



NATA Foundation Free Communications Program Instructions for Peer-Reviewed Abstracts

The mission of the NATA Research and Education Foundation Free Communications Program is to advance the discovery, dissemination, and application of scientific knowledge in athletic training domains through written and oral forum. This mission is realized by communicating scientific knowledge to the athletic training community through the sharing of peer-reviewed unique clinical case reports and original research reports during our annual symposium, as well as their publication in the Journal of Athletic Training. Furthermore, the Free Communications Committee will pilot test reviewing and accepting a limited number of critically appraised topic abstracts.

To assure the exchange of valuable information, the NATA Research and Education Foundation uses a blinded peer-review process for abstracts following standardized guidelines but expects abstracts to be submitted at a quality worthy of publication. Each of the 600 plus abstracts submitted annually are blinded and peer reviewed by at least two committee members. Because of the vast number of submissions and limited time and human resources, investigators or clinicians must follow these instructions precisely and copy-edit their work. There is not time to request edits to abstracts, as you might receive for a manuscript. Abstracts that fail to adhere to the instructions below will likely be rejected. Provided below are example abstracts, it is recommended that you download one of the abstracts in document form and simply replace the text, but leave the headings. A large proportion of rejects are mechanical. We have provided these instructions to increase investigator success in the submission process, provided investigators read and follow these directions.

CALL FOR ABSTRACTS
for the
NATA Clinical Symposia & AT Expo
June 29 - July 2, 2021 – Orlando, FL

DEADLINE FOR ABSTRACT SUBMISSION IS NOVEMBER 1, 2020

(All abstracts submitted for presentation must be submitted ONLINE.)

Instructions for Abstract Preparation and Submission

Please read all instructions before preparing and submitting the abstract. Individuals may submit only one **Original Research Abstract, Critically Appraised Topic Abstract, or Clinical Case Study Abstract** as the primary (presenting) author but may submit unlimited abstracts as a secondary author.

All presentations must be of original work and not previously presented in oral, poster, or electronic format. **Exceptions to the restriction are limited to** athletic training organizations' state and district meetings and the NATA Athletic Training Educators' Conference as long as the abstract has not been and will not be published in a journal prior to the 2021 NATA Annual Meeting

The **Original Research Abstract** must be written to the accepted scientific standards of a research area and should present findings pertaining to healthcare issues related to the athletic training profession. The Original Research Abstracts may include systematic reviews and meta-analyses but not critically appraised topics (CATs). The **Clinical Case Study Abstract** should present a unique individual athletic injury case of general interest to the NATA membership. The **Critically Appraised Topic Abstract** should present the best available evidence to answer a focused clinical question using publications from the prior 5 years (summarizing 3 to 10 published manuscripts).

View all [Required Submission Elements](#).

Formatting Instructions

Prepare your abstract (on your computer) following the instructions below. You will later be directed to upload your abstract from your computer to the Abstract Manager system.

1. **Abbreviations:** Place abbreviations in parentheses after the first time the full word(s) appear.
2. **Numbers:** Use numerals to indicate numbers, except when beginning sentences.
3. **Title:** Enter the title in the title field only. Titles should be brief, clearly describing the content of the abstract. The title should be entered in title case. For example, "This is a Properly Formatted Abstract Title". Do not include a trial or registry/cohort group name or acronym in the abstract title.
4. **Authors and Affiliations:**
 - Provide the names of all authors, with the author who will make the presentation listed first. Enter the last name, then initials (without periods), followed by a comma, and continue the same format for all secondary authors (if any), ending with a colon. On the same line following the colon, indicate the name of the institution (including the city and state) where the research was conducted. If primary author is not at the institution where the work was completed place an * after their name and following the institution where the research was conducted the primary author can indicate their present institution (including the city and state). For collaborative projects where portions of the project were conducted at different institutions, list all authors as described above, then list institutional affiliations using the following consecutive symbols (*, †, ‡, §, †, ¶, #, **, etc.). This content will be copied into the "authors" field.
 - The form will also ask for the credentials of the presenting author. Students should enter "ATS". The "ATS" indicator is for internal purposes and will be removed before publication.
 - The form will also ask for an email address for each author.
 - The form will also ask for a Twitter handle/username for the presenting author (optional).
 - To qualify for authorship, individuals must have made substantial contributions to the conception and design, or acquisition of data, or analysis and interpretation of data; drafting the abstract or revising it critically for important intellectual content; and final approval of the version to be published.
5. **The text of the body must be structured** to enable the copying of the text into the appropriate fields. Headers do not count towards the word count.
 - The body of the abstract for Original Research and Critically Appraised Topic is limited to 450 words.
 - The body of the abstract for a Clinical Case Study is limited to 600 words.
6. **Tables and Figures:**
 - One-page for a table or figure may accompany the submission.

