NSCA GLOBAL CONFERENCE 10TH EDITION

23/25 OTTOBRE VERONA 2026

# CALL FOR ABSTRACT

# 10 TH NSCA GLOBAL CONFERENCE

The **10th NSCA Global Conference** officially opens the Call for Abstracts, inviting researchers, professionals, students, and specialists in the field who wish to share their scientific work, research projects, or practical experiences in the areas of strength and conditioning, physiotherapy, performance, and sports rehabilitation.

The goal is to promote scientific and professional dialogue, highlighting original contributions that reflect the central theme of the event: the integration between **Strength & Conditioning and Physiotherapy** to optimize performance, prevent injuries, and support effective recovery pathways.

# Selection Procedures

## ABSTRACT SUBMISSION

Authors are invited to submit an original abstract (maximum 2,000 characters) in English, prepared according to the following format:

- Title: Brief (fewer than 15 words) and written in Title Case.
- Authors: The first and last names of all authors should be included in the author block.
- Do not include academic titles (e.g., PhD, MD), as these may interfere with online search functions.

Structure:

- Introduction / Background
- Methods
- Expected or Obtained Results
- Conclusions and Practical Implications

Each table, figure, or diagram counts as 300 characters toward the total character limit.

Do not use brand names within the abstract.

Please indicate any funding sources (grants) and acknowledgments related to artificial intelligence usage during the submission process.

## SCIENTIFIC REVIEW

All submitted abstracts will be evaluated by the NSCA GC Italy Scientific Committee.

The evaluation criteria will include:

- Relevance and originality of the content
- Methodological rigor
- Practical applicability within the sports or clinical context
- Scientific quality and clarity of presentation

## ACCEPTANCE NOTIFICATION

Selected authors will receive an official email and will be invited to present their work as a poster or oral communication during the conference.

# ABSTRACT EXAMPLES

## BRAKING FORCE-TIME CHARACTERISTICS BETWEEN TRADITIONAL SQUATS AND FLYWHEEL INERTIA SQUATS AT DIFFERENT LOADS

**PURPOSE:** The purpose of this study was to examine the differences in braking force-time characteristics between traditional back squats and flywheel inertia squats performed using a spectrum of loads.
**METHODS:** 17 resistance-trained subjects took part in this research study including 9 men (age=24.7±4.0 years, height=171.7±5.8 cm, body mass=77.9±11.2 kg, relative one repetition maximum [1RM] back squat=2.01±0.26 kg/kg) and 8 women (age=23.0±2.1 years, height=167.6±8.6 cm, body mass=71.5±7.7 kg, relative 1RM back squat=1.43±0.25 kg/kg). Each subject participated in three total sessions over the course of one week. During the first testing session, each subject completed a 1RM back squat and were familiarized with flywheel inertia squats. During the subsequent two testing sessions, the subjects performed three repetitions each of the free weight back squat exercise with 40, 50, 60, 70, and 80% of their 1RM back squat or flywheel squats using inertial loads of 0.010, 0.025, 0.050, 0.075 and 0.100 kgm2. The traditional and flywheel squat session order was randomized. All squat repetitions were performed on dual force plates sampling at 1000 Hz. Raw force-time data were collected and exported for analysis within a customized spreadsheet. Braking mean force, duration, and impulse were compared using a series of 2 (condition) x 5 (load) repeated measures ANOVA. In addition, Hedge's g effect sizes were calculated between conditions to examine the magnitude of the differences at each load.
**RESULTS**: The descriptive data for each load and mode are displayed in Table 1. There was a significant interaction between mode x load for eccentric mean force (p< 0.001), and duration (p=0.008) but not for braking impulse (p=0.513). In addition, there was a significant load main effect for braking impulse (p< 0.001) but not for mode (p=0.140). Large-very large effects favoured traditional squats for braking mean force (g =1.66-2.70). The differences in braking duration between conditions were small-moderate (g=0.25-1.00). Finally, the effect sizes between conditions for eccentric impulse were trivial-moderate (g=0.12-0.76).
**CONCLUSIONS:** Significantly greater braking mean forces were produced during traditional squats compared to flywheel squats. In contrast, braking durations were significantly greater during flywheel squats compared to traditional. There were no significant differences between squat conditions for braking impulse; however, moderate effect sizes favouring the traditional condition were present at the lightest loads.
**PRACTICAL APPLICATION:** The desired training adaptation may influence the decision to use one training mode over another. Traditional squats may be more beneficial for braking rapid force production as greater force may be produced over shorter durations. However, flywheel training may provide a novel braking stimulus to individuals who almost exclusively use traditional exercises within their training programs.
**ACKNOWLEDGEMENTS:** none

Table 1: Eccentric mean force, eccentric duration, and eccentric impulse for traditional and flywheel inertia squats.

