

# SANJAYA DEEPAL NAYANA KUMARA BATHIGE

## BSc. Hons. (Chem. Sp), MSc, PhD

### PERSONAL DETAILS

#### Home address;

339/A Koswatta road  
Dippitigoda  
Kelaniya  
Sri Lanka

#### Current address;

47/66 Perera Mawatha  
Thalangama South  
Battaramulla  
Sri Lanka

#### Office address

Senior Research Scientist  
Sri Lanka Institute of  
Nanotechnology (SLINTEC),  
Nanotechnology and Science  
Park, Mahenwatta, Pitipana,  
Homagama,  
Sri Lanka

Tel: +94 112784626 (Home)  
+94 715 364068 (Mobile)  
+94114650550 (Office)

#### E.mail:

[sl\\_sanjaya@yahoo.com](mailto:sl_sanjaya@yahoo.com)  
[sanjayachem@gmail.com](mailto:sanjayachem@gmail.com)  
[sanjayaD@slintec.lk](mailto:sanjayaD@slintec.lk)

### AREAS OF EXPERTISE

Bioinformatics  
Molecular genetics  
Gene expression  
Cloning techniques  
Recombinant protein  
Biochemistry  
Animal experiments  
Microbiology  
Fish cell line  
Water quality assessment  
Natural products

### ACADEMIC QUALIFICATIONS

Department of Marine Life Sciences  
Jeju National University, South Korea  
**PhD, Marine life Sciences** 2013 - 2016

Department of Marine Life Sciences  
Jeju National University, South Korea  
**MSc, Marine life Sciences** 2011 - 2013

Department of Chemistry  
University of Colombo, Sri Lanka  
**BSc (Hons) – Chemistry** 1998 - 2002

### ACADEMIC AWARDS AND DISTINCTIONS

- ❖ **Young Scientist award** – Korean Society of Marine Life Science Nov 2016
- ❖ **The award for the outstanding research** - Presented by the Korean Society of Fisheries and Aquatic Science (KOSFAS) – Feb 2016
- ❖ **Young Scientist award** - Second Asian Marine Biology Symposium – Oct 2014
- ❖ **Presidential award** – Research publications in 2005

### EMPLOYMENTS

**Senior Research Scientist** (Oct 2017 – Present)  
Sri Lanka Institute of Nanotechnology (SLINTEC), Sri Lanka

**Postdoctoral fellow** (March 2016 – Feb 2017)  
Department of Marine Life Sciences, Jeju National University, South Korea

**Scientific Assistant** (Oct 2006 – Feb 2011)  
Department of Chemistry, University of Colombo, Sri Lanka.

**Research Assistant** (Jan 2003 - Sep 2006)  
Department of Chemistry, University of Colombo, Sri Lanka.

**Demonstrator (Teaching Assistant)** (Sep 2002 - Dec 2002)  
Department of Chemistry, University of Colombo, Sri Lanka.

## PROFESSIONAL EXPERIENCE

Working as a Postdoctoral Fellow at the Department of Marine Life Science, Jeju National University, my duties are;

2016 March – 2016  
Feb

- Coordinate the GSP (Green Seed Project) work to establish the MS markers to differentiate the four abalone species available in Korea
- Writing grant proposals regarding immune system, disease prevention, and differentiation of marine organisms
- Guide the postgraduate students
- Writing and correction of manuscripts

Worked as a Research Assistant (MSc & PhD student) at the Department of Marine Life Science, Jeju National University under the supervision of Prof. Jehee Lee,

2011 - 2016

- My research work was based on the structural and functional characterization of immune related genes from marine organisms.

Worked as a Scientific Assistant at the Department of Chemistry, University of Colombo, my duties were;

2006 - 2011

- Guide the undergraduate students, postgraduate students (MSc in Analytical chemistry) during their practical courses.
- Research studies related to molecular biology

Worked as a Research Assistant at the Department of Chemistry, University of Colombo, duties were;

2003 - 2006

- Research work on extracting plant materials, elucidation of active compounds and testing their bio activities on rats
- Preparation of analytical reports regarding the quality of trade effluents to be submitted to the Central Environmental Authority (CEA)
- Analysis of samples of varying nature such as Food, Soil, Plant materials, Thinner, Varnish, Paints, Compost, Battery water, Shampoo etc.
- Involvement in a nationally important project of "Water Quality Assessment in the Kala Oya Basin" (Physical, Chemical and Bacteriological analysis of water samples) funded by the Mahaweli Authority of Sri Lanka

Worked as a Demonstrator (Teaching Assistant) at the Department of Chemistry, University of Colombo, duties were;

2002(Sep) –  
2002(Dec)

