# Davis College of Agriculture, Natural Resources & Design 24<sup>th</sup> Annual Graduate Research & Creative Scholarship Conference Friday, April 16, 2021

## **Guidelines for Abstracts**

Each student must submit an abstract of no more than 250 words. Include a descriptive title, the names of all authors (presenter's name should be underlined, and main faculty advisor's name should be indicated with an asterisk\*), and their division affiliation(s). The abstract should be a concise summary of the information that will be presented in the paper or poster. A good **research** abstract can be prepared by writing two to three sentences on each of the following items: (i) history and importance of the problem or issue you will be discussing; (ii) the main question, hypothesis, or creative innovation; (iii) the approaches or methods that led to results being reported; (iv) the results and their meaning; and (v) a concluding statement on the significance of this work to your discipline. A good **creative scholarship** abstract can be prepared by writing two to three sentences on each of the following items: (i) purpose and importance of the project; (ii) background of the problem; (iii) research/design methods; (iv) findings; and (v) importance of findings. It is expected that the faculty co-author/advisor will review, provide editorial guidance, and approve the abstract prior to submission.

Registration and abstract submission is open until **5:00 pm Monday, March 15<sup>th</sup>, 2021**.

If you have specific questions of need additional information, please e-mail: <u>Elizabeth.Owen@mail.wvu.edu</u>.

Example abstract and guidelines for preparation, are provided on the following pages.

### **Abstract Format**

Title:

Author(s):

School / Division Affiliation(s):

Abstract:

Text (Maximum of 250 words):

# Investigating omega-3 polyunsaturated fatty acid and/or soy protein isolate supplementation on renal inflammation in a rat model of polycystic kidney disease

<u>Kaitlin Maditz</u><sup>1</sup>, Christopher Oldaker<sup>1</sup>, Nainika Nanda<sup>1</sup>, Ryan Livengood<sup>2</sup>, Vagner Benedito<sup>3</sup> and Janet Tou<sup>1\*</sup>

### **Author Affiliations**

<sup>1</sup> Division of Animal and Nutritional Sciences, West Virginia University, Morgantown, WV

<sup>2</sup> Department of Pathology, West Virginia University School of Medicine, Morgantown, WV

<sup>3</sup> Division of Plant and Soil Sciences, West Virginia University, Morgantown, WV

## Abstract

Polycystic kidney disease (PKD) is a leading cause of end stage renal failure, resulting in the need for transplantation or long-term dialysis. Inflammation is a common pathology in disease severity. Soy protein isoloate (SPI) and omega-3 fatty acids (n-3 PUFA's) have been shown to have anti-inflammatory properties. Therefore, the objective of the study was to examine the effects of SPI and/or n-3 PUFA's on renal inflammation. Female pck rats (age 28 d) were fed diets consisting of casein + corn oil (Casein + CO), casein + soybean oil (Casein + SO), SPI + soybean oil (SPI + SO) or SPI + 1:1 soybean/salmon oil (SPI + SB) for 12-weeks. Kidney fatty acid analysis by gas chromatography showed rats fed Casein + SO and SPI +SB diets had the higher (P = 0.02) renal alpha linoleic acid content. The SPI + SB group had the highest (P < 0.001) renal docosahexaenoic acid (DHA) content. The Casein + CO group had the lowest (P < 0.001) DHA compared to the other diet groups. There were no significant differences in renal eicosapentaenoic acid content among the diet groups. Despite differences in renal n-3 PUFA content, real time quantitative polymerase chain reaction showed no differences in relative genetic expression levels of cyclooxygenase-2, peroxisome proliferator-activated receptor gamma or mammalian target of rapamycin. Histological evaluation also showed no differences in renal interstitial inflammation. Based on the results, SPI and/or n-3 PUFAs did not appear to attenuate PKD severity by reducing inflammation.

#### **Guidelines for preparing effective abstracts**

Davis College Graduate Research and Creative Scholarship Day Committee

**The purpose of an abstract** is to summarize the essential elements of a paper or presentation, often in no more than 250 words. It is meant to help the reader decide whether the full article or presentation warrants their involvement. A typical format includes:

- 1. Rationale; description of, and background to, an issue or problem, and why your work matters.
- 2. Hypothesis/es, objective(s), or main question(s).
- 3. Methods and approach.
- 4. Key findings.
- 5. Conclusions and implications or recommendations.

Guidelines for abstract preparation and examples of effective abstracts may be found at:

https://www.acsmeetings.org/files/meetings/tips-for-writing-abstracts-annual-mtgs.pdf

Pages 1-07 and 1-08 of https://dl.sciencesocieties.org/files/publications/style/chapter-01.pdf

(both from American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America).

http://hsp.berkeley.edu/sites/default/files/HOW%20TO%20WRITE%20AN%20ABSTRACT.pdf

(from The Haas Scholars Program at University of California - Berkeley).