Promoting Access to Assistive Technology

RESNA/NCART 2016 Conference ◆ Arlington, VA ◆ July 12-14, 2016

In partnership with NRRTS

SCIENTIFIC PAPER SUBMISSION INSTRUCTIONS

Deadline: 11:59 p.m. ET on February 17, 2016

This document provides detailed instructions on submitting your work as one of the following types of papers to be presented at the RESNA/NCART 2016 Conference:

- Research
- Practice and Service Delivery
- Public Policy and Education

1. OVERVIEW

All submissions for the RESNA/NCART Conference will be reviewed by judges who are professionals in the field. Accepted papers will be presented at the conference and published in the conference proceedings, which will be made available online.

Presentations

Authors of accepted papers will be expected to present their work during a poster session at the RESNA/NCART Conference. Four or five of the accepted papers from each topic area will be selected for presentation together as a 75-minute platform session, instead of a standard poster session. The selection of papers for the platform sessions will be made by the conference program committee and based on content that helps complete or balance the overall program. Authors cannot choose the format in which their paper will be presented. Assignment to one or the other format is not a reflection of the quality of a paper. (Additional information on presentation formats is provided in Section 10, below.)

Publication Options

Authors of accepted papers are able to select to publish either their full paper, or the abstract-only, in the conference proceedings. The abstract-only option is only for authors who plan future submission to scholarly journals and wish to avoid strict restrictions on "prior publication" established by some journals (e.g., Archives of PM&R and some medical journals).

- Authors considering requesting the abstract-only publication option; especially students are encouraged to research the requirements of their targeted publications and consult with their advisors on this issue.
- Authors who wish to submit their paper to the RESNA Assistive Technology Journal do not need to limit their publication to an abstract, as the proceedings CD is not considered to be prior publication by the Journal editors.
- Winners of the Student Scientific Paper Competition are required to have their entire paper published in the conference proceedings, not just their abstract.

Student Scientific Paper Competition

RESNA will conduct a student scientific paper competition. Full time students in either an undergraduate or graduate academic program are eligible. To enter the competition, simply submit a paper through the online process. Papers are reviewed with other scientific papers; however, student papers that are accepted are then moved to a second review process, specifically for the student scientific paper competition. Winners are selected and their papers are presented during a platform session at the conference. When submitting a paper to be considered for the Student Scientific Paper Competition, the author must include a Letter of Certification from a faculty member verifying that the first author was a student and carried out a majority of the work presented in the paper.

Eligibility for Student Scientific Paper Competition

- Any research substantially performed while an individual is a full time student in either an undergraduate or graduate academic program.
- Work of part-time students performed completely as part of his or her academic requirements and not related to other professional research.
- Student must be listed as the first author and must have carried out a majority of the work presented in the paper. Letter of Certification from a faculty member must be submitted with the paper.
- More than one paper can be submitted to the competition but no student will receive more than one award per year.
- The same paper cannot be submitted to both the Student Design and Student Scientific Paper competitions.

2. DEADLINE

Papers must be submitted via the online system no later than 11:59 pm ET Wednesday, February 17, 2016.

3. TYPES OF PAPERS

Authors must classify their papers as one of the following paper types:

- RE **Research**: Scholarly or scientific investigation and inquiry into rehabilitation technology-related issues. Research papers should be hypothesis-driven and should explore, through methodical investigation, a specific research question. Concrete results and discussion should follow.
- PR Practice and Service Delivery: Practice papers may include an actual case study or single event, documenting background of problem, options for intervention, resolution and costs. A practice paper may also report on the feasibility, design, or modification of a device, method, or system for future research or for commercialization purposes. Practice papers are generally not formal hypothesis-driven papers, but may describe the development and validation of methods/technology that may be used in future hypothesis-driven research.
- PP **Public Policy and Education**: Report on legislation, reimbursement, service delivery programs and administration, Tech Act projects, technology transfer, telerehabilitation, AT Education, distance learning, advocacy efforts, credentialing, etc.

4. TOPIC AREAS

Authors must classify the scope and content of their papers into one of the following topic areas:

- CAC **Computer Applications & Communication**: Augmentative and alternative communication, new or emerging technologies and applications, assessment and intervention strategies, language representation techniques, clinical/technical AAC research and developments, funding issues, service delivery options, outcomes measurement, computer access and use, innovation in software and hardware, training strategies, integration of computer technologies, alternative access, outcomes measurement.
- COG **Cognitive and Sensory Impairments**: Cognitive disabilities, learning disabilities, developmental disabilities, cognitive rehabilitation and aids to memory, low vision/blindness, hearing impairments, aging and cognition changes.
- INT **Internationally Appropriate Technology**: Providing services or conducting research relative to assistive technology in developing countries and other resource limited environments.
- JEA **Job & Environmental Accommodation Including Ergonomics**: Access to employment, education, or built environments, ergonomics, farming and other rural interventions, EADL systems, universal design of products, places & systems, home accessibility, liability and legal issues associated with home access and workplace modifications.
- NEW **Emerging Technology**: Emerging technologies are new technologies and innovations with the potential to improve the health and well-being of people with disabilities.
- OUT **Service Delivery and Outcomes**: Service delivery programs and administration, telerehab, models, challenges, funding and best practices, ethics for practitioners; outcomes measurement tools, application, importance, practice; measuring/quantifying function, documenting change in performance, testing validity and reliability of measurement instruments.
- PP **Public Policy and Advocacy**: Legislation, credentialing and certification, advocacy for assistive technology funding, access to services, nationwide or model programs.
- SM Seating and Mobility Including Complex Rehab Technology (CRT): Seating and wheelchair interventions, transportation issues, vehicle modifications, user training, wheelchair features and client/diagnosis matching, objective tests, custom vs. off-the-shelf solutions, documentation and outcome measures for funding approval, mobility issues over a lifespan.
- OTH Other (please describe): Psychosocial aspects associated with accepting assistive technology at different stages of life/for different diagnoses, serving baby-boomers, assistive technology and end-of-life issues, grant writing and how to identify partners and resources, strategies for cognitive rehab, aging into multiple disabilities. Other topics will also be considered.

5. REVIEW CRITERIA

Each paper will be reviewed according to the criteria listed below.

Abstract/Background/Statement of Problem or Research Question

Does the Abstract concisely describe the content of this paper? Is the Statement of the Problem or Objective clear? Is the end user's need clearly identified? Does the background information support the need for this study/development/policy issue? Is reference to previous work delineated clearly (if appropriate)?

Methods/Approach/Solutions Considered

If a research paper, are the methods clearly described and appropriate for achieving the stated objective? Is the research design appropriate and does it respond to the stated needs? If a practice or policy paper, are current methods or technologies considered? Are the solutions consistent with current clinical/design practice? Are methods to address the end user's need adequately addressed? If applicable, have alternate methods to address the needs been presented and/or explored?

Evaluation/Results/Resolution/Discussion/Outcome/Performance & Cost/Implications**

**May not be applicable for all Public Policy submissions

If a research paper, are results well-documented, valid and reliable? Are appropriate statistics used? If a practice paper, was an evaluation attempted? Do results/conclusions address wider use of the new device/methods/information gained? If design related, are appropriate design details and analysis presented? For all, are the conclusions/implications reasonable? Does the discussion demonstrate how the model/policy/solution/device addresses the issue? Is the discussion consistent and relevant to the needs described in the Problem Statement/Objective?

Overall Quality of Presentation

Is the paper understandable and well-organized? Are the flow of information and development of ideas presented in a logical and easy-to-follow fashion? Are the grammar and spelling correct? Are the figures and figure legends clear? Are appropriate references provided (when relevant)?

Subject Matter

Is the subject matter timely and relevant to the RESNA/NCART audience, and not too narrowly focused? Is the paper appropriate for the designated topic area? Is the content noteworthy? Will this paper add to the existing knowledge in the field? Is there sufficient detail for an out-of-field observer to follow the presentation? Does this paper provide a foundation for future work?

6. AUTHOR NOTIFICATION

Authors will receive notification indicating acceptance or rejection by April 6, 2016. The most common reasons for paper rejection include:

- 1. Failure to follow formatting and submission guidelines
- 2. Falling outside the areas of interest/expertise of the RESNA/NCART audience.
- 3. Having a seriously flawed approach to conducting the work reported.
- 4. Failing to substantiate the claims made in the paper.
- 5. Incomplete in methodology, results, or documentation.
- 6. Previously submitted or published.
- 7. Numerous grammatical errors or failure to adequately proofread.

7. FORMATTING YOUR PAPER

The following guidelines provide explicit instructions on how to format your paper to facilitate the review process and comply with electronic accessibility requirements for the conference proceedings. The format must be followed precisely in order to make your paper accessible to individuals with visual impairments and to enhance our ability to publish the paper in electronic format on the RESNA website. Failure to adhere to these guidelines will hinder the review and publication process and may result in your paper being rejected.

Paper Structure and General Style Guidelines

Template: ALL papers must be formatted according to the template, which is available on the RESNA website.

Sample Paper: Authors should review the sample paper, which is available on the RESNA website, in order to gain the clearest idea about style and layout guidelines.

Style Manual: Authors can also refer to accepted style guides, such as the *Manual of the American Psychological Association (APA)* (3rd Edition or later).

Submission of Files: You will need to upload the following files to the online system. The total allowable size for each file is 5MB.

1. Your full paper to include all tables, charts, and figures placed appropriately.

letter is used, that letter should be identified in parentheses - for example, "λ (lambda)".