- Guide the undergraduate students during their practical courses
- Conduct the tutorial classes for undergraduate students

2002(Aug) –  
2002(Sep)

Underwent an industrial training at the Industrial Technology Institute (ITI);

- Evaluated a method to determine the concentration of Ammonia in water

## RESEARCH PUBLICATIONS

2017

1. Jehanathan Nilojan, **S.D.N.K. Bathige**, Roopasingam Kugapreethan, Hyerim Yang, Myoung-Jin Kim, Bo-Hye Nam, Jehee Lee: *Molecular features and the transcriptional and functional delineation of complement system activators C1r and C1s from *Sebastes schlegelii**. *Developmental & Comparative Immunology* 12/2017; DOI:10.1016/j.dci.2017.12.011
2. H.M.V. Udayantha, **S.D.N.K. Bathige**, Thanthrige Thiunuwan Priyathilaka, Sukkyoung Lee, Myoung-Jin Kim, Jehee Lee: *Identification and characterization of molluscan caveolin-1 ortholog from *Haliothis discus discus* : Possible involvement in embryogenesis and host defense mechanism against pathogenic stress*. *Gene Expression Patterns* 11/2017; DOI:10.1016/j.gep.2017.11.003
3. Thanthrige Thiunuwan Priyathilaka, **S.D.N.K. Bathige**, Seongdo Lee, Jehee Lee: *Molecular identification and functional analysis of two variants of myeloid differentiation factor 88 (*MyD88*) from disk abalone (*Haliothis discus discus*)*. *Developmental & Comparative Immunology* 10/2017; 79., DOI:10.1016/j.dci.2017.10.010
4. M.D. Neranjan Tharuka, **S.D.N.K. Bathige**, Jehee Lee: *Molecular cloning, biochemical characterization, and expression analysis of two glutathione S-transferase paralogs from the big-belly seahorse (*Hippocampus abdominalis*)*. *Comparative biochemistry and physiology. Part B, Biochemistry & molecular biology* 09/2017; 214., DOI:10.1016/j.cbpb.2017.08.005
5. Thanthrige Thiunuwan Priyathilaka, **S.D.N.K. Bathige**, H.M.L.P.B. Herath, Sukkyoung Lee, Jehee Lee: *Molecular identification of disk abalone (*Haliothis discus discus*) tetraspanin 33 and CD63: Insights into potent players in the disk abalone host defense system*. *Fish & Shellfish Immunology* 08/2017; 69., DOI:10.1016/j.fsi.2017.08.020
6. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, G.I. Godahewa, William Shanthakumar Thulasitha, J.D.H.E. Jayasinghe, Qiang Wan, Jehee Lee: *Molecular insights of two *STAT1* variants from rock bream (*Oplegnathus fasciatus*) and their transcriptional regulation in response to pathogenic stress, interleukin-10, and tissue injury*. *Fish & Shellfish Immunology* 08/2017; 69., DOI:10.1016/j.fsi.2017.08.015
7. Jehanathan Nilojan, **S.D.N.K. Bathige**, Roopasingam Kugapreethan, W.S. Thulasitha, Bo-Hye Nam, Jehee Lee: *Molecular, transcriptional and functional insights into duplicated goose-type lysozymes from *Sebastes schlegelii* and their potential immunological role*. *Fish & Shellfish Immunology* 05/2017; 67., DOI:10.1016/j.fsi.2017.05.037
8. Minyoung Oh, **S.D.N.K. Bathige**, Yucheol Kim, Seongdo Lee, Hyerim Yang, Myoung-Jin Kim, Jehee Lee: *A *CXCL* ortholog from *Hippocampus abdominalis* : Molecular features and functional delineation as a pro-inflammatory chemokine*. *Fish & Shellfish Immunology* 05/2017; 67., DOI:10.1016/j.fsi.2017.05.050
9. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, Thanthrige Thiunuwan Priyathilaka, William Shanthakumar Thulasitha, J.D.H.E. Jayasinghe, Qiang Wan, Bo-Hye Nam, Jehee Lee: *Molecular cloning, transcriptional profiling, and subcellular localization of signal transducer and activator of transcription 2 (*STAT2*) ortholog from rock bream, *Oplegnathus fasciatus**. *Gene* 05/2017; 626., DOI:10.1016/j.gene.2017.05.021

10. Thanthrige  
Thiunuwan  
Priyathilaka,  
Minyoung Oh,  
**S.D.N.K. Bathige**,  
Mahanama De  
Zoysa, Jehee Lee:  
*Two distinct CXC  
chemokine  
receptors (CXCR3  
and CXCR4)*

