collection of preservation statistics in 2008 from its research library members. At present, ARL has no immediate plans to continue the ARL Preservation Statistics program.

The PARS Executive Board, in conjunction with ALCTS, is interested in assuring that preservation statistics be collected and shared. We believe that most libraries, archives, museums, and other cultural heritage institutions still record preservation statistics for annual reporting purposes within their own institutions and consortiums. The loss of this shared data leaves the preservation community without a way to assess and analyze its collective current practices, staff and budget resources, and strategic direction. It is hoped that a recently conducted survey among those in the preservation community will help define these needs.

—Holly Robertson, Member-at-Large, Preservation and Reformatting Section (PARS)/Association for Library Collections and Technical Services (ALCTS) American Library Association (ALA)

Health & Safety

Ergonomics: A Quick Note

A posting this summer on the Conservation DistList (Instance 26:6) brought attention to a recent International Institute for Conservation of Historic and Artistic Works (IIC) newsletter that depicted conservators hunched over their projects. While some strain is unavoidable when performing micro tasks over long periods of time, work-related musculoskeletal disorders (WMSD) may be avoided by following a few simple steps. The topic of ergonomics has been written about extensively, and this article serves only as a reminder to take preventative measures in the workplace to preclude unnecessary injury. For more information, please see the resource list located at the end of the article.

According to the National Institute for Occupational Safety and Health (NIOSH), "The goal of ergonomics is to reduce stress and eliminate injuries and disorders associated with the overuse of muscles, bad posture, and repeated tasks. This is accomplished by designing tasks, work spaces, controls, displays, tools, lighting, and equipment to fit the employee's physical capabilities and limitations." (NIOSH 2012)

Injuries may occur from single events or from cumulative stress. Common injuries in museum settings include back injuries and repetitive motion strain. These can be caused by excessive lifting, overuse of muscles, lack of recovery time, repetitive motion, poor posture, stress, pressure against sharp objects, vibration, and environmental factors such as extreme temperatures and low lighting (Hawks et al. 2011; McCann 2000). Symptoms may include pain, aching, stiffness, tenderness, swelling, numbness, cracking, tingling, decreased coordination, and loss of strength or joint movement (Coueignoux 2007; McCann 2000).

In "Overuse Injuries in Museum Conservators," Michael McCann provides the following preventative advice for conservators:

> The basic concept is that the body undergoes the least strain when the neck, arms, hands, back and legs are in neutral positions. This means that:

- the head is erect with eyes forward;
- the shoulders are not elevated;
- the upper arms are vertical with elbows at the sides;
- the forearms are horizontal and about 2-3 inches above the work surface;
- the wrists are straight;
- the back has its natural S-curve;
- legs are straight (but knees are not locked), or bent at an angle of about 90 degrees if seated;
- feet are supported on the floor or on an adjustable foot rest; and
- there is adequate clearance between the knees and lower work surfaces (McCann 2000, 3).

Working on a repetitious task for more than four hours a day is generally considered an occupational risk factor. To prevent repetitive motion strain, it is imperative to take frequent micro-breaks of 30 seconds to 1 minute, especially during intense activity at the bench. And, of course, work should cease as soon as any pain is experienced.

Back injuries in particular can be avoided by using proper lifting techniques and by using material handling equipment such as a dolly, making sure that the path of travel is clear, keeping knees bent, and avoiding twisting (Hawks et al. 2011). For specific ergonomic recommendations for computer workstations, see www.osha.gov/SLTC/etools/computerworkstations/index.html.

—Erin Jue, and members of the AIC Health & Safety committee

References and Recommended Resources

Coueignoux, C. May 2007. Your Workstation: Is it Working for You? *AIC News* 32, no. 3: 16-17.

Dul, J. and B. Weerdmeester. May 2009. *Ergonomics for Beginners: A Quick Reference Guide, Third Edition*. Florida: CRC Press.

Hawks, C., M. McCann, K. Makos, L. Goldberg, D. Hinkamp, D. Ertel, and P. Silence, eds. 2011. *Health & Safety for Museum Professionals*. New York: Society for the Preservation of Natural History Collections and the Health & Safety Committee of the American Institute for Conservation of Historic & Artistic Works, specifically pages 427-431.

McCann, Michael. Sept 2000. Overuse Injuries in Museum Conservators. *AIC News* 25, no. 5: 1, 3-6.

National Institute for Occupational Safety and Health (NIOSH): www.cdc.gov/niosh/topics/ergonomics/

Occupational Safety and Health Administration: www.osha.gov/SLTC/ergonomics/ www.osha.gov/SLTC/etools/computerworkstations/index.html.

Washington State Department of Labor & Industries: www.lni.wa.gov/Safety/Topics/Ergonomics/default.asp