

**CENTRAL STATES CHAPTER OF THE AMERICAN COLLEGE OF  
SPORTS MEDICINE (CSACSM)**

**DIRECTIONS FOR ABSTRACT SUBMISSION**

**Directions:** Please carefully read over the directions and then complete the submission form, providing the information requested.

1. There is no fee to submit an abstract for the CSACSM annual meeting.
2. The submission deadline is Monday, September 16<sup>th</sup>, 2019 by 5PM CST
3. You will need to open an **EasyChair** account prior to submitting your abstract (<https://easychair.org/conferences/?conf=csacsm2019meeting> or click the link on the CSACSM web page). Please have your abstract and adviser form (if you are competing for the outstanding research project) prior to submission. Only electronic submissions through **EasyChair** will be accepted.
  - a. Professional members will choose the CSACSM2019meeting track while students will choose the appropriate track for their level of education during which the study was performed (e.g., a first year doctoral student would present his/her master's thesis in the master's category).
4. The abstract needs to be submitted as a Microsoft Word document. If submitting the adviser form, it must be in pdf format.
5. Save both documents as "FirstAuthorLastname\_First Initial\_CS19"
6. All students will be required to create a poster of their abstract regardless of whether they are applying for the outstanding student research project. The winners of the outstanding student projects will present both an oral presentation as well as a poster of the same project at the conference.
7. There are two award categories by which the abstracts will be judged: 1) The Central States Outstanding Student Research Award and 2) The President's Cup Challenge. Students will choose whether they wish to be included in the first competition by denoting so on the abstract submission.
  - a. Central States Outstanding Student Research
    - i. Three awards will be presented: Undergraduate, Masters, PhD.
    - ii. There are no other materials to submit to be evaluated for the Outstanding Student Research Award. All projects will be judged solely by their abstract.
    - iii. **Students who cannot be present at the entire conference should not apply for the outstanding student award. Oral presentations are typically the first day, but students need to be able to present at any time during the conference.**
    - iv. Winners of this award will present both orally and have a poster presentation.
    - v. Winners will receive \$750 and a plaque. The monetary award is intended for deferring costs to the national ACSM convention. If the winner is not able to attend the national conference, the monetary award will not be given.
  - b. The President's Cup Challenge
    - i. This competition is open to graduate students (Masters and PhD combined).
    - ii. All graduate student applications will be judged for this award.
    - iii. This award will be judged based off of both the abstract and poster presentation.
    - iv. First place will receive a travel allowance and registration fee waiver for attending the ACSM Annual Meeting to present their research project.

## Experimental Abstract Format:

Abstract narratives are limited to 2,000 characters (not including spaces, title, author names, and institutional affiliations). If including table, chart or graph, character limit will be approximately 1,700 characters depending on the size of the table, chart, or graph.

1. The entire abstract must be typed using Microsoft Word using 1-inch margins, a Times New Roman font, and 12-point font size.
  - a. Please make sure to adjust line and paragraph spacing so there is no extra spacing between lines. Select line and paragraph spacing →. Make sure spacing before and after is set to zero.
2. **The title of the abstract must be typed in UPPERCASE and in bold (15 word limit. Not counted in character count for abstract).**
  - a. The title must be succinct and informative.
3. Skip a line between authors and the title
4. Type the first and last names of the authors with Fellows denoted by FACSM (e.g., John Doe, FACSM). Do not include authors' titles or degrees. Include the institutional affiliations of all authors denoted with a superscript number (e.g., John Doe<sup>1</sup>, FACSM). Include the superscript number even if all authors are from the same institution.
  - a. Do not list sponsor FACSM members unless they are authors
5. On the line below the authors list the institutions of the authors.
  - a. Do not start the institution list on the same line as authors even if there is space.
  - b. Start the institution with the corresponding superscript (e.g., <sup>1</sup>University of...., City, State.
  - c. Put a semicolon between institutions (if more than one) and start on the same line if space permits.
6. Skip a line between the authors and the body of the abstract.
7. The text of the abstract must be single-spaced and one paragraph. A Table, chart or graph is permitted.
  - a. Using Word's table maker is the preferred method of creating a table and should use Times Roman 12 pt font.
  - b. If an image of a table (or all charts) are inserted, the font must be large enough to read without making the image bigger; however, the entire abstract should fit on one page.
8. The abstract must be informative, and must include the specific subheadings of **PURPOSE:, METHODS:, RESULTS:, and CONCLUSION:** in uppercase and bold within the body of the abstract.
9. Abstracts must include data to substantiate the findings/conclusions being drawn. The lack of inclusion of data will result in the abstract being rejected.
10. Do not use brand names within the abstract.
11. Indicate any grant funding information at the bottom of the abstract (not counted in character count). Do this by:
  - a. Skipping a single line after the end of the abstract
  - b. Start with the subheading **ACKNOWLEDGEMENTS:** This study was funded...
12. Abstracts may be submitted/presented both at the regional and national ACSM annual meetings.
13. You may only appear as first author on one abstract.
14. **Submissions that do NOT meet the above format instructions will not be accepted.** Please refer to the [sample abstract](#) provided.