*from the big-belly seahorse Hippocampus abdominalis : Molecular perspectives and immune defensive role upon pathogenic stress.* Fish & Shellfish Immunology 03/2017; 65., DOI:10.1016/j.fsi.2017.03.038

11. **S.D.N.K. Bathige**, William Shanthakumar Thulasitha, Navaneethaiyer Umasuthan, J.D.H.E. Jayasinghe, Qiang Wan, Bo-Hye Nam, Jehee Lee: *A homolog of teleostean signal transducer and activator of transcription 3 (STAT3) from rock bream, Oplegnathus fasciatus : Structural insights, transcriptional modulation, and subcellular localization.* Veterinary Immunology and Immunopathology 03/2017;, DOI:10.1016/j.vetimm.2017.02.008
12. Navaneethaiyer Umasuthan, **S.D.N.K. Bathige**, William Shanthakumar Thulasitha, R.G.P.T. Jayasooriya, Younhee Shin, Jehee Lee: *Identification of a gene encoding a membrane-anchored toll-like receptor 5 (TLR5M) in Oplegnathus fasciatus that responds to flagellin challenge and activates NF- $\kappa$ B.* Fish & Shellfish Immunology 01/2017;, DOI:10.1016/j.fsi.2017.01.020
13. H.M.L.P.B. Herath, P.D.S.U. Wickramasinghe, **S.D.N.K. Bathige**, R.G.P.T. Jayasooriya, Gi-Young Kim, Myoung Ae Park, Chul Kim, Jehee Lee: *Molecular identification and functional delineation of a glutathione reductase homolog from disk abalone (Haliotis discus discus): Insights as a potent player in host antioxidant defense.* Fish & Shellfish Immunology 12/2016; 60., DOI:10.1016/j.fsi.2016.12.002
14. Jiyeon Ko, Qiang Wan, **S.D.N.K. Bathige**, Jehee Lee: *Molecular characterization, transcriptional profiling, and antibacterial potential of G-type lysozyme from seahorse (Hippocampus abdominalis).* Fish & Shellfish Immunology 10/2016; 58., DOI:10.1016/j.fsi.2016.10.014
15. Minyoung Oh, Don Anushka Sandaruwan Elvitigala, **S.D.N.K. Bathige**, Seongdo Lee, Myoung-Jin Kim, Jehee Lee: *Molecular and functional characterization of caspase-8 from the big-belly seahorse (Hippocampus abdominalis).* Fish & Shellfish Immunology 10/2016; 58., DOI:10.1016/j.fsi.2016.10.015
16. J.D.H.E. Jayasinghe, **S.D.N.K. Bathige**, Bo-Hye Nam, Jae Koo Noh, Jehee Lee: *Comprehensive characterization of three glutathione S-transferase family proteins from black rockfish (Sebastes schlegelii).* Comparative Biochemistry and Physiology Part C Toxicology & Pharmacology 07/2016; 189., DOI:10.1016/j.cbpc.2016.07.003
17. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, J.D.H.E. Jayasinghe, G.I. Godahewa, Hae-Chul Park, Jehee Lee: *Three novel C1q domain containing proteins from the disk abalone Haliotis discus discus: Genomic organization and analysis of the transcriptional changes in response to bacterial pathogens.* Fish & Shellfish Immunology 07/2016; 56., DOI:10.1016/j.fsi.2016.07.010

2016

18. G.I. Godahewa, N.C.N. Perera, **S.D.N.K. Bathige**, Bo-Hye Nam, Jae Koo Noh, Jehee Lee: *Complement factor D homolog involved in the alternative complement pathway of rock bream (Oplegnathus fasciatus): Molecular and functional characterization and immune responsive mRNA expression analysis.* Fish & Shellfish Immunology 06/2016; 55., DOI:10.1016/j.fsi.2016.06.018
19. H.M.V. Udayantha, G.I. Godahewa, **S.D.N.K. Bathige**, W.D. Niroshana Wickramaarachchi, Navaneethaiyer Umasuthan, Mahanama De Zoysa, Hyung-Bok Jeong, Bong-Soo Lim, Jehee Lee: *A molluscan calreticulin ortholog from Haliotis discus discus: Molecular characterization and transcriptional evidence for its role in host immunity.* Biochemical and Biophysical Research Communications 04/2016; 474., DOI:10.1016/j.bbrc.2016.04.056

20. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, Hae-Chul Park, Jehee Lee: *An invertebrate signal transducer and activator of transcription 5 (STAT5) ortholog from the disk abalone, Haliotis discus discus: Genomic structure, early developmental expression, and immune responses to bacterial and viral stresses. Developmental and comparative immunology* 11/2015; 56. DOI:10.1016/j.dci.2015.11.012
21. G.I. Godahewa, **S.D.N.K. Bathige**, H.M.L.P.B. Herath, Jae Koo Noh, Jehee Lee: *Characterization of rock bream (Oplegnathus fasciatus) complement components C1r and C1s in terms of molecular aspects, genomic modulation, and immune responsive transcriptional profiles following bacterial and viral pathogen exposure. Fish & Shellfish Immunology* 10/2015; 46(2):656-668. DOI:10.1016/j.fsi.2015.07.026
22. Navaneethaiyer Umasuthan, **S.D.N.K. Bathige**, Jae Koo Noh, Jehee Lee: *Gene structure, molecular characterization and transcriptional expression of two p38 isoforms (MAPK11 and MAPK14) from rock bream (Oplegnathus fasciatus). Fish & Shellfish Immunology* 09/2015; 47(1). DOI:10.1016/j.fsi.2015.09.018
23. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, G.I. Godahewa, J.D.H.E. Jayasinghe, Ilson Whang, Jae Koo Noh, Jehee Lee: *A homolog of Kunitz-type serine protease inhibitor from rock bream, Oplegnathus fasciatus: Molecular insights and transcriptional modulation in response to microbial and PAMP stimulation, and tissue injury. Fish & Shellfish Immunology* 07/2015; 46(2). DOI:10.1016/j.fsi.2015.07.004
24. Jiyeon Ko, Wan Qiang, Sukkyoung Lee, **S.D.N.K. Bathige**, Minyoung Oh, Jehee Lee: *Characterization of Mitochondrial Heat Shock Protein 75 (mtHSP75) of the Big-belly Seahorse Hippocampus abdominalis. Fish & Shellfish Immunology* 06/2015; 48(3):354-361. DOI:10.1016/j.fsi.2015.03.054
25. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, G.I. Godahewa, William Shanthakumar Thulasitha, Ilson Whang, Seung Hwan Won, Chul Kim, Jehee Lee: *Two variants of selenium-dependent glutathione peroxidase from the disk abalone Haliotis discus discus: Molecular characterization and immune responses to bacterial and viral stresses. Fish & Shellfish Immunology* 05/2015; 45(2). DOI:10.1016/j.fsi.2015.05.028
26. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, G.I. Godahewa, Ilson Whang, Chul Kim, Hae-Chul Park, Jehee Lee: *Three novel clade B serine protease inhibitors from disk abalone, Haliotis discus discus: Molecular perspectives and responses to immune challenges and tissue injury. Fish & Shellfish Immunology* 04/2015; 45(2). DOI:10.1016/j.fsi.2015.04.020
27. Navaneethaiyer Umasuthan, **S.D.N.K. Bathige**, Kasthuri Saranya Revathy, Bo-Hye Nam, Cheol Young Choi, Jehee Lee: *Molecular genomic- and transcriptional-aspects of a teleost TRAF6 homolog: Possible involvement in immune responses of Oplegnathus fasciatus against pathogens. Fish & Shellfish Immunology* 01/2015; 42:66-78. DOI:10.1016/j.fsi.2014.10.022
28. Navaneethaiyer Umasuthan, **S.D.N.K. Bathige**, Ilson Whang, Bong-Soo Lim, Cheol Young Choi, Jehee Lee: *Insights into molecular profiles and genomic evolution of an IRAK4 homolog from rock bream (Oplegnathus fasciatus): Immunogen- and pathogen-induced transcriptional expression. Fish & Shellfish Immunology* 12/2014; 43(2). DOI:10.1016/j.fsi.2014.12.010
29. G.I. Godahewa, W.D. Niroshana Wickramaarachchi, Ilson Whang, **S.D.N.K. Bathige**, Bong-Soo Lim, Cheol Young Choi, Mahanama De Zoysa, Jae Koo Noh, Jehee Lee: *Two carboxypeptidase counterparts from rock bream (Oplegnathus fasciatus): Molecular characterization, genomic arrangement and immune*

Lim, Jehee Lee: *Characterization of rock bream (Oplegnathus fasciatus) cytosolic Cu/Zn superoxide dismutase in terms of molecular structure, genomic arrangement, stress-induced mRNA expression and antioxidant function*. Comparative Biochemistry and Physiology Part B Biochemistry and Molecular Biology 10/2014; 176(1). DOI:10.1016/j.cbpb.2014.07.004