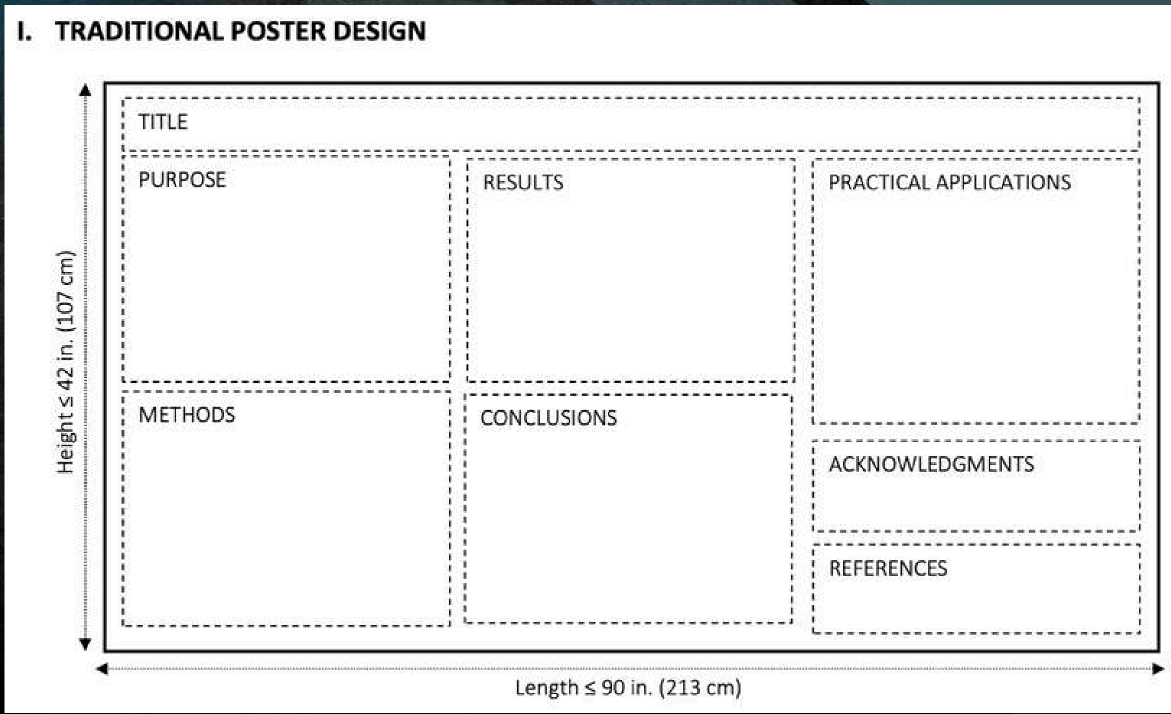
| Traditional | | | |
|---|---|---|---|
| Load (%1RM) | Eccentric Mean Force (N/kg) | Duration (s) | Impulse (Ns) |
| 40 | 21.5 ± 3.0* | 0.42 ± 0.11 | 651.8 ± 136.4 |
| 50 | 22.7 ± 3.4* | 0.49 ± 0.13 | 808.2 ± 186.3† |
| 60 | 24.4 ± 3.5* | 0.49 ± 0.12 | 889.3 ± 220.7† |
| 70 | 25.4 ± 3.6* | 0.55 ± 0.11 | 1044.1 ± 269.5† |
| 80 | 26.7 ± 3.8* | 0.61 ± 0.13 | 1230.9 ± 308.5† |
| **Flywheel** | | | |
| Inertia ($kgm^2$) | Eccentric Mean Force (N/kg) | Duration (s) | Impulse (Ns) |
| 0.010 | 16.4 ± 2.0 | 0.48 ± 0.14# | 563.1 ± 127.3 |
| 0.025 | 18.0 ± 1.9 | 0.52 ± 0.11 | 685.0 ± 125.3† |
| 0.050 | 18.0 ± 2.1 | 0.64 ± 0.21# | 857.4 ± 278.3† |
| 0.075 | 17.9 ± 2.2 | 0.76 ± 0.27# | 999.9 ± 348.0† |
| 0.100 | 18.0 ± 2.3 | 0.83 ± 0.30# | 1106.1 ± 381.7† |

