

2nd Hybrid Alumni conference 12th -13th September 2024 IMU University, Kuala Lumpur



Appendix A 1 Information

Abstracts must include sufficient information for reviewers to judge the nature and significance of the topic, the adequacy of the findings of the nature, results, and the conclusions. The abstract should summarise the substantive results of the work and not merely list topics to be discussed.

An abstract is an outline/summary of your paper and your whole project of interest or experiences. It should have an introduction, body, and conclusion. It is a well-developed paragraph, should be exact in wording and must be understandable to a wide audience.

Sample 1:

Researcher: Jared Vasquez Presentation Title: An Analysis of Yukon Delta Salmon Management Focus Areas: Fisheries management related to Bering Sea fisheries and Yukon River salmon populations. Graduated from School: School of Medicine (choose the options) Highest Studies Level: Bachelor, Masters or PhD (choose the options) Presentation Type: Oral Presentation

Abstract:

An Analysis of Yukon Delta Salmon Management Rita Asgeirsson, Western Washington University The broad range of Pacific Alaskan salmon has resulted in the creation of a complex and multi-organisational system of management that includes the state of Alaska, various federal departments, a Congressionally mandated fishery council, and several commercial and nongovernmental fish organisations. In the Bering Sea salmon are caught by the commercial groundfish fleet as by-catch. On the Yukon River salmon are commercially and traditionally harvested for both economic and cultural sustenance by the Yup'ik residents of the Yukon Delta. Declining salmon populations has driven scientific research which considers the effects of Bering Sea salmon by-catch.

My research findings indicate that Bering Sea fisheries occur where juvenile salmon mature, directly impacting Yukon River salmon populations. Further, the research reflects that although Yukon salmon populations have plummeted, a recent effort was made to open the northern Bering Sea, which includes the Yukon River coastal shelf, to deep-sea commercial fishing.

By researching the relationship of policy to cultural salmon dependence, it becomes evident that Alaskan salmon-tribes are excluded from salmon management and decision-making. Legal research reflects those three basic federal Indian concepts – inherent rights, Indian Country, and tribal right of occupancy – emerge as potential foundations that may allow Alaskan salmon tribes to begin sharing legal responsibility over salmon.

Yukon River salmon are an international and anadromous species that require multi-organisational management. My research reflects that current management favours the Bering Sea commercial fishing industry, despite data indicating Bering Sea fisheries impact Yukon salmon populations and an overall downward trend in Yukon salmon populations.



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Sample 2:

Researcher: Jared Vasquez Presentation Title: An Analysis of Yukon Delta Salmon Management Focus Areas: Fisheries management related to Bering Sea fisheries and Yukon River salmon populations. Graduated from School: School of Medicine (choose the options) Highest Studies Level: Bachelor, Masters or PhD (choose the options) Presentation Type: Poster Presentation

Abstract:

Characterisation of Iron Deposition in Recombinant Heteropolymer Ferritins Deneen Cole, Dr. Fadi Bou-Abdallah, SUNY Potsdam (NY, USA), Dr. Paolo Arosio, University of Brescia (Italy), Dr. Sonia Levi, Vita-Salute San Raffaele University (Italy)

Ferritin is a ubiquitous iron storage and detoxification protein found highly conserved in species from bacteria to plants to humans. In mammals, ferritin is composed of two functionally and genetically distinct subunit types, H (heavy, ~21,000 Da) and L (light, ~19,000 Da) subunits which co-assemble in various ratios with tissue specific distribution to form a shell-like protein. The H-subunit is responsible for the fast conversion of Fe(II) to Fe(III) by dioxygen (or H2O2) whereas the L-subunit is thought to contribute to the nucleation of the iron core. In the present work, we investigated the iron oxidation and deposition mechanism in two recombinant heteropolymers ferritin samples of ~20H:4L (termed H/L) and ~22L:2H (termed L/H) ratios. Data indicates that iron oxidation occurs mainly on the H-subunit with a stoichiometry of 2Fe(II):1O2, suggesting formation of H2O2. The H/L sample completely regenerates its ferroxidase activity within a short period of time suggesting rapid movement of Fe(III) from the ferroxidase center to the cavity to form the mineral core, consistent with the role of L-chain in facilitating iron turn-over at the ferroxidase center of the H-subunit. In L/H, Fe(II) oxidation and mineralisation appears to occur by two simultaneous pathways at all levels of iron additions: a ferroxidation pathway with a 2Fe(II)/1O2 ratio and a mineralisation pathway with a 4Fe(II)/1O2 resulting in an average net stoichiometry of ~3Fe(II)/1O2.

These results illustrate how recombinant heteropolymer ferritins control iron and oxygen toxicity while providing a safe reservoir for reversible uptake and release of iron for use by the cell.

********* Researcher: Jared Vasquez