

TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE -5925

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Department of Pharmaceutical Sciences**

Scientist- in - charge: Dr. Lammi Carmen

[Yathisha UG]

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Undiganalu G
Name	Yathisha

PRESENT OCCUPATION

Appointment	Structure
Senior Research associate	Currently, I am leading Enzymatic Hydrolysis Team, in that project planning, method development, experimental design from lab scale to industrial. Scale data processing, statistical approaches.

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	Bachelor of Science	Tumkur University, Karnataka, India	June.2011
Specialization	Physics, Mathematics Chemistry		
PhD	Biological Sciences (Food Safety and Nutrition)	Nitte Deemed University Karnataka, India	Nov. 2022
Master	Biochemistry	Davangere University Karnataka, India	May. 2013
Degree of medical specialization	-	-	-
Degree of European specialization	-	-	-
Other	-	-	-

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of Association City	Date of	Association	City
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registration		
-	-	-

FOREIGN LANGUAGES

Languages	level of knowledge
English	Proficiant

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award	
2017	Received the Best poster presentation award for the Ph.D. work on Angiotensin -I converting enzyme (ACE-I) and antioxidant activity of the fish protein hydrolysates from ribbon fish during the national conference on food regulation in India current status and way forward. Two-day national conference held at Central University of Pondicherry on 27th and 28th March 2017	
2020	Awarded as a Senior Research fellowship by the Indian Council of Medical Research (ICMR), The government of India, New Delhi, 2020-2021.	
2022	Participated in Anveshan 2021-2022 AIU- National Student Research Convention 2022 held at Academy of Maritime Education and Training (AMET)- Deemed to be University, Chennai under the aegis of Association of Indian Universities (AIU) during 27th and 28th March 2022. My project entitled "Natural peptide from fish waste: A potent drug candidate for antihypertensive activity" was presented in the category Basic Science and secured first place in the best research project from the south zone.	

TRAINING OR RESEARCH ACTIVITY

description of activity: I work in the field of biomedical science and my specific area of research is to understand the role of naturally isolated peptides in hypertension management and other bioactivities. I belong to the division of Food safety and nutrition and my research work focuses on the purification, isolation, and characterization of bioactive peptides. I used Electrophoresis, ELISA, Spectroscopy, Cell culture, Western blot and Chromatography techniques for peptide purification and characterization. Spontaneously hypertensive rats (SHRs) as our model system for *in vivo* antihypertensive activity. In our group work towards bioavailability, screening and design the natural compounds using RP-HPLC, FT-IR, LC-MS/MS and bioinformatic soft-wares. Analyse the toxicity of the isolated compounds in zebrafish model. Isolated compound stability studies were standardized by RP-HPLC methods. I published my research work in international journals. In my PhD, I awarded as a senior research fellowship by Indian Council of Medical Research (ICMR-SRF) at Nitte Centre for Science Education and Research Mangaluru, India. Wherein, I worked on "Isolation and characterization of Angiotensin-I converting enzyme inhibitory peptides from fish protein hydrolysates". I am always engrossed in working and integrating into multi-disciplinary research areas and am passionate about gaining experience in advanced molecular and experimental approaches.

PROJECT ACTIVITY

Year	Project
2016-2019	"Preparation of fish protein hydrolysates having bio-active property and it use for food formulation" DST-SERB Govt. of India sponsored project.
2020-2022	"Isolation and characterization of Angiotensin converting enzyme inhibitory peptides from fish protein hydrolysate" ICMR- SRF



PATENTS

Patent: Indian Patent

Yathisha UG, and Mamatha BS. "**PROCESS FOR THE PREPARATION OF LIPID-FREE PROTEIN HYDROLYSATES FROM RIBBONFISH.** Published in Indian Patent <u>No 48/2020</u>.

CONGRESSES AND SEMINARS

Date	Title	Place
4 th August 2017.	Hands-on Training on "Basics of Flow Cytometry and its Applications"	held at School of Life Sciences, Manipal Karnataka, India.
3 rd Sep. 2018	National conference on "Recent innovation in Nanomedicine and drug delivery"	held at St. Aloysius College, Mangalore, Karnataka, India
21 st . Sep. 2018	Workshop on "Entrepreneurship Opportunities in the dairy industry"	held at NUCSER, Nitte University, Mangalore, Karnataka, India
on 25 May 2018	Symposium on "Rare Genetic Disorders"	at NITTE (Deemed to be University) Mangalore . under the DST-BELSO, INDIA-BELGIUM collaborative Program.
9 th Jan 2020,	Workshop on "Biotechnology in One Health"	Organized by Nitte University Center for Science Education and Research, Deralakatte Mangaluru India.
on Nov 25th-27th, November 2021.	International Conference of Indian Association of Biomedical Scientists (IABMSCON -2021)	held at NITTE (Deemed to be University)

PUBLICATIONS

Books

Its in Progress

Articles in reviews

1.Yathisha UG, Ishani Bhat, Iddya Karunasagar & Mamatha BS, Antihypertensive Activity of Fish Protein Hydrolysates and its Peptides, Critical Reviews in Food Science, 2019, 59(15), 2363-2374. https://doi.org/10.1080/10408398.2018.1452182. Impact factor 11.027

2.Yathisha, UG., Karunasagar, I, and Mamatha BS. Bioactivity and Functional Properties of Protein Hydrolysate from Muscle and Visceral Waste of Ribbon Fish (*Lepturacanthus Savala*) Extracted by three Different Proteolytic Enzymes. Journal of Biologically Active Products from Nature, 2021, 11(4), 363-379. <u>https://doi.org/10.1080/22311866.2021.1953399</u>.