- Only 1 figure or table may be uploaded per abstract. However, submission of a figure or table is optional. A table legend does not count toward the word limit of the abstract - however, the title MUST be succinct.
 - The table/figure MUST be referenced within the text of the abstract.
 - The figure or table must contain original material that is directly relevant to the results or conclusions of the abstract.
 - The figure or table must be original. That is, it may not contain any protected or copyright material or any material that was previously published in (or is currently being considered for) any publication or free communications program. A figure or table that does not adhere to these guidelines will not be reviewed and will subject the abstract to rejection without review.
 - Figures showing participants or patients in any image (photograph, radiograph, etc.) must conceal each person's identity.
 - The figure or table should be saved as a pdf in a file separate from the abstract.
 - The maximum size of the figure or table is 6.5 inches wide and 4 inches high. The minimum size is 2 inches wide and 2 inches high.
 - The figure or table will not be edited. Therefore, it must be clear and easy to read or understand at the specified size. Questions about figure or table preparation should be directed to the Journal of Athletic Training editorial office: phone, 314-977-8591; email jat@slu.edu
7. The required formats for the structured abstracts are listed below. For further clarification, authors should consult the AMA Manual of Style 9th edition and the instructions for authors in the Journal of Athletic Training.
 8. Abstracts fall into one of the following 4 categories (Original Research, Critically Appraised Topic, Level 1-3 Clinical Case Study, Level 4 Clinical Case Study); the author is responsible for determining the most appropriate category for structuring their abstract. Each is provided with examples where applicable, but the examples are not all encompassing and some may overlap. Authors should choose the format that seems to best fit and present their data or case study.
 9. **Additional information required for submission:**
 - **Domain/Task:** Identify the domain and the task tied to that domain. Reference the [Practice Analysis, Seventh Edition Content Outline](#).
 - **Learning Objectives:** The objectives should follow best practices for learning objective construction (i.e., "At the conclusion of the program, participants will be able to..." and use [Bloom's Taxonomy Action Verbs](#); Avoid "understand" and "appreciate". Refer to [BOC's Developing Measurable Learning Objectives for](#) more information. Example: "1) Describe the results of a research study about changes in balance between patients with chronic ankle instability and healthy controls. 2) Review the literature in the area of chronic ankle instability as it pertains to the presented research findings."
 - **Key Take Home Message for Possible Use on Social Media** (120 characters or less): Provide a concise take-home message that could be used to promote the abstract on social media.
 - **References:** Provide 1-2 key references or sources supporting the submission's content. Format according to the [Journal of Athletic Training author guide](#).
 - **CV or bio for presenting author** must be uploaded.
 - **Disclosures and Funding Sources:** Indicate if any author has a relevant financial relationship with commercial interests that have the potential to affect the content of the abstract. If the authors have no disclosures enter "The authors report no relevant financial disclosures." Indicate the funding source (and grant number if appropriate), if applicable. Please review the [Policy for the Submission of the Disclosure Form and Presenter Commitment](#). This section does not count towards the word count.

Review Criteria for All Original Research and Critically Appraised Topic Abstracts:

- Completeness of requested information in each structured heading
- Overall clarity of writing
- Originality of research and or contribution to the literature or knowledgebase
- Methods and results address the primary objective
- Consistency between data and conclusions
- Adequacy of sample size to support conclusions

Review Criteria for All Clinical Case Study Abstracts:

- **MUST PROVIDE:** [Patient Release of Information Form](#) (retain in your files until requested)
- Completeness of requested information in each structured heading.
- Overall clarity of writing
- Originality of clinical case report
- Case managed within the standard of care

Format for Original Research Abstracts

The Title of your Abstract Bolded and in Title Case

[3 spaces]Doe JT*, Public JQ†: *First Author's Institution Name, †Second Author's Institution.

[Blank Line]

[Blank Line]

Context: Write a sentence or two summarizing the rationale for the study, providing a reason for the study question and/or uniqueness of the study. State the precise objective(s) of the report, including a priori hypotheses, if applicable. The objective/purpose statement MUST identify the target population, intervention or exposures, and outcomes.

