

# Implementation of Ergonomic Programs in Various Industries

## Panel Discussion

### Panel Organizer

**Abbas Moallem, Ph.D.**  
Ergo-Consult, Cupertino

### Panelists

**Feridi Diri**

EORM, Sun Microsystems, Inc

**Donald G. Price**

Pacific Gas and Electric Company

**Carol L. Parkinson**

Xicor, Inc.

**Jane Hall Taylor**

Silicon Graphics, Inc.

Even though the need for ergonomics in the workplace has been recognized for many years, only recently have companies started to design and implement ergonomic programs. Without question, the recently passed California ergonomic standards, even though more politically correct than technically efficient, brought some consciousness to companies to find better protection for the employee in the working environment through application of ergonomic principles. Panelists from different companies will describe their ergonomic programs, and how they handle their ergonomic problems.

Ergonomics has become an important part of companies occupational health and safety programs. Without question, the recent ergonomic standards, although seen by some as just "politically correct," has brought about awareness regarding ergonomic principles. Therefore, many companies are looking for methods to design, implement and evaluate an ergonomic program. There are frequently asked questions as to who is qualified to design or supervise ergonomic programs. How would these programs be

implemented and what criteria would be used to evaluate these programs? A way to answer these questions is to review ergonomic programs of various industries. Therefore, in this panel we are going to survey several companies ergonomic programs. Each company's presentation has a specific aspect that will demonstrate a variety of working environments. We are going to look at Sun Microsystems, Xicor, Inc., Pacific Gas and Electric Company and Silicon Graphics, Inc.

## Sun Microsystems Ergonomic Program

**Feridi Diri** EORM, Sun Microsystems, Inc

Sun Microsystems, Inc. completely outsources its US Ergonomics Program to EORM<sup>®</sup>, Environmental and Occupational Risk Management. The following program components are tailored to meet Sun's growing needs.

### Components of Sun's Ergonomics Program

#### 1. Program Awareness

Employees are made aware that an Ergonomics Program is available to them, they have the services of trained personnel in areas such as; work safety, ergonomic standards, cumulative or repetitive trauma injury prevention, product selection, and workstation planning.

#### 2. Program Access

Employees have an easy procedure for contacting the ergonomics office to request a workstation evaluation, ergonomics consulting services, etc., (clear on-line interface).

#### 3. Training and Education

Employees are trained (individual, web-based, or group sessions) to perform basic equipment set up (chair, keyboard/mouse, monitor) to understand neutral posture and proper breaks and recovery periods; and to identify early warning signs of cumulative or repetitive trauma injuries.

#### 4. Proper Staffing

All ergonomics program staff are trained in general principles of ergonomics and symptoms of common work related injuries. Ergonomic evaluations are conducted by ergonomists, trained EH&S staff, or ergonomics specialists depending on the urgency and complexity of the employee's needs.

#### 5. Individualized Ergonomic Evaluation

The assessment includes:

- **Work Station Design:** Setting up furniture and equipment to support neutral postures, safe work activity, and ease of use.
- **Recovery Training:** How to take breaks for efficient use of time and optimal tissue recovery.
- **Motion Retraining: Analysis** of musculoskeletal movement that is contributing to trauma, and training in remedial motion.
- **Task/Scheduling Analysis:** To design a graded transition to customary duties and workload.
- **Discomfort Charting:** Involving the use of a metric to accurately document decreases or increases in symptom intensity.

#### 6. Evaluation Follow-up

Ergonomic evaluations are followed up by a "closure" contact with the employee to determine if the equipment was delivered and installed properly? Are employees using equipment properly? Are additional adjustments necessary? Is there a decrease in discomfort related to ergonomic changes? Should the employee see a physician? Also, employee feedback on the evaluation process and procedures (satisfaction surveys).

#### 7. Product Selection

The ergonomic evaluator assists with the selection and distribution of furniture and office products that have ergonomic impact. The ergonomics program manager recommends stock amounts, works with facilities, researches, and reports on new ergonomic products and procedures.

