**NEW ENGLAND AMERICAN COLLEGE OF SPORTS MEDICINE (NEACSM) ANNUAL MEETING**

**Conference Date:** November 8-9th, 2018

**Location:** Rhode Island Convention Center in Providence, RI

**ABSTRACT SUBMISSION DEADLINE: FRIDAY, SEP 21, 2018 BY 5PM (EST)**

**General Directions:** Please carefully read over the instructions listed here and then complete the 2018 NEACSM ABSTRACT SUBMISSION FORM, providing the information requested.

1. The primary focus and substance of submitted abstract must be novel. The abstract must not have been published or presented as an abstract or a full paper in a retrievable or readily available scientific, medical, or professional publication. Abstracts presented first at the NEACSM meeting may later be presented at another meeting, as abstracts will not be published.
2. Each individual is permitted to be first author on only one abstract, but may co-author several abstracts. The first author must present the abstract.
3. If multiple abstracts are being submitted from the same study/project, in order to be eligible for presentation, each abstract should be uniquely written for title, purpose, methods, results, and conclusion, and relate directly to the stated purpose.
4. Only electronic submissions will be accepted.
5. Abstract presenters will have the option of selecting a poster or oral/slide presentation (preference can be indicated on the abstract submission form). The Abstract Review Committee will do their best to accommodate preference, however, they will make the final determination of format.

# Confirmation of Receipt of the Abstract, and Acceptance of the Abstract:

1. The NEACSM office will notify the lead author of receipt of the abstract by email within one week of the submission deadline.
2. Abstracts will be forwarded to the Free-Communication Chair who will assemble a committee to review the abstracts. This committee will review the abstracts and make decisions concerning the acceptance of the abstract for presentation, the presentation format (poster or slide session) and the student award competition.
3. As soon as the Abstract Review Committee has completed its work, the lead author will be notified by email concerning the acceptance of the abstract, the presentation format, and the date/time of the session.
4. Notifications are expected to be sent out by Friday, October 12, 2018.

**Student Investigator Competition Information and Guidelines:**

1. Student Investigator Competition submissions must represent *the student’s ideas and work.* 
   1. Please complete the “Student Description of Research Contribution and Faculty Attestation” (Note: To be eligible for the competition, a student must have initiated the research questions, objectives and/or aims.) If more information is needed, please complete the optional description of the student’s specific role (no more than 100 words).
   2. Both the mentor/advisor and the student must sign the application form to confirm the student contribution to the research abstract.
   3. If this section is not complete, the student will be ineligible for the Student Investigator Competition.
2. Students choosing to compete in the Student Investigator Competition must select “oral/slide presentation” as their preferred format.
3. The top 4 highest rated written student abstracts in each competition category (Bachelor’s, Master’s and Doctoral) will be selected to present oral/slide presentations as finalists.
   1. Written abstracts will be scored 1-5 (5 being highest possible) on:
4. **Significance and Innovation:** How well the project relates to the mission statement of ACSM; novelty and use of new methodologies, under-investigated populations, addressing emerging problems, etc
5. **Research Design:** Ability of the methodologies used to address research question and hypothesis; appropriate use of design and statistics to test hypothesis
6. **Results:** Appropriate selection and presentation of critical key data
7. **Interpretation/Translation:** Appropriate and clear conclusions from findings
8. Finalists will then compete in oral presentations and the student competition winner will be determined from the highest Oral Presentation score.
9. The Oral Presentations will be scored 1-5 (5 being the highest possible) on the following criteria:
10. **Presentation Content**: Description of research project is clear and includes intro/background, methods, results, strengths/limitations, and description of student contribution
11. **Presentation Skills:** Eye contact, elocution, projection
12. **Quality of visuals:** Clarity of the figures and tables in explaining methods and results as appropriate
13. **Ability to answer questions:** Ability of the student to demonstrate and explain knowledge as well as demonstrate critical thinking
14. Winners of the student competition will be awarded $500 in the Doctoral category, $500 in the Master’s category, and $500 in the Bachelor’s category.
15. Other students who competing in the student competition but were not selected as finalists may have the opportunity to present in a moderated poster session (similar to the “thematic” poster sessions at the ACSM National meeting).
16. Students competing in the Student Competition must be a current member of NEACSM (through November 2018).
17. The student competition category (Bachelor’s, Master’s, Doctoral) should be based on what program the student was in when the work was completed. If currently a Master’s student and presenting work done while in a Bachelor’s program, the competition category chosen should be Bachelor’s. This is true for Doctoral students presenting work done in a Master’s program or a Doctoral graduate presenting work done while a Doctoral degree student. Students have one year from graduation from a Bachelor’s, Master’s or Doctoral program to present in that category.
18. Students who have previously received a student investigator award in a certain category (e.g., Bachelor’s, Master’s, or Doctoral) are not eligible to compete for an award again in the same category (a previous Master’s winner may compete for Doctoral award but not a master’s award).