Methods: Describe the overall study design of the project reported (e.g., randomized controlled trial, crossover trial, cohort, or cross-sectional). Describe the environment in which the study was conducted to help readers understand the transferability of the findings (e.g., patient clinic, research laboratory or field). Describe the underlying target population, selection procedures (e.g., population-based sample, volunteer sample, or convenience sample) and important aspects of the final subject pool (e.g., number, average age, weight, height, and measures of variance, years of experience or gender). Appropriate sample size should be evident. Describe the independent variables (e.g., interventions, exposure) in the study. Describe the essential pieces of the experimental methods, types of materials, measurements and instrumentation utilized, data analysis procedures, and statistical tests employed. Identify primary or critical dependent variables that support the primary objective(s) of the study. Provide validity and reliability information on novel instrumentation. Survey research should state the validity and reliability of the survey and how it was validated. Indicate the statistical analysis employed to answer the primary research objective(s).

Results: The main results of the study should be given. Comparative reports must* include descriptive data (e.g., proportions, means, rates, odds ratios or correlations), accompanying measures of dispersion (e.g., ranges, standard deviations or confidence intervals) and inferential statistical data. The exact level of statistical significance should accompany results. The P-value should not exceed 3 digits to the right of a decimal. When the exact significance is below $P < .001$, the exact significance should be reported as $P < .001$. Survey research should report a comparison between the survey sample and the overall population the

findings are generalizable to. Tables and figures can be used to communicate the results efficiently. If tables or figures are included with the abstract, they need to be referenced in the abstract.

Conclusions: Summarize or emphasize the new and important findings of the study. The conclusion must be consistent with the study objectives and results as reported and should be no more than three to four sentences. Relate implications of the findings for clinical practice – provide a clinical take-home message.

Word Count: Limited to 450 words, not including headings.

** The purpose of having both descriptive and inferential data is that it provides the reader with the ability to judge the concluding statements. Descriptive data provide confidence that the data are 'reliable' and provides a gauge to determine whether the inferential statistics and conclusions are meaningful. Studies reporting analysis of larger databases with multiple variables do not need to report all descriptive data. However, they should provide descriptive data for those variables that the author(s) believe to be the primary outcome(s) and support the overall conclusions of the study. Tables or figures can be efficient methods to share these results.*

Format for Critically Appraised Topic Abstracts

The Title of your Abstract Bolded and in Title Case: A Critically Appraised Topic

[3 spaces]Doe JT*, Public JQ†: *First Author's Institution Name, †Second Author's Institution.

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Context: Write a sentence or two summarizing the clinical scenario leading to the clinical question. Typically, the PICO (Patient or Population of interest, Intervention, Comparison or Control group, Outcome of interest) format is used to develop the clinical question. However, not all questions need to follow this exact format. For more information on the PICO format, see the guide from the Center of Evidence-Based Medicine (<http://www.cebm.net/index.aspx?o=1036>).

Methods: Identify how relevant research papers were identified – search strategy (e.g., electronic databases, hand search), databases, timeframe of search, keywords, and search limits. Describe the criteria for selection - the processes through which studies were selected for inclusion for further analysis. **Only abstracts reporting on literature from the past 5 years (3 to 10 studies) will be accepted. If more than 10 studies are identified then the search/question may be too broad, or the question may be better answered with a systematic review or meta-analysis.** Describe the specific outcomes that were to be gathered from the included studies. Describe the main summary measures or analyses to be used (e.g., calculation of effect sizes, odds ratios, mean differences). In other words, describe how the extracted data were organized and summarized, the statistical procedures applied, and the results (e.g., effect sizes, odds ratios, and 95% confidence intervals) of the analysis. Describe the method used to appraise the quality of the evidence included, addressing issues related to the internal (the ability to determine cause and effect) and external (the ability to generalize) validity of the evidence. EXAMPLES of commonly used critical appraisal tools: Appraisal of Intervention effectiveness studies– the PEDro scale based on the CONSORT statement; Appraisal of Diagnostic Accuracy of a clinical test studies – The QUADAS scale based on the STARD statement; Appraisal of Observational studies for sport-related conditions – the STROBE statement and associated checklists.

Results: Present the overall results of the number of studies screened vs. those included. A flow diagram or table should be included to report how the studies were narrowed down to the final sample (e.g., <http://prisma-statement.org/PRISMAStatement/FlowDiagram>). For all outcomes considered, present a concise summary of data for each comparison, group differences, intervention, etc. For these results, point

estimates and measures of variability should be presented (for example, effect sizes and confidence intervals). Present the overall results of the Evidence Appraisal.

