## SCHEDULE

### Monday, August 29, 2005

#### 7:30–8:30 a.m.
Breakfast and Registration

#### 8:30–9:00 a.m.
Overview and Course Objectives

#### 9:00–10:00 a.m.
Overview of Human Factors Engineering and Patient Safety

#### 10:00–10:15 a.m.
Break

#### 10:15 a.m.–12:00 p.m.
What is Human Factors Engineering, What is an Error and What is a System–1

#### 12:00–1:00 p.m.
Lunch

#### 1:00–2:45 p.m.
What is Human Factors Engineering, What is an Error and What is a System–2

#### 2:45–3:00 p.m.
Break

#### 3:00–5:00 p.m.
The Physical Environment and Ergonomics

### Tuesday, August 30, 2005

#### 7:30–8:30 a.m.
Breakfast and Conversation

#### 8:30–10:30 a.m.
Technology Design and Usability

#### 10:30–10:45 a.m.
Break

#### 10:45 a.m.–12:00 p.m.
Cognitive Ergonomics

#### 12:00–1:00 p.m.
Lunch

#### 2:30–5:00 p.m.
Job and Organizational Issues

### Wednesday, August 31, 2005

#### 7:30–8:30 a.m.
Breakfast and Conversation

#### 8:30–10:00 a.m.
Case Studies and Applications

#### 10:00–10:15 a.m.
Break

#### 10:15–11:30 a.m.
Role of Healthcare Provider

#### 11:30 a.m.–12:00 noon
Wrap-up and Evaluations (Box Lunch)

### Thursday, September 1, 2005

#### 7:30–8:30 a.m.
Breakfast and Conversation

#### 8:30–10:30 a.m.
Crew Resource Management

#### 10:30–10:45 a.m.
Break

#### 10:45–12:00 noon
Crew Resource Management and Team Work

#### 12:00–1:00 p.m.
Lunch

#### 1:00–2:45 p.m.
Probabilistic Risk Assessment

#### 2:45–3:00 p.m.
Break

#### 3:00–5:00 p.m.
Root cause analysis, Failure Modes and Effects Analysis and human error taxonomies

### Friday, September 2, 2005

#### 7:30–8:30 a.m.
Breakfast and Conversation

#### 8:30–10:15 a.m.
Usability Testing —A Prospective Analysis and Assessment for Patient Safety

#### 10:30–10:45 a.m.
Break

#### 10:45–12:45 p.m.
Organizational Change

#### 12:45–2:00 p.m.
Wrap-up and Evaluations (Box Lunch)
FACULTY

Carla J. Alvarado, Ph.D., Research Scientist CQPI, (SEIPS Short Course Coordinator), University of Wisconsin Madison

Pascale Carayon, Ph.D., Professor, Industrial and Systems Engineering, and Director CQPI, University of Wisconsin Madison

David H. Gustafson, Ph.D., Research Professor, Industrial and Systems Engineering, University of Wisconsin Madison

Ben-Tzion Karsh, Ph.D., Assistant Professor, Industrial and Systems Engineering, University of Wisconsin Madison

Bruce R. Thomadsen, Ph.D., Associate Professor, Medical Physics, University of Wisconsin Madison

Vicki M. Bier, Ph.D., Professor, Industrial and Systems Engineering, University of Wisconsin Madison

John W. Gosbee, M.D., M.S., Human Factors Engineering and Health Care Consultant, Ann Arbor, Mi

Ann Schoofs Hundt, Ph.D., Research Scientist CQPI, University of Wisconsin Madison

Eduardo Salas, Ph.D., Professor of Psychology, University of Central Florida

Robert L. Wears, M.D., Professor, Emergency Medicine, University of Florida College of Medicine

CQPI

Founded in 1985, the University of Wisconsin Center for Quality and Productivity Improvement (CQPI) is recognized for multidisciplinary research, requiring input and interaction from many different fields. Since its inception, CQPI has been at the forefront in the development of new techniques for improving the quality of products and processes. Today, the Center’s Systems Engineering Initiative for Patient Safety (SEIPS) is also at the forefront of developing methods aimed at improving the quality of healthcare work processes, quality of working life, and quality of healthcare patient safety.

SPECIFIC LEARNING OBJECTIVES

At the conclusion of this activity, participants should be able to:

- Identify the objectives of human factors engineering
- Promote the use of human factors engineering to minimize patient related error
- Recognize the difference between micro and macro human factors engineering approaches
- Summarize what a system is, and what are the implications for its design
- Target and evaluate medical device design and usability issues for patient safety
- Identify cognitive ergonomics issues, such as information processing and human error
- Understand organizational issues related to patient safety (e.g. transitions of care, communication, teamwork, process analysis)
- Ability to assess the physical environment for patient safety associated issues
- Give examples of physical environment issues and patient safety
- Improve situational awareness
- Improve workload management
- Reduce the risk of harm to patients through a team-work approach to patient safety and quality of care
- Identify human characteristics, capabilities and limitations
- Recognize interfaces between job, person and environment
- Develop team skills and behaviors which reduce the occurrence of clinical errors.
- Attain skills in the HFE method of usability testing and how it fits into proactive risk assessment (e.g., FMEA) and problem investigation

Accreditation Statement: This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the Center for Quality and Productivity Improvement, University of Wisconsin–Madison and The University of Wisconsin Medical School. The University of Wisconsin Medical School is accredited by the ACCME to provide continuing medical education for physicians.