* = significantly greater than flywheel corresponding load ($p < 0.001$); # = significantly greater than traditional corresponding load ($p < 0.05$); † = significantly greater than all the preceding lighter loads ($p < 0.05$)

# GUIDELINES FOR POSTER ABSTRACT PRESENTATION

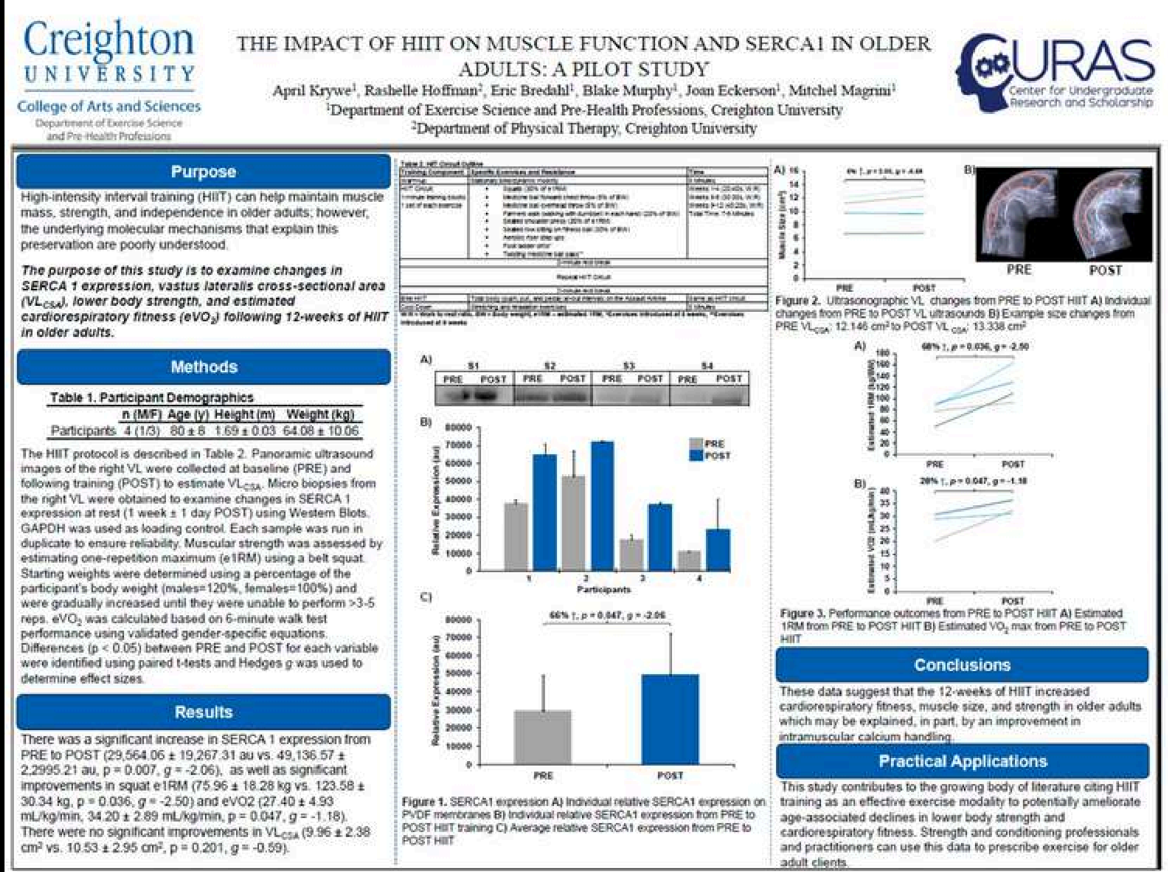
- All poster presentations must be printed on a single, uniform sheet with dimensions not exceeding 42 × 90 inches (107 × 229 centimeters) (height × width).
- Unless otherwise specified, the poster display boards will measure 48 × 96 inches (122 × 244 cm).
- Poster abstract presentations must be consistent with the content of the accepted abstract and include the following sections: Purpose, Methods, Results, Conclusions, and Practical Applications.
- Poster presenters are required to stand next to their poster for the entire duration of the assigned presentation time.
- The Research Committee recommends one of the following two layout options as a general guideline for all poster presentations: Traditional Poster or #BetterPoster

