NSCA NATIONAL CONFERENCE RESEARCH ABSTRACT SUBMISSION & PRESENTATION GUIDELINES

2019

General Information
The National Strength and Conditioning Association (NSCA) is pleased to make a call for research abstract submissions for presentation at the 2019 National Conference. Research abstract presentations are an opportunity to present current research findings to researchers and strength and conditioning professionals at the NSCA National Conference. The research abstracts are the largest portion of the scientific programs presented every year at the National Conference. The NSCA encourages all researchers and students to submit their abstracts for consideration to the 2019 National Conference.

Submission Deadline
The abstract submission deadline is **March 1, 2019**. Late submissions will not be accepted.

Notification
Submitting authors will receive notification of acceptance or rejection of their research abstract by **May 1, 2019**. If you do not receive notification by May 1, please contact abstracts@nsca.com.

Language
All abstracts must be written in English.

Cost
There is no cost to submit an abstract, but due to costs incurred by the NSCA, all accepted abstracts are expected to be presented. Failure to present an accepted abstract may result in disqualification from presentations at future NSCA conferences.

Presentation Format
Research abstracts can be presented in either a podium or poster. Due to a limited number of available podium presentations, all requests for podium presentations cannot be accommodated.

Presentation Dates
Podium and poster presentations occur on all three days of the conference (Thursday, July 11; Friday, July 12; and Saturday, July 13). Podium presentations typically occur in the morning with poster presentations occurring over lunch with a second session in the afternoon.

Publication of Abstracts
All accepted abstracts will be published online. The printed program book is no longer offered.

Accepted abstracts, that are presented, will be published as an electronic supplement to the *Journal of Strength and Conditioning Research* (date to be determined). The NSCA encourages all research abstract presenters to submit the completed manuscript of their presented research for consideration in the *Journal of Strength and Conditioning Research*.

Research Abstract Submission Guidelines

- Abstracts must be original research studies works that are unpublished.
- Abstracts may not have been previously presented (except at an NSCA regional or state conference).
- All data collection must be completed at the time of submission. Incomplete data collection will not be accepted.
- Do not submit abstracts containing data currently in press. In the event that data contained in an accepted abstract is published (paper, electronic, or other format) prior to the abstract's submission to the National Conference, the abstract will be withdrawn.
- Case studies (involving clinical cases, rare circumstances, adverse events, etc.) will only be considered on an individual basis.
- The first author of the research abstract is considered the *primary author* and must present the abstract. However, all authors must approve the abstract prior to submission.
- One person may be the primary author on a maximum of two abstracts (only one may be submitted as a podium presentation).
- All abstract presenters must pay for their conference registration and all other fees associated with travel.
- Abstracts may only be submitted online.
- For questions, please email the NSCA at abstracts@nsca.com.

Subject Categories

There are twelve (12) available categories for research abstracts:

1. Biochemistry / Endocrinology
2. Biomechanics / Neuromuscular
3. Body Composition
4. Endurance Training / Cardiorespiratory
5. Fitness / Health
6. Flexibility / Stretching
7. Nutrition / Ergogenic Aids
8. Resistance Training / Periodization
9. Social and Behavioral Science
10. Special Populations
11. Speed / Power Development
12. Tactical Strength and Conditioning

Use of Human and Animal Subjects

All research studies that include data recorded from human participants must comply with the Declaration of Helsinki and the US Department of Health and Human Services Policy for the Protection of Human Research Subjects (US Code, Title 45, Part 46 Protection of Human Subjects). All animal studies must comply with the Public Health Service Policy on Humane Care and Use of Laboratory Animals.

Abstract Formatting Specifications

- All abstract submissions must be formatted correctly (see examples below) and include original research-based data to allow for a thorough review. Abstracts that do not meet these criteria will not be accepted.
- The body of the abstract cannot exceed 3,500 characters (including spaces) when there is no figure or table included. When there is a figure or table associated with the abstract, the text cannot exceed 3,000 characters (including spaces).

