

CIRRICULUM VIATE

Full name: Nguyen Thi Thu Huong **DOB:** Sept 8th, 1987 **Sex:** Female

Nationality: Vietnam **Minor ethnicity:** Tay

Email: nguyenthithuhoongcb@tuaf.edu.vn **Mobile:** (+84) 0336738118

ORCID: 0000-0003-4429-1519

Institution:

- Lecturer, Faculty of Basic Sciences, Thai Nguyen University of Agriculture and Forestry (TUAF), Thai Nguyen University, Thai Nguyen city, Vietnam.
- Vice chief, Department of Science and International Affairs, Hi-tech Agriculture and Forestry R&D Center (HACEN) – TUAF.

EDUCATION

2018 – 2021	<p>PhD, Doctor of Philosophy</p> <ul style="list-style-type: none"> • University of Miyazaki, Miyazaki, Japan • Advisor: Atsushi Iguchi, PhD • Thesis: Study on the diversity of the O-antigen encoding region and tellurite resistance gene in <i>Escherichia coli</i>
2012 – 2013	<p>Msc, Animal Science</p> <ul style="list-style-type: none"> • University of Queensland, Queensland, Australia • Advisor: Rafat Al Jassim, PhD • Thesis: The effects of plant extract compounds on colonization of <i>Campylobacter jejuni</i> in broiler chicken. • GPA: 6.75/7
2005 - 2009	<p>Bsc, Education of Science in Biology - Honors Program</p> <ul style="list-style-type: none"> • Hanoi National University of Education, Hanoi, Vietnam. • Advisor: Mai Thi Hang, PhD • Co-Advisor: Ngo Thanh Xuan, PhD • Thesis: The productivity of recombinant phytase derived from <i>Aspergillus niger XP</i> in <i>Pichia pastoris X33</i>. • GPA: 8.62/10

PROFESSIONAL POSITIONS

Dec, 2014 – present	<p>Lecturer - Faculty of Basic Sciences, TUAF</p> <ul style="list-style-type: none"> • Thai Nguyen University of Agriculture and Forestry, Vietnam <p>Courses: Introduction to Biology (GBI 131), Molecular biology (MBI 221)</p>
Jan, 2023 - present	<p>Vice chief and Researcher - Department of Science and International Affairs – HACEN, TUAF</p> <ul style="list-style-type: none"> • Manage assigned projects' part of food safety and hygiene in good agriculture practice • Develop research plans in theme of advanced applications of microbiology to ensure best animal performances, environmental protection, and food safety.
Sept 2021- Mar 2022	<p>Short-time researcher - Faculty of Agriculture, University of Miyazaki, Japan</p> <ul style="list-style-type: none"> • Projects: <ul style="list-style-type: none"> ○ Genetic analysis of <i>ter</i> operon-negative <i>Escherichia coli</i> strains showed tellurite resistance at an intermediate level. ○ Characterization of a <i>Paenaltcaligenes suwonesis</i> strain that bears multidrug resistance.

	<ul style="list-style-type: none"> ○ Characterization of pathogenic <i>E. coli</i> from children with diarrhea in Vietnam.
Mar, 2014 – Dec, 2014	Filed coordinator <ul style="list-style-type: none"> • Adventist Development and Relief Agency (ADRA) in Vietnam • Project: Sustainable livelihood development project in Cao Bang Province
May, 2010 – May, 2012	Project officer <ul style="list-style-type: none"> • Department of Labours - Invalids - Social Affairs Office at Hoa An District, Cao Bang Province, Vietnam • Project: Development of livestock herds for low-income households.

SKILLS AND TECHNIQUES

- Fluently in genotypic subtyping of O and H antigens in *Escherichia coli*.
- Skilled experimental techniques in isolation of pathogenic *E. coli*, DNA/RNA purification, screening virulence genes.
- Experiences with IMC molecular cloning, DFAST, MEGA, GenomeMatcher, Adobe Illustrator.

RESEARCH PROJECTS (in the last 5 years)

No	Name of project/program	Funding institution	Implementation period	Role
1	Screening of human infected viruses from domestic animals in Vietnam	Nagasaki University	2024 - 2025	Collaborator
2	Field research of diarrheagenic bacteria in Vietnam	Nagasaki University	2022-2023	Collaborator
3	One Health approach to control diarrheagenic <i>Escherichia coli</i> in Vietnam	Nagasaki University	2020-2022	Participant
4	Study toward establishment of surveillance system and evaluation of virulence potential in diarrheagenic bacterial pathogens	Japan Agency for Medical Research and Development	2018-2020	Participant

PUBLICATIONS

Nguyen Thi Thu Huong. 2023. A review on isolation and identification methods for emerging enteropathogen *Escherichia albertii*. TNU Journal of Science and Technology. 228: 104 -110. <https://doi.org/10.34238/tnu-jst.8019>

Iguchi A, Takemura T, Ogura Y, **Nguyen TTH**, Kikuchi T, et al. 2023. Genomic characterization of endemic diarrheagenic *Escherichia coli* and *Escherichia albertii* from infants with diarrhea in Vietnam. 2023. *PLoS Negl Trop Dis* 17(4): e0011259. <https://doi.org/10.1371/journal.pntd.0011259>

Habets A, Touzain F, Lucas P, **Huong NTT**, Iguchi A, Crombé F, Korsak N, Piérard D, Saulmont M, Cox E, Engelen F, Mainil J, Thiry D. 2022. Identification of five serotypes of enteropathogenic *Escherichia coli* from diarrheic calves and healthy cattle in Belgium and comparative genomics with Shigatoxigenic *E. coli*. *Vet Sci*.9:492. <https://doi.org/10.3390/vetsci9090492>

Nguyen TTH, Kikuchi T, Tokunaga T, Iyoda S, Iguchi A. Diversity of the tellurite resistance gene operon in *Escherichia coli*. 2021. *Front Microbiol* 12:681175. <https://doi.org/10.3389/fmicb.2021.681175>.

