

CURRICULUM VITAE



- Family name: TRUONG, Given names: NAM HAI
- Birth year: 1954.
- Organization: Institute of Biotechnology (IBT), Vietnamese Academy of Sciences and Technology (VAST).
- Address: 18 Hoang Quoc Viet, Hanoi, Vietnam; Tel: +84-4-7562790; Email: tnhai@ibt.ac.vn; URL: www.ibt.ac.vn
- PhD degree: 1988
- Professor title: 2012

1. Professional associations:

- 2012 - Up to now: Member of the National policy Council on Science and Technology.
- 2010 - 2019: Member of Professor Title Council on Biology.
- 2011 - June 2016: Head of the National Program on Biotechnology.
- 2013 – 2020: Member of National Program on High technology.

2. Main research topics:

- Gene expression: Pharmaceutical proteins (interleukin 2, 3 and 11), sub-unit vaccine (H5N1, Salmonella), enzymes (amylase, pectinase, chitinase, cellulase), preservative proteins (Enterotoxin P), recombinant subunit vaccine.
- OMICS research: Genomics (De novo genome sequencing of sea microalgae), transcriptomics (*Pichia pastoris*), metagenomics of natural microbiomes (soil, termite gut and goat rumen...).
- Diagnostic kits for detecting human genetic and infective diseases.
- Bioinformatics (database mining).
- Bioactive compounds (for anticancer activity).

3. Publications: Total 202 (35 SCI/SCIE). For 5 last years:

International:

1. Khanh Hoang Viet Nguyen, Thi Thao Nguyen, Nam Hai Truong, Thi Huyen Do. Application of Bioinformatic Tools for Prediction of Active pH and Temperature Stability of Endoglucanases Based on Coding Sequences from Metagenomic DNA Data. *Biological forum – An International Journal*, (2019), 11(2): 14-20.
2. Trong Khoa Dao, Quang Trung Dam, Tuyet Mai Vuong, Thi Thu Hong Le, Nam Hai Truong and Thi Huyen Do. Diagnosis of some Common Uropathogens from Patients with Urinary Tract Infection Symptom in Vietnam by PCR Method. *Biological Forum – An International Journal*, (2019), 11(1): 206-211.
3. Thi-Quy Nguyen, Thu-Huong Duong, Thi-Ngoc-Ha Dang, Ngoc-Giang Le, Quynh-Giang Le, Thi-Huyen Do, Van-Do Nguyen, Thi-Thu-Hong Le, Nam-Hai Truong. Enhanced soluble expression and effective purification of recombinant human interleukin-11 by SUMO fusion in *Escherichia coli*. *Indian Journal of Biotechnology*, (2018), 17:579-585.
4. Ha Ly Thi Thanh, Huong Le Thi Thanh, Long Hoang Luong, Thinh Huy Tran, Su-Chinh Liu, Hai Nam Truong, Thanh Van Ta, The Hung Bui, Van Khanh Tran. 2018. Prenatal diagnosis of a case with SEA-HPFH deletion thalassemia with whole Hbb gene deletion. *Taiwanese Journal of Obstetrics and Gynecology*. Manuscript ID: 2018-212.
5. Thi Huyen Do, Trong Khoa Dao, Khanh Hoang Viet Nguyen, Ngoc Giang Le, Thi Mai Phuong Nguyen, Tung Lam Le, Thu Nguyet Phung, Nico M. van Straalen, Dick Roelofs and Nam Hai Truong. Metagenomic analysis of bacterial community structure and diversity of lignocellulolytic bacteria in Vietnamese native goat rumen. *Asian Australian Journal of Animal Sciences* September (2017), pp. 1-10. DOI: 10.5713/ajas.17.0174.
6. Thi Huyen Do, Ngoc Giang Le, Trong Khoa Dao, Thi Mai Phuong Nguyen, Tung Lam Le, Han Ly Luu, Khanh Hoang Viet Nguyen, Van Lam Nguyen, Lan Anh Le, Thu Nguyet Phung, Nico M. van Straalen, Dick Roelofs, and Nam Hai Truong. Metagenomic insights into lignocellulose-degrading genes through Illumina-based *de novo* sequencing of the microbiome in Vietnamese native goats' rumen. *J. Gen. Appl. Microbiol.* (2017). doi 10.2323/jgam.2017.08.004.
7. Duong CQ, Nguyen C, Nguyen TT, Nguyen LV, Pham HQ, Trinh HTT, Tran HC, Le TQ, Pham HT, Hong TH, Nguyen TH, Truong Nam Hai, Bach KQ and Nguyen TA. Utilization of Next-Generation Deep Sequencing to Analyze BCR-ABL1 Kinase Domain Mutation for Imatinib-Resistant Chronic Myeloid Leukemia Patients in Vietnam. *Journal of Leukemia*, (2017), V. 5, N. 2: DOI: 10.4172/2329-6917.1000235.
8. Van Ngoc Bui, Thi Thu Huyen Nguyen, Chi Thanh Mai, Yvan Bettarel, Thi Yen Hoang, Thi Thuy Linh Trinh, Nam Hai Truong, Hoang Ha Chu, Vu Thanh Thanh Nguyen, Huu Duc Nguyen, Stefan Wölfl. Procarcinogens – Determination and Evaluation by Yeast-Based Biosensor Transformed with Plasmids Incorporating *RAD54* Reporter Construct and Cytochrome *P450* Genes. *PLOS ONE* (2016), DOI:10.1371/journal.pone.0168721 December 22, 2016.
9. Minh Hien Hoang, Cuong Nguyen, Huy Quang Pham, Lam Van Nguyen, Le Hoang Duc, Le Van Son, Truong Nam Hai, Chu Hoang Ha, Lam Dai Nhan, Hoang Thi Lan Anh, Le Thi Thom, Hoang Thi Huong Quynh, Nguyen Cam Ha, Pham Van Nhat, Dang Diem Hong. Transcriptome Sequencing and Comparative Analysis of *Schizochytrium mangrovei* PQ6 at Different Cultivation Periods. *Biotechnology Letter* (2016), 38:1781-1789.