2013

31. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, Ilson Whang, Bong-Soo Lim, Seung Hwan Won, Jehee Lee: *Antibacterial activity and immune responses of a molluscan macrophage expressed gene-1 from disk abalone, Haliotis discus discus*. Fish & Shellfish Immunology 05/2014; 39(2). DOI:10.1016/j.fsi.2014.05.012
32. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, Kasthuri Saranya Revathy, Youngdeuk Lee, Seokryel Kim, Mi Young Cho, Myoung-Ae Park, Ilson Whang, Jehee Lee: *A mu class glutathione S-transferase from Manila clam Ruditapes philippinarum (RpGSTμ): Cloning, mRNA expression, and conjugation assays*. Comparative Biochemistry and Physiology Part C Toxicology & Pharmacology 05/2014; 162(1). DOI:10.1016/j.cbpc.2014.03.007
33. Navaneethaiyer Umasuthan, **S.D.N.K. Bathige**, Kasthuri Saranya Revathy, W.D. Niroshana Wickramaarachchi, Qiang Wan, Ilson Whang, Eunmi Kim, Myoung-Ae Park, Hae-Chul Park, Jehee Lee: *A C1 inhibitor ortholog from rock bream (Oplegnathus fasciatus): Molecular perspectives of a central regulator in terms of its genomic arrangement, transcriptional profiles and anti-protease activities of recombinant peptide*. Developmental and comparative immunology 09/2013; 42(2). DOI:10.1016/j.dci.2013.09.006
34. H.K.A. Premachandra, Don Anushka Sandaruwan Elvitigala, **S.D.N.K. Bathige**, Ilson Whang, Youngdeuk Lee, Mahanama De Zoysa, Jehee Lee: *Genomic structure and immunological response of an STAT4 family member from rock bream (Oplegnathus fasciatus)*. Fish & Shellfish Immunology 09/2013; 35(6). DOI:10.1016/j.fsi.2013.09.011
35. **S.D.N.K. Bathige**, Ilson Whang, Navaneethaiyer Umasuthan, W.D. Niroshana Wickramaarachchi, Qiang Wan, Bong-Soo Lim, Myoung-Ae Park, Jehee Lee: *Three complement component 1q genes from rock bream, Oplegnathus fasciatus: Genome characterization and potential role in immune response against bacterial and viral infections*. Fish & Shellfish Immunology 08/2013; 35(5). DOI:10.1016/j.fsi.2013.08.013
36. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, Ilson Whang, Bong-Soo Lim, Hyung-Bok Jung, Jehee Lee: *Evidences for the involvement of an invertebrate goose-type lysozyme in disk abalone immunity: Cloning, expression analysis and antimicrobial activity*. Fish & Shellfish Immunology 08/2013; 35(5). DOI:10.1016/j.fsi.2013.07.048
37. Saranya Revathy Kasthuri, Qiang Wan, Navaneethaiyer Umasuthan, **S.D.N.K. Bathige**, Bong-Soo Lim, Hyung-Bok Jung, Jehee Lee, Ilson Whang: *Genomic characterization, expression analysis, and antimicrobial function of a glyrichin homologue from rock bream, Oplegnathus fasciatus*. Fish & Shellfish Immunology 08/2013; 35(5). DOI:10.1016/j.fsi.2013.08.008
38. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, Kasthuri Saranya Revathy, Ilson Whang, Bong-Soo Lim, Bo-Hye Nam, Jehee Lee: *A bifunctional invertebrate-type lysozyme from the disk abalone, Haliotis discus discus: Genome organization, transcriptional profiling and biological activities of recombinant protein*. Developmental and comparative immunology 06/2013; 41(2). DOI:10.1016/j.dci.2013.06.009

*responses upon pathogenic stresses*. Veterinary Immunology and Immunopathology 10/2014; DOI:10.1016/j.vetimm.2014.10.005