Nguyen TTH, Iguchi A, Ohata R, Kawai H, Ooka T, Nakajima H, Iyoda S. Distribution of novel Og types in Shiga toxin-producing *Escherichia coli* isolated from healthy cattle. 2021. *J Clin Microbiol* 59: e02624-20. <https://doi.org/10.1128/jcm.02624-20>.

Prah I, Ayibieke A, **Nguyen TTH**, Iguchi A, Mahazu S, Sato W, Hayashi T, Yamaoka S, Suzuki T, Iwanaga S, Ablordey A, Saito R. 2021. Virulence profiles of diarrheagenic *Escherichia coli* isolated from the Western region of Ghana. *Jpn J Infect Dis* 74:115-121. <http://doi:10.7883/yoken.JJID.2020.356>.

Karn Duangtathip, **Nguyen Thi Thu Huong**, Atsushi Iguchi, Naoaki Misawa and Takako Taniguchi, 飼育犬から分離された *Escherichia albertii* の性状 (Characterization of *Escherichia albertii* isolated from a domestic dog). 2020. *J Jpn Vet Med Assoc* 73: 191-194.

Nguyen Thi Thu Huong. 2015. A review of strategies to control colonization of *Campylobacter jejuni* in chicken, p 132-141. Proceedings of the Sustainable livestock development. Vietnam National Academy of Agriculture, Hanoi.

Cemil Kurekci, **Nguyen Thi Thu Huong**, Shakir Hassan, Sharon Bishop-Hurley, Chris McSweeney, Rafat Al Jassim. 2014. Reducing *Campylobacter* load in broiler chickens by using plant extracts, p 14-15. Proceeding of the Challenges in poultry Industry (Reality and Expectation), the 1st International Conference, ICCPI –VHM-CU-EGYPT. Faculty of Veterinary Medicine, Cairo University.

Nghiên cứu đặc điểm và tiêu hóa *invitro* của phytaza tái tổ hợp có nguồn gốc từ *Aspergillus niger* XP. Ngô Thanh Xuân, Mai Thị Hằng, **Nguyễn Thị Thu Hương**, Đinh Thị Mỹ Hằng, Vũ Nguyên Thành, Tạp chí Nông nghiệp và phát triển nông thôn số 1/2012 - Kỳ 1 tháng 1, 15-20. (Translation: "Ngô Thanh Xuân, Mai Thị Hằng, **Nguyễn Thị Thu Hương**, Đinh Thị Mỹ Hằng, Vũ Nguyên Thành. 2012. Study on characteristics and in vitro digestion activities of recombinant phytase from *Aspergillus niger* XP. Agriculture and Rural Development, Vol 1, No.1,15-20".)

PRESENTATIONS

Nguyen Thi Thu Huong, Kikuchi T, Tokunaga T, Iyoda S, Iguchi A. 2020. Genetic diversification of tellurite resistance in *Escherichia coli*. Annual seminar, Graduate school of Agriculture and Engineering, University of Miyazaki, Japan. (Poster presentation).

Nguyen Thi Thu Huong, Atsushi Iguchi, Ritsuko Ohata, Hisahiro Kawai, Tadasuke Ooka, Hiroshi Nakajima, Sunao Iyoda. 2019. Comprehensive Og- and Hg-typing of 367 STEC from cattle. Annual meeting, Japanese Society of Food Microbiology. Tokyo. (Oral presentation).

HONORS AND AWARDS

April, 2024	Orange Knowledge Program for Making Education Work course
Dec, 2023	Excellent annual work performance awarded by Thai Nguyen University
Nov 2022 - Jan 2023	Orange Knowledge Program for Making Research Work course
Mar 2017 - Sept 2021	Japanese Ministry of Education, Culture, Sports, Sciences, and Technology (MEXT) scholarship.
Semester 2 nd , 2012	Dean's commendation for High Achievement, School of Agriculture and Food science, University of Queensland, Australia.
2012 - 2013	Australian Development Award.
Oct 2009 - Mar 2010	Japan Student Services Organization (JASSO) Scholarship, Kochi University, Japan.
Jun, 2009	Valedictorian Award (Faculty of Biology), Hanoi National University of Education, Vietnam.
Semester 1 st , 2005	The Award for Excellent Academic Achievement by Director of Hanoi National University of Education, Vietnam.

SCIENTIFIC COMMUNITY

Member of Japanese Food Microbiology Society, 2019 - 2021

COMMUNITY SERVICES

Time	Services	Activities	Organization
2 hours/week	Volunteer counselor	Consult about working internship at Australia and Japan for Vietnamese students	International Relation office, TUAF
2 hours/fortnight	Volunteer coordinator	Organize English tutors between foreign and Vietnamese students at TUAF	Student Union, TUAF

REFERENCES

Nguyen Hung Quang, PhD, Associate Professor, Rector of Thai Nguyen University of Agriculture and Forestry, Thai Nguyen, Vietnam.
nguyenhungquang@tuaf.edu.vn

Atsushi Iguchi, PhD, Associate Professor, Department of Animal and Grassland Science, University of Miyazaki, Japan.
iguchi@med.miyazi-u.ac.jp

Ha Minh Tuan, PhD, Director, Hi-tech Agriculture and Forestry R&D Center (HACEN), Thai Nguyen University of Agriculture and Forestry, Thai Nguyen, Vietnam.
haminhtuan@tuaf.edu.vn