

## Anh THAI LE PHUONG

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Anh L.P Thai's CV

26 years old • Vietnamese

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LinkedIn

### SUMMARY

A self-motivated and creative graduate with great passion on Life Sciences and Technology Innovation, supported by lab-bench experiences in Micro- and Nanotechnology to study Cancer Diagnostics & Therapy, Polymeric scaffolds design in Drug delivery and Regenerative Medicine. Demonstrates a strong scientific competency, outstanding communication and writing skills. Participates actively in various social activities related to public health and entrepreneurship. Determines to pursue a professional long-term career in the Research and Development of practical technologies to solve global healthcare issues.

### EDUCATION

Sep 2016 – Aug 2017 **University of Paris Descartes – Faculty of Medicine, Paris, France**

- **M2 Interdisciplinary Approaches in Life Sciences (AIV)** GPA 17/20
- Joined scientific seminars and performed three rotational internships to tackle various questions in Life Sciences.

Sep 2014 – Dec 2015 **University College London (UCL), London, United Kingdom**

- **MSc. Biomaterials and Tissue Engineering (Taught master)** Merit degree
- Capstone Design project: A cylindrical shaken bioreactor in light of bio-industrial applications by performing pressure measurement in different operation conditions.
- Master dissertation: "*Characterization of polycaprolactone filaments modified by plasticizers for 3D printing*" (joint with School of Pharmacy – UCL)

Sep 2010 – Aug 2014 **Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea**

- **BSc. Bio and Brain Engineering (Major)/ Business and Technology Management (Minor)** GPA 90.11/100
- Bachelor thesis: "*Directing cardiac myocytes differentiation by optimally synthesizing the combined PDO nanofiber & hydrogel scaffold*"

### RESEARCH EXPERIENCES

Jan 2017 – May 2017 **Research Intern, Translational Research & Microfluidics Group, INSERM-UMR1147, University of Paris Descartes, Paris, France (Advisors: Dr. Valerie Taly & Dr. Antoine Riaud)**

- Characterize and perform COMSOL simulation of acousto-microfluidic chips for cell sorting.
- Control fluid flows, acoustic field and cell migration. Perform in-silico optimization and test on cancer cell lines.

Sep 2016 – Dec 2016 **Research Intern - Laboratory of Materials & Complex System (MSC), CNRS/University of Paris Diderot, Paris, France (Advisor: Dr. Jean-Francois Berret)**

- Synthesized optimal magnetic nanowires as potential probes to study micro-rheology of a lung surfactant mimetic.
- Measured the surfactant phase viscosity by adding nanowires to induce critical phenomena and subsequently monitoring magnetic nanowires under rotating field.

Mar 2015 – Sep 2015 **Dissertation Student – Department of Mechanical Engineering & School of Pharmacy, University College London (UCL), London, UK. (Advisor: Dr. Simon Gaisford)**

- Implemented innovative 3D printing platform by considering pharmaceutical ingredients and process design.
- Modified plasticizers to enhance hot-melt extrusion during 3D printing process to fabricate anti-inflammatory drug-loaded polymeric films.

Dec 2013 - Jun 2014 **Undergraduate Researcher- “Oxide and Organic Nanomaterial for Energy Lab”, KAIST, Daejeon, Korea (Advisor: Associate Professor. Cafer T. Yavuz)**

- Successfully applied for \$2500 from KAIST Research Committee to do a 6-month team project. Selected for final presentation at Research Workshop – KAIST 08/2014.
- Synthesized and characterized nanoporous material, specifically fluorinated covalent organic polymers to test dye adsorption efficiency.

Jul 2013 - Aug 2013 **Summer Research Intern – National Institute for Materials Science (NIMS), Tsukuba, Japan (Advisor: Dr. Takao Aoyagi)**

- Tested the new characteristics of newly synthesized incorporated Magnetic nanoparticle integrated onto poly-caprolactone (PCL) nanofibers to form scaffold.
- Conducted organic solvent analysis for specific applications. Recorded observation and results to suggest improved solutions for the hypothesized materials.

Aug 2012 - Jun 2013 **Research Assistant - “The Soft Biomechanics & Biomaterials Lab”, KAIST, Daejeon, Korea (Advisor: Associate Professor. Jennifer H. Shin)**

- Successfully applied for research grant \$1500 from KAIST Research Committee to carry out a 6-month creative project.
- Integrated polydioxanone (PDO) nanofiber and hydrogel to regulate cardiomyocytes differentiation applied for cardiac tissue engineering, supporting data for further publications.

