Assoc.Prof. Dr. Quoc Bao Nguyen

Lecturer

Office: Research Institute of Biotechnology and Environment Nong Lam University, Thu Duc District, Ho Chi Minh City, Vietnam Tel: +84-8-37220294; Fax: +84-8-38972262

Email: <u>baoquoc@hcmuaf.edu.vn</u> baoquoc@gmail.com

a. Professional Preparation

Nong Lam University, VietnamAgronomyB.Sc., 2000Kobe University, JapanAgricultureM.Agr.., 2005Kobe University, JapanPh.DPh.D., 2008

Kobe University, Japan Plant Pathology JSPS postdoc, 2008-2010 Dartmouth College, USA Microbilolgy Research Associate, 2011-2013

b. Appointments

2019 – now: Associate Professor, senior lecturer at the Research Institute of Biotechnology and Environment, Nong Lam University, Vietnam

2010 – 2019: Lecturer at the Research Institute of Biotechnology and Environment, Nong Lam University, Vietnam

2016: Borlaug Fellow at the University of Tuskegee, Alabama, USA

2014: Visiting scientist at the University of Nottingham, UK

2011-2013 Research Associate at the Geisel School of Medicine, Dartmouth College, USA

2008-2010 JSPS postdoctoral fellow at Kobe University, Japan

c. Publications

International publication

- 18. **Nguyen Bao Quoc***, Ho Thi Thu Trang, Nguyen Doan Nguyen Phuong, Nguyen Ngoc Bao Chau, Chatchawan Jantasuriyarat (2020) Development of a SCAR marker linked to fungal pathogenicity of rice blast fungus *Magnaporthe oryzae*. *International microbiology* (accepted) (**SCIE**, **Q**, citation: 0).
- 17. Nguyen Don Hieu, Nguyen Anh Nghia, Nguyen Thi Kim Uyen, Nguyen Ngoc Bao Chau, **Nguyen Bao Quoc*** (2020) Genetic diversity analysis of *Corynespora cassiicola* isolates on the rubber tree (*Hevea brasiliensis*) in Vietnam using ribosomal DNA internal transcribed spacer (rDNA-ITS) sequences and sequence-related amplified polymorphism (SRAP). *Journal of Rubber Research* (accepted) (**SCIE**, **Q4**, **citation: 0**).
- 16. Jitender Singh, Thao Ngoc Truong', Dinh My An, Malyaj R Prajapati, Aakansha Manav, **Nguyen Bao Quoc**, Koushlesh Ranjan, Amit Kumar, Pankaj Kumar, Ravindra Kumar' V. K. Baranwal (2020) Complete Genome Sequence and Genetic Organization of a Garlic Virus D, a Member of the Allexivirus Family infecting Garlic (*Allium sativum*) cultivar Yamuna Safed (G-282). *Acta Virologica* (accepted) (**SCIE**, **Q3**, citation: 0).
- 15. Nguyen Ngoc Bao Chau, Nguyen Thi Phung Kieu, Nguyen Van Tri Dung, **Nguyen Bao Quoc**, Truong Kim Phuong (2019) Effects of floral resources on the longevity and paratism

