Open Forum Research Discussion:
Promising Research Directions

The Open Research Forum provided an opportunity for both university and program-based researchers to discuss ongoing and proposed research projects.

Carol Rathmann, Director, Forget Me Not Farm

Carol Rathmann, Program Director of Humane Society & SPCA of Sonoma County Program Director, developed and has directed Forget Me Not Farm since 1992. With more than 30 years of experience in humane education and animal welfare, Ms. Rathmann holds a Master's Degree in Psychology. Her studies focused on the effects of abuse, neglect and trauma on early childhood development. She is a Registered Veterinary Technician with certification from Harcum College (1996) as a Specialist in Animal Assisted Activities and Therapy. Ms. Rathmann has received numerous awards for her innovative work at Forget Me Not Farm, including Prevent Child Abuse California's Henry Bergh Award in 1994, for the year's most innovative program for child abuse treatment and prevention.

The major points from Ms. Rathmann's presentation are as follows:

- There is no magic bullet in instrumentation for evaluating animal assisted interventions
- Videotaping is a good strategy to document what is happening in programs. Forget Me Not Farm is having experts from a variety of disciplines analyze 18 hours of videotape.

Preliminary findings from the following studies were reported upon during the Open Forum Research discussion:

Kate Nicoll, MSW, LCSW, Soul Friends
The Benefits of Animal Assisted Interventions and TAGteach in Improving Eye Contact and Body Awareness in Special Needs Children

A goal-directed animal assisted therapy group, Come, Follow Me! has shown success in the integration of TAGTeach (Teaching with Acoustical Guidance) in a population of special needs children. Research has commented on the motivating factor of animals in treatment, as well as the ability of these interactions to assist with learning about appropriate touch and boundaries, improve communication and reduce isolation (Chandler, 2001). Come Follow Me! is a six session program of social skills development and dog training for children living with autism spectrum disorders, ADHD and other developmental challenges. The incorporation of clicker training, known as TAGTeach in human interactions, has shown encouraging results in improving attention and body awareness in diverse populations including gymnasts and children living with autism. Interactions with animals have been thought to be able to increase focus and attention, as well as to be agents of de-arousal (Kruger et al 2004). In this study, eye contact and body awareness was tracked in five
children participating in the group program. Children were given a TAG point, such as “look at me” or “hands by your side” during interactions with both the therapy dog and group leader in an attempt to promote prosocial behavior during social communication. The children’s TAG points were tallied by an outside observer and the child was rewarded in the moment by success in the human-animal interaction and later with a workbook and sticker book that tracked their positive behavior. A pre and post questionnaire completed by parents by three of the participants noted improvement in several areas of social communication including eye contact for two of the children. This pilot study demonstrated the benefits of a didactic approach of TAGteach and the integration of animal assisted interventions in a group program for special needs children.

Kate Nicoll, MSW, LCSW, Soul Friends
The Effectiveness of a Curriculum Based Animal Assisted Intervention Psychotherapy Group on Hopefulness and Empathy in Adolescents

During the period of June-July, 2006 a group of 8 adolescents (3 girls, 5 boys) who were students in an inner city technical high school in Connecticut went through the Heeling Hearts program using a newly developed student workbook. The workbooks were developed by the Heeling Hearts program founders, Kate Nicoll, M.S.W. and Cindy Tifone, MA., in connection with Suzanne Duke, Ph.D., who received a grant from Southern CT State University to help develop the workbooks and pilot test their effectiveness in enhancing the program.