Jun 2012 – Jul 2012 **Global Research Intern – Nanyang Technological University, Singapore (Advisor: Associate Professor. Chew Sing Yian)**

- Synthesized biofunctional nanotopographical scaffold using electrospinning technique and delivered siRNA for gene silencing. Presented in Nanyang Research Final Workshop – 07/2012.

Feb 2011 – May 2011 **Undergraduate Researcher - “Biomaterials Engineering Laboratory”, KAIST, Daejeon, Korea. (Advisor: Associate Professor. Jiho Park)**

- Synthesized gold nano-particles to study cancer photodynamic therapy. Conducted image analysis and practiced cell culture. Supported daily lab setup and prepared technical manuals.

## **KEY SKILLS**

### **Scientific skills**

Nanotechnology: Gold/ covalent organic polymers nanoparticles & magnetic nanowires synthesis, electrospinning, microfluidic chip fabrication

Characterization: XRD, FTIR, Gas adsorption-desorption, TGA, XPS, DSC, NMR, Alternative Magnetic Field, DLS.

Cell biology: Cell culture (Hela cells, C2C12 myoblasts, human mesenchymal stem cells), real-time PCR.

Microscopy: optical fluorescence, confocal, SEM, image analysis (image J)

## Languages

Vietnamese (native), English (fluent), Japanese (pre-intermediate), Korean (basic), French (beginner)

## Software

Microsoft Office (Word, Excel, Power Point), Adobe Illustrator, COMSOL Physics, MATLAB

## Other skills

Negotiation, Teamwork, Translation, Event planning, Project Management.

## CONFERENCES

- Unghyun Ko, Sukhee Park, Jinsung Jung, Thai Le Phuong Anh, Junho Lee and Jennifer H. Shin. **Three - dimensional microenvironment with uniaxial topology induces myoblast maturation.** *Experimental Biology (2016), San Diego, USA.*
- Unghyun Ko, Hyunseung Bang, Thai Le Phuong Anh, Junho Lee, Mina Kim, Hyunjun Shin, Sukhee Park, Dong-yol Yang and Jennifer H. Shin. **The Mechanism of enhanced skeletal muscle differentiation by combined effects of aligned topography and electrical field.** *Biomedical Engineering Society Annual Meeting (BMES 2015), Florida, USA.*
- Unghyun Ko, Thai Le Phuong Anh, Junho Lee, Sukhee Park, Jennifer H. Shin. **Incorporation of hydrogel and electrospun scaffold induces skeletal myoblasts differentiation.** *The 8th Asian Pacific Conference on Biomechanics (APAB 2015), Sapporo, Japan.*
- Unghyun Ko, Thai Le Phuong Anh, Junho Lee, Sukhee Park, Jennifer H. Shin. **3-dimensional collagen imbedded scaffold induces myoblast maturation.** *International Biomedical Engineering Conference (IBEC 2014) joint with uHealthcare 2014, Gwangju, South Korea*
- Unghyun Ko, Thai Le Phuong Anh, Junho Lee, Sukhee Park, Jennifer H. Shin. **3-dimensional hybrid microenvironment induces myoblast maturation.** *International Conference on Biofabrication (ICB 2014), Pohang, South Korea*

## HIGHLIGHTED SOCIAL ACTIVITIES

Dec 2015 – Apr 2016 Marketing Executive – HVIET 2016 (Harvard University – Vietnam International Education Teach-in) summer program to train top talented high school students in liberal art education.

Apr 2014 – Aug 2014 Staff of BizWorld 2014 - International Entrepreneurial Student Conference held at KAIST

Aug 2013 – Sep 2014 Public Health Content Coordinator for “Better Kids, Better Wellness” Volunteer Club, Youth Organization of University of Medicine and Pharmacy, Ho Chi Minh city, Vietnam

Jan 2013 (23-30/1) University Representative - Global Youth Exchange Entrepreneurship conference, NUS, Singapore

## AWARDS & FELLOWSHIPS

- Best Performance in Bioengineering Module awarded by the Chair of Biomaterials, University College London- UK, 2015
- Excellent Award for Creative Research Project – Bachelor Thesis, KAIST – Korea, 2013
- National Institute for Materials Science (NIMS) Japan Internship Fellowship, Tsukuba – Japan, 2013
- Global Internship Fellowship, Nanyang Technological University – Singapore, 2012
- Team Award of Outstanding Technical Video, Freshmen Design Project Workshop, KAIST - Korea, 2010
- KAIST Full scholarship for Undergraduate study with tuition and living expenses, Korea, 2010 -2014
- Bronze Medal in The Southern Vietnam Mathematical Olympiad, Vietnam, 2007