- of *Cotesia vestalis* Haliday (Hymenoptera:Braconidae) on *Plutella xylostella* (L.) (Lepidoptera:Plutellidae) in Vietnam. *Heliyon* 5(8): e02258 (**SCIE**, **Q1**, citation: 0).
- 14. Adonay Zuniga-Centeno, Izayana Sandoval-Carvajal, Mauricio Montero-Astua, William Villalobos-Mullar, **Nguyen Bao Quoc**, and Nicolas Perez Hidalgo (2019) A molecular study of *Neophyllaphis varicolor* (Hemiptera:Aphididae) in Costa Rica. *Zookeys* 865:123-135 (SCI, Q2, citation: 0)
- 13. **Nguyen Bao Quoc***, Nguyen Doan Nguyen Phuong, Ho Thi Thu Trang, Nguyen Bang Phi, Nguyen Ngoc Bao Chau (2019) Expression of *osa-miR7695* against the blast fungus, *Magnaporthe oryzae* in rice cultivars in Vietnam. *European Journal of Plant Pathology* 155 (1): 307-317 (SCI, Q1, citation:1)
- 12. Ho Thi Thu Trang, Nguyen Ngoc Bao Chau, Nguyen Phuong Thao, Chatchawan Jantasuriyarat, **Nguyen Bao Quoc***. (2019) Analyzing sequence variation of avirulence Avr-Pital gene of rice blast isolates, *Magnaporthe oryzae* in Vietnam. *Agriculture and Natural Resources* 53(1):20-25 (Scopus, Q3, citation:0)
- 11. Samin Kim, **Quoc Bao Nguyen**, Micheal J Wolyniak, Christian R. Lehman, Brandon K.Fox, and Paula Sundstrom (2018) Release of transcriptional repression through the HCR promoter region confers uniform expression of *HWP1* on surfaces of Candida albicans in germtubes. *Plos One* 3(2): e0192260. **(SCI, Q1, citation: 16)**
- 10. **Nguyen Bao Quoc***, Nguyen Doan Nguyen Phuong, Nguyen Ngoc Bao Chau, Do Thi Phuong Linh. (2018) closed tube loop-mediated isothermal amplification assay for rapid detection of hepatitis B virus in human blood. *Heliyon* 4:e00561 (**SCIE, Q1, citation: 6**)
- 9. **Nguyen Bao Quoc***, Nguyen Doan Nguyen Phuong, Nguyen Thi Minh Linh, Pham Hung Cuong, Nguyen Ngoc Bao Chau (2018) Expression of plasma hsa-miR122 in HBV-related hepatocellular carcinoma (HCC) in Vietnamese patients. *microRNA* 7,1-8 (**Scopus, Q2, citation: 4**)
- 8. Ho Thi Thu Trang, Nguyen Phuong Thao, Nguyen Ngoc Bao Chau, **Nguyen Bao Quoc***. (2017) A comparative genomic analysis of cell wall degrading enzyme encoded proteins in *Magnaporthe oryzae* and *Aspergillus nidulans*. *Agrica*. 6:7-13
- **7.** Nguyen Bao Quoc* and Nguyen Ngoc Bao Chau. (2016) The roles of cell wall degrading enzymes in pathogenesis of *Magnaporthe*. Current Protein and Peptide Science. 18(2):1-16 (SCI, Q2, citation: 12)
- 6. Ba Van Vu, Kenji Itoh, **Quoc Bao Nguyen**, Yukio Tosa and Hitoshi Nakayashiki. (2012) Cellulases belong to glycoside hydrolase family 6 and 7 contribute to the virulence of *Magnaporthe oryzae*. *Molecular Plant-Microbe Interactions*. 25(9): 1135-1141. (**SCI, Q1, citation: 66**)
- 5. **Quoc Bao Nguyen**, Kenji Itoh, Ba Van Vu, Yukio Tosa, and Hitoshi Nakayashiki. (2011) Simultaneous silencing of endo-β-1,4 xylanase genes reveals their roles in the virulence of *Magnaporthe oryzae. Molecular Microbiology.* 81(4):1008-19. (**SCI, Q1, citation: 65**)
- 4. Kadotani Naoki, Toshiki Murata, **Nguyen Bao Quo**c, Yusuke Adachi and Hitoshi Nakayashiki. (2008) Transcriptional control and protein specilization have roles in the functional diversification of two Dicer-like proteins in *Magnaporthe oryzae*. *Genetics*. 180: 1245–1249. (**SCI, Q1, citation: 9**)
- 3. Hitoshi Nakayashiki and **Quoc Bao Nguyen**. (2008) RNA interference: roles of fungal biology. *Current Opinion in Microbiology*. 11: 1-9. (**SCI, Q1, citation:116**)
- 2. **Quoc Bao Nguyen**, Naoki Kadotani, Seiji Kasahara, Yukio Tosa, Shigeyuki Mayama, and Hitoshi Nakayashiki. (2008) Systematic functional analysis of calcium signaling proteins in the genome of the rice blast fungus, *Magnaporthe oryzae*, using a high-throughput RNA silencing system. *Molecular Microbiology*. 68(6): 1348 1365. (**SCI, Q1, citation: 186**)

1. Hitoshi Nakayashiki., Shugo Hanada, **Nguyen Bao Quoc**, Naoki Kadotani, Yukio Tosa, and Shigeyuki Mayama. (2005) RNA silencing as a tool for exploring gene function in *Ascomycete* fungi. *Fungal Genetics and Biology*, **42**:275-283. (**SCI**, **Q1**, **citation: 295**)

National publication: 26 papers were published in peer-reviewed national journals since 2013.