#### 8. Design Input

The ergonomics staff has input into the selection of standard equipment and furniture and works closely with architectural staff. Input into the redesign of equipment is ongoing.

#### 9. Communication

A regular meeting between key personnel connects the domains of the program (administrative, management and applied

ergonomics), and facilitates ongoing program development.

### 10. Alternative work environments

Because Sun's main work environment is the office setting, the ergonomics program primarily focuses on this area. However, the program also supports manufacturing, shipping and receiving, flexible field offices, etc. on a request basis and by conducting regular ergonomic surveys.

### 11. Hidden Costs and Metrics

An effective ergonomics program can reduce the hidden costs of worker injuries and ergonomic related inefficiency. Some of these costs come in the form of increased absenteeism, decreased productivity, additional personnel coverage, and psychological factors like worker frustration. Data are tracked in these areas before and after ergonomic intervention to show program value. Metrics showing program effectiveness is delivered quarterly to management.

### SGI's Evolving Ergonomics Program Early Efforts

**Jane Hall Taylor**, Silicon Graphics, Inc.

SGI's ergonomic program was started in the early 90's and has been evolving ever since. What drove the program to be started and the initial program elements will be briefly discussed.

#### Current Effort

The SGI Ergonomic Program is a part of the SGI Mountain View Environmental, Health, and Safety program and oversees both the office and our manufacturing environments. The following current program goals and program elements that are being implemented will be discussed: Evolving our program charter from a "its the right thing to do charter" to a "data-driven" charter.

Streamlining existing program elements.  
Further cutting our casualties in terms of new RSI claims in the office environment.

Developing a work recovery program to support an early return to work for employees off work or on temporary work restrictions due to injury.

- Evolving the manufacturing ergonomic program from a start-up program to a "built-in" program.
- Facilitating SGI's diversity mandate for the ADA by facilitating building, furniture, computer, phone, and equipment accommodations for qualified employees.
- Continuing to develop our voice recognition user program.
- Continue to develop our teleworker furniture request program as a part of a corporate strategy to support the telecommuter and alternative office at SGI.

#### Future Needs

We'd like to think we can forecast the future needs of our employee! As best we can, we've tried to set our sights on some important future goals based on trends in similar industries and what information we gather from our employees. These future goals will be briefly discussed.

### Growing an Ergonomic Program "A Developmental Perspective"

**Carol L. Parkinson** Xicor, Inc.

In this presentation, we will cover how the ergonomics program at Xicor has been developed and continues to evolve. The program has been in existence for nearly 3 years. Our injuries stemming from ergonomic risk factors have decreased, but the severity has increased. Our analysis has shown that the average age of the employee with a strain lost time injury is 51 years of age.

**The following areas will be addressed in this presentation.**

- Role of Occupational Health Manager
- History of Ergonomic Efforts
- The Bigger Picture
- Organizational Factors
- What We Started With
- What We Have Now
- What We Need
- What has worked, what hasn't
- Real Life

### Easy Ergonomics

#### Donald G. Price

Pacific Gas and Electric Company

Create a Positive Ergonomic Environment  
 Management Support "Just Call ERGO" Concept  
 ERGO TEAM Approach Annual Safety Meeting  
 on Ergonomics Access to Ergonomics  
 Professionals Demonstrate Highly Visible  
 Solutions Make it FUN

Symptom Survey  
 Don't wait for reportable injuries  
 Have an Early Warning System  
 Simple to use Survey  
 Keep asking for surveys  
 Prioritize Evaluations  
 Evaluate symptoms quickly  
 Evaluate everyone eventually  
 Have an obligation for action  
 Prompt Access to Solutions  
 Focus "Simple is Best"  
 Quick supply paths  
 Stock Trial Materials  
 Make Custom Corrections  
 Train Building Mechanics in Ergonomic Basics  
 Follow-up Often  
 Monthly Status Reports  
 Follow-up Visits  
 Help Expedite Authorizations  
 Continuous Records  
 Network Database for ERGO TEAM  
 Case Studies (4 before after situations)

