Reza Ovissipour Curriculum Vitae

+1 (509) 432-3882;

: ovissi@vt.edu; mrovissi@yahoo.com

Address: 201 Crossroads Loop, Yorktown, VA 23693

U.S. Permanent Resident

• Education

Washington State University **Pullman, WA**
Department of Biological Systems Engineering
Ph.D. in Food Safety Engineering *Jan. 2015- May 2017*
Dissertation: The effect of mild thermal processing in combination with non-thermal processing (Electrolyzed water solutions) on *Listeria monocytogenes* inactivation in Atlantic salmon
Advisor: Dr. Shyam Sablani
GPA: 3.8/4

Tarbiat Modares University **Tehran, Iran**
Ph.D. in Seafood Science and Technology *Sept. 2006-Nov. 2010*
Dissertation: Value Added Products and Marine Bioprocessing
Advisor: Professor Mohamad Abedian
GPA: 17.79/20

Tarbiat Modares University **Tehran, Iran**
M.Sc. in Seafood Science and Technology *Sept. 2004-Sept. 2006*
Dissertation: Microencapsulation of Fish Oil and Vitamin C: Enrichment of Daphnia as a Live Vector for Persian Sturgeon Larvae Nutrition
Advisor: Professor Mohamad Abedian
GPA: 18.81/20

Gorgan Agricultural Sciences and Natural Resources University **Gorgan, Iran**
B.Sc. in Aquaculture and Fisheries *Sept. 2000 Sept. 2004*
Track: Fish Feed Production and Nutrition
GPA: 17/20

• Professional Experience

- **Assistant Professor, Seafood AREC/Department of Food Science and Tech. at Virginia Tech University** ***August 2018-Present***
- **Research Associate and Senior Food Safety Scientist at UC Davis** ***June 2017-Present***
- **Processing and R&D Manager at Stolt Sea Farm** ***October 2015-August 2016***
- **Research Associate at Washington State University** ***2011-2015***
- **Caspian Zist-Fanavaran Co.** ***2009-2011***
- **Assistant Professor in the Department of Seafood Science and Technology**, at Gorgan Agricultural Sciences and Natural Resources University, Iran. ***2007-2011***

• Extension, Outreach, Volunteer, and Social Media Experience

- Seafood Outreach Specialist: Seafood Cooperative Extension Center, WSU, Seattle
    - My responsibilities are developing proposals, providing teaching materials and outreach activities. I am working closely with seafood industry and funding agencies to provide enough fund to develop a strong seafood program for seafood industry. Also, I am leading several projects and outreach programs
- Working closely with Georgia Sea Grant and Fisheries industry in the State of Georgia for developing novel products from some underutilized seafood species
- Seafood Safety Teaching, Tbilisi, Georgia, 12 Days, Farmer to Farmer Program, US AID
- Working closely with UC Davis-Chile Life Science Innovation Center and Universidad Federico Santa Maria researchers to teach several courses in Seafood safety and product development in Chile and develop a platform for seafood industry in Chile
- Western Regional Center to Enhance Food Safety; Developing add-on curriculum materials for Aquaponics HACCP
- Working with clusters, platforms, angels, entrepreneurs, and investors for developing startups
- Developing and commercializing new products from Seafood by-products in collaborating with a company in the United States
- Scientific advisory board member, AquaOX, CA, USA
- Collaborating with Food companies, Washington and California growers and Electrolyzed water manufacturer to develop a new strategy for applying the electrolyzed water in food industry and farms for producing safer products
- Volunteer industry advisory council member, Western Regional Aquaculture Center, USDA (2016-2019)
- Seafood HACCP and Food Safety Modernization Act (FSMA) training lectures (Cochran Fellowship Program, Foreign Agricultural Service, United States Department of Agriculture, International Extension Program), *September 2012*, *May 2013*, *June 2013*, WSU, Pullman, WA, USA
- Consulting on Alaskan Cod Fisheries Improvement and Postharvest Practices for safety and quality, Blue North Fisheries Inc. Seattle, WA
- Presented technical speech for Blue North Inc. for 120 audience in Seafood Expo 2015 (Boston, MA, U.S.A) (http://bluenorth.com/home/#/humane-harvest/, http://bluenorth.com/home/#/humane-harvest/seafood-expo)
- Serving as a scientific board member for Blue North Inc. (http://bluenorth.com/home/#/humane-harvest/board-members)
- Onsite seafood HACCP and processing training, Pacific Plaza Imports Co. (Pittsburg, CA, USA)
- Organizing online FSMA training course, January 2013, Washington State University
- Organizing onsite FSMA workshop, November 2014, Seattle, WA
- Washington State University Magazine: An interview about the caviar quality, and our recent findings on developing novel lexicon for caviar sensory evaluation, and image analysis of sturgeon ovary Winter, 2014/15, page 21, available online at: http://wsm.wsu.edu/s/index.php?id=1158
- Video: A short scientific video about post-harvest practices and fish quality in collaboration with Blue North Fisheries Inc
- Factsheet Design: Factsheets were prepared about post-harvest practices and fish quality in collaboration with Blue North Fisheries Inc. for the Seafood Expo North America (March 2015, Boston, MA)
- Seattle Times: Seattle Times had an interview with me about the humane harvesting fisheries (http://www.seattletimes.com/business/local-business/blue-north-fisheries-ceo-works-towards-a-humane-harvest-2/)
- Feature Story News video interview
- Video: Presentation entitled “Industrial Scale Production of Amino Acid Fertilizer from Fish Waste and Underutilized Fish” is available on Youtube (https://www.youtube.com/watch?v=zXRIK4VNB50)
- Training the chefs, international and national caviar distributers, designing the fact sheets for regular consumers about the handling the caviar and sturgeon meat, improving the social media activities