*Note.* If multiple abstracts are being submitted from the same study, each abstract must have a unique title and purpose, and must include specific information in the methods, results, and conclusion that are directly related to the purpose. You may NOT use the exact same purpose and methods, etc. If the wording in the abstracts is verbatim, then that would qualify as plagiarism, and will result in the abstracts being rejected.

### **Clinical Case Abstracts:**

1. Abstract narratives are limited to 2,000 characters (not including spaces, title, author names, and institutional affiliations). If including table, chart, graph, or picture character limit will be approximately 1,700 characters depending on the size of the graph.

2. The abstract must be informative, and should include the following specific subheadings:

**HISTORY:** (to include the history of the present injury/illness, past medical history, medications, etc.)

**PHYSICAL EXAMINATION:**

**DIFFERENTIAL DIAGNOSIS:**

**DATA:** (to include diagnostic tests performed and results, etc.)

**FINAL WORKING DIAGNOSIS:**

**TREATMENT:**

**OUTCOME:**

*Please note that all other abstract format guidelines are the same.*

### **Acceptance of the Abstract:**

1. Abstracts will be forwarded to the President-Elect and Abstract Review Committee. This committee will review the abstracts and determine acceptance of the abstracts for poster presentations.
2. 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 and the date/time of the session.
3. If you do not receive a notification by **September 30, 2019** please contact **Dr. Matt Ganio** at [msganio@uark.edu](mailto:msganio@uark.edu)
4. The first author must present the abstract.
5. Posters should be 3'x4'

### **Abstract Submission Checklist (Students and faculty sponsors should review this)**

- Document is typed using Microsoft Word with 1-inch margins.
- The font is Times New Roman with a 12-point font size.
- Spacing has been checked so no extra spacing occurs between lines
- The title of the abstract is typed in UPPERCASE and in bold (15 word limit).**
- The authors' information is listed correctly (1 line between authors and title, superscript denotes institution).
- Only names of authors and not degrees nor certifications provided (However, FACSM may be noted).
- Only authors' are listed (No FACSM sponsors).
- Institutions start 1 line below the authors with a superscript. University, City, and State are provided
- There is a line between the institutions and the body of the abstract.
- The text of the abstract is typed single-spaced and in one paragraph with the following subheadings in (UPPERCASE and bold): **PURPOSE:, METHODS:, RESULTS:, and CONCLUSION:** (please refer to the section on clinical case studies for specific subheadings).
- The abstract includes data to substantiate the findings/conclusions.
- The abstract does NOT exceed 2,000 characters (not including spaces, title, author names, acknowledgements, and institutional affiliations). If including table, chart, graph, or picture character limit will be approximately 1,700 characters depending on the size of the graph.
- Charts/Tables are legible
- Funding or other acknowledgements are listed 2 lines below (1 blank line) the abstract and start with the subheading **ACKNOWLEDGEMENTS:**

### **Expectations of Faculty Sponsor:**

1. Read over and comply the directions for abstract submission.
2. Work with the student author in the development of the abstract.
3. Complete a final proofread of the abstract prior to submission

1-inch margins on each side

## THE ROLE OF AGE-ASSOCIATED CHANGES IN SKELETAL MUSCLE ON BLOOD PRESSURE IN STANDING

Single space

Michelle M. Masterson<sup>1</sup>, Amy L. Morgan<sup>2</sup>, FACSM, C. E. Multer<sup>1</sup>, & Charles A. Armstrong<sup>2</sup>

<sup>1</sup>University of Toledo, Toledo, Ohio; <sup>2</sup>Bowling Green State University, Bowling Green, Ohio

