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### **EDUCATION**

*Ernst-Moritz-Arndt-University of Greifswald*, Greifswald, Germany  
Ph.D. in Microbiology, 2005-2008

*Vietnam National University*, Hanoi, Vietnam  
B.A. in Biology, 1999-2003

### **RESEARCH INTERESTS**

- Development of novel pharmabiotics (probiotics, bacteriocins and bioactive molecules) for food security and human/animal health
- Biodiversity of marine microorganisms in Vietnam
- Bacterial transcriptomics and proteomics

### **RESEARCH EXPERIENCE**

- Study on using bacteriocin-producing acid lactic bacteria for food preservation, Grant number B2010-13-54, supported by Ministry of Education and Training, 2010-2012, principal investigator
- Isolation, screening and characterization of marine bacteriocin-producing bacteria for the development of multi-functional drugs in aquaculture, Grant number 106.03-2011.34, supported by NAFOSTED, 2011-2013, principal investigator

### **TEACHING RESPONSIBILITY**

#### **Undergraduate**

- Molecular Biology
- Microbiology
- Environmental Biotechnology
- Genetic Engineering
- Probiotic Technology

## Graduate

- Modern Microbial Technology (NTU)
- Molecular Biology of Cell (NTU)
- Microbial Enzymes (PSU, Thailand)

## Training courses

- Lecture: “The application of molecular techniques in broodstock management”, Regional Training Course on “Broodstock Management in Aquaculture”, organized by UNU-FTP, NACA, Nha Trang University, Deakin University, DPI Victoria Australia, 2013.
- Lecture: “Molecular techniques for disease diagnostics in aquaculture”, Training course “Molecular Diagnostics for aquatic animal diseases”, organized by the Department of Animal Health, Ministry of Agriculture and Rural Development, 2010, 2011, 2012.

## PUBLICATIONS and PRESENTATIONS

### Books:

1. **Nguyen Van Duy**, Le Minh Hoang, Trang Si Trung (2013), “Application of probiotics from marine microbes for sustainable marine aquaculture development”. *In*: Se-Kwon Kim (ed.), “Marine Microbiology: Bioactive Compounds and Biotechnological Applications”, Weinheim: Wiley-VCH, pp. 307-349.

### Journals

#### A. Review

1. **Nguyen Van Duy**, Le Minh Hoang, Trang Si Trung (2013), “Application of probiotics from marine microbes for sustainable marine aquaculture development”. *In*: Se-Kwon Kim (ed.), “Marine Microbiology: Bioactive Compounds and Biotechnological Applications”, Weinheim: Wiley-VCH, pp. 307-349.
2. **Nguyen Van Duy** (2011): Marine bacteriocin as a new drug for aquaculture health. *Journal of Fisheries Science and Technology*, 4: 182-187.

#### B. Research articles on SCI/SCIE journals

1. **Van Duy Nguyen**, Thu Thuy Pham, Thi Hai Thanh Nguyen (2013): Isolation and molecular characterization of bacteriocin-producing bacteria from the intestinal tract of marine animals suggested novel *Proteus* species and potential probiotics for food security and animal health. *Journal of Applied Microbiology* (submitted).
2. Thu Thuy Pham, Thi Hong Nhi Ho, **Van Duy Nguyen** (2013): Screening and phylogenetic analysis of bacteriocin producers from clam against shrimp pathogenic vibrios (submitted).

