Tuan Viet Nguyen

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Education

- **University of the Sunshine Coast** — QLD, Australia
  Doctor of Philosophy (PhD) ; Comparative Genomics — *Feb. 2016 – August. 2019*
- **Queensland University of Technology** — QLD, Australia
  Master of Applied Science (MsAppSc) ; Molecular Genetics — *May. 2013 – May. 2015*
- **International University, Ho Chi Minh National University Vietnam** — HCMC, Vietnam
  Bachelor of Science (Bsc) ; Major: Aquaculture Biotechnology — *2008 – 2012*

Professional experience

- **University of the Sunshine Coast** — QLD, Australia
  Research Assistant — Teaching Assistant — *Aug. 2015 – Now*
- **Queensland University of Technology** — QLD, Australia
  Research Assistant — Teaching Assistant — *Feb. 2014 – Jul. 2015*
- **International University, Ho Chi Minh National University Vietnam** — HCMC, Vietnam
  Research Assistant — *Feb. 2012 – Mar. 2013*

Publication

[1] **Nguyen, Tuan Viet**, Guiomar E Rotllant, Scott F Cummins, Abigail Elizur, and Tomer Ventura. Insights into sexual maturation and reproduction in the Norway lobster (*Nephrops norvegicus*) via *in silico* prediction and characterization of neuropeptides and G Protein-coupled Receptors. *Frontiers in Endocrinology*, 9, 2018.

[2] **Nguyen, Tuan Viet**, Hyungtaek Jung, Guiomar Rotllant, David Hurwood, Peter Mather, and Tomer Ventura. Guidelines for RNA-Seq projects: applications and opportunities in non-model decapod crustacean species. *Hydrobiologia*, 825(1):5–27, 2018.

[3] Guiomar Rotllant†, **Nguyen, Tuan Viet**†, David Hurwood, Valerio Sbragaglia, Tomer Ventura, Silvia Joly, Abigail Elizur, Peter B Mather, et al. Evaluation of genes involved in Norway lobster (*Nephrops norvegicus*) female sexual maturation using transcriptomic analysis. *Hydrobiologia*, 825(1):137–158, 2018.

[4] Guiomar Rotllant, **Nguyen, Tuan Viet**, Joseph Aizen, Saowaros Suwansa-ard, and Tomer Ventura. Toward the identification of female gonad-stimulating factors in crustaceans. *Hydrobiologia*, 825(1):91–119, 2018.

[5] Guiomar Rotllant†, **Nguyen, Tuan Viet**†, Valerio Sbragaglia, Lifat Rahi, Kevin J Dudley, David Hurwood, Tomer Ventura, Vincent Chand, Jacopo Aguzzi, Peter B Mather, et al. Sex and tissue specific gene expression patterns identified following *de novo* transcriptomic analysis of the Norway lobster, *Nephrops norvegicus*. *BMC Genomics*, 18(1):622, 2017.

[6] Dania Aziz, **Nguyen, Tuan Viet**, Md Lifat Rahi, David A Hurwood, and Peter B Mather. Identification of genes that potentially affect social dominance hierarchy in adult male giant freshwater prawns (*Macrobrachium rosenbergii*). *Aquaculture*, 476:168–184, 2017.

[7] **Nguyen, Tuan Viet**, Hyungtaek Jung, Thanh Minh Nguyen, David Hurwood, and Peter Mather. Evaluation of potential candidate genes involved in salinity tolerance in striped catfish *(Pangasianodon hypophthalmus)* using an RNA-Seq approach. *Marine Genomics*, 25:75–88, 2016.

[8] **Nguyen, Tuan Viet**, Scott F Cummins, Abigail Elizur, and Tomer Ventura. Transcriptomic characterization and curation of candidate neuropeptides regulating reproduction in the eyestalk ganglia of the Australian crayfish, *Cherax quadricarinatus*. *Scientific Reports*, 6:38658, 2016.

[9] Azam Moshtaghi, Md Lifat Rahi, **Nguyen, Tuan Viet**, Peter B Mather, and David A Hurwood. A transcriptomic scan for potential candidate genes involved in osmoregulation in an obligate freshwater palaemonid prawn (*Macrobrachium australiense*). *PeerJ*, 4:e2520, 2016.

[10] Nguyen Minh Thanh, Hyungtaek Jung, Russell E Lyons, Isaac Njaci, Byoung-Ha Yoon, Vincent Chand, **Nguyen, Tuan Viet**, Vo Thi Minh Thu, and Peter Mather. Optimizing *de novo* transcriptome assembly and extending genomic resources for striped catfish (*Pangasianodon hypophthalmus*). *Marine Genomics*, 23:87–97, 2015.