Single space

Thirty percent of people aged 65 years and older living independently have experienced a fall. Muscle weakness, postural instability, and orthostatic hypotension (OH) have been identified as contributing factors to falls. However, the age-associated differences in these factors and the relationship between them is not clear. **PURPOSE:** Therefore, the purpose of this study was to investigate the differences in lower extremity (LE) muscle activity, LE volumetric measurements, blood pressure (BP), heart rate (HR), and postural sway between young and old individuals upon assuming an upright position. **METHODS:** Two groups of 10 healthy males (20-24 yrs. and 65-82 yrs.) volunteered for this study. BP and HR were measured during supine resting and LE volumetric measurements were obtained immediately after supine rest. Electromyographic (EMG) activity of bilateral gastrocnemius and tibialis anterior muscles was recorded during a one-repetition maximal isometric contraction, followed by a second resting period. Subjects then stood quietly for 15 minutes while BP, HR, EMG, and postural sway on a force platform were measured for 20 seconds each minute. **RESULTS:** Systolic, diastolic, and mean arterial BP of both groups significantly increased from supine values within one minute of standing (mean arterial BP: young = 86.5 to 96.9 mmHg, old = 100.3 to 114.0 mmHg). The BP variables remained elevated during the 15 minutes of standing with no instances of OH, despite a significantly attenuated HR response in the older group relative to the younger group (greatest mean HR recorded during 15 minutes of standing: young = 85 bpm, old = 73 bpm). There were no differences in EMG activity or postural sway between the two groups. **CONCLUSION:** Older subjects did not exhibit an increased incidence of OH, despite an attenuated HR response, nor did they demonstrate changes in postural sway or EMG activity. Therefore, it appears that BP is maintained by mechanisms other than changes in HR or LE muscle activity. Further research is needed to develop a better understanding of how LE muscle activity, BP maintenance, and postural instability interact as individuals age in order to develop effective interventions to reduce the incidence of falls in the older population.

*Insert table or graph here*

**ACKNOWLEDGEMENTS:** This study was funded by.....

Check Character Count  
Do not exceed 2000 (not including spaces, title, author names, and institutional affiliations) /1700 if table or graph included.

If applying for the outstanding student research project, below is the rubric that will be used to evaluate your abstract.

| Category                            | 0  | 1   | 3   | 5  |
|-------------------------------------|--|---|---|--|
| Grammar / Formatting                | Multiple aspects of formatting not followed and/or several grammatical errors. Importance or relevance of study not conveyed.      | Multiple aspects of formatting not followed and/ or several grammatical errors.   | Minor issues in formatting and/or grammar.  | <ol style="list-style-type: none"> <li>1) Abstract follows formatting guidelines.</li> <li>2) Lack of grammatical issues.</li> <li>3) Conveys the important aspects of their study.</li> </ol> |
| Purpose                             | Purpose is not clear or understandable.  | Purpose statement is not clearly stated or very well developed.   | Purpose is somewhat clear but needs to be further developed.  | Purpose is very clear and well developed.  |
| Soundness of the research           | Study has very limited sample size <b>and</b> there are threats to internal/external validity that call the results into question. | Study has a very limited sample size <b>or</b> there are threats to internal/external validity that call the results into question.   | Minor research design issues or simple size slightly less than ideal.   | Sample size is appropriate for research design. No glaring threats to internal or external validity.   |
| Results                             | Results are not well stated and difficult to understand<br>And/or<br>No Data provided.   | Results are not clearly stated, and the reader does not fully understand all aspects of the study. Statistical methods may not be appropriate.  | Results are somewhat clear, the audience can interpret the results. Some areas for improvement are notable.   | Results are very clear and well stated. Data are provided and correct statistical methods are used.  |
| Conclusions                         | Conclusion is not well developed and is not clearly stated.  | Conclusion is stated but does not fully summarize the body of the presentation. Not all limitations are addressed nor are Future directions provided.   | Conclusion is somewhat clear and does summarize the body of the presentation, not all limitations are addressed.  | Conclusion is very clear and well stated. Limitations and Future directions are mentioned.   |
| Novelty / Contribution to the Field | Study is a repeat of previous studies with no changes in methodology compared to previous research.                                | Study is a repeat of previous studies with minor changes that would not have much effect on previous findings.<br><b>Or</b><br>Multiple posters at conference are based off this study and only the dependent variables have changed. | Study is a repeat of previous studies with minor changes that could possibly have an effect on previous findings. (e.g., evaluating hormones during exercise in females using a protocol previously performed only on males). | Study addresses a question in a way that is unique or expands upon previous research in a way that adds to our understanding of the topic.   |