30. Navaneethaiyer Umasuthan, **S.D.N.K. Bathige**, William Shanthakumar Thulasitha, Wan Qiang, Bong-Soo

39. Minyoung Oh, Kasthuri Saranya Revathy, Qiang Wan, **S.D.N.K. Bathige**, Ilson Whang, Bong-Soo Lim, Hyung-Bok Jung, Myung-Joo Oh, Sung-Ju Jung, Sung Yeon Kim, Jehee Lee: *Characterization of MIF family proteins: MIF and DDT from rock bream, Oplegnathus fasciatus*. Fish & Shellfish Immunology 05/2013; 35(2). DOI:10.1016/j.fsi.2013.05.003
40. Navaneethaiyer Umasuthan, **S.D.N.K. Bathige**, Kasthuri Saranya Revathy, Qiang Wan, Ilson Whang, Jehee Lee: *Two duplicated chicken-type lysozyme genes in disc abalone Haliotis discus discus: Molecular aspects in relevance to structure, genomic organization, mRNA expression and bacteriolytic function*. Fish & Shellfish Immunology 05/2013; DOI:10.1016/j.fsi.2013.04.038
- 2012
41. W.D. Niroshana Wickramaarachchi, Ilson Whang, Qiang Wan, **S.D.N.K. Bathige**, Mahanama De Zoysa, Bong-Soo Lim, Sang-Yeob Yeo, Myoung-Ae Park, Jehee Lee: *Genomic characterization and expression analysis of complement component 8 $\alpha$  and 8 $\beta$  in rock bream (Oplegnathus fasciatus)*. Developmental and comparative immunology 10/2012; 39(3). DOI:10.1016/j.dci.2012.09.005
42. Navaneethaiyer Umasuthan, Kasthuri Saranya Revathy, **S.D.N.K. Bathige**, Bong-Soo Lim, Myoung-Ae Park, Ilson Whang, Jehee Lee: *A manganese superoxide dismutase with potent antioxidant activity identified from Oplegnathus fasciatus: Genomic structure and transcriptional characterization*. Fish & Shellfish Immunology 09/2012; 34(1). DOI:10.1016/j.fsi.2012.09.011
43. **S.D.N.K. Bathige**, Ilson Whang, Navaneethaiyer Umasuthan, Bong-Soo Lim, Myoung-Ae Park, Eunmi Kim, Hae-Chul Park, Jehee Lee: *Interferon regulatory factors 4 and 8 in rock bream, Oplegnathus fasciatus: Structural and expressional evidence for their antimicrobial role in teleosts*. Fish & Shellfish Immunology 08/2012; 33(4):857-71. DOI:10.1016/j.fsi.2012.07.017
44. Navaneethaiyer Umasuthan, **S.D.N.K. Bathige**, Kasthuri Saranya Revathy, Youngdeuk Lee, Ilson Whang, Cheol Young Choi, Hae-Chul Park, Jehee Lee: *A manganese superoxide dismutase (MnSOD) from Ruditapes philippinarum: Comparative structural- and expressional analysis with copper/zinc superoxide dismutase (Cu/ZnSOD) and biochemical analysis of its antioxidant activities*. Fish & Shellfish Immunology 07/2012; 33(4):753-65. DOI:10.1016/j.fsi.2012.06.024
- 2008
45. W.D. Ratnasooriya, S.A. Deraniyagala, G. Galhena, S.S.P. Liyanage, **S.D.N.K. Bathige**, J.R.A.C. Jayakody: *Anti-inflammatory Activity of the Aqueous Leaf Extract of Ixora coccinea*. Pharmaceutical Biology 10/2008; 43(2):147-152. DOI:10.1080/13880200590919483
- 2005
46. W.D. Ratnasooriya, S.A. Deraniyagala, **S.D.N.K. Bathige**, H.D.I. Hettiarachchi: *Leaf extract of Crinum bulbispermum has antinociceptive activity in rats*. Journal of Ethnopharmacology 02/2005; 97(1):123-8. DOI:10.1016/j.jep.2004.10.024
47. W.D. Ratnasooriya, S.A. Deraniyagala, **S.D.N.K. Bathige**, C.L. Goonasekara, J.R.A.C. Jayakody: *Antinociceptive action of aqueous extract of the leaves of Ixora coccinea*. Acta Biologica Hungarica 02/2005; 56(1-2):21-34. DOI:10.1556/ABiol.56.2005.1-2.3



## RESEARCH ABSTRACT PRESENTATION

### ORAL PRESENTATION

01. **S.D.N.K. Bathige**, and Jehee Lee. *Identification of STAT members in teleost JAK/STAT signaling pathway and their vital antiviral role and transcriptional responses against IL-10*. Korean Society of Marine Life Science: Annual Meeting & Conference 2016, Republic of Korea, November 10-11, 2016.
02. **S.D.N.K. Bathige**, William Shanthakumar Thulasitha, Navaneethaiyer Umasuthan, G. I. Godahewa, J.D.H.E. Jayasinghe, and Jehee Lee. *Molecular insights, functional aspects and subcellular localization of two stat1 isoforms from a marine teleost fish*. International conference “Aquaculture Europe 15” Rotterdam, Netherlands, October 20-23, 2015.
03. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, Jehee Lee. *Functional characterization of a mu-class glutathione s-transferase from manila clam, Ruditapes philippinarum*. International conference “Asian-Pacific Aquaculture 2013” Ho Chi Minh City, Vietnam, December 10-13, 2013.
04. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, Kasthuri Saranya Revathy, Jehee Lee. *A new lysozyme from the disk abalone (Haliotis discus discus) potentially function in host defense*. International conference “Fisheries & Marine Sciences 2012” Negombo, Sri Lanka, August 23-24, 2012.
05. **S.D.N.K. Bathige**, Jehee Lee. *Involvement of C1q in the Defense of Rock Bream Oplegnathus fasciatus Against Bacterial and Viral Infections*. The 9<sup>th</sup> Asia-Pacific Marine Biotechnology conference, Kochi, Japan, July 13-16, 2012.
06. W.D. Ratnasooriya, S.A. Deraniyagala, **S.D.N.K. Bathige**, G. Galhena, S.S.P. Liyanage and J.R.A.C. Jayakody. *Antinociceptive action of aqueous extract of the leaves of Ixora coccinea in rats*. Session of the Sri Lanka Association for the Advancement of Science (SLAAS) 2003.