Book Chapter/Technical Report (Corresponding author*)

- 5. **Nguyen Bao Quoc***, Nguyen Ngoc Bao Chau, Cao Anh Duong (2020) Sugarcane white leaf and grassy shoot management for healthy seed production in Vietnam. In book "Advances in Seed Production and Management" Springer, Singapore (Accepted)
- 4. Nguyen Bang Phi, Nguyen Ngoc Bao Chau, **Nguyen Bao Quoc*** (2018) The roles of microRNA in disease resistance of plants: potential and applications. In Plant Pathology.Eds Vu Trieu Man. Vietnam National University of Agriculture Publisher. (In Vietnamese)
- 3. Greet Blom-Zandstra, Martha Nardelli, Nguyen Duc xuan Chuong, Vu Thi Thu Hien, **Nguyen Bao Quoc**, Gerard Van der Linden, Jan Verhagen (2017) Flora. Wageningen University and Research. Technical Report
- 2. Montip Gettayacamin, Richard Grant, Imelda Liunanita Winoto, Dondin Sajuthi, Yasmina Arditi Paramastri, Joanna Debby Khoo, Pradon Chatikavanij, Jason Villano, Abdul Rahim Mutalib, Nguyen Ba Tiep, Nguyen Bao Quoc (2016) Laws, regulation, guideline and principles pertaining to laboratory animals in Southeast Asia. In Laboratory Animals: Regulations and Recommendations for Global Collaborative Research. Eds. Timothy Bennett and Javier Guillen. Elsevier.
- 1. **Quoc Bao Nguyen*** and Hitoshi Nakayashiki. (2014) RNA silencing in filamentous fungi: from basic to applications. **In Genetic Transformation systems in fungi**. Eds. Marco van den Berg and Karunakaran Maruthachalam. Springer Publishers. pp. 107-124.

Patents

1. Intergenic RNAs and methods for modulating gene expression and pathogenesis in *Candida*. Pub.No:WO/2016/048813. International application No. PCT/US2015/050869. Publication date:31.03.2016. International Filling Date:18.09.2015.

RESEARCH SUPPORT

- 2020 2021 Identification of potential microRNA involving in Hepatocellular Carcinoma (HCC) in Vietnamese patients Ministry of Science and Technology, PI
- 2019 2020 NanoLSI Bio-SPMs Collaborative Research Program, Kanazawa University, Japan. :" High speed AFM observation of dynamic interactions of Bacillus lipopeptides with Corynespora casiicola toxin, casiicola on artificial lipid membranes " PI (Phase II)
- Regional Collaboration Programme, Australia :" **Empowering Agricutural Research through (meta)genomics**" co-PI (In reviewed)
- 2018-2019 NanoLSI Bio-SPMs Collaborative Research Program, Kanazawa University, Japan. :" **High speed AFM observation of dynamic interactions of Bacillus lipopeptides with Corynespora casiicola toxin, casiicola on artificial lipid membranes** "– PI (Phase I)
- 2019-2023 National project, Ministry of Science and Technology (MoST), Vietnamese Government. "Selection and multiplication of high yield coconut varieties for

- sustainable development of coconut industry in Mekong River Delta, Vietnam"— co-PI
- 2017 2019 Project of Ministry of Education and Training (MoET), Vietnamese government:"

 Nghiên cứu quy trình nhân nuôi và thả ong ký sinh *Cotesia vestalis* quản lý sâu tơ *Plutella xylostella* hại rau tại Thành phố Hồ Chí Minh" Member
- Sở Khoa học Công nghệ tỉnh Bình Phước :" Nghiên cứu sản phẩm vi khuẩn Bacillus spp. tự do và nội sinh trong cây cao su từ quy mô ex vivo đến in vivo nhằm phòng trừ sinh học bệnh rụng lá cao su Corynespora tại tỉnh Bình Phước" Member
- 2018 2020 The e-ASIA Joint Research Program:" Functional Bio-Nanotechnology for Innovative Material System" Co-PI
- 2018-2019 FIRST-MOST project from World Bank and Vietnamese government:"