• Visiting Scientist

- **Norwegian University of Science and Technology (NTNU)** ***2009-2010***

  Department of Biotechnology,

  Food Chemistry and Bioprocessing Research Topic: Food By-products Utilization, Value Added Products, ACE Inhibitor Bioactive Peptides.

• Selected Publications

33- J. Wang, J. Tang, B. Rasco, S. Sablani, **M. Ovissipour**, Z. Qu. (2018). Kinetics of Quality Changes of Shrimp (*Litopenaeus setiferus*) During Thermal Pasteurization. *Submitted*.

32- **M. Ovissipour***, S.G. Shiroodi, S. Sablani, J. Tang, B. Rasco. (2018). The effect of acidic and neutral electrolyzed water solutions in combination with mild thermal processing on *Listeria monocytogenes* inactivation in Atlantic salmon (*Salmo Salar*) fillet. *Under Review*.

31- **M. Ovissipour*,** B. Rasco, J. Tang, S. Sablani. (2017). The kinetic of quality degradation during the pasteurization of Atlantic salmon. *Food and Bioprocess Technology*.

30- **M. Ovissipour***, C. Liu, G. Unlu, S. Sablani, J. Tang, B. Rasco. (2017). A kinetic study protein denaturation temperature in pasteurized salmon roe (*Oncorhynchus keta*) at different water phase salt activities. *Journal of Aquatic Food Product Technology*.

29- H.M. Al-Qadiri, M. Al-Holy, S.G. Shiroodi, **M. Ovissipour***, S. Sablani, B. Govindan, N.A. Alami, B. Rasco. (2016). Effect of acidic electrolyzed water-induced bacterial inhibition and injury in live clam (*Venerupis philippinarum*) and mussel (*Mytilus edulis*). *International Journal of Food Microbiology*, *DOI: 10.1016/j.ijfoodmicro.2016.05.012.*

28- H.M. Al-Qadiri, **M. Ovissipour**, S.G. Shiroodi, B. Govindan, N.A. Alami, B. Rasco. (2016). Efficacy of Neutral Electrolyzed Water, Quaternary Ammonium and Lactic Acid-Based Solutions in Controlling Microbial Contamination of Food Cutting Boards Using a Manual Spraying Technique. *Journal of Food Science*, *DOI: 10.1111/1750-3841.13275*.

27- K. Bhunia, **M. Ovissipour**, B. Rasco, J. Tang, S. Sablani. (2016). Oxidation-reduction potential and lipid oxidation in ready-to-eat blue mussels in red sauce: Criteria for Package Design. *Journal of the Science of Food and Agriculture, DOI: 10.1002/jsfa.7738.*

26- S.G. Shiroodi, S. Nesaei, **M. Ovissipour***, H.M. Al-Qadiri, B. Rasco, S. Sablani. (2016). Biodegradable Polymeric Films Incorporated with Nisin: Characterization and Efficiency against *Listeria monocytogenes*. *Food and Bioprocess Technology, DOI: 10.1007/s11947-016-1684-3*.

