09-2015/Present Mahasarakham University, Lecturer
- 01-07-2014/Present Physical Therapist & CEO, Dr.K Manipulative Physiotherapy Clinic
- 26-12-2014/1-06-2015 Harvard Medical School, Postdoctoral Fellow
- 01-05-2013/30-09-2013 Srinakarinwirot University, Lecturer and Clinical Instructor
- 01-10-2008/30-09-2012 Radboud University Medical Center, PhD student (President of Thai Student Association in the Netherlands)
- 21-10-2004/30-09-2008 The Consortium for Calcium and Bone Research, Research Assistant
- 03-06-2002/20-10-2004 Mahidol University, MSc student (Distinguished Thesis Award in Health Sciences)
- 25-05-1998/01-05-2002 Khon Kaen University, BSc student

Study visits in the Netherlands and abroad during my PhD:

- 04-07-2012/16-07-2012 Department of Internal Medicine, Erasmus Medical Center, Rotterdam, the Netherlands. I investigated the thrombin/thrombin receptor signaling pathway (ERK1/2) in osteoblast cell culture. This data is combined with previous data of bone phenotypes of thrombin receptor knockout mice.
- 15-01-2012/26-01-2012 Institut des Neurosciences Cellulaires et Intégratives, Centre National de la Recherche Scientifique (CNRS), Université de Strasbourg, Strasbourg, France. I investigated Ca²⁺ balance phenotypes and investigated intestinal and renal Ca²⁺ transport proteins in β 2-adrenergic receptor transgenic mice.
- 14-10-2010/18-10-2010 Laboratory of Angiogenesis and Neurovascular Link (VIB Vesalius Research Center), Faculty of Medicine, Katholieke Universiteit Leuven, Leuven, Belgium. Here, I characterized Ca²⁺ phenotypes and molecular mechanism (PKC/Rac1/ERK) on urokinase and urokinase receptor knockout mice.
- 14-10-2010/18-10-2010 Department of Pathology, Academic Medical Center, Amsterdam, the Netherlands. I identified the role of thrombin receptor on intestinal, renal, and bone Ca²⁺ metabolism in thrombin receptor knockout mice using metabolic analysis.

Extramural collaborations:

- Department of Internal Medicine, Division of Nephrology, University Medical Centre Groningen, Groningen, the Netherlands. Our collaborator here supplied urine samples from chronic kidney disease patients. These samples were used for plasmin purification.

Intramural collaborations:

- Department of Biomolecular Chemistry, Radboud Institute for Molecular Life Sciences, Radboud University Nijmegen Medical Centre, Nijmegen, the Netherlands. I have learned plasmin purification with ion exchange chromatography here for the nephrotic syndrome project.
- Department of Protein Biophysics, Institute of Molecules and Materials, Radboud University Nijmegen, Nijmegen, the Netherlands. The collaborator applied the nuclear magnetic resonance (NMR) and the isothermal titration calorimetry (ITC) to identify TRPV5-calmodulin binding in the nephrotic syndrome project.

Other Experience, Prizes and Professional Memberships

Mahidol University

- Distinguished Thesis Award 2005 Presentation, **Tudpor K**, Mahidol University, Thailand

Physiological Society of Thailand

- 43rd Annual Conference of Physiological Society of Thailand 2014, **Tudpor K***, van der Eerden BCJ, Jongwattapanisan P, Woudenberg-Vrenken TE, Bindels RJM, Hoenderop JGJ & van Leeuwen JPTM Thrombin receptor deficiency leads to osteopetrosis, Garden Cliff Resort, Chonburi, Thailand *presenter
- 37th Annual Conference of Physiological Society of Thailand 2008, **Tudpor K**, Non-genomic action of 1 α ,25-dihydroxyvitamin D₃ on paracellular active calcium transport in rat duodenum via PI3K/PKC/MAPK pathway, Garden Sea View Resort, Chonburi, Thailand
- 34th Annual Conference of Physiological Society of Thailand 2005, **Tudpor K**, Hyperprolactinemia stimulated duodenal active calcium absorption in ovariectomized rats, Chumporn Cabana Resort, Chumporn, Thailand

Dutch Kidney Foundation

- Nephrology Winter School 2010, De Bergse Bossen Congress Center, Driebergen, the Netherlands

Dutch Physiological Society

- Young Physiologists Symposium 2009 **Tudpor K**, Extracellular cleavage of TRPV5 by the serine protease plasmin, Papendal Congress Centrum, Arnhem, the Netherlands
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Radboud Institute for Molecular Life Sciences (formerly Nijmegen Centre for Molecular Life Sciences)

- 18th NCMLS PhD Retreat 2012 **Tudpor K**, Plasmin reduces TRPV5 activity by phosphorylation of serine 144 in the N-terminus, Hof van Wageningen, Wageningen, the Netherlands
- NCMLS Symposium 2011: New Frontiers in Nobel Channels, Radboud Auditorium, Radboud University Nijmegen, Nijmegen, the Netherlands
- 3rd prize 17th NCMLS PhD Retreat 2011 **Tudpor K**, Urokinase receptor is important for normal Ca²⁺ handling, Hof van Wageningen, Wageningen, the Netherlands
- 16th NCMLS PhD Retreat 2010 **Tudpor K**, Plasmin inhibits the epithelial calcium channel (TRPV5) via protein kinase C-dependent phosphorylation, Hof van Wageningen, Wageningen, the Netherlands
- NCMLS Symposium 2009: New Frontiers in Pattern Recognition Receptors, Radboud Auditorium, Radboud University Nijmegen, Nijmegen, the Netherlands
- 15th NCMLS PhD Retreat 2009 **Tudpor K**, Extracellular regulation of the epithelial calcium channel TRPV5 by calciotropic hormones: development of extracellular epitope tag for studying TRPV5 turnover and recycling, Papendal Congress Centrum, Arnhem, the Netherlands