 Development of Loop Mediated Isothermal Amplification (LAMP) for rapid detection of phytoplasmas causing witches'broom disease (WBD) in crop" PI
- 2016 2018 DOST-HCMC Research Grant: "Expression profile of microRNAs involving in blast resistance in rice" PI
- 2016 2017 Đề tài sinh viên Đại học Nông Lâm TP.HCM:" **Application of LAMP for rapid detection of HBV in human**" Mentor
- 2016 2019 NAFOSTED Research Grant, MOST (106-NN 03-2015.67):" Expression profiles of cell wall degrading enzymes in the rice blast fungus, *Magnaporthe oryzae*" PI
- 2016 2019 NAFOSTED Research Grant, MOST (106-NN 03-2015.86):" **Tạo cây lúa biểu** hiện cấu trúc microRNA nhân tạo thích hợp bất hoạt hữu hiệu gen độc tính của tuyến trùng sưng rễ" Member
- 2016 2017 UNU-IAS Grant, Japan:" Enhancing food security through the Development of Loop Mediated Isothermal Amplification (LAMP) for rapid detection of phytoplasmas associated diseases" PI
- 2016 Laboratory Animal Limited Grant, UK:"Laboratory Animal Science" PI
- 2015 2018 MOET Research Grant, Vietnamese government B2015-12-11: "Expression profiles of microRNAs in Hepatocellular carcinoma (HCC)" PI
- 2015-2017 Đề tài cấp Bộ GD và ĐT:" **Nghiên cứu sự lưu hành và mối quan hệ phân tử** của vi khuẩn liên cầu lơn *Streptococcus suis* phân lập trên lơn" Member
- 2015-2017 Đề tài Sở KHCN TP.HCM:" **Hoàn thiện quy trình sản xuất chế phẩm Bt** (*Bacillus thươingiensis*) dùng trong kiểm soát sâu hại thuộc bộ Lepidoptera trên cây rau" Member
- 2016 EP-NUFFIC TMT course grant, NFP-TM.15/146 VNM, Netherland government:"Enhancing food security through novel technologies in plant breeding to abiotic stress factor" PI
- 2015 ICGEB Course Grant 2015, W/VIE13-01:" Loop Mediated Isothermal Amplification (LAMP) technique for rapid detection of phytoplasmas" PI
- 2014-2017 CRP-ICGEB Research Grant 2013, CRP/VIE 13-02:" **Host-induced gene** silencing in the rice blast fungus, *Magnaporthe oryzae*" PI
- 2014-2015 Đề tài sinh viên Đại học Nông Lâm:" **Úng dụng PCR trong việc phát hiện nhanh bệnh đạo ôn trên lúa**" Mentor
- 2008-2010 Grant-In-Aid for Scientific Research, JSPS (Japan Society for The Promotion of Science), Japan: Functional genomics of the rice blast fungus, Magnaporthe oryzae, using a high throughput RNAi approach" co-PI