10. Thanh H. Nguyen, Mónika Z. Ballmann, Huyen T. Do, Hai N. Truong, Mária Benkő, Balázs Harrach and Mark J. van Raaij. 2016. Crystal structure of raptor adenovirus 1 fibre head and role of the beta-hairpin in siadenovirus fibre head domains. *Virology Journal* (2016), 13:106-115
11. Martin Gustavsson, Thi-Huyen Do, Petra Lühje, Ngoc Tan Tran, Annelie Brauner, Patrik Samuelson, Nam Hai Truong, and Gen Larsson. Improved cell surface display of *Salmonella enterica* serovar Enteritidis antigens in *Escherichia coli*. *Microbial Cell Factories*, (2015), V. 14, N. 47: 4-12.
12. Thi Quy Nguyen, Thi Thu Hao Van, Yu-Chen Lin, Thi Nhu Ngoc Van, Khanh Chi Bui, Quynh Giang Le, Thi Huyen Do, Thi Thu Hong Le, Viet Cuong Vo, Van Dung Truong, Peter M Smooker, Peter J Coloe & Nam Hai Truong. A potential protein-based vaccine for influenza H5N1 from the recombinant HA1 domain of avian influenza A/H5N1 expressed in *Pichia pastoris*. *Future Virology*, (2014), V. 9, N. 12: 1019-1031.
13. Thu Ngoc Le, Thi Huyen Do, Thanh Nhan Nguyen, Ngoc Tan Tran, Sven Olof Enfors, Nam Hai Truong. Expression and Simple Purification Strategy for the Generation of Anti-microbial Active Enterocin P from *Enterococcus faecium* Expressed in *Escherichia coli* ER2566. *Iranian Journal of Biotechnology*, (2014), V. 12, N. 4: 17-25.
14. Thi Huyen Do, Thi Thao Nguyen, Thanh Ngoc Nguyen, Quynh Giang Le, Cuong Nguyen, Keitarou Kimura, and Nam Hai Truong. Mining biomass-degrading genes through Illumina-based de novo sequencing and metagenomic analysis of free-living bacteria in the gut of the lower termite *Coptotermes gestroi* harvested in Vietnam. *Journal of Bioscience and Bioengineering*, (2014), 118(6): 665-671.
15. Nguyen Thi Thao, Do Thi Huyen, Duong Thu Huong, Le Quynh Giang, Dao Trong Khoa, Nguyen Thi Trung, Nguyen Thi Quy, Nguyen Thi Thu Huyen, Keitarou Kimura, Truong Nam Hai. Identification of Vietnamese *Coptotermes* pest species based on the sequencing of two regions of 16S rRNA gene. *Bulletin of Insectology*, (2014), 67(1): 131- 136.