### POSTER PRESENTATION (Selected abstracts)

1. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan and Jehee Lee. *Two I|B kinase paralogs from marine gastropod Haliotis discus discus: molecular characterization and transcriptional profiling upon pathogenic stress*. International conference “Aquaculture Europe 15” Rotterdam, Netherlands, October 20-23, 2015.
2. Navaneethaiyer Umasuthan, **S.D.N.K. Bathige**, Jehee Lee. *A putative protein kinase domain containing protein (AbPKDCP) gene of disk abalone responses to*

VHSV infection.

International  
conference  
“Aquaculture  
Europe 15”  
Rotterdam,  
Netherlands,  
October 20-23,  
2015.

3. J.D.H.E. Jayasinghe\*, **S.D.N.K. Bathige** and Jehee Lee. *Glutathione s-transferase theta; molecular and functional characterization of an antioxidant gene from a teleostean origin*. International conference “Aquaculture Europe 15” Rotterdam, Netherlands, October 20-23, 2015.
4. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, Jehee Lee. *A homolog of MyD88 from disk abalone, Haliotis discus discus: molecular characterization, early developmental expression and immune responses to microbial pathogens*. International conference “9<sup>th</sup> International Abalone Symposium 2015” Yeosu, Korea, October 5-10, 2015.
5. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, Wan Qiang, Jehee Lee. *Signal transducer and activator of transcription 3 (STAT3) homologue from rock bream (Oplegnathus fasciatus): molecular characterization and potential immune responses upon bacterial infection*. International conference “World Aquaculture 2015” Jeju, Korea, May 26-30, 2015.
6. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, J.D.H.E. Jayasinghe, G.I. Godahewa, Jehee Lee. *Molecular insights and potent immune responses of three novel c1q domain containing (C1qDC) proteins from disk abalone Haliotis discus discus*. International conference “World Aquaculture 2015” Jeju, Korea, May 26-30, 2015.
7. Navaneethaiyer Umasuthan, **S.D.N.K. Bathige**, and Jehee Lee. *Experimental flagellin injection mediates transcription of TLR5 signaling genes: genomic and expressional profiling of teleost flagellin sensing elements*. International conference “World Aquaculture 2015” Jeju, Korea, May 26-30, 2015.
8. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, William Shanthakumar Thulasitha, G. I. Godahewa, J.D.H.E. Jayasinghe and Jehee Lee. *Three variants of serine protease inhibitors from disk abalone Haliotis discus discus: molecular insights and potential immunological responses upon bacterial infection*. International conference “Aquaculture America 2015” Louisiana, USA, February 19-22, 2015.

9. Jehee Lee, **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, Sukkyoung Lee. *A membrane-attack complex/perforin (MACPF) domain containing protein from disk abalone, Haliotis discus discus and its immune responses upon pathogenic stress*. International conference “Aquaculture America 2014” Washington, USA, February 9-12, 2014. Biology Symposium 2014” Jeju, Korea, October 1-4, 2014.
10. **S.D.N.K. Bathige** and Jehee Lee. *Two isoforms of selenium dependent glutathione peroxidases from disk abalone Haliotis discus discus: Bioinformatics analysis and transcriptional profiling upon pathogenic stress*. International conference “The 2<sup>nd</sup> Asian Marine