Parental or guardian consent was obtained before pre and post testing was obtained from each of the students. Students were identified by the school psychologist and were part of an anger management group. Both before and after the 8-week program, the students each took two paper and pencil tests. The first was Bryant’s Empathy Index for Children and Adolescents, a 22 item instrument scored on a 1-5 scale of Strongly Agree to Strongly Disagree which contained items such as "I get upset when I see a girl being hurt" and “It makes me sad to see a boy who can’t find anyone to play with.” This index has been successfully tested for internal consistency (Cronbach’s alpha = .79) and internal validity, and thus has been frequently used in the literature. The second instrument distributed was a Hopefulness Scale. Here there were 6 questions answered on a 6-point scale of None of the Time to All of the Time, with questions such as "I can think of many ways to get the things in life that are most important to me".
The results were positive with this very small pilot test. On the Empathy Index, all 8 students increased their total score, with increases ranging from 1-11 points, with an average 4.63. On the Hopefulness Scale, all students but one increased their total score, from 2 points to 5 points increase, and the one student's total score remained unchanged. The average increase was 2.63 points. The results seem to indicate that the program enhanced with the new workbooks may be effective in positively impacting empathy and hopefulness in the population at-risk youth. Continued testing with larger numbers of adolescents is recommended.

Marivic Rosabelle Dizon, Stanford University School of Education
Creature Comfort: The Effect of an Animal-Assisted Intervention on Anxiety and Self-Disclosure Among Youth Exposed to Community Violence

The purpose of this dissertation study was to test experimentally whether an animal-assisted intervention would have an effect on middle school students' anxiety level and amount and type of emotional self-disclosure during an interview that examined exposure to community violence. Participants were 42 students in grades 6 to 8. Twenty students were randomly assigned to the experimental group (i.e., presence of a therapy rabbit) and twenty-two students were randomly assigned to the control group (i.e., absence of a therapy rabbit). Students participated in a pre-interview, community violence interview, and post-interview during which anxiety was measured. During the community violence interview, students were asked questions about violence they witnessed in their neighborhood (e.g., seeing the police arrest someone, seeing someone get shot). Self-disclosure was measured as total word count and frequency of negative emotion words used during the interview. Students’ Immediate Anxiety, Greatest Anxiety and Delayed Anxiety were measured at the conclusion of the interview. During the post-interview, students were asked to describe their experience participating in the study. Students in the experimental group were also asked questions about their experience with the therapy rabbit.

Students in the total sample reported being exposed to a high level of community violence, with 59% witnessing between four to seven violent events. Hearing gunshots was the most frequently reported event, and 38% of students knew either the victim or perpetrator of the violent event they witnessed. Because this study had a small sample size, interpretation of findings was based on the magnitude and direction of the effect sizes. The animal-assisted intervention had a medium effect on students’ Greatest Anxiety and level of self-disclosure. Students in the experimental group compared to students in the control group reported higher Greatest Anxiety and fewer negative emotion words (e.g., scared, sad). The animal-assisted intervention had a small effect on students’ Immediate Anxiety, Delayed Anxiety and total word count. Anxiety was not found to be significantly related to self-disclosure. Qualitative findings included the following: 1) Students demonstrated empathy and care for the victims/or perpetrators of the violence; 2) Students stated that the interview was a positive outlet through which they could relieve their distress; 3) Students engaged in “touch-talk dialogue” with the therapy rabbit; and 4) Students felt comfortable in the interview due to the presence and interaction with the rabbit. This study demonstrated that an animal-assisted intervention can be a source of support for youth exposed to community violence.
Patricia A. Cody, The University of Texas at Austin - School of Social Work. Therapeutic Horsemanship and Children Adopted from Foster Care: A Case Study Analysis Using Mixed Methods

The purpose of this study was to explore the potential benefits of a therapeutic horsemanship program for children adopted from foster care and their adoptive mothers. A case study analysis using mixed methods was done on a sample of nine adopted children and their adoptive mothers. Standardized measures, open-ended interviews and surveys were administered to determine effects on external child behavior, child self-esteem and parenting stress. The Child Behavior Checklist was administered to measure behavioral challenges in the children in this sample. There were no statistically significant changes on any of the CBCL scales. Qualitative data from the mothers and instructor and researcher observations show some affect on behavior. The Culture Free Self-Esteem Inventory-3 was administered to measure self-esteem of the nine children in the sample. The decrease on the Global Self-Esteem Quotient of the CFSEI-3 was statistically significant. Of the nine children, only three of them scored in the clinical range at pre-test. Of these three, two moved into the normal range and the third improved her score to be very close to the normal range. Qualitative data from the mothers, Instructors and researcher observations support this finding. The Total Stress score of the Parenting Stress Index – Short Form for the mothers in the sample did not show a statistically significant decrease. Six of the nine mothers’ pre-test and post-test scores were in the clinical range and only three had decreased post-test scores. The Qualitative data obtained through interviews, surveys and observations did not support a direct impact of the program on stress levels but rather an impact on level of support. Many mothers reported that they liked spending time with the other mothers to share resources and discuss their children. The data collected in this study does not provide sufficient evidence to make any causal statements about therapeutic horsemanship programs and children adopted from foster care. It does, however, provide support for the need for future research. The findings from this study have implications for meeting the needs of a variety of children adopted from foster and their adoptive parents.

