

**2017 Internships being sought by Fisheries and Aquaculture Department
Food and Agriculture Organization (FAO) of the United Nations – Rome, Italy**

The following internships are being offered to qualified graduate students:

1. Fish and nutrition
2. Impacts of climate on fisheries and livelihoods
3. Social and cultural aspects of fisheries
4. Code of Conduct for Responsible Fisheries
5. Rights-based approach to management
6. Human behaviour in fisheries
7. Gender and information in fisheries
8. Fisheries value chain development/upgrading

A brief description of these internships is attached.

The FAO internship programme (<http://www.fao.org/employment/opportunities-for-young-talents/internship-programme/en/>) provides students with the opportunity to work in an international setting with professionals dedicated to alleviating hunger and poverty throughout the world. The internships relate to specific study or activity identified by the overseeing FAO officer, but should also directly relate to the student's graduate study program at MSU. The interns will further perform specialized tasks to assist FAO staff members with their professional duties.

The internships will all be located at FAO Headquarters in Rome, Italy. A small monthly stipend of \$700, working space, computer, connection to the FAO intranet and internet and building pass will be provided by FAO. It is the students' responsibility to pay for and arrange transportation to and living arrangements in Rome; there are numerous sources of information available to assist the students finding accommodations - see for example <https://vifao.wordpress.com/housing-in-rome/how-to-get-started/>.

At present, there is no deadline for applications however interested students are encouraged to apply as soon as possible. The time period for the internships is 3 – 5 months; there may be some flexibility in the timing of the internships and this can be arranged with FAO staff. Graduate students who are interested in the internship should contact Dr. Devin Bartley or Dr. Bill Taylor, immediately, to arrange a skype interview with FAO staff in Rome.

For contact and more details:

Dr. William W. Taylor
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Dr. Devin M. Bartley
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MSU Adjunct Professor; Robin Welcomme Scholar
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Internship Title: Fish and Nutrition

FAO Supervisor: Jogeir Toppe

Qualifications of MSU graduate student to be considered for an FAO internship in the Fisheries and Aquaculture Department:

- Graduate student with a background in human nutrition/food science/food safety and with an interest in the role fish play in a healthy diet

Terms of Reference while working with an FAO staff member in the Fisheries and Aquaculture Department:

The potential intern will be located in the Products Trade and Marketing Branch (FIAM) of the Fisheries and Aquaculture Department of FAO. More than 50% of the fish consumed today comes from aquaculture and this share will continue to grow. The type of feed used for fish farming might have an impact on the fish consuming it and eventually on the consumer of the fish. During the last ten years, there has been a significant reduction of fishmeal and fish oil in the feed, mainly replaced by vegetable alternatives. There is a growing concern that the nutritional benefits of consuming farmed fish are going down at the same time as the risks of consuming this fish is going up. During his/her stay at FAO, the intern will:

- Conduct a literature review on changes in major feed ingredients used for selected farmed fish species and how this has impacted on the nutritional composition and levels of contaminants of the fish. A comparison on nutritional quality and levels of contaminants of farmed fish today, farmed fish 10 years ago and its wild equivalent will be conducted;
- Prepare a report on the main finding from the above literature review, including the major issue(s); how they are being addressed; any conclusions that emerge and any other item of interest from the review;
- Present the work/findings of the literature review in a seminar at FAO HQ

Profile of the FAO staff member providing support and mentoring during the internship:

Jogeir Toppe is a Fishery Industry Officer at FAO. His responsibilities cover mainly fisheries post-harvest activities including aspects of food safety, value addition and improved use of fish, including waste and by-products. He is in charge of activities aimed at improving the role fish plays in contributing to reduced levels of malnutrition, particularly looking at low cost, but high impact solutions. The potential risks of consuming fish are also part of his responsibilities. Prior to joining FAO he worked on aquaculture feed development and improved use of waste from fish processing.