- 2. A blinded copy of the full paper. The blinded copy will be the full paper minus the names of all of the author names and affiliations, as well as any acknowledgement section.
- 3. Alternative text for all non-text elements of your paper, and any photos included in your paper separately.
- 4. Student scientific paper authors will need to upload a letter of certification from their advisor/member of the faculty indicating that the author is (or was) a student at the time the research was conducted.

PLEASE NOTE: You will also be required to paste your abstract into the system. Your abstract cannot exceed 2000 characters.

Naming your Files: All files should be submitted in an editable format (doc or docx), rather than a PDF. Please name your file using the name of your paper.

Technical Guidelines

Equations: Equations should be accompanied by text equivalent of the equation. For example, the quadratic formula $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$) should be accompanied by the text equivalent "x equals the quantity minus b plus or minus the square root of the quantity b squared minus four a c, that quantity divided by two a". Whenever a special symbol or Greek

Images: All images must be included as separate files, with at least an 800 pixel width. Images can be in png, jpg, or gif formats. Image should include a text equivalent (ALT text) providing the information that the image is intended to convey. The ALT text is not a description of the image (e.g. "a graph showing the relationship between speed and force") but the information of that image (e.g. "The data shows that as speed increases, the force increases as the square of the speed.").

Tables: Tables do not need ALT text, but do need to be submitted as true tables. This means that it is submitted either as an excel spreadsheet or table within a word processing document. If it isn't possible to select and copy the contents of an individual cell of the table, it isn't a true table. It is allowed to color columns or cells individually, but the inclusion of graphical symbols, rotated text, etc. is not possible.

Alternative Text Descriptions

When writing your text alternatives for non-text elements, there are a few points to keep in mind that will make your paper more accessible.

General ALT Text: The W3C requirement is that all non-text elements be accompanied by an alternative text to convey the same information. The user of your ALT text will be someone who cannot see your image (e.g. blind or using a text only browser), but wants your information. The content of your ALT text should be what you wanted the reader to get from your image, not a description of the image.

For example, for Figure 1, one might say "Picture of an alternative keyboard layout." While this is true, it tells the reader who cannot see the image nothing other than that this is an alternative layout, not QWERTY. But the reader has no information about what the alternative layout is.



Figure 1.

A slightly better alternative text would be "Picture of the Chubon keyboard layout." This allows the reader to put a label on the image, but still gives no information about its content.

A satisfactory ALT text might say something like: "Picture of the Chubon keyboard layout. This layout moves the most frequently used letters to the center of the keyboard, and also places frequent letter pairs close together. The overall key layout matches that of the conventional keyboard, with the space bar in the bottom middle and shift keys to each side. The arrow keys and enter are located on the right." This ALT text gives the reader an overall impression of the keyboard without simply reading off the rows of keys, which would make the pattern very hard to grasp.

Equations: All equations must have accompanying ALT text, especially those that use non-English symbols. Most screen readers ignore symbols that are not standard alpha-numeric, including pi, theta, and other standard mathematical symbols. Imagine you are giving someone the formula over the telephone, and write what you would say.

Tables: Standard numerical tables do not require ALT text, though a description of the purpose of the table is requested. However, this is true only if your table is, in your document, alpha-numerical. Some applications, when pasting a table, will silently convert it to a graphic, which is not accessible. If you are not able to select text from a table in the finished document, it will not be accessible to screen-readers and other assistive technology. If you cannot insert the table as text, you must send a copy of the table in a form that is compatible with Excel (including csv and tab-delimited text).

For tables that include graphics, bar charts or other non-text elements, you must provide ALT text for those elements, or for the table as a whole.

Please keep in mind that we are required by policy to make the information of your paper available to all readers, and that ALT text is an important part of that process.

8. SUBMITTING YOUR PAPER

Papers must be submitted via the online system no later than 11:59 pm ET Wednesday, February 17, 2016. Go to https://cmt.research.microsoft.com/RESNA NCART2016 to submit your paper.

You will need to upload the following files to the online system. The total allowable size for each file is 5MB.

- 1. Your full paper to include all tables, charts, and figures placed appropriately.
- 2. A blinded copy of the full paper. The blinded copy will be the full paper minus the names of all of the author names and affiliations, as well as any acknowledgement section.
- 3. Alternative text for all non-text elements of your paper, and any photos included in your paper separately.
- 4. Student scientific paper authors will need to upload a letter of certification from their advisor/member of the faculty indicating that the author is (or was) a student at the time the research was conducted.

PLEASE NOTE: **PLEASE NOTE**: You will also be required to paste your abstract into the system. Your abstract cannot exceed 2000 characters.

