

## Curriculum vitae

Dr. Dung T. Dang

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*Tel.:* +65 84567843 *Born:* 29 March 1982

### **EDUCATION:**

- 1/2013 to present: Research Fellow at Division of Biophysics, SPMS, Nanyang Technological University (NTU), Singapore. Project: "Biological functions of DNA Gquadruplex-protein interaction in human cells" with prof. Phan Anh Tuan.
- 6/2012 to 1/2013: Post-doc at BioMedical Engineering Department, Technological University of Eindhoven (TUE), The Netherlands. Project: "Supramolecular dimerization of membrane proteins in mammalian cells" with prof. Luc Brunsveld.
- 9/2008 to 6/2012: PhD of BioMedical Engineering Department, Technological University of Eindhoven, The Netherlands. Project: "Supramolecular cucurbit[8]uril induced protein dimerization" with prof. Luc Brunsveld.
- 3/2008 6/2008: Internship at the Max Planck Institute of Molecular Physiology, Dortmund, Germany. Project "Engineering fluorescent proteins" with prof. Luc Brunsveld.
- 3/2005 2/2007: Master of Biological Engineering at Inha University, Incheon, Republic of Korea (South Korea). Project: "Lipase-catalyzed bioconversion in ionic liquids" with prof. Yoon M. Koo.
- 9/2000 9/2004: Bachelor of Biotechnology at University of Science-Vietnam National University, Vietnam. Project: "Determination of clotrimazol concentration for malaria treatment in mouse by HPLC" with prof. Tran Linh Thuoc.

# LIST OF PUBLICATIONS AND PATENT

1. Development of DNA-cutting endonuclease for specific parallel G-quadruplex. *Preparation* 

<u>Dung T. Dang</u>, Tuom T. T. Truong, Hoang D. Nguyen and Anh Tuan Phan

 Enhancement of ribonuclease activity for sequence-specific cleavage of the RNA strand in DNA-RNA hybrids. *preparation* <u>Dung T. Dang</u>, Anh Tuan Phan

Supramolecular reactivation of an inactivated, mutant caspase-8
 <u>Dung T. Dang</u>, Arthur H. A. M. van Onzen, Yvonne L. Dorland, and Luc Brunsveld.
 Submitted

Development of fluorescent protein probes specific for parallel DNA and RNA G-quadruplexes. *ChemBioChem*, 2016, 17,42–45
 Dung T. Dang, Anh Tuan Phan (Featured art on the back cover of chembiochem, 2016, issue 1)

 Solution structure of a cucurbit[8]uril induced compact supramolecular protein dimer. Org. Biomol. Chem., 2014,12, 9341-9344
 Dung T. Dang, Ralph P. G. Bosmans, Christian Moitzi, Ilja K. Voets and Luc Brunsveld

- Supramolecular control of enzyme activity through cucurbit[8]uril-mediated dimerization.
   <u>Dung T. Dang</u>, Hoang D. Nguyen, Maarten Merkx and Luc Brunsveld. *Angew. Chem. Int. Ed.* 2013, 52, 2915-2919.
- Cucurbit[8]uril-mediated protein homotetramerization.
   <u>Dung T. Dang</u>, Jurgen Schill, and Luc Brunsveld. *Chem. Sci.*, 2012, 3, 2679-2684.
   (Featured art on the front cover of chemical science, 2012, issue 9, page 2657-2884)
- 8. Protein dimerization induced by supramolecular interactions with cucurbit[8]uril. Hoang D. Nguyen, <u>Dung T. Dang</u>, Joost L.J van Dongen, and Luc Brunsveld. *Angew. Chem. Int. Ed*, **2010**, 122, 907-910.
- Preparation method for high stable supersaturated solutions of hydrophilic substrates in ionic liquids.

<u>Dung T. Dang</u>, Sung H. Ha, Sang H. Lee, and Yoon M. Koo. **International patent**, *WIPO*, **2008**, WO2008030033.

 Lipase-catalyzed synthesis of fatty acid sugar ester using extremely supersaturated sugar solution in ionic liquids.
 Sang H. Lee, Dung T. Dang, Sung H. Ha, Woo, J. Chang, and Yoon M. Koo. *Biotechnol*.

Sang H. Lee, <u>Dung T. Dang</u>, Sung H. Ha, Woo J. Chang, and Yoon M. Koo. *Biotechnol Bioeng.*, **2008**, 99, 1-8.

11. Enhanced stability of candida Antarctica lipase B in ionic liquids.

Sung H. Ha, Sang H. Lee, <u>Dung T. Dang</u>, Min S. Kwon, Woo J. Chang, Yong J. Yu, II S. Byun, and Yoon M. Koo. *Korean J. Chem. Eng.*, **2008**, 25, 291-294.



Enhanced activity and stability of ionic liquid-pretreated lipase.
 <u>Dung T. Dang</u>, Sung H. Ha, Sang M. lee, Woo J. Chang, and Yoon M. Koo. *J Mol Catal B- Enzym.*, 2007, 45, 118-121.

## **RESEARCH INTERESTS**

- Gene & protein engineering, research & develop the value and useful proteins for biotechnological researches and biomedical applications.
- Structural DNA&RNA G-quadruplexes and bio-functions of proteins/G-quadruplexes interaction in biological processes.
- Reversible system-supramolecular protein assembly controls and modulates protein interaction in biological system.
- Cell membrane proteins, cellular uptake and cell imaging.

### **ACADEMIC AWARD**

• Scholarship of BK21 (Brain of Korea) in 2006 at Inha University, Incheon, South of Korea.

### WORK EXPERIENCE

- 2007 2008: Lecturer at Department of Biotechnology, Ho Chi Minh City-Open University, Vietnam.
- 2004 2005: Lab Operator at FrieslandCampina-Vietnam, Binhduong, Vietnam.

## **ADDITIONAL SKILLS**

- Language skills: Vietnamese (native), English (good), Korean (advance), Dutch (very basic)
- Computer skills: Proficient with Microsoft Office applications (Word, Excel, PowerPoint)
- Sport skills: Good at tennis, soccer, table tennis and bowling