25- S.G. Shiroodi, **M. Ovissipour***, C.F. Ross, B. Rasco. Efficacy of electrolyzed oxidizing water as a pretreatment method for reducing *Listeria monocytogenes* contamination in cold-smoked Atlantic salmon (*Salmo salar*). (2016). *Food Control*, *60, 401-407*.

24- **M. Ovissipour***, H.M. Al-Qadiri, X. Lu, Y. Hu., C.F. Ross, J.P. Van Eenennaam, S.I. Doroshov. (2016). The effect of white sturgeon (*Acipenser transmontanus*) ovarian fat deposition on caviar yield and nutritional quality: introducing image processing method for sturgeon ovary fat determination. *International Aquatic Research, DOI 10.1007/s40071-015-0111-0*.

23- **M. Ovissipour**, H. Al-Qadiri, S. Sablani, B. Govindan, N. Al-Alami, B. Rasco. (2015). Application of electrolyzed water for inactivating the foodborne pathogens. *Food Control, 53, 117-123*.

22- H. Al-Qadiri, S. Sablani, **M. Ovissipour**, N. Al-Alami, B. Govindan, B. Rasco. (2015). Study the effect of oxygen stress on the survival and growth of *Clostridium perfringens*, *Campylobacter jejuni*, and *Listeria monocytogenes* under different storage conditions. *Journal of Food Protection. 78(4):691-697*.

21- B. Rasco, K. Down, **M. Ovissipour***. (2015). Humane harvesting initiative: The influence of harvest and post-harvest handling practices on fish welfare and product quality. *Journal of Aquaculture Research and Development*. 6, 1. *Editorial Note*.

20- **M. Ovissipour**, B. Rasco. (2015). Electrolyzed water application in aquaculture and the seafood industry. *Journal of Aquaculture Research and Development*. *Editorial Note*.

19- A. K. Baker, B. Vixie, B. Rasco, **M. Ovissipour**, C. Ross. (2014). Development of a lexicon caviar and its usefulness for determining consumer preference. *Journal of Food Science*. *DOI: 10.1111/1750-3841.12703.*

18- **M. Ovissipour**, B. Rasco. (2014). Fish Oil: Perspectives on a Sustainable Multi-Use Resource. *Journal of Fisheries and Livestock Production*. *Editorial Note*.

17- **M. Ovissipour***, A. M. Abedian, R. M. Nazari, A. Motamedzadegan, B. Rasco. (2014). Tuna viscera protein hydrolysate: nutritive and disease resistance properties for Persian sturgeon (*Acipenser persicus* L.) larvae. *Aquaculture Research. 45: 591-601.*

16- X. Lu, M. J. Talbott, J. P. Van Eenennaam, M. A. H. Webb, S. I. Doroshov, **M. Ovissipour**, B. Rasco. (2013). Determining ovarian maturity in farmed sturgeon (*Acipenser transmontanus*) for caviar production. *Journal of Aquaculture Research and Development*.

15- **M. Ovssipour**, B. Rasco, J. Tang, S. Sablani. (2013). Kinetics of quality changes in whole blue mussel (*Mytilus edulis*) during pasteurization. *Food Research International. 53: 141-148*.

14- **M. Ovissipour**, B. Rasco, S. Sablani. (2013). Engineered nanoparticle adhesion and removal from tomato surfaces. *Journal of Agricultural and Food Chemistry*. *61: 10183-10190.*

13- **M. Ovissipour**, B. Rasco, S. Shiroodi, S. Gholami, M. Nemati. (2013). Antioxidative activity of protein hydrolysates from the whole anchovy sprat (*Clupeonella engrauliformis*) prepared using endogenous enzymes and commercial proteases. *Journal of the Science of Food and Agriculture*. *DOI: 10.1002/jsfa.5957*.

12- R. Safari, A. Motamedzadegan, **M. Ovissipour***, J. M. Regenstein, A. Gildberg, B. Rasco. (2012). Use of hydrolysates from yellowfin tuna (*Thunnus albacares*) heads as a complex nitrogen source for lactic acid bacteria. *Food and Bioprocess Technology. 5: 73-79*.