[11] Nguyen Minh Thanh, Hyungtaek Jung, Russell E Lyons, Vincent Chand, **Nguyen, Tuan Viet**, Vo Thi Minh Thu, and Peter Mather. A transcriptomic analysis of striped catfish (*Pangasianodon hypophthalmus*) in response to salinity adaptation: *De novo* assembly, gene annotation and marker discovery. *Comparative Biochemistry and Physiology Part D: Genomics and Proteomics*, 10:52–63, 2014.

† **Equal contribution author**

Projects

- The neuropeptidome and putative G-Protein Coupled Receptors (GPCRs) in the Tropical rock lobster, *Palinurus ornatus*
- Understanding molecular mechanism of flesh coloration in Atlantic salmon (*Salmo salar)*
- Insights on the molecular basis of sexual maturation in the Black tiger prawn (*Penaeus monodon*)
- Understanding the neurohormonal pathway in the Australian Red claw crayfish (*Cherax quadricarinatus*)
- Unlocking the neuropeptidome and their putative G-Protein Coupled Receptors (GPCRs) in the Norway lobster, *Nephrops norvegicus*
- Development of genomic tools for assessing nutrition, growth and reproduction issues in Norway lobster, *Nephrops norvegicus* (DeNuGReC FP7-PEOPLE-612296)
- Differential morphological characteristic/sexual characteristic of the giant fresh water prawn *Macrobrachium rosenbergii*
- Transcriptomic analysis involving salinity tolerance in fresh water palaemonid prawn *Macrobrachium australiense*
- Transcriptomic response related to salinity elevation in Tra catfish (*Pangasianodon hypophthalmus*)
- Effect of salinity on growth performance of Tra catfish (*Pangasianodon hypophthalmus*) fingerlings

Funding

- **Vietnam National Foundation for Science and Technology Development (NAFOSTED)** — Understanding the differences in reproductive traits between wild and captive populations of female black tiger shrimp (*Penaeus monodon*) using RNA-Sequencing approach — Role: Co-PI — Value: 55.000 AUD
- **Biotechnology center of Ho Chi Minh City** — Transcriptomics analysis of tilapia for molecular marker involved in resistance of Tilapia Lake virus (TiLV) — Role: Co-PI — Value: 90.000 AUD

Conferences and workshops

- **Introduction to RNA-sequencing : Opportunities and challenges in applied transcriptomics studies** — Ho Chi Minh city, Vietnam — Mar 2019 — *Course coordinator*
- **RNA sequencing in a nutshell : Perspectives and applications in marine biology** — Barcelona, Spain — Jun 2017 — *Course coordinator*
- **The Crustacean mid-year meeting** — Barcelona, Spain — Jun 2017 — *Invited Presenter*
- **University Research Week: Local research, Global impact** — University of the Sunshine Coast, Australia — Jun 2016 — *Presenter*
- **Big Biology and Bioinformatics Symposium (B3)** — Queensland University of Technology, Australia – Nov 2015 — *Poster*
- **Winter School in Mathematical and Computational Biology** — University of Queensland, Australia — Jul 2014 — *Attendee*
- **Hands-on Workshop on Next Generation Sequencing** — University of Queensland, Australia — Mar 2014 — *Attendee*
- **Workshop on application of blended learning** — International University, Vietnam — Aug 2012 — *Attendee*

Honours and Awards

- 3 Minutes thesis winner – USC Scool of Science and Engineering 2019
- Best HDR presentation – USC Faculty of Science, Health, Electrical Engineering Research Day 2016
- University of the Sunshine Coast International Research Scholarship (USCIRS) 2016
- Best HDR presentation – QUT Earth, Environment and Biological Science Seminar 2013
- International University, Ho Chi Minh National University Entrance scholarship 2008

Key Skills

- **Molecular biology skills**: DNA/RNA/protein extraction, PCR, qRT-PCR, Next generation sequencing (WGS, RNAseq)
- **Bioinformatics skills**: QC, assembly, mapping, variant analysis, differential expression analysis and gene data mining
- **Computer skills**: Microsoft Office, Adobe Photoshop, Lightroom, LaTeX, Unix shell scripts, Python, R
- **Interpersonal skills**: Leadership, Public speaking, Multi-tasking, Cross-cultural communication

References

- **Dr Tomer Ventura** University of the Sunshine Coast, Australia *Email: tventura@usc.edu.au*
- **Professor Abigail Elizur** University of the Sunshine Coast, Australia *Email: aelizur@usc.edu.au*
- **Dr Guiomar Esterich Rotllant** Institut de Ciències del Mar (CSIC), Spain *Email: guio@icm.csic.es*