Figures and Tables

- Abstracts can contain either one figure or one table, but not both. Abstracts submitted with more than one figure or table will have both images removed.
- Any figure or table must pertain to the abstract for the purpose of visualizing data and must be referred to in the text of the abstract. Graphs or tables that do not pertain to the abstract will be removed.
- Figures or tables must be concise. It is at the discretion of the NSCA if a graph or table is too big, and if so, it will be removed. Additional text that should be in the abstract may not be substituted in the graph or table.
- The resolution of the figure or table must be adequate for reprinting (i.e., = 150 dpi).
- Including a figure or table does not replace any of the required sections (i.e., purpose, methods, results, etc.).
- No photos or pictures are allowed – only a graph or a table.
- The graph or table must be an image file (.jpg, .gif, and .png are accepted). PDF and PowerPoint are not acceptable.

Required Information

- Abstracts/submissions must contain the following:
    - Title (typed in ALL CAPS) cannot exceed 150 characters (including spaces).
    - Language: English.
    - Short title cannot exceed 10 words.
    - Abstracts must contain the following labeled sections: purpose, methods, results, conclusions, and practical applications. Acknowledgements should be included to denote funding sources or conflicts of interest when applicable.
- Abstracts/submissions cannot contain the following:
    - Brand names.
    - Advertising. Research abstracts should be non-biased, free from solicitations, and should not contain demonstrations of products for the purpose of sales.
    - Author(s) degrees (MS, PhD, etc.) or credentials (CSCS, FNSCA, etc.).
- The following information will be asked during the submission process:
    - All authors' names.
        - If the primary/presenting author is submitting for award consideration, they must be an NSCA Member (professional or student).
    - All authors' primary institutions/laboratories (institution/laboratory name, city, state).
    - All authors' professional mailing address, email address, and phone number.
    - Desired presentation format (i.e., podium or poster).
        - Due to limited availability, not all podium requests can be accommodated.
    - Abstract subject category.
    - If the abstract is being considered for a Student Research Award (see below).

Example Abstract with Graph or Table

RAPID-PHASE EXCESS POST-EXERCISE OXYGEN CONSUMPTION FOLLOWING A DAMAGING PLYOMETRIC EXERCISE BOUT IN RESISTANCE-TRAINED MALES