- 2019 Awarded travel grant from 8th International Rice Blast Conference 2019 held from May 25-31, 2019 in Chengdu, China
- 2018 Awarded travel grant from the Federation of Indian Chambers of Commerce and Industry for attending India ASEAN InnoTecch Summit from 29-30 November 2018 in New Dehli, India
- 2018 Awarded travel grant from e-ASIA Joint Research Program for attending Helium Ion Microscope workshop at the Institute of Scientific and Industrial Research, from 21-23/9/2018, Osaka University, Japan
- 2018 Awarded Innovative Scientist of the Year-2018 for outstanding contribution in the field of Biotechnology and Environment by Scientific-Educational Research Society, Meerut, U.P., India
- 2018 Awarded JIRCAS/Khon Kaen University sponsorship for attending the international workshop "the second international workshop on network development and information sharing for management of sugarcane white leaf disease in Asia" held in Khon Kaen University, Feb 19-20, 2018, Khon Kaen City, Thailand.
- 2017 Awarded ICGEB sponsorship for attending biosafety workshop "risk analysis for the release of GMOs into the environment" held in ICGEB, the Area Science Park, Padriciano Campus, Trieste, Italy.
- 2017 Awarded DAAD fellowship for DIES-UNILEAD training course 2017 in the University of Oldenburg, Germany from March 12, 2017, to April 1, 2017, and from September 3-16, 2017.
- 2016 Awarded travel grant from Chinese Academy of Agricultural Sciences (CAAS) for attending APEC Wisdom Agriculture Training and Workshop held from November 24-25, 2016 in Yinchuan, China
- 2015 Awarded ICGEB sponsorship for attending theoretical and practical course microRNAs in Plant Development Stress held in ICGEB campus in New Dehli, India. November 16-27, 2015
- 2015 Awarded Borlaug Fellowship for visiting researchers at the University of Tuskegee in Alabama, the USA from February April 2016
- 2015 Awarded travel grant from Kasetsart University to attend Research Links workshop: "Plant-microbe interactions: pathogen and host diversity, infection and defense mechanisms and disease protection" held from 16-19 February 2015 at Kasetsart University, Bangkok, Thailand
- 2015 Awarded DAAD fellowship for the DIES-ProGRANT training course on "Proposal Writing for Research Grants". January 26-30, 2015 in Ho Chi Minh City and August 17-21, 2015 in Hanoi, Vietnam
- 2014 Awarded Research Link Grant of British Council for Research Link workshop on "Enhancing vaccine design and delivery strategies: application of protein science, proteomics and adjuvants" held in Ho Chi Minh City, February 17-20, 2014
- 2014 Awarded Research Links Travel Grant from British Council to work and develop a joint research project with the University of Nottingham, UK. July 1-30, 2014.
- 2013 Awarded Collaborative Development Award of UK-Southeast Asia Knowledge Partnership for the travel grant to visit the University of Nottingham, UK. November 24 December 1, 2013.
- 2008 2010 Awarded JSPS Post-doctoral Fellowship of Japan Society For The Promotion of Science at Laboratory of Plant Pathology, Graduate School of Agricultural Science, Kobe University, Japan.

- 2002 2008 Awarded Monbugakusho Scholarship of the Japanese government for Master and Ph.D. courses at Laboratory of Plant Pathology, Graduate School of Agricultural Science, Kobe University, Japan.
- 2002 Awarded MASHAV Fellowship, Ministry of Foreign Affairs of Israel for IPM (Integrated Pest Management) training at Volcani Center, Tel Aviv, Israel.
- 2000 Awarded Fujisawa International Fellowship for cultural exchange at Fujisawa town, Iwate prefecture, Japan.

e. Synergistic Activities

- 2019 Co-organizer at regional workshop "Empowering Agricultural Research through (meta) Genomics" held in Kasesart university, Bangkok, Thailand.
- 2018 Organizer at international workshop " **Phytoplasma associates diseases and LAMP based detection of pathogens on crops"** held in Vung Tau City, Vietnam, November 24-25, 2018.
- 2018 Organizer at international conference "the 1st Indo-ASEAN Conference on Innovative Approaches in Applied Sciences and Technologies" held in Nong Lam University, Vietnam, June 13-17, 2018.
- 2018 Organizing committee member at:"The third RSU National and International Research Conference on Science and Technology, Social Science and Humanities 2018" (RSUSSH2018) held in Rangsit University, Bangkok, Thailand, May 4, 2018. Bangkok, Thailand, ngày 4 tháng 5 năm 2018.
- 2017 Organizer: "the International training course on Rapid Detection of Foodborne Microbes" held in Nong Lam University, Vietnam, December 27-29, 2017
- 2017 Organizing committee member at :"Asia Mycological Congress 2017" held in Ho Chi Minh City, Vietnam, October 10-13, 2017.
- 2017 Organizer at: "the International training course on Molecular Diagnosis of Plant Diseases" held in Nong Lam University, Vietnam, August 6-8, 2017.
- 2016 Organizer at:"International workshop on Insect Pathogenic Fungi and *Bacillus thuringiensis*" held in Nong Lam University, Vietnam, October 17-20, 2016.
- 2016 Organizer:" the International training course on Laboratory Animal Science (ICLAS2016)" held in Nong Lam University, Vietnam, October 3-14, 2016.
- 2016 Organizer: "TMT training course on "Enhancing Food Security Through Novel Technologies in Plant Breeding to Abiotic Stress Factors" held in Nong Lam University, Vietnam, May 2-14, 2016.
- 2015 Organizer at :"Theoretical and Practical Course "Loop-Mediated Isothermal Amplification (LAMP) Technique for Rapid Detection of Phytoplasma" held in Nong Lam University, Vietnam, August 3-12, 2015.