Internship Title: Climate Impacts on Fisheries

FAO Supervisor: Florence Poulain

Qualifications of MSU graduate student to be considered for an FAO internship in the Fisheries and Aquaculture Department:

- Undergraduate degree in fisheries or related subject with some course work in climate change;
- Ability to access global and scientific search engines and bibliographic databases (e.g. Google Scholar and SCOPUS)
- Demonstrated analytical and writing skills

Terms of Reference while working with an FAO staff member in the Fisheries and Aquaculture Department:

This intern will help assess the current and expected evolution of El Niño-Southern Oscillation (ENSO) and its impact on fisheries and aquaculture, paying special attention to impacts on livelihoods and food security, as well as identify priority countries and/or regions. In particular, the intern will undertake the following:

- a) Contact and interview key FAO staff members with knowledge of ENSO
- b) Develop a list of FAO ENSO-related projects and contact persons list
- c) Develop a short questionnaire, circa 4 questions for each fishery subsectors (inland and marine capture fisheries and aquaculture), to help collect preliminary information on the current observed impacts of El Niño-La Niña on fisheries and aquaculture at regional levels
- d) Based on the questionnaire, obtain first-hand information remotely on the current ENSO event, using the contact person list developed in b, and compile responses per region in a word document
- e) Conduct a global literature review of past and current El Niño-La Niña effects on marine and inland fisheries and aquaculture, including emerging reports and observations and climate models (ENSO or related). The review will focus on the top 10 most cited papers per the region(s) most likely to be affected, in particular Southern Africa, Eastern Africa, Asia and the Pacific, Central America and the Caribbean. The review will include an annotated bibliography of relevant documents
- f) From the literature review, obtain an overall best estimate or range of estimates, of the financial effects of the current El Niño on fisheries and aquaculture by regions and globally, if possible, as well as data/information on the total economic value loss at country level, if available, and government relief/rehabilitation funds spent on each event

Profile of the FAO staff member providing support and mentoring during the internship:

Ms. Florence Poulain, will be the direct supervisor. She has over 13 years professional experience in the development and implementation of fisheries policies, programmes and instruments at global, regional and country levels with FAO. She has field experience in Africa, the Caribbean, Pacific, Middle East and Asia. The intern will work in close collaboration with a team of FAO professional staff – biologists, economists, political scientists – with knowledge and experience in marine and inland fisheries and aquaculture and/or humanitarian responses to climate events.

Internship Title: Social and Cultural Aspects of Fisheries

FAO Supervisor: Susana V. Siar

Qualifications of MSU graduate student to be considered for an FAO internship in the Fisheries and Aquaculture Department:

- Graduate student in anthropology, geography or sociology who is interested in the social and cultural aspects of fisheries. It would be desirable if the potential intern were considering working on a topic related to fisheries and aquaculture for his/her thesis or doctoral dissertation

Terms of Reference while working with an FAO staff member in the Fisheries and Aquaculture Department:

The potential intern will be located at the Fishing Operations and Technology Branch (FIAO) and will be working on the following:

- a) Conduct literature review on one of the following topics:
 - 1) Access of fishing and fish farming households to microfinance services and impacts on food security and livelihoods
 - 2) Status of livelihoods diversification in fishing and fish farming communities
- b) Prepare a report on the main finding from the above literature review, including the major issue(s); how they are being addressed; any conclusions that emerge and any other item of interest from the review
- c) Present the above report and findings of the literature review in a seminar at FAO HQ

Profile of the FAO staff member providing support and mentoring during the internship:

Dr. Susana V. Siar started her career in fisheries and aquaculture in 1989 as a researcher at the Aquaculture Department of the Southeast Asian Fisheries Development Center in Tigbauan, Iloilo, Philippines. Prior to joining FAO in 2005, she worked as a Regional Coordinator at the WorldFish Center in Penang, Malaysia. Her work at FAO involves providing technical expertise on the socio-economic dimension of fishing operations and technology in areas such as: participatory approaches and stakeholder participation, capacity development, dissemination of experiences and lessons learned, bycatch management and discards reduction, strengthening fisheries organizations, and livelihoods diversification and reduction of vulnerability of small-scale fishing and fish farming households. She has a Bachelor of Science degree in Human Ecology, a Master of Science degree in Rural Sociology from the University of the Philippines at Los Baños and a PhD in Geography from the University of Hawai'i at Mānoa.

Internship Title: Code of Conduct for Responsible Fisheries **FAO Supervisor:** Matthew Camillieri

Qualifications of MSU graduate student to be considered for an FAO internship in the Fisheries and Aquaculture Department:

- Graduate student with academic background in fisheries management/statistics and with an interest in fisheries policy and governance frameworks

Terms of Reference while working with an FAO staff member in the Fisheries and Aquaculture Department:

The intern will be assigned to the Fisheries Policy, Economics and Institutions Branch (FIAP) of the Fisheries and Aquaculture Department of FAO and will be working on the questionnaire for monitoring the Implementation of the Code of Conduct for Responsible Fisheries (CCRF). Fisheries, including aquaculture, provide a vital source of food, employment, recreation, trade and economic well-being for people throughout the world, both for present and future generations and should therefore be conducted in a responsible and sustainable manner. The CCRF was adopted as a guide for national and international fisheries policies and management practices to promote long-term conservation and sustainable use of fisheries resources. The continued monitoring of the implementation of the CCRF is an essential part of this process. During his/her stay at FAO, the intern will:

- Assist in transferring data from historical CCRF questionnaires into a compatible format to the currently used database
- Analyse time series compatibility issues due to possible changes or data gaps in different questionnaire versions
- Assist in time series analysis of indicators for different components of the CCRF
- Attend a class on Global Issues in Fisheries and Aquaculture conducted by Devin Bartley
- Assist in other related matters

Profile of the FAO staff member providing support and mentoring during the internship:

Dr. Matthew Camillieri is a Fishery Liaison Officer at the Food and Agriculture Organization (FAO) of the United Nations. His responsibilities include the promotion and monitoring of the implementation of the FAO Code of Conduct for Responsible Fisheries and other international fisheries instruments, especially those aiming to combat illegal, unreported and unregulated fishing. He leads FAO's capacity-development programme on the implementation of the 2009 FAO Agreement on Port State Measures. He holds a PhD in fisheries management from the University of Plymouth (UK).

Internship Title: Rights-based Approach to Management

FAO Supervisor: Rebecca Metzner

Qualifications of MSU graduate student to be considered for an FAO internship in the Fisheries and Aquaculture Department:

- Graduate student with a background in rights-based approaches for natural resource management (preferably for fisheries management)
- I would like the student to have an interest in the role that rights-based approaches can have in achieving sustainable fisheries management outcomes who has interests within the areas of work considered in COFI/INF 15 (<http://www.fao.org/3/a-mq773e.pdf>)

Terms of Reference while working with an FAO staff member in the Fisheries and Aquaculture Department:

The participating intern will be located in the Fisheries Policy, Economics and Institutions Branch (FIAP) of the Fisheries and Aquaculture Department of FAO.

Rights-based approaches are not new, but new interest in using them as part of fisheries management has emerged – in considerable part due to the recently developed Voluntary Guidelines for Responsible Governance of Tenure of Land, Fisheries and Forests (2012), the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries (2014), and a series of consultative fora – UserRights 2015, Friends of UserRights 2015, and Entebbe 2016 amongst others where stakeholders shared their challenges, concerns and information needs. As a result, in July 2016, the 32nd Committee on Fisheries welcomed a Global Work Programme on Advancing Knowledge on Rights-based Approaches for Fisheries Management with six major areas of work.

Prior to her/his stay at FAO, the intern will work with FIAP staff to finalize agreed, precise terms of reference. Then, whilst at FAO, the intern will:

- Undertake agreed activities to achieve the TORs
- Prepare a report on the main topic of research
- Present the work findings in a seminar at FAO headquarters
- Participate in relevant related activities as requested by the FAO supervisor

Profile of the FAO staff member providing support and mentoring during the internship:

Rebecca Metzner is the Head of the Fisheries Policy, Economics and Institutions Branch of the Fisheries and Aquaculture Department at FAO. Her responsibilities include leading the branch to undertake FAO's policy work in the arena of fisheries governance as well as working on a broad range of specific fisheries policy issues. Her area of expertise is rights-based fisheries management approaches. Prior to working at FAO, she worked in Australia and, many years ago, was a Knauss Fellow.

Internship Title: Human Behaviour in Fisheries

FAO Supervisor: Nicole Franz

Qualifications of MSU graduate student to be considered for an FAO internship in the Fisheries and Aquaculture Department:

- Graduate student in law, sociology or natural resources who is interested in human behaviour in fisheries
- An interest or academic background in human rights issues and community empowerment would be particularly desirable, as well as the consideration to work on a topic related to capture fisheries for his/her thesis or doctoral dissertation

Terms of Reference while working with an FAO staff member in the Fisheries and Aquaculture Department:

The potential intern will be located at the Fisheries Policy and Economics Division (FIAP) and will be working in the context of the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication on the following:

- Conduct literature review on one of the following topics:
 - Application of the human rights based approach to small-scale fisheries
 - Monitoring progress in small-scale fisheries through a human rights based approach
- Present findings of the literature review in a seminar at FAO HQ
- Prepare a report on the main topic of research
- Participate in relevant activities

Profile of the FAO staff member providing support and mentoring during the internship:

Nicole Franz holds a degree in Economics from the University La Sapienza, Rome. She joined FAO as Fishery Planning Analyst in 2011. Prior to joining the FAO she worked in the Fisheries Division of the Organization for Economic Cooperation and Development (OECD) in Paris, focusing on certification in fisheries and as fisheries consultant for the International Fund for Agricultural Development (IFAD) and FAO, including in fisheries marketing related projects in Namibia and Indonesia. Her current work focuses primarily on supporting small-scale fisheries policy development and implementation at regional and national level, including mainstreaming fisheries into other related policy processes (e.g. food security, rural development, SDGs), with special attention on socio-economic aspects. This involves the organization of/support to activities such as awareness raising and stakeholder empowerment to facilitate policy processes in support of sustainable small-scale fisheries.

Internship Title: Gender and Information in Fisheries

FAO Supervisor: Jennifer Gee

Qualifications of MSU graduate student to be considered for an FAO internship in the Fisheries and Aquaculture Department:

- Graduate student from interdisciplinary social sciences, socio-economics or natural resources
- An interest or academic background in fisheries, gender and rural livelihoods would be particularly desirable, as well as the consideration to work on a topic related to fisheries for their thesis or doctoral dissertation

Terms of Reference while working with an FAO staff member in the Fisheries and Aquaculture Department:

The potential intern will be located at the Fisheries Information and Statistics branch (FIAS) and will be working on improving data for small scale fisheries, and particularly gendered employment statistics on the following:

- Review of country reporting for employment, by gender, in the primary sector of fisheries
- Conduct literature review on income provision from engagement in fisheries and direct and indirect contributions to food provision and fisher households' livelihoods with a focus on engagement of women
- Prepare summary report of work conducted and present this in a seminar at FAO HQ
- Participate in relevant activities

Profile of the FAO staff member providing support and mentoring during the internship:

Jennifer Gee has a MSc degree in Environmental Studies from the University of Victoria, Canada with a thesis that analyzed the intersection of social, economic and environmental indicators of performance in the aquaculture sector. Her work in fisheries began more than ten years ago as a fisheries observer for the Pacific trawl fleet of Canada. This experience sparked a passion for work on the social aspects of fisheries in addition to her background in ecology. Jennifer joined FAO in 2013 and is currently the Fishery Officer in charge of statistics on fleet and employment and the gender focal point for the department. This work allows for a focus on socio-economics, gender mainstreaming and the development of standards and methodologies for the collection of socio-economic data. At the core of her work is the mandate to improve data availability for small scale fisheries and aquaculture.

Intern Title: Fisheries Value Chain Development/Upgrading **FAO Supervisor:** Yvette Diei Ouadi

Qualifications of MSU graduate student to be considered for an FAO internship in the Fisheries and Aquaculture Department:

- I am looking for an MSU graduate student in food science, fish technology and quality, interested in all aspects of sustainable fisheries value chain development/upgrading. An interest for priority topics on the international development agenda, namely the fish loss and waste reduction, and the compliance to market access requirements would be a great asset.

Terms of Reference while working with an FAO staff member in the Fisheries and Aquaculture Department:

The potential intern will be located at the Fish Products, Trade and Marketing Branch and will be working on the following:

- Secondary source review coupled, if possible, with key informants' interview (through IT means) to analyze the trends and measures taken over the past 5 years in (at least) 2 selected developed fishing nations to reduce the wastes/losses at from retailing to consumption stages
- Prepare a report on the main findings from the above study, including the major issue(s); mitigation measures and outcomes; perspectives and conclusions that emerge from the review
- Present the above report and findings in a seminar at FAO HQ
- Participate, upon request by the supervisor, in relevant activities directly linked to this field of research

Profile of the FAO staff member providing support and mentoring during the internship:

Dr. Yvette Diei Ouadi has over twenty years of experience in post-harvest fisheries. She holds a veterinary doctorate in the areas of hygiene and processing of food of animal origin. Her first years of employment were dedicated to the preparedness of her country, Cote d'Ivoire, for the fish export accreditation, within the sanitary regulatory framework of the hitherto 91/493 Directive of the EU Commission. She then joined FAO in 1996 where she has been involved in activities relevant to reducing post-harvest losses and value chain efficiency, in particular through innovations in technological processes and improvements in hygienic practices, enabling institutional and regulatory setup. Dr. Diei-Ouadi was the coordinator in 2006-2008 of the regional programme in Africa which led to the establishment of the post-harvest loss assessment methodology in small-scale fisheries, then mainstreamed in the FAO Save Food approach to assessing losses across food commodities.