Dr. Cody contributed several additional comments as follows:

• Programs need to be cautious about their use of language, particularly using the term “success” without adequate research findings.

• Research should be grounded in theoretical frameworks.

• Partnerships between programs and researchers enable both to use their expertise.
Rick Yount, Assistance Dog Institute
Teens-at-risk Learn Effective Parenting Skills Through Service Dog Training

The process of shaping a puppy to become a reliable service dog offers many experiential learning opportunities. Teaching effective parenting strategies to teens at-risk by teaching them this method may provide a valuable prospect for learning. Many psychologists have studied behavioral and learning theories during their undergraduate and graduate work. University programs provide hands-on learning through laboratory work where students shape and observe the behaviors of animals including rats, pigeons and other species. Providing a similar experiential learning opportunity to teens deemed as “At-Risk” offers an effective means of teaching them important social and emotional concepts resulting in improved parenting skills and attitudes. In this research study, teens are referred through the juvenile probation department into the Assistance Dog Institute's High Schooled Assistance Dog Program (HS A-Dog). Prior to the teens' involvement in the HS A-Dog Program, each participant is administered the Adult and Adolescent Parenting Inventory (AAPI) pre-test A. Using Dr. Bonita Bergin's HS A-Dog curriculum (BASICS and ABC'S of the SMARTEST DOG TRAINING), the teen trainers are taught how to nurture, shape behaviors and foster willing attitudes within the dogs resulting in their graduation as service dogs. The participants, upon their departure from the program complete the AAPI post-test B. Initial test results have shown significant improvements in the participants' parenting attitudes. Constructs identified in the AAPI include; Understanding of Normal Developmental Behaviors, Level of Empathy and Understanding of a Child's Needs, Valuation of Alternatives to Corporal Punishment, Understanding of Appropriate Family Member Roles, and Ability to Empower Children to Make Good Choices. The greatest deficits identified to date in the pre test have been related to understanding appropriate family member roles. Pilot data shows improvement in all areas monitored by the AAPI for each participant. These results are encouraging and reflect a need for expanded research on the efficacy of this teaching methodology. By teaching the skills to teens-at-risk and shaping their attitudes related to effective parenting, we can disrupt the cycle of abuse and neglect, resulting in fewer incidents of child maltreatment for the next generations. Traditional methods of parenting education have not proven to be greatly effective. The skills and attitudes necessary to train a service dog draw striking parallels to those employed by effective parents. Taking this psychology lab to the teens who need it most will prepare them for success in their greatest role as an adult, that of a parent.
Kenna Graunke, R.N., Southern Oregon Humane Society
Long-term Effects of Animal Assisted Programs: The Process of Follow Up Data Collection on LEAP Participants

Southern Oregon Humane Society has conducted an animal assisted program for middle school at risk youth in the Rogue Valley since 1999. Approximately 190 students and 95 dogs have participated in the program. Although anecdotal evidence leads us to believe that there are positive long term effects, insufficient data have been collected.

LEAP (Love, Empathy, Acceptance, Partnership) costs approximately $8000 per session. The money for the programs comes from foundations, donors and the organization’s general operating budget. The need for social programs is increasing in the Rogue Valley. Therefore, evaluating the long term effects of LEAP has become a priority as funding decisions are, in part, based on the outcomes.