American Society of Nephrology

- 45th Annual Meeting American Society of Nephrology-Kidney Week 2012, Hoenderop JGJ*, **Tudpor K**, Láinez S, Navis G, Bindels RJM. Urinary plasmin inhibits transient receptor potential cation channel V5 in nephrotic-range proteinuria, San Diego Convention Center, San Diego, California *presenter

European Calcified Tissue Society

- 50th European Calcified Tissue Society Congress 2013, van der Eerden BCJ*, **Tudpor K**, Jongwattanapisan P, Woudenberg-Vrenken TE, Bindels RJM, Hoenderop JGJ, van Leeuwen JPTM, Thrombin receptor deficiency leads to osteopetrosis by decreasing the RANKL/OPG ratio, Lisbon Congress Centre, Lisbon, Portugal *presenter

B. SELECTED PEER-REVIEWED PUBLICATIONS (IN CHRONOLOGICAL ORDER).

- **Tudpor K**, Charoenphandhu N, Saengamart W, Krishnamra N. Long-term prolactin exposure differentially stimulated the transcellular and solvent drag-induced calcium transport in the duodenum of ovariectomized rats. *Exp Biol Med*. 2005; 230(11): 836-44.
- Charoenphandhu N, **Tudpor K**, Poolsuk N, Krishnamra N. Chronic metabolic acidosis stimulated the transcellular and solvent drag-induced calcium transport in the duodenum of female rats. *Am J Physiol Gastrointest Liver Physiol*. 2006; 91(3): G446-55.
- Charoenphandhu N, **Tudpor K**, Thongchote K, Saengamart W, Puntheeranurak S, Krishnamra N. High-calcium diet modulates effects of long-term prolactin exposure on the cortical bone calcium content in ovariectomized rats. *Am J Physiol Endocrinol Metab*. 2007; 292(2): E443-52.
- Charoenphandhu N, Wongdee K, **Tudpor K**, Pandaranandaka J, Krishnamra N. Chronic metabolic acidosis upregulated claudin mRNA expression in the duodenal enterocytes of female rats. *Life Sci*. 2007; 80(19): 1729-37.
- Seriwatanachai D, Thongchote K, Charoenphandhu N, Pandaranandaka J, **Tudpor K**, Teerapornpantakit J, Suthiphongchai T, Krishnamra N. Prolactin directly enhances bone turnover by raising osteoblasts-expressed receptor activator of nuclear factor κ B ligand/osteoprotegerin ratio. *Bone*. 2008; 42(3): 535-46.
- Wongdee K, Pandaranandaka J, Teerapornpantakit J, **Tudpor K**, Thongbunchoo J, Thongon N, Jantarajit W, Krishnamra N, Charoenphandhu N. Osteoblasts express claudins and tight junction-associated proteins. *Histochem Cell Biol*. 2008; 130(1): 79-90.
- **Tudpor K**, Teerapornpantakit J, Jantarajit W, Krishnamra N, Charoenphandhu N. 1,25-dihydroxyvitamin D₃ rapidly stimulates the solvent drag-induced paracellular calcium transport in the duodenum of female rats. *J Physiol Sci*. 2008; 58(5): 297-307.
- Boros S, Xi Q, Dimke H, van der Kemp AW, **Tudpor K**, Verkaart S, Lee KP, Bindels RJ, Hoenderop JG. Tissue transglutaminase inhibits the TRPV5-dependent calcium transport in an N-glycosylation-dependent manner. *Cell Mol Life Sci*. 2012; 69(6): 981-92.
- Markadieu N, San-Cristobal P, Nair AV, Lenssen E, **Tudpor K**, van Zeeland F, Bindels RJM, Hoenderop JGJ. A primary culture of distal convoluted tubules expressing functional thiazide-sensitive NaCl transport. *Am J Physiol Renal Physiol*. 2012; 303(6): F886-92.
- **Tudpor K**, Láinez S, Kwakernaak AJ, Kovalevskaya NV, Verkaart V, van Genesen S, van der Kemp A, Navis G, Bindels RJ, Hoenderop JG. Urinary plasmin inhibits TRPV5 in nephrotic-range proteinuria. *J Am Soc Nephrol*. 2012; 23(11): 1824-34.
- **Tudpor K***, van der Hagen EA*, Verkaart S, Lavrijsen M, van der Kemp A, van Zeeland F, Bindels RJ, Hoenderop JG. β 1-adrenergic receptor signaling activates the epithelial calcium channel, TRPV5, via the protein kinase A pathway. *J Biol Chem*. 2014; 289(26): 18489-96. *equal contributions.
- **Tudpor K***, van der Eerden BCJ*, Jongwattanapisan P, Roelofs JJTH, van Leeuwen JPTM, Bindels RJ, Hoenderop JG. Thrombin receptor deficiency leads to a high bone mass phenotype by decreasing the RANKL/OPG ratio. *Bone*. 2015; 72: 14-22. *equal contributions.

C. FELLOWSHIPS/GRANTS

- 2002-2004 Teaching Assistantship, Mahidol University
- 2003-2004 The Royal Bangkok Sports Club Fellowship
- 2012-2012 Erasmus Staff Training Fellowship, European Union

D. CONTACT INFORMATION

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