3. **Van Duy Nguyen**, Thu Thuy Pham, Ngoc Minh Quynh Pham (2013): Two novel strains of bacteriocin-producing *Lactobacillus plantarum* and their application as biopreservative in chill-stored fresh cobia meat. *Journal of Pure and Applied Microbiology*, 7(3). (in press)
4. Manuel Liebeke, Dierk-Christoph Pöther, **Nguyen Van Duy**, Dirk Albrecht, Dörte Becher, Falko Hochgräfe, Michael Lalk, Michael Hecker, Haike Antelmann (2008): Depletion of thiol-containing proteins in response to quinones in *Bacillus subtilis*. *Molecular Microbiology* 69(6):1513-29.
5. Montira Leelakriangsak, Nguyen Thi Thu Huyen, Stefanie Töwe, **Nguyen Van Duy**, Dörte Becher, Michael Hecker, Haike Antelmann, Peter Zuber (2008): Regulation of quinone detoxification by the thiol stress sensing DUF24/MarR-like repressor, YodB in *Bacillus subtilis*. *Molecular Microbiology* 67, 1108-24.
6. Stefanie Töwe, Montira Leelakriangsak, Kazuo Kobayashi, **Nguyen Van Duy**, Michael Hecker, Peter Zuber, Haike Antelmann (2007): The MarR-type repressor MhqR (YkvE) regulates multiple dioxygenases/glyoxalases and an azoreductase which confer resistance to 2-methylhydroquinone and catechol in *Bacillus subtilis*. *Molecular Microbiology* 66, 40-54.
7. **Nguyen Van Duy**, Carmen Wolf, Ulrike Mäder, Michael Lalk, Peter Langer, Ulrike Lindequist, Michael Hecker, Haike Antelman (2007): Transcriptome and proteome analyses in response to 2- methylhydroquinone and 6-brom-2-vinyl-chroman-4-on reveal different degradation systems involved in the catabolism of aromatic compounds in *Bacillus subtilis*. *Proteomics* 7, 1391-408.
8. **Nguyen Van Duy**, Ulrike Mäder, Ngoc Phuong Tran, Jean-François Cavin, Le Thi Tam, Dirk Albrecht, Michael Hecker, Haike Antelmann (2007): The proteome and transcriptome analysis of *Bacillus subtilis* in response to salicylic acid. *Proteomics* 7, 698-710.

### **C. Research articles on national journals**

1. **Nguyen Van Duy**, Pham Thu Thuy (2012): Phylogenetic diversity of 16S rRNA genes in beneficial and pathogenic bacteria isolated from marine animals in Vietnam. *Journal of Biotechnology*, 10(4A): 803-815.
2. Pham Thu Thuy, **Nguyen Van Duy** (2012): Bacteriocin production by *Proteus* sp. isolated from the intestine of cobia (*Rachycentron canadum*). *Journal of Biotechnology*, 10(4A): 793-801.
3. **Nguyen Van Duy**, Nguyen Thi Ngoc Thanh (2012): Isolation and screening of marine bacteriocin-producing bacteria from the intestine of snubnose pompano (*Trachinotus blochii*). *Journal of Biotechnology*, 10(4A): 1045-1053.

4. Pham Ngoc Minh Quynh, **Nguyen Van Duy**, Vu Ngoc Boi (2012): Protocol for the preservation of fresh cobia fish using crude bacteriocin extracts of lactic acid bacteria. *Journal of Fisheries Science and Technology*, 4: 56-60.
5. **Nguyen Van Duy**, Luu Thi Thuy (2012): The growth and bacteriocin production of lactic acid bacteria strain T13 on culture medium and fresh cobia meat. *Journal of Fisheries Science and Technology*, 4: 15-19.
6. **Nguyen Van Duy**, Luu Thi Thuy (2012): Isolation and screening of bacteriocin-producing lactic acid bacteria from Vietnamese traditional fermented cabbage for seafood preservation. *Journal of Biotechnology*, 10(2): 327-333.
7. **Nguyen Van Duy**, Nguyen Thi Hai Thanh (2012): Some characteristics of bacteriocin from two strains of lactic acid bacteria reveal their potential applications for seafood preservation in Vietnam. *Journal of Fisheries Science and Technology*, 1: 88-93.
8. **Nguyen Van Duy**, Nguyen Thi Cam Ly (2012): Isolation and detection of toxin genes of *Vibrio parahaemolyticus* in fresh seafood in Nha Trang. *Journal of Fisheries Science and Technology*, 2: 42-47.
9. **Nguyen Van Duy** (2012): The inhibitory spectrum of bacteriocin-producing lactic acid bacteria against food borne pathogenic and spoilage microorganisms. *Journal of Agriculture and Forestry Science and Technique*.
10. Pham Thu Thuy, **Nguyen Van Duy**, Vo Thi Ha (2011): The development of Realtime PCR method for the detection of *Salmonella* in water and food. *Journal of Fisheries Science and Technology*, 4: 68-73.
11. **Nguyen Van Duy**, Pham Thu Thuy (2011): Detection of pathogenic *Vibrio parahaemolyticus* through toxin gene-based PCR and sequence analysis in seafood in Nha Trang, Vietnam. *Journal of Science and Technology*, 49(1A): 106-116.
12. **Nguyen Van Duy**, Du Thi Luu (2011): Isolation and screening of marine *Bacillus* strains as biocontrol agents against pathogenic *Vibrio* in black tiger shrimp in Central Vietnam. *Journal of Fisheries Science and Technology*, 3: 120-129.
13. **Nguyen Van Duy**, Vu Thi Nhung (2010): An investigation of culture media, sulfide reduction ability and freeze drying procedure of the purple photosynthetic bacterium *Rhodobacter* sp. NTU for environmental treatment. *Journal of Biotechnology*, 8(3B): 1717-1724.
14. Chu Van Man, Ngo Tu Thanh, Nguyen Dinh Phuong, **Nguyen Van Duy** (2004): Second-order orthogonal optimization with 4 variables for maximum alkaline protease production by *Bacillus* sp. T20. *Journal of Science, Hanoi National University*, XX: 27-31.