In Vietnamese:

1. Dang Thi Ngoc Ha, Le Thi Thu Hong, Truong Nam Hai. Expression of the gene encoding for recombinant single chain variable antibody recognizing blood antigen fused with thioredoxin in *Escherichia coli*. *Journal of Biology*, 2019, 41(1): 45-52.
2. Nguyễn Minh Giang, Đỗ Thị Huyền, Phùng Thu Nguyệt, Trương Nam Hải. Xây dựng probe để khai thác và chọn gen mã hóa endo 1-4-xylanase từ dữ liệu giải trình tự DNA metagenome. *Tạp chí sinh học*, (2018), 40(1): 39-50.
3. Dang Thi Ngoc Ha, Le Thi Thu Hong, Truong Nam Hai. Co-expression of recombinant single chain variable fragment recognizing blood antigen fused with SUMO and chaperones in *Escherichia coli*. *Journal of Biology*, (2018), 40(4): 103-110.
4. Nguyễn Minh Giang, Nguyễn Minh Thu, Nguyễn Thị Duyên, Đỗ Thị Huyền, Hồ Thị Thương, Phạm Bích Ngọc, Chu Hoàng Hà, Trương Nam Hải. Thiết kế vector biểu hiện pCB301-Xbxs14-ELP và biểu hiện gen Xbxs14 mã hóa Xylan 1,4-beta xylosidase từ vi sinh vật ruột mối *Coptotermes gestroi* trong cây thuốc lá *Nicotiana benthamiana*. *Tạp chí Sinh học*, (2017), 39(2): 239-248.
5. Nguyen Thi Minh Giang, Do Thi Huyen, Truong Nam Hai. Using bioinformatic tools in exploited gene encoding enzyme to decompose lignocellulose from metagenome of free-living bacteria in the gut of the lower termite *Coptotermes gestroi*. *Journal of Biotechnology*, (2016), V.14, N. 1: 39-47.

6. Nguyen Thi Minh Giang, Do Thi Huyen, Truong Nam Hai. *In silico* mining for alkaline enzymes from metagenomic DNA data of gut microbes of the lower termite *Coptotermes gestroi* in Vietnam. Journal of Biology, (2016), V. 38, N. 3: 374-383.
7. Nguyen Thi Minh Giang, Do Thi Huyen, Truong Nam Hai. Isolation of α -L-Arabinofuranosidase gene from metagenomic DNA of symbiotic microorganisms in the gut of *Coptotermes gestroi*. Vietnam medical Journal, (2016), N. 445: 131-137.
8. Lý Thị Thanh Hà, Ngô Ngọc Diễm, Dương Bá Trực, Ngô Thị Tuyết Nhung, Nguyễn Thị Mai Phương, Trần Danh Cường, Lê Thị Thanh Thúy, Trương Nam Hải, Tạ Thành Vân, Trần Văn Khánh. Case report người mang gen alpha thalassemia: Sàng lọc người mang gen và chẩn đoán trước sinh tại bệnh viện Nhi trung ương. Tạp chí Y học Việt Nam, (2015), 434(2): 160-170.
9. Lý Thị Thanh Hà, Ngô Ngọc Diễm, Dương Bá Trực, Ngô Thị Tuyết Nhung, Nguyễn Thị Mai Phương, Trần Danh Cường, Lê Thị Thanh Thúy, Trương Nam Hải, Tạ Thành Vân, Trần Văn Khánh. Áp dụng kỹ thuật sinh học phân tử trong chẩn đoán trước sinh bệnh Beta thalassemia tại bệnh viện Nhi trung ương. Tạp chí Y học Việt Nam, (2015), 434(2): 170-176.
10. Hua Ngoc Phuc, Truong Nam Hai, Do Thi Huyen, Nguyen Thi Trung, Nguyen Thi Quy, Duong Thu Huong. Bacterial diversity in penaeid shrimp hepatopancreas revealed by metagenome analysis, Journal of Fisheries Science and Technology, (2015), special issue: 29-35.
11. Nguyễn Thị Quý, Dương Thu Hương, Đặng Thị Ngọc Hà, Lê Thị Thu Hồng, Đỗ Thị Huyền, Trương Nam Hải. Cải thiện khả năng biểu hiện protein SUMO-IL11 từ tế bào *Escherichia coli* bằng cách lựa chọn điều kiện lên men phù hợp. Tạp chí Sinh học, (2015), 37(1): 289-295.
12. Nguyễn Minh Giang, Đỗ Thị Huyền, Trương Nam Hải. Sử dụng công cụ tin sinh trong nghiên cứu metagenomic - hướng nghiên cứu và ứng dụng mới trong sinh học. Tạp chí khoa học Trường ĐHSPTP.HCM, (2015), 2(67): 167-177.
13. Nguyễn Thị Quý, Lê Ngọc Giang, Lê Quỳnh Giang, Dương Thu Hương, Đặng Thị Ngọc Hà, Đỗ Thị Huyền, Lê Thị Thu Hồng, Trương Nam Hải. Biểu hiện Interleukin-11 người tái tổ hợp dạng tan trong tế bào *Escherichia coli*. Tạp chí Công nghệ sinh học, (2014), V. 12, N. 3: 417-422.
14. Do Thi Huyen, Le Quynh Giang, Truong Nam Hai. Expression of flagellin FljB derived from serovar *Salmonella enterica* Typhimurium in *Escherichia coli* BL21. Journal of Biology, (2014), V. 36, N. 4: 506-514.