11- **M. Ovissipour*,** R. Safari, A. Motamedzadegan, B. Shabanpour. (2012). Chemical and biochemical hydrolysis of Persian sturgeon (*Acipenser persicus*) visceral protein. *Food and Bioprocess Technology. 5: 460-465*.

10- **M. Ovissipour*,** A. M. Abedian, A. Motamedzadegan, R. M. Nazari. (2012). Optimization of enzymatic hydrolysis of visceral waste proteins of Yellowfin Tuna (*Thunnus albacares*). *Food and Bioprocess Technology*. *DOI: 10.1007/s11947-010-0357-x.*

9- **M. Ovissipour,** B. Rasco. (2011). Fatty acid and amino acid profiles of domestic and wild beluga (*Huso huso*) roe and impact on fertilization ratio. *Journal of Aquaculture Research and Development*. *2:113. DOI:10.4172/2155-9546.1000113.*

8- M. Ahmad, S. Benjakul, S., **M. Ovissipour,** T. Prodpran. (2011). Indigenous proteases in the skin of unicorn leatherjacket (*Alutherus monoceros*) and their influence on characteristic and functional properties of gelatin. *Food Chemistry*. *127(2): 508–515*.

7- **M. Ovissipour***, A. M. Abedian, A. Motamedzadegan, B. Rasco, R. M. Nazari. (2011). Optimization of protein recovery during hydrolysis of Yellowfin tuna visceral protein. *Journal of Aquatic Food Product Technology. 20: 148-159*.

6- M. R. Ghomi, M. Nikoo, Z. Heshmatipour, A. Amir Jannati , **M. Ovissipour**, S. Benjakul, M. Hashemi, H. Faghani Langroudi, M. Hasandoost, D. Jadiddokhani. (2011). Effect of sodium acetate and nisin on microbiological and chemical changes of cultured grass carp (*Ctenopharyngodon idella*) during refrigerated storage. *Journal of Food Safety. 31(2): 169-175.*

5- **M. Ovissipour***, S. Gholami, H. R., Ovissipour, S. A. R. Hejazi Farahmand. (2011). The Separation of Bioactive Peptides with Low Molecular Weight and Hypertension Decreasing Properties from Fisheries By-Products. *Food Processing and Production. 1: 11-18.*

4- **M. Ovissipour***, S. Benjakul, R. Safari, A. Motamedzadegan. (2010). Fish protein hydrolysates production from yellowfin tuna (*Thunnus albacares*) head using Alcalase and Protamex. *International Aquatic Research. 2: 87-95.*

3- **M. Ovissipour***, A. M. Abedian, A. Motamedzadegan, R. M. Nazari. (2010). The study on the properties of the Yellowfin tuna (*Thunnus albacares*) visceral protein hydrolysates using commercial enzymes. *Iranian Food Science & Technology Research Journal. 6 (1): 68-76. In Farsi*.

2- **M. Ovissipour***, M. Taghiof, B. Rasco, A. Motamedzadegan, A. Esmaeili. (2009). Optimization of enzymatic hydrolysis of beluga sturgeon (*Huso huso*) viscera waste proteins using Alcalase. *International Aquatic Research. 1, 31-38.*

1- **M. Ovissipour**, A.M. Abedian Kenari, A., Motamedzadegan, B. Rasco, R. Safari, H. Shahiri. (2009). The effect of enzymatic hydrolysis time and temperature on the properties of protein hydrolysates from Persian sturgeon (*Acipenser persicus*) viscera. *Food Chemistry, 115 (1), 238-242.*

• Book and Book Chapter

- **Book Chapter:** S. Shiroodi, **M. Ovissipour**. (2018). Electrolyzed Water Application for Food Sanitation. In: Postharvest Disinfection of Fruits and Vegetables, (Ed. M. W. Siddiqui). Elsevier.
- **Book Chapter: M. Ovissipour**, R. M. Syamaladevi, B. Rasco, S. Sablani. (2014). Nanotechnology: Toxicology and Detection. In: Food Chemical Hazard Detection: Development and Application of New Technologies, (Ed. S. Wang). Wiley-Blackwell, Ltd. pp: 207-247.
- **Book Chapter: M. Ovissipour**, B. Rasco, G. Bledsoe. (2014). Aquatic Food Products. In: Food Processing: Principles and Applications, Second Edition (Ed. S. Clark, S. Jung, B. Lamsal). Wiley-Blackwell, Ltd. pp: 501-534.
- **Book**: **M. Ovissipour**, M.R. Ghomi. (2009). Bioprocess Technology for Value Added Products Production from Seafood By-Products. In Persian.

