

University of Maryland Baltimore Graduate School  
**Announcement of Doctoral Dissertation Defense\***

Candidate: Chia-Chun Tsai

Date, Time, and Place: November 19, 2007, 14:00pm-16:00pm, Room503 at School of Nursing

Dissertation Title: The Effect of Animal-Assisted Therapy on Children's Stress During Hospitalization

Dissertation Abstract\*\*:

Hospitalization is a major stressful experience for children. The stress associated with hospitalization of children may lead to physiological and psychological sequelae resulting from adverse stress. Animal-assisted therapy (AAT) has been used to alleviate the stress of hospitalization and health care experiences. Although AAT frequently is used with hospitalized children, little scientific evidence evaluates the use of AAT with hospitalized children. This study examines the effects of AAT on physiological (blood pressure, heart rate, and salivary cortisol) and psychological [Child Medical Fear Scale (CMFS) and State Anxiety Scale (SAS)] responses in hospitalized children. A quasi-experimental repeated measures study was conducted in pediatric settings. Children (8 girls, 7 boys, aged 7 to 17 years) participated in AAT and person visits (PV) on two consecutive days; they were assigned to AAT (n=9) or person (n=6) visits first. Children's systolic (SBP) and diastolic (DBP) blood pressures and heart rates (HR) were measured 9 times, 3 pre-, during, and post-each visit. Salivary cortisol samples were collected pre- and 20 minutes post-visits; CMFS and SAS scales were collected post-visits. Repeated measures ANOVAs, t-tests, and correlation/regression were used for data analysis. Girls tended to have lower CMFS than boys post-visits; girls tended to be less anxious than boys post-AAT ( $p < .10$ ). Previous hospitalization was not related to CMFS or SAS. Older children had a lower CMFS post-visits ( $p < .05$ ), and tended to have lower SAS post-AAT ( $p < .10$ ). Age was related negatively to CMFS ( $p < .05$ ) but not SAS. SBP responses depended on visit order. In the PV first group, SBP decreased from pre- to post-AAT ( $p < .05$ ), and did not change from pre- to post-PV. SBP did not change in the AAT first group. Changes in DBP were not parallel for AAT and PVs. DBP did not change from pre- to post-AAT and increased from pre- to post-PVs ( $p < .05$ ). Visit type didn't affect HR. After AAT CMFS tended to be higher than after the PV ( $p < .10$ ). This study indicates that AAT can decrease physiological arousal for hospitalized children and suggests that AAT may be useful in health care settings to play a part in decreasing hospitalized children's stress.

Dissertation Committee Chair (name and title): Erika Friedmann, Professor

Dissertation Committee Members (names and titles):

Sue Ann Thomas, Professor and Assistant Dean for the Doctoral Program

Patricia Morton, Professor and Associate Dean for Academic Affairs

Deborah Jones, Assistant Professor

Shoshana Ringel, Assistant Professor

*\*The Open Presentation is open to the university community and invitees of the candidate. Any member of the Graduate Faculty may observe the Final Examination. Only committee members may vote. For more information, see **Procedures for Examination of the Doctoral Dissertation.***

*\*\*You must type your abstract on this form in the space provided.*

*Updated: February 24, 2006*