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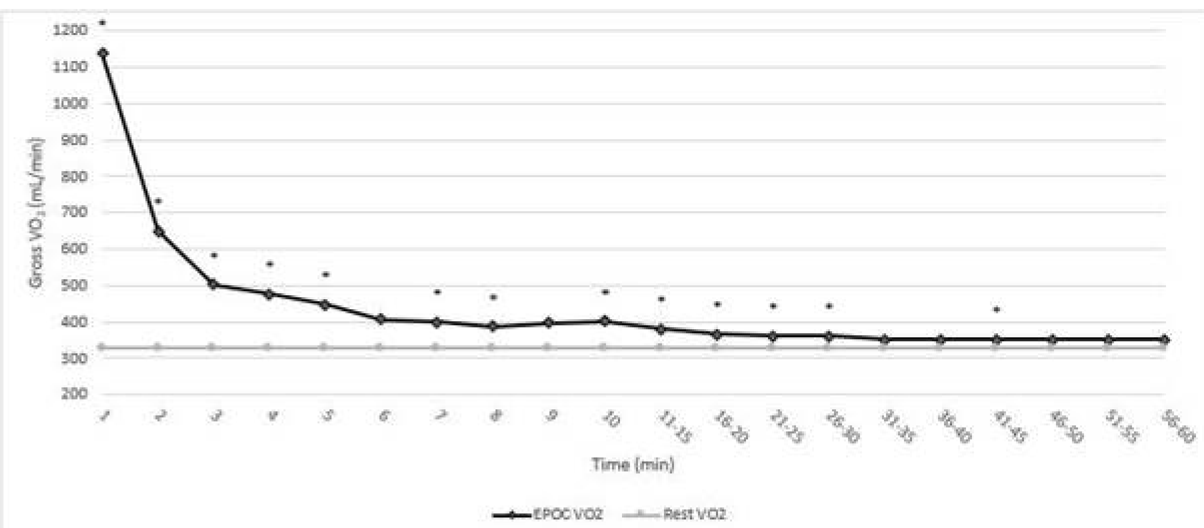
Excess post-exercise oxygen consumption (EPOC) is a transient increase in oxygen consumption that remains elevated above baseline following completion of exercise. EPOC manifests as both a rapid phase present during the first hour after exercise as well as a prolonged component which may last up to 72 hours. While the EPOC responses resulting from resistance training, aerobic exercise, and circuit training are well-quantified, no study to date has examined rapid-phase EPOC after damaging plyometric exercise. **PURPOSE**: To assess the effect of a damaging plyometric exercise bout on rapid-phase EPOC and to determine the presence of any relationship between lean body mass and EPOC. **METHODS**: 13 healthy resistance-trained males (Mean ± SD; Age: 21.6 ± 1.7 years; Height: 178.1 ± 4.3 cm; Mass: 84.3 ± 6.3 kg; Percent Body Fat 18.4 ± 5.0 %) participated in this study. Following anthropometric assessments and body composition analysis via DEXA, resting metabolic rate (RMR) was measured to establish baseline oxygen consumption. Subjects then performed 5 sets of 20 drop jumps from a height of 0.6 m with 10 seconds between jumps and two minutes of rest between sets. After exercise, EPOC was assessed via indirect calorimetry for one hour or until baseline oxygen consumption was reached. Repeated measures factorial ANOVA was used to identify time points where oxygen consumption and RER were elevated above resting values using a Bonferroni adjustment. Pearson product-moment correlations were used to assess relationships between body composition variables such as lean mass and net EPOC. **RESULTS**: Net EPOC (2.78 ± 0.99 L O2) was significantly elevated ($p < 0.05$) compared to baseline during minutes 1-5, 7-8, and 10-30 post-exercise (See figure below), while RER was significantly elevated ($p < 0.05$) during minutes 1-20 following exercise. A significant positive correlation was identified between RMR and lean body mass ($r = 0.848$, $p < 0.001$). No significant relationships were found between net EPOC and lean mass or between net EPOC and self-reported weekly resistance training time. **CONCLUSIONS**: A bout of damaging plyometric exercise is of sufficient intensity to elicit rapid-phase EPOC for up to 30 minutes following cessation of exercise. No significant relationships exist between net EPOC and body composition variables. **PRACTICAL APPLICATION**: The results of this investigation suggest that high-volume plyometric exercise has the potential to significantly disrupt metabolic homeostasis for at least thirty minutes following cessation of exercise. Strength and conditioning professionals should be cognizant of the effect of EPOC on subsequent athletic performance and plan training sessions accordingly to maximize their athletes' recovery.

EPOC Following a Plyometric Exercise Bout



This figure outlines mean oxygen consumption values during every minute (first 10 minutes) and of every 5 minutes (last 50 minutes) during the recovery period following a drop jump protocol. * Indicates a significant difference ($p < 0.05$) between pre-exercise and recovery values. SD bars omitted to provide clarity.

