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Country:
Vietnam

Placement Code:
CTU-1

Project type: Research Methodology in Aquatic
Animal Physiology and Nutrition

Internship Placement

Organization: the College of Aquaculture and Fisheries, Can Tho University

Supervisor: A/Prof.Dr. Do Thi Thanh Huong and Dr. Tran Le Cam Tu

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1. Project work description

The College of Aquaculture and Fisheries of Can Tho University (CAF-CTU) has been recognized as strong unit in fundamental and applied research, especially in aquatic animal physiology and nutrition. The College has been implementing various national and int'l funded research projects (especially from Denmark, Belgium, USA, Australia, *etc.*) on physiology and nutrition and feed of aquatic animals (especially, local species) using advanced methods. The research teams have published quite a number of peer reviewed papers on good/high quality journal. The internship students who want to improve research methodology in physiology and nutrition and scientific paper writing for their thesis or for future research career can apply for. The students will work on the following topics:

- Learn methodologies in conducting physiology and nutrition and feed research/study;
- Learn scientific writing;
- Conduct case study experiments;
- Learn analytical methods and measurement parameters such as (i) physiology: respiration, red/white blood cell, haematocrit, Na⁺, Cl⁻, cortisol, haemoglobin, methaemoglobin, nitrite/nitrate in plasma, glucose, total immunoglobulin, lysozyme, digestive enzymes, protein in plasma/tissues, osmolality, pH blood, HCO₃⁻ or pCO₂ in plasma; and (ii) protein, lipid, COH. Ash,... in feed and aquatic animal, digestibility, *etc.*;
- Practice sample collection and analysis and measurement of above parameters;
- Visit aquaculture farms;
- Practice writing manuscript.

Internship period ranges from 8 to 10 weeks. The student can choose one topic (physiology or nutrition and feed) (8 weeks) or both (10 weeks). Working hours are flexible.

2. Placement description

The laboratory and experimental facilities (wet labs) of the course will be at the College of Aquaculture and Fisheries of Can Tho University. It is based in the campus 2, Xuan Khanh ward, Ninh Kieu district, Can Tho city, Vietnam. Can Tho city is well known as the center of the Mekong River Delta. The laboratories are equipped with modern instruments and wet labs are with many composite tanks with various sizes and specific tank systems (such as digestibility study tank system; temperature and CO₂ controlled tank systems, *etc.*). Other supported equipment/tools are also available.

3. How to get there?

There are several ways to get to Can Tho city. If the international students, they can arrive in Tan Son Nhat international airport (Ho Chi Minh city) or Can Tho International airport (Can Tho city). In case of Tan Son Nhat int'l airport, students can take a taxi to Mien Tay bus station (30-45 minutes; US\$ 10) and then a bus from Mien Tay bus station to Can Tho (about 3,5 hours; US\$ 7-8). If Can Tho Int'l airport is by taxi (about 20 minutes, US\$ 7-8).



4. Living conditions

There are available cheap hotel for rent surrounding the university with the cost of IS\$ 20-30 USD/day. Rooms of the int'l dormitory of the University is also available if booked in advance with the cost of 100-200 \$/month without or with air condition. Meal costs US\$ 1.5-2.0 on average.

5. Climate

Can Tho city is located in tropical region. Therefore, the weather is warm all year round, but there are two seasons a year, dry season from December to April and wet/rain season from May to November to October. The average temperature is about 27°C (often occur in April or May) and lowest is about 20°C (occur in December or January). The average rainfall is 1,850mm.

6. Culture

It is important to respect local culture and traditions. Cover-up dresses are required. Shoes or sandal does not matter but most of the time you will need to walk; therefore, light sport shoes/trainers will be suitable. Dress conservatively; casual clothing is suitable while working at the wet lab; T-shirts, shorts and sandals are appropriate.

7. Host arranges:

- Dormitory type accommodation nearby
- Subsidized rate for food wherever possible
- Work space and computer and internet facilities
- Materials, chemical and animal for the study

8. Interns are responsible for the followings:

- International airfare
- Transportation from and to the airport
- Fees for visa/passport
- Food and drinks (approx. about US\$ 1.5-2 per meal)
- Any costs of trips, trainings, and others arranged personally
- Insurance and costs of damages due to personal negligence
- Tuition fees to be discussed

9. Miscellaneous

Travel medical kit, flash light, umbrella or rain coat, few books, a towel and toiletries. In fact, these are available locally at cheap prices.



Bimodal intermittent-closed respirometer



Digestibility study system