TEACHING

- 2018 now: **Biotechnology**, the core course in Biotechnology Ph.D curriculum
- 2014 now: **Application of biotechnology in human health**, the core course in Biotechnology graduate curriculum, 2 credits

Medical Microbiology, the core course in Biotechnology undergraduate curriculum, 2 credits **Introductory Bioinformatics**, the core course in biotechnology undergraduate curriculum, 3 credits

2005–2010 Teaching assistant of JICA students at the laboratory of plant pathology, Kobe University, Japan.

RELATED PROFESSIONAL EXPERIENCE

2013 – now: Reviwer

Frontier Chemistry, Frontiers, Switzerland. ISSN: 2296-2646 African Journal of Microbiology Research, ISSN: 1996-0808 Emirates Journal of Food and Agriculture, ISSN: 2079-0538 Agriculture and Natural Resources Journal, ISSN: 2452-316X

Journal of Biological Method, ISSN: 2326-9901

Peer J, ISSN: 2376-5992

Asian Biomedicine, ISSN: 1905-7415 Genes and Genomics, ISSN: 1976-9571 Scientific Reports, ISSN: 2045-2322

Biologia, ISSN: 1336-9596 **Genomics**, ISSN: 0888-7543

Anal Translation Medicine, ISSN: 2305-5839

Rice Science, ISSN: 1672-6308 **Oncology**, ISSN: 0030-2414

Biodiversitas Journal of Biological Diversity, ISSN: 1412-033X

Plant Cells Report, ISSN:07217714

Journal of Science and Technology, Viện Hàn Lâm Khoa học và Kỹ thuật Vietnam. ISSN: 0866-708X

Journal of Agriculture and Development, ISSN: 1859-1523

2017 – now: start-up committee member in the field of chemistry, pharmacology and rubber in Ho Chi Minh City

2017 – now: Committee member of Vietnam Society of Mycology

2016 – now: Phytopathological Society of Vietnam, member

2015 - now: Society of Biology and Biotechnology in Ho Chi Minh City

2014 – now: Member of committee of Mycological Society in Vietnam

2016 - now: Genetics Society of America, member

2016 – now: Phytopathological Society of Japan, member

2009 – 2010 President of Vietnamese Student and Youth Union in Kobe, Japan.

2008 – 2009 Vice-President of Vietnamese Student and Youth Union in Kobe, Japan

f. Collaborators & Other Affiliations

(i)Collaborators

Ngo Xuan Kien, Kanazawa University, Japan

Woubit Abdela, Department of Pathobiology, College of Veterinary Medicine, Nursing, and allied Health, Tuskegee University, USA

Ramajulu Sunkar, Dept. of Biochemistry and Molecular Biology, Oklahoma State University, USA

Paula Sundstrom, The Geisel School of Medicine, Dartmouth College, USA

Matthew Dickinson, School of bioscience, Nottingham University, UK

Hector M. Mora Montes, Departmento de Biologia, Universidad de Guannajuato, Mexico

Daniel Danial, Wageningen UR, Netherlands

Valerie Pujade-Renaud, CIRAD, France

Sutarnthip Ruenprapavut, Rangsit University, Thailand

Chatchawan Jantasuriyarat, Kasetsart University, Thailand

Christian Joseph R. Cumagun, College of Agriculture, University of the Philippines Los Banos

Hitoshi Nakayashiki, Kobe University, Japan

Yukio Tosa, Kobe University, Japan

(ii) Graduate and Postdoctoral Advisors

Graduate and postdoctoral advisors: Prof. Hitoshi Nakayashiki, School of Agricultural Sciences, Kobe University, Japan

Postdoctoral advisor: Prof. Paula Sundstrom, Department of Microbiology, The Geisel School of Medicine, Dartmouth College, USA

(iii) Thesis Advisor and Postgraduate Sponsor Ph.D students: 3

Nguyen Bang Phi, Ph.D candidate in Nong Lam University, Ho Chi Minh City, Vietnam Nguyen Don Hieu, Ph.D candidate in Nong Lam University, Ho Chi Minh City, Vietnam Bui Hoang Thiem, Ph.D candidate in Nong Lam University, Ho Chi Minh City, Vietnam

Master students: 23 students of which 15 students already completed Master program

Undergraduate students: 80 students (completed their program) including 14 international students from various countries like France, Kenya, Thailand