# EXAMPLE OF A TRADITIONAL POSTER

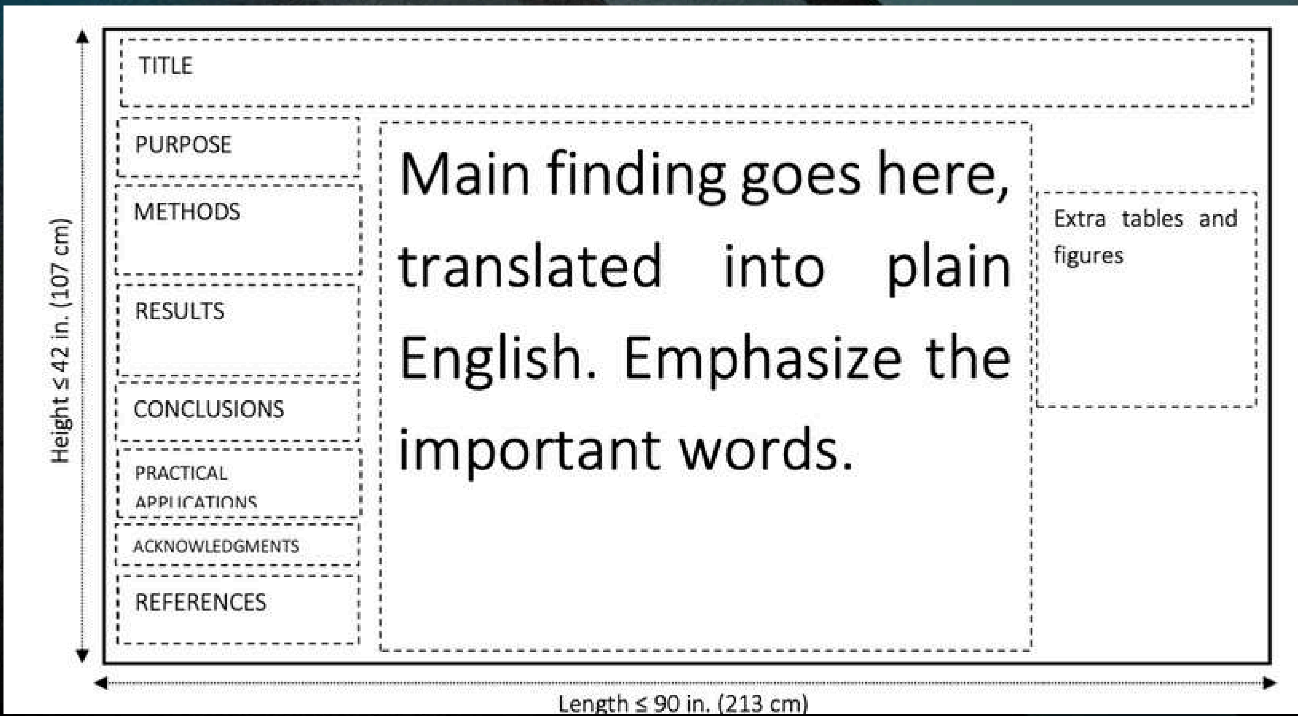


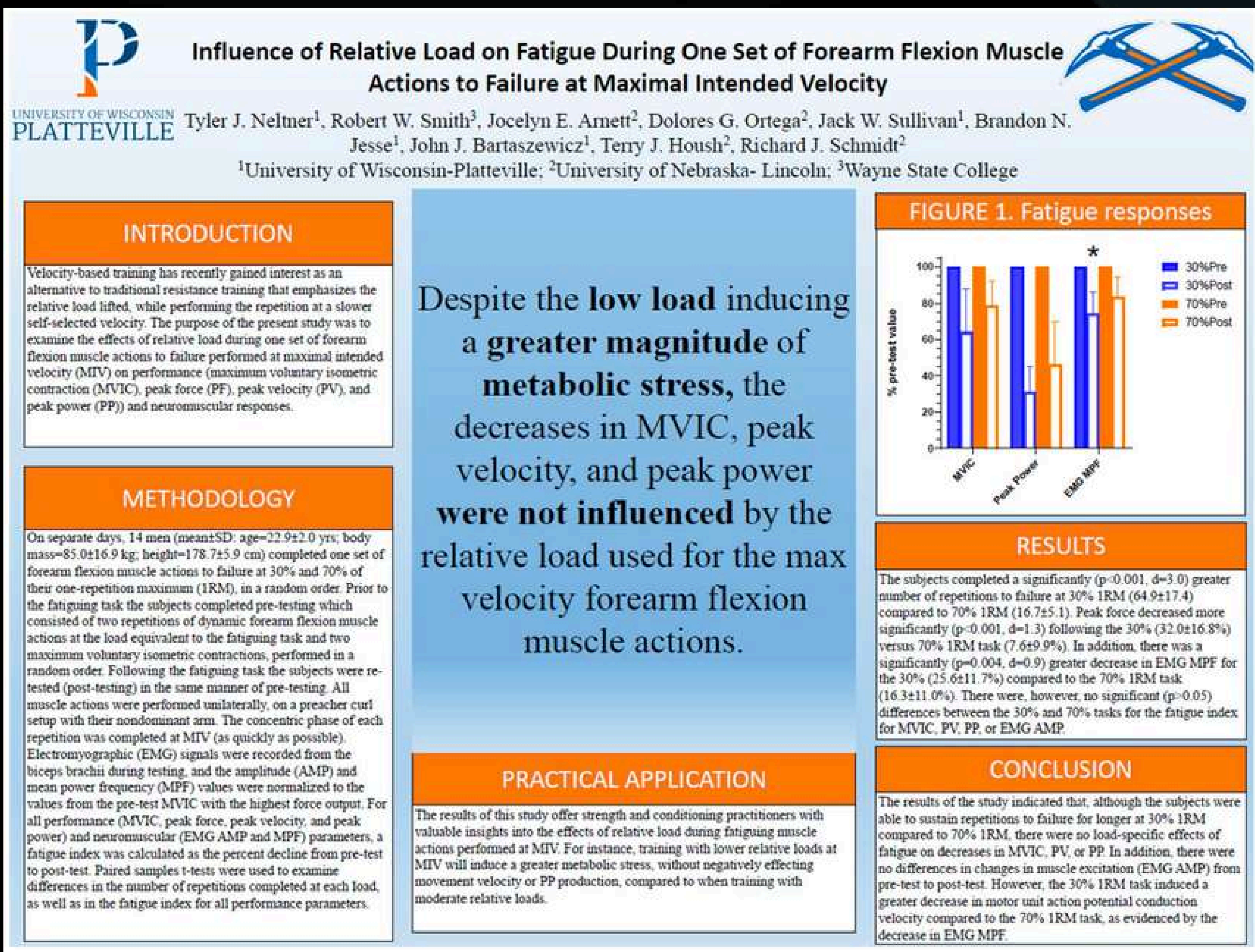

**2025 Undergraduate Student Poster Presentation Winner**

April Krywe – Creighton University



# EXAMPLE OF A #BETTERPOSTER DESIGN



## CONFERENCE REGISTRATION

The acceptance of the abstract is subject to the purchase of a registration ticket for the 10th NSCA Global Conference.

Registration is mandatory for at least one of the authors and grants access to all scheduled scientific, practical, and networking sessions.

## HOW AND WHERE TO SUBMIT

Your submission must be sent to the following email address:
riccardo.battioli@nsca.it
Please include the following in the email subject line:
“Name-Surname + Abstract Submission NSCA Global Conference 2026“

# *Deadlines and Useful Information*

| | |
|---|---|
| **ABSTRACT SUBMISSION DEADLINE** | **JUNE 31, 2026** |
| **NOTIFICATION OF RESULTS** | **JULY 31, 2026** |

Presenting your work at the 10th NSCA Global Conference represents a unique opportunity to actively contribute to the international scientific dialogue, share professional experiences, and build connections with colleagues and researchers from around the world.

**The best abstract will be honored with the "Young Investigator Award."**
**The winner will be recognized during the Saturday evening dinner.**