Call for Student Platform Presentations
April 20th, 2013

Submission deadline: March 8th, 2013

The MNPTA Research Committee requests that each of the four DPT academic programs in the state of Minnesota (College of St. Scholastica, Mayo Clinic College of Medicine, St. Catherine University, and the University of Minnesota) nominate one outstanding student/student research group to present at MNPTA Spring Conference. Students will present orally using the platform presentation format. Suggested criteria for nomination include quality of the research, quality of the student’s(s’) presentation skills, clinical interest, and student willingness and availability to present at Spring Conference.

Once your student/student group is nominated, please ask that they forward the attached abstract submission form (see page 2) to John Schmitt, Research Committee Co-Chair (jsschmitt@stkate.edu). Any informative submission is welcome including work that has been presented at other conferences or symposia (e.g., CSM).

Platform Presentation Format
A platform presentation is a 20 minute oral presentation of a research paper to a seated audience followed by 5 minutes of question time, moderated by a chair.

Suggestions for platform content:

Research type reports, such as (but not limited to):
- Single subject design studies
- Clinical trials including pilot projects
- Basic or applied research
- Qualitative research
- Systematic review of the literature

Case reports
- Unique or interesting patient diagnosis or presentation
- Unique or interesting intervention approach
- Application of evidence based practice approach to a clinical case

Special interest reports, such as (but not limited to):
- Observed or measured outcomes from a new or adapted treatment or protocol
- Unique patient education techniques
- Meeting patient or community needs
- Critical review of the literature
- Wellness or injury prevention program
- Reports on new programs of interest to physical therapists

This is not an appropriate venue for advertisement of products or services.

For further information on platform presentations, contact research committee member John Schmitt (jsschmitt@stkate.edu). For further information about state conference, visit the MN Chapter website at http://www.mnapta.org/, phone the MNPTA chapter offices at (651) 635-0902, or fax at (651) 635-0903.
MNPTA Abstract Submission Form for Platform Presentation

To be eligible for presentation, this application must be **received** by the MNPTA Research Committee by **Friday March 8th, 2013**. Applications may be sent by email attachment directly to research committee chair John Schmitt (jsschmitt@stkate.edu). All communication regarding this abstract submission will be limited to the individual named on this form at the e-mail listed.

Each student platform presenter who wishes to attend the entire Saturday conference will receive a 50% discount from the conference registration fee. Registration materials will be sent with the notification of acceptance for presentation.

Please include the information below with your submission:

<table>
<thead>
<tr>
<th>STUDENT NAME(S): List each author’s last name and initials without titles or degrees.</th>
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<tbody>
<tr>
<td>Johnson, K, Schwartzhoff, B, Silva, S, Terk R</td>
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<th>SCHOOL:</th>
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<td>St Catherine University</td>
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<tr>
<th>ADVISOR:</th>
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<tr>
<td>Laura Gilchrist, PT, PhD, David Chapman, PT, PhD</td>
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<tr>
<th>HUMAN SUBJECTS PROTECTION: Provide a specific statement regarding compliance with protection of subjects or records of subjects participating in this project, including notice of IRB approval, if applicable.</th>
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<tbody>
<tr>
<td>IRB approval was obtained from Children’s Hospitals and Clinics of Minnesota</td>
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<tr>
<th>FUNDING/CONFLICT OF INTEREST: Disclose of source of funding and/or potential conflicts of interest for this project (if none, indicate “none”).</th>
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<th>PHONE (PRIMARY)</th>
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<td>(715) 699-2569</td>
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<tr>
<th>E-MAIL ADDRESS (one student contact and advisor)</th>
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<tbody>
<tr>
<td><a href="mailto:lsgilchrist@stkate.edu">lsgilchrist@stkate.edu</a></td>
</tr>
<tr>
<td><a href="mailto:bschwartzhoff@stkate.edu">bschwartzhoff@stkate.edu</a></td>
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<th>TITLE OF PRESENTATION (ALL CAPS):THE IMPACT OF CHEMOTHERAPY ON THE NEUROMUSCULAR COMPONENTS OF GAIT</th>
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ABSTRACT (Limited to 300 Words; see next page for format):

**Background and Purpose:** Pediatric cancers affect over ten thousand children in the United States each year. Although survival rates continue to improve, debilitating long-term side effects from cancer treatment are emergent. The purpose of this prospective, cross-sectional study was to investigate the effects of chemotherapy on selected gait characteristics in children ages five to eighteen.