## Presentations

1. **Nguyen Van Duy**, Ho Thi Hong Nhi (2013): Isolation and phylogenetic analysis of marine bacteria in association with otter clam (*Lutraria philippinarum*) revealing bacteriocin production by *Cronobacter sakazakii* and *Enterobacter cloacae*, *Proceedings of National Biotechnology Conference 2013*, Hanoi, 27/9/2013, Book 2, pp. 147-152.
2. Nguyen Thi Hai Thanh, Nguyen Thi Hong Mai, **Nguyen Van Duy** (2013): Antimicrobial activity and characterization of crude bacteriocin produced by marine bacteria isolated from Vietnam, *Proceedings of National Biotechnology Conference 2013*, Hanoi, 27/9/2013, Book 1, pp. 474-478.
3. **Nguyen Van Duy**, Pham Thu Thuy (2012): Two novel strains of bacteriocin-producing lactic acid bacteria and their application as biopreservative in chill-stored fresh cobia meat, *Proceedings of International Fishery Symposium (IFS 2012)*, Can Tho, 6-8/12/2012.
4. **Nguyen Van Duy** (2012): Transdisciplinary systems approach of sustainable aquaculture for food security in Southeast Asian developing countries: two cases of study in Vietnam, *The Regional Workshop on Water, Land and Southeast Asia Food Sovereignty*, Bogor, Indonesia, 17-21/9/2012.
5. **Nguyen Van Duy**, Nguyen Thi Hai Thanh, Le Phuong Chung, Pham Thu Thuy (2012): Isolation, screening and characterization of marine bacteriocin-producing bacteria for the development of potential drugs in aquaculture, *Proceedings of International Conference on Bien Dong*, Institute of Oceanography, Nha Trang, 12-14/9/2012.
6. **Nguyen Van Duy** (2010): Screening of bacteriocin-producing lactic acid bacteria for food preservation. *National Conference of Aquacultural Biotechnology*, Hochiminh city, 2/12/2010.
7. **Nguyen Van Duy**, Le Thi Tam, Carmen Wolf, Ulrike Mäder, Dirk Albrecht, Ngoc Phuong Tran, Jean-François Cavin, Michael Lalk, Ulrike Lindequist, Rabea Sietmann, Frieder Schauer, Michael Hecker and Haike Antelmann (2007), Transcriptome and proteome analyses in response to aromatic compounds in *Bacillus subtilis*, *Annual Conference of the Association for General and Applied Microbiology (VAAM)*, Osnabruck, Germany, 1-4/4/2007.
8. Ngo Tu Thanh, Nguyen Viet Dung, **Nguyen Van Duy** (2003): Biosynthesis and characterization of extracullular alkaline proteases from *Bacillus* sp. 20. *Proceedings of Basic Research in Life Sience in Vietnam*, 1012-1015.