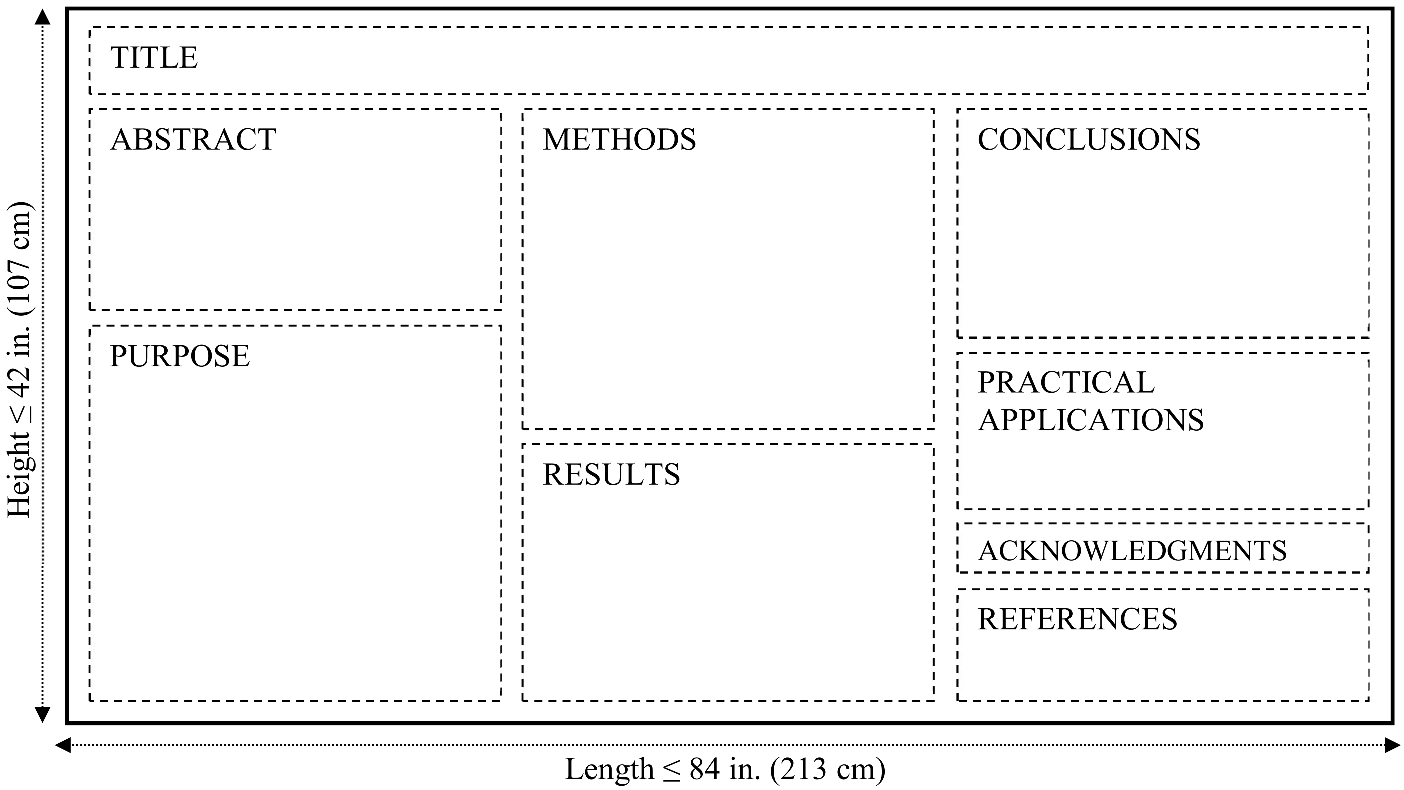
Podium Abstract Presentation Guidelines

- All podium abstract presentations must be prepared in Microsoft PowerPoint.
- All presenters are asked to bring their presentation (.ppt or .pptx) to the conference on a USB flash/jump drive, CD, or their own personal laptop.
- Presenters are asked to load their presentations onto the laptop (provided by the NSCA) and ensure the presentation displays properly **before 8:30 AM on the day of the presentation**.
- All presenters should check in with their session's moderator prior to presenting
  - Moderators are assigned in 1-hour blocks (9:00 – 10:00 AM, 10:00 – 11:00 AM, etc.). Podium presenters should check-in with their moderator before the hour block of their presentation.
- Podium abstract presentations must be consistent with the contents of the accepted abstract: including a purpose, methods, results, conclusions, and practical applications section.
- Podium presentations are 10 – 12 minutes in duration with 3 – 5 minutes of questions from the audience and responses from the presenter.