Credit Designation Statement: The University of Wisconsin Medical School designates this educational activity as follows: Part I: 16.0 category 1 credits, 1.6 CEUs (16 hours) toward the AMA Physician’s Recognition Award. Each physician should claim only those credits that he/she actually spent in the activity.

Continuing Education Units: This program is accredited by the University of Wisconsin, Continuing Medical Education, for up to 3.2 CEUs (32 hours). This credit applies to nurses, engineers, and other health professionals.

American Osteopathic Association, American Academy of Physicians Assistants: AOA and AAPA accept AMA category 1 for their credit requirements.

Conference Completion Report: You will be mailed a completion report 4 to 6 weeks after the conference.

Policy on Faculty and Sponsor Disclosure
It is the policy of the University of Wisconsin Medical School that the faculty and sponsor disclose real or apparent conflict of interest relating to the topics of this educational activity, and also disclose discussions of unlabeled/unapproved uses of drugs or devices during their presentation(s). Detailed disclosure will be made in the course handout materials.

Intended Audience
This educational activity is designed for all physicians, nurses, physician assistants, pharmacists, engineers, patient safety officers, and other professionals interested in human factors engineering and patient safety.
REGISTRATION

Register online at www.peopleware.net or use the form below.

SEIPS Short Course on Human Factors Engineering and Patient Safety Part I and Part II
Part I August 29-31, 2005
Part II August 31 - September 2, 2005

Complete a separate registration form (or copy) for each registrant.

Card Number  _____________________________________
Name on Card _____________________________________
Signature  ________________________________________
Checks payable to UW-Madison

Company/Affiliation  ___________________________________________________________________________________
Address  __________________________________________________________________________________________

City/State/Zip __________________________________ Fax __________________ E-mail ______________________________

Circle one: Home or Business address

Registration Fees:
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<td>$1,500 Part II only - First Registrant from an Organization</td>
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PARTS I and II
$2,200 Part I and Part II - First Registrant from an Organization
$2,000 Part I and Part II - Each Additional Registrant from the Same Organization

$_________ Total Enclosed

Checks payable to UW-Madison
☐ Check attached.
☐ Bill Purchase Order Number: _______________________________________________________________________
☐ Please charge on the following account:

☐ VISA         ☐ Master Card         Exp. Date __________
Card Number  _____________________________________
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Signature  ________________________________________

If you have registration questions, please call CALS Conference Services at 608-263-1672.
No phone registrations please.

Mail or fax this form to:
UW-Madison CALS Conference Services
620 Babcock Drive
Madison, WI 53706
FAX: 608-262-5088

The University of Wisconsin provides equal opportunities in employment and programming, including Title IX requirements.
The University of Wisconsin Medical School fully complies with the legal requirements of the ADA and the rules and regulations thereof. If any participant in this educational activity is in need of accommodations, please notify Dr. Carla J. Alvarado in order to receive service. Please call (608) 263-3678.

ACCOMMODATIONS

Blocks of rooms are reserved at the following hotels. Please call or write to the hotels directly to reserve your accommodation. Be sure to reference the short course “CQPI/SEIPS” to receive the special room rate.

Double Tree Hotel—Madison
525 West Johnson Street
Madison, WI 53703–1993
Phone: 608/251–5511
Fax: 608/251–4824
Rates: $95/single, $105/double
Reservations must be made prior to July 29, 2005.

The Campus Inn
601 Langdon Street
Madison, Wisconsin 53703
Phone: 608/257–4391 or 800–589–6285 Fax: 608/257–2832
info@thecampusinn.com
Rate: $105/single, $120/double
Reservations must be made prior to July 15, 2005.
Systems Engineering Initiative for Patient Safety (SEIPS)

Short Course on Human Factors Engineering and Patient Safety—Part I & Part II

This two-part, five-day course for professionals presents nationally recognized speakers discussing a variety of Human Factors Engineering and Patient Safety topics including:

**Part I**
- Human Factors Engineering
- Sociotechnical Systems and Macroergonomic
- Design of the Physical Environment and Ergonomics
- And more…

**Part II**
- Failure Modes and Effects Analysis (FMEA)
- Root Cause Analysis (RCA)
- Crew Resource Management (CRM)
- Probability Risk Analysis
- And more…

www.fpm.wisc.edu/seips

Jointly sponsored by the University of Wisconsin Center for Quality and Productivity Improvement (CQPI) and the University of Wisconsin Medical School Office of Continuing Medical Education