• Professional Development and Certificates

- ***Better Process Control School-In Person****, UC Davis, 2018, Davis, CA (4 days).*
- ***Produce Safety Alliance****, Washington State University and AFDO Certificates, February 2017, Pullman, WA (One day).*
- ***Preventive Control Qualified Individual,*** *Food Safety Preventive Controls Alliance, Washington State University and AFDO Certificates, September 2016, Pullman, WA (3 days).*
- ***HACCP Certificate****, Issued by Barbara Rasco JD, Ph.D., School of Food Science, Washington State University.*
- ***HACCP Certificate****, Issued by Cornell University (On-line Course).*
- ***R&D Management Certificate****, Issued by Ministry of Industry, Mine and Trade, Iran (5 days).*
- ***Intellectual Properties, Product Development, Commercialization and Marketing Workshop****, Organized by Ministry of Industry, Mine and Trade, Tehran, Iran (2 days).*
- ***Thermal and Non-Thermal Food Processing****, Department of Biological Systems Engineering, Washington State University, Pullman, WA (Food Engineering Division, 3 Credits).*
- ***31st Annual Food Safety and Sanitation Workshop****, Washington State University, November 2011 Portland, OR (2 days).*

• Journal Referee

Food Chemistry, Aquaculture, Journal of Food Composition and Analysis, Journal of Food Science, Aquatic Food Product Technology, Journal of Food Processing and Preservation, Process Biochemistry, Amino Acids, International Journal of Food Science and Technology, Journal of Food Science and Technology, Journal of Microbiology and Antimicrobials, Marine Drugs, BioMed Central Journal.

• Federal and Non-Profit Agencies Proposal Referee

- NOAA - National Oceanic and Atmospheric Administration (U.S.A.)
- Mitacs (Canada)
- FONDECYT: National Fund for Scientific and Technological Development (Chile)

• Journal Editor

- International Aquatic Research. Springer, Editor-in-Chief: Dr. Mohammad Reza Ghomi, ISSN: 2008-4935 (print version), ISSN: 2008-6970 (electronic version).

- Journal of Aquaculture Research and Development. OMICS Group, Editor-in-Chief: Dr. Daniel L Merrifield, ISSN: 2155-9546.
- Journal of Fisheries and Livestock Production. OMICS Group, Editor-in-Chief: Dr. Tzachi Matzliach Samocha, ISSN: 2332-2608.
- Journal of Agriculture and Ecology Research International. Science Domain International, Editor-in-Chief: Dr. M. Basu, ISSN: 2394-1073.
- Journal of Antioxidant Activity. Open Access Pub., Editor-in-Chief: Santiago Cuevas Gonzalez.
- International Journal of Oceanography & Aquaculture (IJOAC). MedWin Publishers, Editor-in-Chief: Mauro Lenzi.

• Professional Membership

- International Association for Food Protection *2017-Present*
- American Society for Microbiology *2015-Present*
- Institute of Food Technology (USA) *2015-Present*
- Association of Food and Drug Officials *2014-Present*

• Honors and Recognitions

- Food, Ag+Health Entrepreneurship Academy Scholarship, UC Davis, 2018
- Arnie & Marta Kegel Endowed Fellowship, WSU, 2017
- IAFP Best Oral Presentation Award Finalist, 2017
- Industry Advisory Council member, USDA, 2016-2019
- Outstanding National Ideas, 1st Rank, Ministry of Science, Iran, 2008.
- Outstanding National Ideas, 1st Rank, Ministry of Science, Iran, 2011.
- Junior Researchers Grant Award, National Talent Organization, Iran 2009.

• Patents

- Fish Protein Hydrolysate Production from Sturgeon Viscera (Iran) No. 49844
- Fish Cheese Production Using Acidic Coagulation (Iran) No. 49843
- Single Cell Production from Tuna Processing Waste Water (Iran) No. 49847
- Peptone for Bacteria from Tuna Head Waste Using Enzymatic Process (Iran) No. 55363
- Rapid Detection of Bacteria in Foods (*US Patent*) (*Submitted*)
- Develop Non-Living Edible Surrogate for Process Validation (*In Preparation*)