Conclusions: Summarize the main findings of the study by highlighting the clinical take-home message related to the research question. Emphasize the "answer" to the clinical question. Interpret these findings within the context of the strengths/weaknesses/biases based on the evidence appraisal.

Word Count: Limited to 450 words, not including headings.

Format For Clinical Case Study Abstracts

NOTE: All clinical case report abstracts submitted to Free Communications must have permission of the patient before submission. Click [here](#) for a sample Consent Release Form.

CASE Study abstract guidelines update

As of August 2017 the CASE (Contributing to the Available Sources of Evidence) study guidelines have been revised to be more inclusive of both evidence-based and practice-based evidence. Drawing from recent publications,¹⁻⁴ there are now four types of CASE study abstracts. Levels 1-3 are submitted in one format, and Level 4 is submitted in a different format.

Table. Comparison of types of CASE report/study based on terminology and research design

Traditional Terminology	New Terminology*	Abstract Format (see guidelines on following pages)
Case Study	Level 1 Validation CASE Study	Level 1-3 Clinical CASE Study Abstract Guidelines
Case Study	Level 2 Exploration CASE Study/Series	Level 1-3 Clinical CASE Study Abstract Guidelines
Case Study	Level 3 Exploration CASE Study/Series	Level 1-3 Clinical CASE Study Abstract Guidelines
Case Report	Level 4 Rare Events CASE Study	Level 4 Clinical CASE Study Abstract Guidelines

Authors are encouraged to review the following references to determine the level of case study they are submitting:

1. McKeon JMM, King MA, McKeon PO. Clinical Contributions to the Available Sources of Evidence (CASE) Reports: Executive Summary. *J Athl Train*. 2016;51(7):581.
2. McKeon JMM, McKeon PO. Evidence-based practice or practice-based evidence: what's in a name? *Int J Athl Ther Train*. 2016;21(1):1-3.
3. McKeon JMM, McKeon PO. New year, a new set of guidelines for making clinical contributions to the available sources of evidence. *Int J Athl Ther Train*. 2016;21(1):1-3.
4. McKeon JMM, McKeon PO. Building a case for case studies. *Int J Athl Ther Train*. 2015;20(5):1-5.

Level 1-3 Clinical CASE Study Abstract Guidelines

The Title of your Abstract Bolded and in Title Case: Indicate the Level of CASE Study

[3 spaces]Doe JT*, Public JQ†: *First Author's Institution Name, †Second Author's Institution.

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Background: Provide an overview of the condition of interest using available evidence, where appropriate. Indicate the level of the clinical CASE Study. For a Level 1 validation CASE study, the authors should provide a clear description of the previously reported comparison study and highlight the most important findings. For Level 2 & 3 exploration case studies/series, introduce the alternate, unique, or irregular presentation of the case examined compared to the available evidence.

Patient: Present the clinical case(s), including primary patient characteristics (age, sex, sport if appropriate, sport or activity, and years of experience) and diagnosis. For a case series, describe the underlying target population with measures of means and variance and important aspects of the subject pool. Pertinent aspects of the medical history should be included. Describe their complaints, MOI, initial clinical examination, diagnostic imaging, lab tests, and their commonality (examples: characteristic, injury, postural/gait abnormality, pathology, MOI). Describe the process that led to the diagnosis of the condition.

Intervention or Treatment: Describe the management of the case, interventions used, the timeline for progression to final resolution in the case, and the specific time points when treatment was provided. Relevant and unique details should be included. For level 2 or 3 case studies/series, compare and contrast the interventions used with the typical presentation of the condition as described in the literature.

Outcomes or other Comparisons: Describe the primary outcomes or results of the case. For Level 1 CASE studies, compare and contrast the outcome from the current case to the outcome of the previously reported comparison study. Compare/contrast the outcomes used in the Level 2 or Level 3 Exploration CASE Studies / CASE Series with the typical presentation of the condition as previously described. For Case Series, report whether all patients responded similarly to each other. For this, it is important to ensure that similar outcome measures were used.

Conclusions: Interpret the findings of the study. For Level 1 CASE studies, discuss the current case in the context with the previously reported comparison study, including the similarities and differences in the patient and outcomes. Discuss challenges associated with implementing the intervention from the comparison study "in real life" and provide recommendations for continued use of the assessment or intervention. For Level 2 & 3 case studies/series, discuss the challenges associated with the case due to the atypical presentation, and provide recommendations for clinical practice.

