

# NATA Research & Education Foundation

## Peer Reviewed Track Instructions

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.

To assure the exchange of valuable information, the NATA Research and Education Foundation utilizes 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 300-400 abstracts submitted annually are blinded and peer reviewed by a minimum of three committee members. Because of the vast number of submissions and limited time and human resources, it is essential that investigators or clinicians submitting abstracts follow these instructions precisely and copy edit their own work. There is not time to request edits to abstracts like you might receive for a manuscript. Abstracts that are not submitted in accordance with the instructions below have a strong likelihood of being 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 simply mechanical in nature. We have provided these instructions in an attempt 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 26-29, 2018 – New Orleans, LA

**DEADLINE FOR ABSTRACT SUBMISSION IS NOVEMBER 15, 2017**

*(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** or **Clinical Case Study Abstract** as the primary (presenting) author, but may submit unlimited abstracts as a secondary author. All abstracts will undergo blind review. All presentations must be of original work (not previously presented). This restriction includes any electronic/internet postings. Exceptions to this restriction are limited to athletic training organizations' state and district meetings and the NATA Athletic Training Educators' Conference.

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 **Clinical Case Study Abstract** should present a unique individual athletic injury case of general interest to the NATA membership.

## Formatting Instructions

1. Prepare your abstract (on your computer) in accordance with the following instructions. You will later be directed to upload your abstract file from your computer to the Abstract Manager system.
2. Top, bottom, right, and left margins of the body of the abstract (in a WORD file) should be set at 1" using the standard 8.5" x 11" format. Use either Arial or Helvetica 12pt. font with single spacing. Provide the title of the paper or project starting at the top left margin.
3. On the next line, indent 3 spaces and 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.
4. 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 (#3), then list institutional affiliations using the following consecutive symbols (\*, †, ‡, §, †, ¶, #, \*\*, etc.)
5. Double space and begin entering the body of the abstract flush left in a single paragraph with no indentions. **The text of the body must be structured** (with the headings as indicated in the various formats below). Do not justify the right margin. Do not include tables or figures. The body of the abstract for Original Research is limited to 450 words. **The body of the abstract for a Clinical Case Study is limited to 600 words.** A word count generated by MS Word must be included at the bottom of the abstract. The word count should include the body of the abstract and structured headings.
6. 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.
7. Abstracts fall into one of the following 6 categories; the author is responsible for determining the most applicable 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.

### Basic Research

- Basic Sciences (e.g. muscle tissue biopsy, EMG, etc)
- Epidemiology (e.g. cohort, case-control, intervention, clinical trial)
- Biomechanics (e.g. motion analysis, jump landing characteristics)

## Survey Research

- Instrument development (e.g. validation and reliability, psychometrics)
- Cross-sectional survey (e.g. paper, web-based, or interview questionnaires)

## Meta-Analysis Research & Systematic Reviews

- Meta-analysis (e.g. review and analysis of ACL clinical trials)
- Systematic Review (e.g. review of all clinical trials of the ACL without analysis)

## Qualitative Research

- Research using qualitative techniques (e.g. interviews or direct observation, etc)

## Clinical Case Study Abstracts

- Report of a Single Patient Case (e.g. snake bites football player)

## Review Criteria for All Original Research 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

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## Format for Basic 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.

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**Context:** Write a sentence or two summarizing the rationale for the study, providing a reason for

the study question and/or uniqueness of study. **Objective:** State the precise objective(s) or question(s) addressed in the report, including a priori hypotheses if applicable. **Design:** Describe the overall study design of the project reported (e.g., randomized controlled trial, crossover trial, cohort or cross-sectional). **Setting:** 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). **Patients or Other Participants:** 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. **Interventions:** Interventions are the independent variables 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. Provide validity and reliability information on novel instrumentation. **Main Outcome Measures:** Clearly identify primary or critical dependent variables that support the primary objective(s) of the study. 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. Results should be accompanied by the exact level of statistical significance. The P value should not exceed 3 digits to the right of decimal. When the exact significance is below  $P < .001$ , the exact significance should be reported as  $P < .001$ . **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. If possible, relate implications of the findings for clinical practice. **Word Count:** Limited to 450 words 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 provides 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 data bases with multiple variables do not need to report all descriptive data, but should provide descriptive data for those variables which the author(s) believe to be the primary outcome(s) and support the overall conclusions of the study.*

## Format For Survey Research Abstracts

### The Title of your Abstract Bolded and in Title Case

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**Context:** Write a sentence or two summarizing the rationale for the study, providing a reason for the study question. **Objective:** State the precise objective(s), purpose or question(s) addressed in the report. **Design:** Describe the overall study design of the project reported (e.g., cross sectional, case-control, longitudinal or controlled intervention trial).