Once you've submitted your paper, you will have the option to send yourself a confirmation email message from the "Submission Successfully Saved" screen. This is the only confirmation message you will receive, as the system does not automatically send one.

If you have problems submitting your paper, please contact the RESNA office at conference@resna.org with subject line Scientific Paper 2016.

Submission Accommodation

If you are unable to utilize the online process due to disability-related reasons, you can submit your paper and supporting files by email to: conference@resna.org with the subject line Scientific Paper 2016. Please include the title of the paper and the submitting authors' last name in the body of the email message.

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Paper is saved as two files (full paper and blinded) as doc or docx, and files are no larger than 5MB.
Submit paper online at https://cmt.research.microsoft.com/RESNA NCART2016 unless unable to do so due
to technical or disability-related reasons.
Alternative text has been uploaded for all non-text elements
For Student Scientific Paper Competition Submissions: Upload another file that is a Letter of Certification
from a faculty member verifying that the first author was a student and carried out a majority of the work
presented in the paper.

9. PRESENTATION FORMATS

The presentation format of each paper will be determined by the conference organizers. Authors should be aware that nearly all of the accepted papers will be presented in an open, free flowing poster session.

Poster Sessions

Poster sessions will be scheduled for 1.5 hour time blocks on the first two days of the conference. Authors will be assigned to one of the 1.5 hour time blocks, either on the first day or on the second day of the conference. On the day of their scheduled poster presentation, authors will be assigned to a 4' x 8' poster board. They will affix their posters on a 4' x 8' poster board and stand next to their posters to present them at their scheduled time, and then dismantle the posters at the end of the day. (Authors will be notified of any changes to this process prior to the conference.) Authors should be prepared to discuss their work with individuals and small groups of people throughout the time slot.

On-site participation of the authors is critical to the interactive nature of the poster sessions, which serves to stimulate spontaneous and dynamic networking, brainstorming, and information gathering between the authors and the attendees.

Accessibility: In order to make the papers accessible to persons with visual or other types of disabilities, authors *must* be physically present during their assigned time-slot so they can verbally interact with the attendees.

Audiovisual Equipment: Due to constraints related to assigned space and location, no audiovisual equipment, tables or outlets will be provided for the poster sessions. Authors should not rely on the use of their laptops.

Platform Sessions

Platform sessions are scheduled in 75-minute time blocks in which a panel of 4-5 authors present their papers in a related topic area. Authors whose papers are chosen for a platform session will be expected to prepare a 10-12 minute oral & PowerPoint presentation so that there will be some time for questions and discussion. The session coordinator may moderate additional discussion as time allows.

Audiovisual equipment: Platform sessions will be furnished with an LCD projector and screen. Presenters <u>must</u> bring their presentation on a CD-ROM or USB flash drive that can be opened on a PC for a quick, smooth, and professional transition. A laptop will be provided by the conference organizers.

10. ASSISTIVE TECHNOLOGY JOURNAL

Assistive Technology, RESNA's official journal, invites authors of accepted papers to submit a longer, full-length manuscript. Such articles, which are peer reviewed, can describe applied research, reviews, case studies, practical notes, trends, practices or policies. Visit www.resna.org and click-on the AT Journal link to see submission guidelines. Editors will be glad to assist first time authors with the process.

11. FREQUENTLY ASKED QUESTIONS

- Q: Who can submit a paper to the RESNA/NCART Conference?
- A: Any individual or group can submit a paper.
- Q: I'm confused by the Topic Areas and not really sure where my proposal fits.
- A: Select the Topic Area "Other" and the program committee will confirm the category for your paper.
- Q: Should I submit BOTH an electronic and hard (paper) copy of the paper?
- A: No hard copies, please. The electronic format is mandatory. If it is saved correctly in doc or docx format, and each file is no larger than 5 MB, there should be no problems.
- Q: I am unable to utilize the online system. What do I do?
- A. If you have technical difficulties, please contact the RESNA office at conference@resna.org with subject line Scientific Paper 2016.
- Q: If my paper is accepted, I understand that I will be invited to present it during the RESNA/NCART 2016 Conference. Will I need to register and pay to attend the conference?
- A: Yes; if an author wants to attend conference workshops, plenary sessions and receptions, they must register and pay applicable registration fees. However, if an author only wants to present his/her paper on the designated day/time and does not want to attend conference sessions, they will receive a pass allowing access to the exhibit hall ONLY, which is where the poster sessions will be held. Only one exhibits-only pass will be provided per paper accepted.
- Q: If my paper is selected and we have multiple authors, who can attend and/or present the paper?
- A: At least one author from each accepted paper <u>must</u> be at the conference to present the paper. Any/all additional authors are welcome to attend the conference by registering and paying applicable fees. There is no limit to the number of authors who present the paper at poster sessions. However, if a paper is selected for presentation as a Platform Session, then only one author can present that paper.