Clinical Bottom Line: Provide an overall statement of the most important clinical points that can be gleaned from the current CASE study.

Word count: Limited to 600 words, not including headings.

Level 4 Clinical CASE Study Abstract Guidelines

The Title of your Abstract Bolded and in Title Case: Indicate the Level of CASE Study

[3 spaces]Doe JT*, Public JQ†: *First Author's Institution Name, †Second Author's Institution.

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Background: Include the individual's age, sex, sport or activity, pertinent aspects of their medical history, a brief history of their complaint, and physical findings from the athletic trainer's examination.

Differential Diagnosis: Include all possible diagnoses suspected based on the history, mechanism of injury, and the initial clinical examination prior to physician evaluation and subsequent diagnostic imaging and laboratory tests.

Treatment: Include the physician's evaluation and state the results of diagnostic imaging and laboratory results if performed. The final diagnosis of the injury or condition and subsequent treatment and clinical course followed should be detailed. Relevant and unique details should be included, as well as the final outcome of the case.

Uniqueness: Briefly describe the uniqueness of this case, such as its mechanism, incidence rate, evaluate findings, rehabilitation, or predisposing factors.

Conclusions: Include a concise summary of the case as reported and highlight the case's importance to the athletic training profession and provide the reader with a clinical learning opportunity.

Word Count: Limited to 600 words, not including headings.

Acceptable Abbreviations

ACL	Anterior Cruciate Ligament
ADL	Activities of Daily Living
AED	Automated External Defibrillator
AIDS	Acquired Immune Deficiency Syndrome
AMA	American Medical Association
AROM	Active Range of Motion
ATP	Athletic Training Program
BESS	Balance Error Scoring System
BMI	Body Mass Index
BOC	Board of Certification
BP	Blood Pressure
bpm	Beats per Minute
CAATE	Commission on Accreditation of Athletic Training Education
CAI	Chronic Ankle Instability
CDC	Centers for Disease Control and Prevention
CE	Continuing Education
CNS	Central Nervous System
COPD	Chronic Obstructive Pulmonary Disease
CPM	Continuous Passive Motion
CPR	Cardiopulmonary Resuscitation
CT	Computed Tomography
DIP	Distal Interphalangeal

DSM IV	Diagnostic and Statistical Manual of Mental Disorders - 4th Ed.
DVT	Deep Vein Thrombosis
EAP	Emergency Action Plan
EBP	Evidence-Based Practice
ECG/EKG	Electrocardiogram
EMG	Electromyography
EMS	Emergency Medical Services
EPA	United States Environmental Protection Agency
FDA	US Federal Drug Administration
FMS	Functional Movement Screen
HIPAA	Health Insurance Portability and Accountability Act
HIV	Human Immunodeficiency Virus
HMO	Health Maintenance Organization
HR	Heart Rate
LCL	Lateral Collateral Ligament
LESS	Landing Error Scoring System
MCL	Medial Collateral Ligament
MCP	Metacarpophalangeal
MMT	Manual Muscle Test
MRI	Magnetic Resonance Imaging
MRSA	Methicillin Resistant Staph Aureus
MTP	Metatarsophalangeal
NATA	National Athletic Trainers' Association
NCAA	National Collegiate Athletic Association
NOCSAE	National Operating Committee on Standards for Athletic Equipment
NSAID	Non-Steroidal Anti-Inflammatory Drug
NWB	Non-Weight Bearing
OSHA	Occupational Safety and Health Administration
OTC	Over The Counter
PCL	Posterior Cruciate Ligament
PFP	Patellofemoral Pain
PIP	Proximal Interphalangeal
PNF	Proprioceptive neuromuscular Facilitation
PPE	Personal Protective Equipment
PPO	Preferred Provider Organization
pps	Pulse Per Second
PRN	As Needed
PROM	Passive Range of Motion
QD	Per Day
QID	Four Times a Day
ROM	Range of Motion
RROM	Resistive Range of Motion
RTP	Return to Play
SEBT	Star Excursion Scoring System
SLAP	Superior Labral Tear from Anterior to Posterior
SOAP	Subjective, Objective, Assessment, Plan

STD	Sexually Transmitted Disease
TBI	Traumatic Brain Injury
TENS	Transcutaneous Electrical Nerve Stimulation
TID	Three Times a Day
WBG	Wet-Bulb Globe Temperature
WNL	Within Normal Limits

ABSTRACTS WILL NOT BE ACCEPTED AFTER NOVEMBER 1, 2020