3. Yathisha UG, Mahendra Gowdru Srinivasa, Revana Siddappa BC, Subankar P Mandal, Sheshagiri R Dixit, Pujar GV, and Mamatha BS. Isolation and characterization of ACE-I inhibitory peptides from ribbonfish for a potential inhibitor of the main protease of SARS-CoV-2: An in-silico analysis. 2021, Proteins: Structure, Function, and Bioinformatics. <u>https://doi.org/10.1002/prot.26291</u>.

4. Yathisha UG, Sneha Vaidya, and Mamatha Bangera Sheshappa. Functional Properties of Protein Hydrolysate from Ribbon Fish (Lepturacanthus Savala) as Prepared by Enzymatic hydrolysis (2022).



International Journal of Food Properties. https://doi.org/10.1080/10942912.2022.2027964.

5. Yathisha, U. G., Tanaaz, M., Bhat, I., Luckose, F., & Mamatha, B. S. (2023). Physicochemical properties and angiotensin-I converting enzyme inhibitory activity of lipid-free ribbon fish (Lepturacanthus savala) protein hydrolysate. Journal of Food Science and Technology, 60(1), 340-352. https://doi.org/10.1007/s13197-022-05620-z

6. Nishith Kumar Jogi, **U.G., Yathisha**, Ishani Bhat a Mamatha Bangera Sheshappa, Antihypertensive activity of orally consumed ACE-I inhibitory peptides, **Critical Reviews in Food Science and Nutrition**, <u>https://doi.org/10.1080/10408398.2021.1938508</u>.

7. Ishani Bhat, **Yathisha UG**, Iddya Karunasagar and Mamatha BS, Nutraceutical approach to enhance lutein bioavailability via nano-delivery systems 2020, 78(9):709-724. <u>https://doi.org/10.1093/nutrit/nuz096</u>.

8. Kushalan S, Yathisha UG, Khyahrii S A, Hegde S. Phytochemical and anti-oxidant evaluation of in vitro and in vivo propagated plants of Curculigo orchioides. In Vitro Cellular & Developmental Biology-Plant. 2022 Jan 11:1-0. https://doi.org/10.1007/s11627-021-10246-5.

9. D'Souza, L. C., Dwivedi, S., Raihan, F., Yathisha, U. G., Raghu, S. V., Mamatha, B. S., & Sharma, A. (2022). Hsp70 overexpression in Drosophila hemocytes attenuates benzene-induced immune and developmental toxicity via regulating ROS/JNK signaling pathway. Environmental Toxicology. https://doi.org/10.1002/tox.23520.

10. Somanath Disha 1, **U G, Yathisha** 2, Mave Harshitha 1, Biswajit Maiti 1 *In silico Evaluation of Outer Membrane Protein S2 as a Suitable Vaccine Candidate Against Edwardsiella tarda Infection of Fish accepted in North American Journal of Aquaculture. <u>https://doi.org/10.1002/naaq.10322</u>.

11. Jeshma Ravindra a, Yathisha U.,G b, Dechamma Pandyanda Nanjappa a, Krithika Kalladka a, Rasik Dhakal a, Anirban Chakraborty Gunimala Chakraborty. "Allicin extracted from Allium sativum shows potent anti-cancer and antioxidant properties in zebrafish" accepted in Biomedicine & Pharmacotherapy. https://doi.org/10.1016/j.biopha.2023.115854.

Congress proceedings

- 1. Studies on Angiotensin -I converting activity of ribbonfish protein hydrolysate. National conference on natural bioactive compounds and the potential effect on health. One day national conference held at St. Aloysius, Mangalore on 27th Jan 2017
- 2. Angiotensin -I converting enzyme (ACE-I) and antioxidant activity of the fish protein hydrolysate from ribbon fish, National conference on food regulation in India current status and way forward. Two-day national conference held at Central University of Pondicherry on 27th and 28th March 2017 (Best Poster presentation award).
- 3. Preparation of Fish Protein Hydrolysate by enzymatic hydrolysis and it having Bioactive component of Novel Angiotensin-I converting peptides. Two-day national conference on held at Mangalore University on 8th and 9th September 2017.
- 4. Bioactivity and functional properties of fish protein hydrolysate extracted from ribbon fish muscle and viscera as influenced by the enzyme type. The one-day conference on held at Nitte (DU) on 28th Jan 2020.
- 5. Isolation and characterization of Angiotensin-Converting Enzyme-I inhibitory peptides from fish protein hydrolysate. International Conference of Indian Association of Biomedical Scientists (IABMSCON -2021), held at NITTE (Deemed to be University) on Nov 25th-27th, November 2021. Mangalore was held on 12 January 2018.

6. Participated in Anveshan 2021-2022 AlU- National Student Research Convention 2022 held at Academy of Maritime Education and Training (AMET)- Deemed to be University, Chennai under the aegis of Association of Indian Universities (AIU) during 27th and 28th March 2022. His project entitled "Natural peptide from fish waste: A potent drug candidate for antihypertensive activity" was presented in the category Basic Science and secured first place in the best project from the



south zone

OTHER INFORMATION

I declare that the information provided in this CV is true and complete to the best of my knowledge.

Place; Bangaluru

(Dr. Yathisha UG)

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

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Place and date: ______, ______,