**Subjects:** Sixty children with and thirty-six without cancer participated in this study.

**Methods:** The data was collected in the oncology program of the two campuses of Children’s Hospitals and Clinics of Minnesota. Each participant completed impairment testing for neuropathy, ankle range of motion, and strength. Selected gait characteristics were recorded using the GaitRite Gait Analysis System. Each subject completed a 6 minute walk test.

**Analyses:** MANOVA procedures were used to test for statistical significance (p < .05).

**Results:** Subjects with cancer demonstrated significantly slower walking velocity, decreased cadence, and shorter step length compared to controls. No significant gait differences were found between patients who received vincristine and those who received IT methotrexate and vincristine. Within the cancer group, significant correlations were found between ankle dorsiflexion strength, neuropathy, and balance with velocity, cadence, and step length. Significant correlations were also found between the distance walked in six minutes with velocity and step length.

**Conclusions:** Children who received chemotherapy had significantly slower velocities, decreased cadence and shorter step lengths when compared to controls. However, adding IT methotrexate to vincristine did not significantly impact gait characteristics. The distance children with cancer walked in six minutes was negatively impacted by their decreased velocity and step length.

**Implications:** This population may benefit from physical therapy designed to improve underlying impairments like ankle strength, gait velocity, cadence, and overall function.
Format Guidelines for MNPTA Abstract Submission Form
Platform Presentations

For Research Report Abstracts, Please Include the Following Subheadings:
- BACKGROUND AND PURPOSE: What were the major reasons for doing this study or for formulating your research hypothesis? Provide a clear statement of your purpose.
- SUBJECT(S): Describe the number and relevant characteristics of subjects.
- METHODS AND MATERIALS: What was your research design? What key measurement methods were used in this project?
- ANALYSES: Describe the type(s) of qualitative/quantitative data analysis used to assist you in interpreting your data.
- RESULTS: Briefly summarize the main findings derived from your analysis.
- CONCLUSIONS: What can you logically conclude through the analysis of your data? What are the suggestions for future work?
- IMPLICATIONS: What are the implications for physical therapy practice?

For Case Report Abstracts, Please Include the Following Subheadings:
- BACKGROUND AND PURPOSE: Please provide relevant rationale for presenting this case report, along with a clear statement of your purpose.
- CASE DESCRIPTION: Include key history and examination findings, patient evaluation, and plan of care. How did your intervention change over time?
- OUTCOMES: What were the key outcomes for your case?
- CONCLUSIONS: Describe the key findings and/or clinical implications of your case.

For Special Interest Report Abstracts, Please Include the Following Subheadings:
- BACKGROUND AND PURPOSE: What were the major reasons for developing the new or adapted program, method, or theory? Please provide a clear statement of your purpose.
- DESCRIPTION: What methods, materials and principles did the project involve and how have these been developed and used?
- OBSERVATIONS: What reactions and responses have you encountered when the program, method, or theory has been put to use?
- CONCLUSIONS: What is the significance of this work for physical therapy, and what are your suggestions for future work related to this project?
- IMPLICATIONS: What are the implications for physical therapy practice/management/education/policy?

By submitting an abstract, you are agreeing to abide by MNPTA policy regarding platform presentations. You agree that you are willing to present your research in person at the MNPTA conference. No materials can be provided to meeting attendees with the exception of a copy of the abstract submitted to the MNPTA.