Example Podium Presentation
2018 Doctoral Student Outstanding Podium Presentation

Poster Abstract Presentation Guidelines

- All poster presentations should be printed on one uniform poster sheet with dimensions not exceeding 42 × 84 in. (107 × 213 cm) (height × width). Unless otherwise noted, the poster boards on which the posters are hung should be 48 × 96 in. (122 × 244 cm).
- Presenters are required to supply their own thumb tacks by which to hang their posters.
- Poster abstract presentations must be consistent with the contents of the accepted abstract: including a purpose, methods, results, conclusion, and practical applications section.
- The Research Committee recommends the following layout as a general guideline for all poster presentations:



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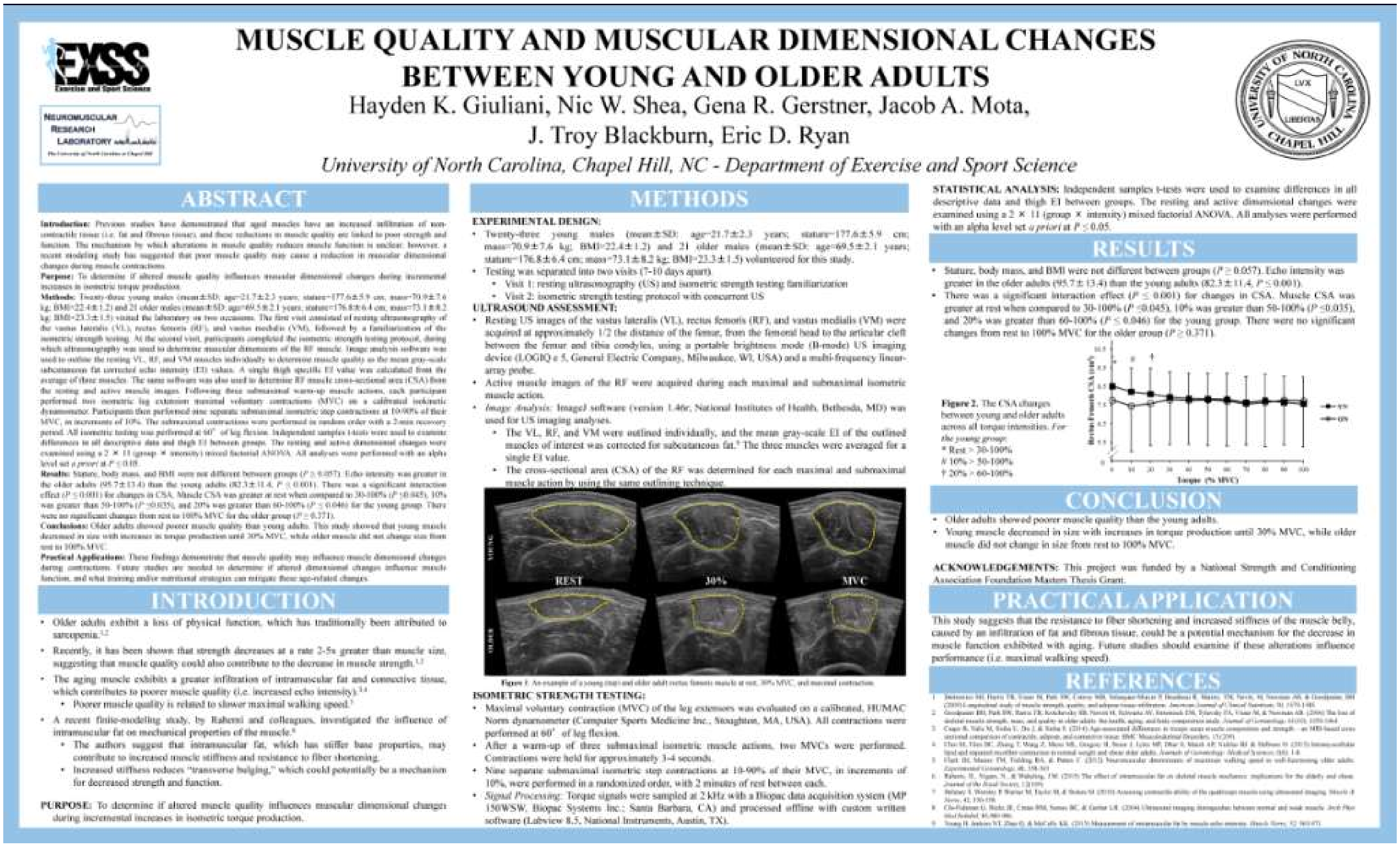
Example Poster Presentation
2018 Master's Student Outstanding Poster Presentation Winner



