measure, we modified feeder boxes with a clear acrylic window panel, allowing staff to safely inspect the leftover food in the feeder from a distance. We also removed redundant feeders on the cages and blocked the ports using a smaller version of the plastic guards. Together, the panel guards and feeder box windows proved to significantly reduce the problem areas frequently encountered by NHP staff. These low-cost improvements in the caging allowed for greater ease of staff movement between cages and improved safety within the facility.

**P87 Pooled Fecal Floats from Colony Cages Detect *Aspiculuris tetraptera* and Fur Mites**

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In 2008, our institution treated all mice with 12 wk fenbendazole-medicated feed and undertook a thorough environmental cleaning to eradicate *Aspiculuris tetraptera* from campus. Treatment exceptions were only approved following negative fecal flotation results (1 mouse sampled per cage). From 2008 through March 2012, all sentinels at the institution (one cage per 70-cage rack exposed to soiled bedding from every cage at each cage change, tested and replaced every 4 mo) were negative for *Aspiculuris* spp. by fecal flotation and for fur mites by fur pluck. However, in October 2011 histopathology from experimental animals revealed intestinal nematodes on cut section. Fecal floats from the colony confirmed the presence of *Aspiculuris* spp. eggs. Seven of 28 racks from collaborators identified via transfer logs were also positive on colony tests. One of the colonies had been exempted from treatment in 2008. All mouse racks (approximately1000) at the institution were then surveyed by colony fecal flotation (CFF) (4 pellets from every cage on the rack, pooled in a 30-mL tube, 1 or 2 tubes per rack). Five additional racks were identified with pinworms and 5 were identified with mites via characteristic eggs: *Myocoptes* and *Radfordia* spp. were confirmed by fur pluck. Examination of racks belonging to collaborators of positive colonies yielded the most positives compared with mass sampling (25% compared with 1%). We suggest that sentinel samples alone are insufficient to confirm the absence of *Aspiculuris* or mite infestations; however, pooled fecal samples from colony cages can diagnose both *Aspiculuris tetraptera* and fur mites.

**P88 Benefitting Your Business: Employee Engagement**

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In most fields, high employee turnover is costly. It decreases production, and causes stress for the remaining employees. According to an article published in 1982 in the *Journal of Human Resources Strategy*, replacing a key person can take up to 6 mo, and can offset production for up to 2 y. Employees who are engaged in their workplace are happier and less likely to leave. Employee engagement programs can lead to decreased turnover. Turnover is highest in the early stages of the laboratory animal technician career. Caring for animals in a research environment can take an emotional toll for the caretakers adding stress to an already redundant job. Employee engagement opportunities can break the monotony and relieve emotional strain by facilitating human interaction, which assists in retaining employees by reducing the effects of other job stressors. By allowing laboratory animal technicians to become engaged in the process, their valuable input and sense of accomplishment can provide cost saving and refinement for the organization. This can substantially reduce attrition. Our institution and the Department of Laboratory Animal Resources (DLAR) provide a variety of employment engagement opportunities. Employees are able to participate at different levels of the university in categories ranging among leadership (Staff Senate), professional development (Human Resource Classes and AALAS meetings and certifications), education (tuition reimbursement), and work-life balance (flexible schedules and Wellness Lunch and Learn series). As with any organization, one of the greatest challenges with engagement opportunities is informing employees and encouraging involvement. This project provides an overview on how employees are informed and encouraged to participate in the opportunities offered. Participation has led to retaining employees for longer periods of time. It has also helped to gain and retain employees with 5 or more years of experience in the field of laboratory animal care. If successful employee engagement programs are measured by employee retention, then the employee engagement programs at our institution and those offered within the DLAR can be called successful, thus, worth the investment these programs incur.

**P89 Reducing Animal Numbers in a Contact Sentinel Program**

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Rodent health surveillance using sentinel animals is a critical part of the preventative health program for most laboratory rodent facilities. Introduction of animals through a quarantine area is generally one of the highest biosecurity risk areas in a rodent housing facility. Adequate health surveillance of animals during the quarantine period is critical to prevent introducing unwanted microorganisms. Since it has been shown that some organisms, such as CAR bacillus and fur mites, do not transfer well through a dirty bedding sentinel program, contact sentinels can be used to increase efficiency of transfer. Female contact sentinels are typically used in an effort to prevent fighting with valuable imported mice. However, one disadvantage of housing contact sentinels in the same cage as quarantined animals is that the female contact sentinel may become pregnant. As an exposure time of 3 to 6 wk is used in most sentinel programs, some facilities have used ovariectomized female mice to prevent this situation. However, ovariectomy is an invasive surgical procedure and exposes the mice to potential pain and distress. In an effort to prevent pregnancies in contact females, we administered a dose of a long-acting progesterone, depot medroxyprogesterone acetate, 3 mg/kg per mouse, to each 4-wk-old CD1 contact sentinel at least 24 to 48 h prior to placing the female in the cage with a male mouse undergoing quarantine. Female contact sentinels were cohoused with imported animals (that is, breeding pairs) for 6 wk prior to testing. After implementing this program, only one female mouse has become visibly pregnant during the contact period of a total of 27 mice, and no unwanted pups have been born. This treatment protocol has significantly reduced the number of animals used in our quarantine sentinel program by minimizing the production of unwanted pups.

**P90 Staff-Directed Environmental Enrichment Program**

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The eighth edition of the *Guide for the Care and Use of Laboratory Animals* states that the IACUC, researchers, veterinarians, and animal care personnel should be involved in reviewing and evaluating the institution's environmental enrichment program. Our IACUC annually reviews the enrichment SOP; however, we wanted to actively include our animal care staff in planning and evaluating our environmental enrichment program. We had our staff complete an online environmental enrichment training course in addition to courses on the behavioral biology of each species we house. Staff members volunteered to write environmental enrichment SOP for the various species housed. Staff then devised a schedule to rotate enrichment objects in animal rooms to vary the type of enrichment the animals received with each cage change. Staff members also developed a checklist to complete each time they changed cages, to evaluate the use of each enrichment object by the animals. On the sheet, they note which environmental enrichment object is in the cage, the species and strain of animals in the cage, and if animals are using the object in a species-specific manner. We review these check-off sheets on a regular basis to assess the effects of our environmental enrichment plan to animal wellbeing. In addition, the investigators communicate regularly with our staff about which enrichment objects are acceptable