- The 2<sup>nd</sup> International conference on frontiers in Molecular Life Sciences. Colombo, Sri Lanka, September 10-12, 2014.
11. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan and Jehee Lee. *Molecular characterization of two STAT1 isoforms from rock bream, Oplegnathus fasciatus and their immune responses upon viral infection.* The 2<sup>nd</sup> International conference on frontiers in Molecular Life Sciences. Colombo, Sri Lanka, September 10-12, 2014
  12. Navaneethaiyer Umasuthan, **S.D.N.K. Bathige** and Jehee Lee. *Genomic arrangement of vertebrate MAPKs p38 $\alpha$  and p38 $\beta$  is highly conserved: Identification, comparison and expression of two rock bream (Oplegnathus fasciatus) MAPKs.*
  13. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, Seung-Hwan Won, Soo-Kang Kim, Jehee Lee. *Molecular characterization and immune response of c1q domain containing protein from disk abalone Haliotis discus discus.* International conference "Aquaculture Europe 14" San Sebastian, Spain, October 14-17, 2014.
  14. Navaneethaiyer Umasuthan, **S.D.N.K. Bathige**, Kasthuri Saranya Revathy, Jehee Lee. *PAMP- and pathogen-induced immune responsive transcriptional profiles of a teleostean TRAF6 counterpart: implication of another intron-loss story.* International conference "Aquaculture Europe 14" San Sebastian, Spain, October 14-17, 2014.
  15. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, Jehee Lee. *A novel serine protease inhibitor from disk abalone, Haliotis discus discus and its involvement in the innate immunity.* International conference "Asian-Pacific Aquaculture 2013" Ho Chi Minh City, Vietnam, December 10-13, 2013.
  16. Saranya Revathy Kasthuri, **S.D.N.K. Bathige**, Jehee Lee. *Genomic/functional characterization and expression analysis of peroxiredoxin 5 from Oplegnathus fasciatus.* International conference "Asian-Pacific Aquaculture 2013" Ho Chi Minh City, Vietnam, December 10-13, 2013.
  17. Navaneethaiyer Umasuthan, **S. D. N. K. Bathige**, Kasthuri Saranya Revathy and Jehee Lee. *The first documentation of three lysozyme types of animal kingdom in disc abalone: Genomic structure and possible evidences for their antibacterial role.* International conference "Asian-Pacific Aquaculture 2013" Ho Chi Minh City, Vietnam, December 10-13, 2013.
  18. **S.D.N.K. Bathige**, Ilson Whang and Jehee Lee. *Molecular characterization of Interferon regulatory factor-4 in rock bream, Oplegnathus fasciatus and its antimicrobial activity.* International conference "Aquaculture America 2012" Las Vegas, Nevada, USA, February 29-March 2, 2012.
  19. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, Ilson Whang, and Jehee Lee. *A mu-class Glutathione S-transferase from Manila clam, Ruditapes philippinarum:*

September 1-5, 2012.

20. Navaneethaiyer Umasuthan, **S. D. N. K. Bathige**, Kasthuri S. Revathy, Ilson Whang, and Jehee Lee. *Characterization of a biologically active MnSOD from Manila clam Ruditapes philippinarum*. International conference "Aqua 2012" Prague, Czech Republic, September 1-5, 2012.
21. **S.D.N.K. Bathige**, Navaneethaiyer Umasuthan, K. Saranya Revathy, Jehee Lee. *Molecular characterization and expression analysis of molluscan goose-type lysozyme from disk abalone, Haliotis discus discus*. Conference on Fishery Scientific Association of Korea (FASK 2012), Busan Republic of Korea, November 16, 2012.

## BOOK CHAPTERS

Pharmaceutical analysis – Chromatography

ISBN – pending

The Open University Press, Sri Lanka, 2010

## EDUCATIONAL QUALIFICATIONS

- Passed G.C.E. Advanced Level Examination in Biological Science in 1996 with Two B's and Two C's
- Passed G.C.E. Ordinary Level Examination in 1992 with two Distinctions, Four Credits and two simple passes

## REFEREES;

- Prof. Jehee Lee (Postgraduate Supervisors)  
Marine Molecular Genetics Lab  
Dept. of Marine Life Sciences  
School of Bio Medical Sciences  
Jeju National University  
Republic of Korea  
E-mail: [jehee@jejunu.ac.kr](mailto:jehee@jejunu.ac.kr)  
[jeheedaum@hanmail.net](mailto:jeheedaum@hanmail.net)
- Prof. K.R.R. Mahanama  
Dean Faculty of Science  
University of Colombo  
Sri Lanka  
E-mail: [maha@chem.cmb.ac.lk](mailto:maha@chem.cmb.ac.lk)  
Office: 0112503367  
Mobile: 0714406243
- Prof. M.D.P. De Costa (Undergraduate Supervisor)  
Department of Chemistry  
University of Colombo  
Sri Lanka

*Molecular  
characterization  
and mRNA  
expression analysis.*  
International  
conference "Aqua  
2012" Prague,  
Czech Republic,

E-mail:  
[mdpdc@chem.  
cmb.ac.lk](mailto:mdpdc@chem.cmb.ac.lk)  
Office:  
0112503367  
Mobile:  
0722881722