Many of the participants live in poverty and violence. The Rogue Valley high school dropout rates exceed the statewide average. The number of homeless students enrolled in school is the second highest in the state. The number of those under 18 living below the poverty line exceeds the national average of 17.4%. The crime index for Medford, the largest city in the Rogue Valley, has been higher than the national index for the past 8 years.

The goals of LEAP include creating attitudes of kindness, caring, respect and responsibility in adolescents by involving them with animals. Lessons are designed to help students gain skills that will assist them in obtaining an education and becoming a productive member of the community.

Pre and post surveys, journaling, presentations and observation by teachers, staff, participants and peers, reflect changes in knowledge, behaviors and thought processes that occur during the program. For the past four years, follow up with students has been conducted in person two to three weeks after graduation. Calls are placed to the dogs’ adoptive families. Interviews of participants at three month intervals for the first year have been attempted with been variable results due to time constraints, the transitory nature of the students and confidentiality issues.

At this time, tools are being developed to collect and evaluate data to assess long-term effects of LEAP. A multi-faceted approach to reach participants will follow. Contact methods will include use of telephone calls, contact with local high schools and colleges, posters, the internet and the media. We will evaluate both subjective and objective outcomes. The information will be compiled and used in presentations and in reports to possible funding sources.
Leah Brookner, MA, MSW, Portland State University
AAT for Children with Early Onset Mental Illness: Quantifying the Benefits

Two pilot studies focus on measuring the therapeutic effects of individualized Animal Assisted Therapy provided to children, aged 2 – 5 years, with early onset mental illnesses or those considered at-risk for developing serious behavioral and emotional problems due to abuse, neglect, poverty, parental mental illness, and/or drug abuse in the family. Children were recipients of traditional mental health services, with the experimental group receiving the added AAT intervention. Each study measured changes in the participants' behavior and emotional functioning during the 18-week period in which the intervention was provided. Children were observed individually and in classroom settings; data were gathered from therapists, teachers, classroom assistants and animal handlers. Instruments include the Deveraux Early Childhood Assessment (DECA) and the Behavioral and Emotional Rating Scale (BERS) as well as a progress tool that captured weekly quantitative and qualitative changes in the children. N = 30. Data have not yet been fully analyzed; dissertation is in progress.

Ms. Brookner contributed additional comments as follows:

- Animal assisted interventions can be grounded in theory drawn from biophilia, attachment theory, and ecological systems theory.

Aimee Tetreault, Equine Assisted Growth and Learning Association
Horses that Heal: The Effectiveness of Equine Assisted Growth and Learning On the Behavior of Students Diagnosed with Emotional Disorder

Students with a diagnosis of Emotional Disorder (ED) have a wide range of academic and behavioral problems (Gable, Hendrickson, Tonelson & Van Acker, 2002). The issues these children face can adversely affect student academic performance and hinder social relationships (Kauffman, 2001). One method alone will not resolve complex emotional disorders. Multiple interventions are needed to serve this population. This research project examines how Equine Assisted Growth and Learning (EAGAL) influences the classroom behavior of elementary school students diagnosed with ED in a special education setting. Using the Illinois Learning Standards for Social Emotional Learning (Stage D), Goals Standards and Objectives, two goals were used to form objectives for this study. They were carried out using EAGAL as the intervention method. A group of 10 students were asked to participate in this study to determine if EAGAL is an effective intervention for students diagnosed with ED.
Bettina Shultz, M.A., Equine Assisted Growth and Learning Association
The Effects of Equine-Assisted Psychotherapy on the Psychosocial Functioning of At-Risk Adolescents ages 12-18

The increased need for effective interventions and the difficulty of working with at-risk adolescents have resulted in the design of many non-traditional approaches to therapy for at-risk youth. Equine-assisted psychotherapy (EAP) combines traditional therapeutic interventions with a more innovative component involving relationships and activities with horses. The purpose of this study is to fill a research gap by examining the therapeutic outcomes of EAP in treating at-risk adolescents ages 12-18. The findings suggest that at-risk adolescents who participate in an EAP program experience greater positive therapeutic progress in psychosocial functioning than those who do not participate in an EAP program.