Abstract Review Process

The Scientific Programs Subcommittee is responsible for reviewing the NSCA Research Abstracts to assure that the correct formatting has been applied and to solicit blinded external review(s) for scientific content. Abstracts that do not meet the previously stated formatting criteria will be rejected. The Scientific Programs Subcommittee may solicit a blinded external review. The abstract may be externally reviewed by two reviewers for scientific content, appropriate methodology, correct statistical analysis, proper interpretation of results, and contribution to the field of strength and conditioning. In cases when both reviewers suggest an abstract be rejected or the reviewers do not agree on rejecting or accepting, the Scientific Programs Subcommittee will independently re-review the abstract in question. In this case, the Scientific Program Subcommittee will have final authority to accept or reject the abstract.

Student Award Consideration

Any student author who wishes to submit a research abstract for award consideration must be a Student or Professional Member of the NSCA at the time the abstract is submitted.

Student Research Award Description

The NSCA awards outstanding research efforts by students through the NSCA Student Research Awards. Five awards are given each year:

1. Doctoral Student Research Award for outstanding *podium* abstract presentation
2. Doctoral Student Research Award for outstanding *poster* abstract presentation
3. Master's Student Research Award for outstanding *podium* abstract presentation
4. Master's Student Research Award for outstanding *poster* abstract presentation
5. Undergraduate Student Research Award for outstanding *poster* abstract presentation

Preliminary Judging for Student Awards

The top ten (10) master's podium and top ten (10) doctoral podium submissions after the initial review period will be selected to be judged at the National Conference. The top ten (10) doctoral posters, top ten (10) master's posters, and top five (5) undergraduate posters after the initial review period will be selected to be judged at the National Conference.

Student Research Award Criteria

- Each student award applicant must be a current Student or Professional NSCA Member at the time the abstract is submitted.
- The candidate must be enrolled as a full-time student at the time of abstract submission *or* have completed his/her degree no more than 1-year prior to the NSCA National Conference.
- The abstract and the online NSCA abstract form must be completed according to the required specifications (*see above*) and the "Student Award" option box must be checked.
- The presentation guidelines (either podium or poster) must be met as stated in this document.
- A student can be the primary author on a maximum of 2 abstracts; however, only 1 abstract can be eligible for the student award.
- Student award candidates must attend the NSCA National Conference to present their research.
- Winners will be announced at the NSCA Awards Banquet on the Friday evening of the conference, as well as through NSCA's social media channels.
- Case studies are not eligible for award consideration.

Student Award Judging Criteria

Below are five (5) basic questions and additional sub-questions that are used by the judges to evaluate the student award candidates. Each question is answered with a Likert scale response on evaluation sheets, with spaces for judges' comments. The points are tallied and the comments are considered, narrowing the candidates for consideration. In the event of a tie, an overall subjective score provided by the judges from 1 – 100 will be considered.

1. Was the presentation knowledgeable and professional?
    a. For podium presentations – were the slides readable?
    b. For poster presentations – was the poster readable?
    c. How involved was the student with this project?
        i. Did the student provide well-informed responses to the questions?
        ii. How knowledgeable was the student about this project?
    d. How well did the authors follow the guidelines for abstract presentations (component parts)?
2. Was the introduction/literature review sufficient and relevant?
3. Was the study well designed?
    a. Was the purpose clearly stated?
    b. Did the methodology address the research question?
    c. Were the statistical procedures appropriate?
    d. Were the conclusions valid based on the results of the study?
4. What was the scientific impact of the research?
5. How well did the student *bridge the gap* with the practical application section?