**President’s Cup Competition Information**

1. Students must be a **currently enrolled** **graduate** student at the time of the 2018 Fall NEACSM Meeting and must be willing to present at the 2019 ACSM National Annual Meeting.
2. The top rated abstract presented by a graduate student in the student competition at the 2018 Fall NEACSM meeting will be chosen to represent the New England chapter at the 2019 ACSM National Annual Meeting in a poster competition **May 28-June 1, 2019 in Orlando, Florida**
3. The winner will be awarded a $1,200 travel allowance and registration fee waiverfor the ACSM National Annual meeting.
4. The research will be presented as a poster on either Wednesday or Thursday night (May 29th or May 30th, 2019) at the ACSM National Annual meeting. Awards and cash prizes will be given for the top three presenters.
5. Student research in the President’s Cup competition at the 2019 ACSM National Annual Meeting will be reviewed and judged on: **Significance**: How well the project relates to the mission statement of ACSM which is to “advance and integrate scientific research to provide educational and practical applications of exercise science and sports medicine.” **Innovation**:  The novelty of the project, specially relating to the use of new methodologies, studying of under investigated populations and/or addressing emerging problems relating to exercise and sports medicine. **Research Design:** The ability of the methodologies used to address the research question and hypothesis. Additionally, the appropriate use of experimental design and statistics to adequately test the hypothesis. **Ability to Respond to Questions:**  Ability of the student to demonstrate knowledge of the literature related to their field of study as well as demonstrates critical thinking for future studies. **Poster Design and Presentation Skills**: Clarity of the poster and description of research project.
6. **Note:** President’s Cup winner may not necessarily be the same as the winner in the Master’s or Doctoral category due to different scoring criteria and eligibility.

***Please direct any questions to Sarah Camhi, Ph.D. (Free Communications Co-Chair) at*** [***sarah.camhi@umb.edu***](mailto:sarah.camhi@umb.edu)

# Research Abstract Guidelines and Checklist

**NOTE:** If the checklist is not complete, the abstract may not be accepted or eligible for presentation.

□ 1. Abstracts must be submitted using the NEACSM 2018 Abstract Submission Form. Be sure that all fields are filled out.

□ Students Investigator Award Applicants:

□ Complete the Student Contribution Checklist; Optional: Complete the Student Detailed Description of Research Contribution

□ Attestation of Student Contribution: Complete Student and Mentor signature

□ 2. The entire abstract must be typed using a Times New Roman font, and 12-point font size.

□ 3. Title of the abstract is in **UPPERCASE** and in **bold and** limited to 15 words.

Total title words: \_\_\_\_\_

□ 4. Authors and affiliations: All first and last names and Fellows denoted by FACSM. Institutional affiliations of all authors are included. Authors’ titles or degrees are **not** included.

□ 5. Abstract is single-space and one paragraph and limited to no more than 350 words (not including spaces, title, author names, institutional affiliations, and grant funding). If including a table, chart or graph the word restriction is reduced to 300 words. One figure, chart or table can be included. If a figure, chart or table is included, word count is reduced to 300 words.

Total abstract words: \_\_\_\_\_\_\_\_ Number of Figures: \_\_\_\_\_\_\_\_\_

□ 6. Abstract includes the specific subheadings of **PURPOSE, METHODS, RESULTS, and CONCLUSION** in UPPERCASE and **bold** within the body of the abstract.

□ 7. Abstract must include data to substantiate the findings/conclusions.

□ 8. Grant funding information is included at the bottom of the abstract (as applicable).

□ 9. The abstract submission form should be saved as a PDF with the lead author’s last name first initial

(i.e., Cook S. pdf)

□ 10. To submit the abstract, please email  [neacsm1@gmail.com](mailto:%20neacsm1@gmail.com.%20)

□ The email subject line should read: *“NEACSM Abstract Submission – (Lead Author’s Last Name and First Initial)”* (ie., NEACSM Abstract Submission – Cook S.)

□ Students entering the student competition must carbon copy “cc” their advisor/mentor in the same email

□ 11. **Abstracts must be received by 5pm (EST) on Friday, September 21, 2018.**

# Abstract Example:

**EFFECT OF 6 WEEKS OF ECCENTRIC CYCLING TRAINING ON WALKING ECONOMY IN HEALTHY INDIVIDUALS**

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Low muscular strength is associated with physical decline. Progressive strength training has been demonstrated to improve physical functional outcomes. Because eccentric exercise is a potent stimulus for increasing muscle size, strength and power, it has the potential to serve as a time- effective intervention to improve ambulatory function at a lower metabolic cost compared to traditional strength training. **PURPOSE:** The purpose of this study was to examine if a 6-week eccentric cycling training intervention could improve walking economy in healthy individuals. **METHODS:** Seven healthy individuals (six males and one female; age=27±6 yrs; mass=73.4±9.7 kg; height=1.7±0.9m) trained on an eccentric ergometer for 6 weeks (3x/week; 10–30 min; 54–66% of HRmax). The metabolic cost of walking (Cw; J/kg/m) was assessed one week prior to, and one week following 6 weeks of eccentric cycling training. Cw was determined as the net energy cost (J/kg/s), divided by walking speed (m/s) during steady-state walking at 5 walking speeds (0.7, 1.11, 1.39, 1.67, and 1.9 m/s). Cohen’s *d* effect sizes (*ES*) were calculated for all analyses and *ES* magnitudes of 0.10, 0.30, and 0.50, were interpreted as small, medium, and large effects, respectively. **RESULTS:** During eccentric cycling training, participants increased work rates from 92.7±29.7 to 222.6±64.6 W, while exercising at “fairly light” to “somewhat hard” exertion levels (11±2 to 13±1; Borg-scale units). Following eccentric cycling training, post-training Cw was significantly lower while walking at 0.7m/s (*P*=0.03). Although there were no statistical significance detected at the walking speeds of 1.11, 1.39 , 1.67, and 1.9 m/s (all *P*>0.05), the lower post-training Cw observed provide strong evidence for a trend of decreased Cw following eccentric cycling training. **CONCLUSIONS:** These results demonstrate that 6 weeks of chronic eccentric cycling training was effective in improving walking economy, and can be safely administered and tolerated by healthy individuals. To the best of our knowledge, this is the first report of a significant improvement in ambulatory function following 6 weeks of eccentric cycling training in a young healthy population. Improvement in ambulatory function would be beneficial for both aging and athletic populations.

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