**Setting:** Describe the environment in which the study was conducted to help readers understand the transferability of the findings, (e.g., population-based, patient clinic, classroom or

athletic event). **Patients or Other Participants:** Describe the underlying target population, sample selection procedures (e.g., population based, volunteer or convenience sample, random or systematic sample, or stratified or cluster sampling) and important aspects of the final subject pool (e.g., number, average age, years of experience or gender). Provide the final response rate. **Interventions:** Interventions are the independent variables in the study. Describe the essential pieces of the experimental methods, the mode of survey administration (e.g., in-person interview, telephone, self-administered, online or computer-assisted), details of the survey development (formative research or pre-testing for new instruments), execution and data collection process, and instruments utilized. Provide validity and reliability information for all new instruments. **Main Outcome Measures:** Clearly identify primary or critical dependent variables that support the primary objective(s) of the study. Describe how any data was manipulated (e.g. scoring process for scaled instruments or categorization of variables). Indicate the data and statistical analysis employed to answer the primary research objective(s). **Results:** The main results of the study should be given. 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. Results should be accompanied by the exact level of statistical significance. The *P* value should not exceed 3 digits to the right of decimal. When the exact significance is below  $P < .001$ , the exact significance should be reported as  $P < .001$ . **Conclusions:** Summarize or emphasize the new and important findings of the study and relate implications of the findings for clinical practice. The statement of your findings must be consistent with the results as reported and should be no more than three to four sentences. **Word Count:** Limited to 450 words 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 provides 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 data bases with multiple variables do not need to report all descriptive data, but should provide descriptive data for those variables which the author(s) believe to be the primary outcome(s) and support the overall conclusions of the study.*

## Format For Meta-Analysis and Systematic Reviews

### 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.

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**Context:** Write a sentence or two summarizing the rationale for the study, providing a reason for the study question. **Objective:** State the precise objective(s) or question(s) addressed in the report, including a priori hypotheses if applicable. **Data Sources:** Identify how relevant research papers were identified – include databases and timeframe, key words and search limits. **Study Selection:** Describe the processes through which studies were selected for inclusion for further analysis. **Data Extraction:** Identify the number of investigators, the descriptive and measurement data obtained and if and how the quality of study methods was evaluated. **Data Synthesis:** Describe how the data were organized, the statistical procedures applied (during assessment of heterogeneity) and the results (e.g., effect sizes, odds ratios and 95% confidence

intervals) of the analysis. **Conclusions:** Summarize or emphasize the new and important findings of the study and relate implications of the findings for future research and/or for clinical practice and offer an indication as to the strength of the evidence provided. The statement of your findings must be consistent with the results as reported. **Word Count:** Limited to 450 words including headings.

## Format For Qualitative 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.

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**Context:** Briefly explain the rationale for the study—provide a background for the study question.

**Objective:** State the precise objective(s) or question(s) addressed in the report. **Design:** Describe the overall study design of the project reported (e.g., case study, phenomenology or grounded theory). **Setting:** Describe the environment in which the study was conducted to help readers understand the transferability of the findings, (e.g., clinical setting or educational institution).

**Patients or Other Participants:** Describe the underlying target population, selection procedures and important aspects of the final subject pool (e.g., number, average age and measures of variance, years of experience or gender). Describe the essential pieces of the sampling methods (e.g., theoretical sampling and criterion sampling). Comment on why this number of participants was used (e.g., data saturation guided the total number of participants selected for the study).

**Data Collection and Analysis:** Describe how the data were collected (e.g., interviews, observations or document analysis), managed (e.g., interviews were recorded and transcribed verbatim; identify if software was utilized) and analyzed (e.g., the interviews were analyzed using an inductive content analysis). Include intercoder agreement information if relevant to the study. Identify any verification strategies used to ensure trustworthiness (e.g., indicate form of triangulation, or use of peer debriefer). **Results:** A short descriptive account of the case or the interpretation of the findings should be provided. This should include identifying and briefly explaining the emergent categories of themes. **Conclusions:** Summarize or emphasize the new and important findings of the study and relate implications of the findings for future research and/or for clinical practice. The statement of your findings must be consistent with the results as reported and should be no more than five sentences. **Word Count:** Limited to 450 words including headings.

## Format For Clinical Case Study Abstracts

**“New for 2017 - Case study guidelines have changed. There are now four categories of Case studies. Please review submission guidelines carefully.”**

**NOTE:** All clinical case report abstracts submitted to Free Communications must have permission of the patient prior to submission. Click [here](#) for sample of 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,<sup>1-4</sup> 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

\*The level of the clinical case should be indicated in the abstract body and/or title to facilitate the review process.

**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

[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:** 600



## Level 4 Clinical CASE Study Abstract Guidelines

### The Title of your Abstract Bolded and in Title Case

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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 clearly 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 including headings.

### Acceptable Abbreviations

ACL	Anterior Cruciate Ligament
ADL	Activities of Daily Living
AROM	Active Range of Motion
BESS	Balance Error Scoring System
BOC	Board of Certification
CAATE	Commission on Accreditation of Athletic Training Education
CAI	Chronic Ankle Instability
CNS	Central Nervous System
CT	Computed Tomography
DVT	Deep Vein Thrombosis
EMG	Electromyography
FMS	Functional Movement Screen
HRQL	Health Related Quality of Life
LCL	Lateral Collateral Ligament
LESS	Landing Error Scoring System
MCL	Medial Collateral Ligament
MRI	Magnetic Resonance Imaging
NWB	Non-Weight Bearing
PCL	Posterior Cruciate Ligament
PFP	Patellofemoral Pain
ROM	Range of Motion

RROM  
SEBT

Resistive Range of Motion  
Star Excursion Scoring System

**ABSTRACTS WILL NOT BE ACCEPTED AFTER NOVEMBER 15, 2017**