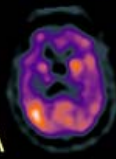


# CyberTherapy 2003

January 19-21, 2003

San Diego, California, USA



The future of Health Care is Now. Discover it.

Updated: 14 January 2003

## **SUNDAY, 19th January 2003**

8:00 **Welcome –**  
**Brenda K. Wiederhold PhD MBA BCIA**

8:15 **Welcome - Giuseppe Riva PhD**

**CyberTherapy in Anxiety Disorders I**  
**Moderators: Stéphane Bouchard PhD &**  
**Brenda K. Wiederhold PhD MBA BCIA**

8:30 **Mel Slater DSc**  
Department of Computer Science University College  
*"Social anxiety in virtual environments:  
a pilot study"*

8:50 **Stéphane Bouchard PhD**  
University of Quebec, Gatineau  
*"An update on the first 18 months of  
clinical studies on anxiety disorders at the UQO cyberpsychology lab"*

9:10 **Marcus F. Kuntze MD MBA**  
Center of Applied Technologies in Neuroscience (COAT-Basel)  
University of Basel  
*"Exposure therapy of acrophobia in  
virtual environment: comparing data helmet and a three-segmented power wall"*

9:30 **David Walshe MA, MB BAO BCh**  
St. Stephen's Hospital Cork  
*"Virtual reality and computer games in the treatment of driving phobia induced by a motor  
vehicle accident"*

9:50 **Bart P. Billings PhD**  
Omni Sonic Systems  
*"The effective use of sound in simulated environments"*

10:10 **DISCUSSION**

10:25 **BREAK**

**CyberTherapy in Anxiety Disorders II**  
**Moderators: Giuseppe Riva PhD and**  
**Rosa Baños PhD**

10:40 **Mariano Alcañiz PhD**  
Universidad Politécnica de Valencia *"Internet based telehealth system for the treatment of  
agoraphobia"*

11:00 **Stephane Roy PsyD**  
Unité de Thérapie Comportementale et Cognitive, Hôpital Sainte-Anne  
*"Definition of a VR-based protocol for the treatment of social phobia"*

11:20 **Mariano Alcañiz PhD**  
Universidad Politécnica de Valencia  
*"Engaging media for mental health applications"*

11:40 **Cristina Botella PhD**  
Universitat Jaume I  
*"Effectiveness of virtual reality for the treatment of panic disorder and agoraphobia"*

12:00 **DISCUSSION**

12:10 **Group Lunch Provided**

***CyberTherapy in Neuropsychological Assessment and Rehabilitation I***

**Moderator: Mel Slater DSc &  
Erik Viirre MD PhD**

1:30 **Stephen Baumann PhD**  
Psychology Software Tools  
*"A virtual reality system for neurobehavioral and functional MRI studies"*

1:50 **Jang Han Lee PhD**  
Dept. of Biomedical Engineering  
Hanyang University  
*"The application of the virtual reality system for the activities of daily living"*

2:10 **Simon Graham PhD PEng**  
Sunnybrook and Women's College Health Sciences Centre  
*"A platform for combining virtual reality experiments with functional Magnetic Resonance Imaging"*

2:30 **Ralph Mager MD**  
Center of Applied Technologies in Neurosciences, University of Basel,  
Dept. of Clinical Psychiatry (COAT-Basel)  
*"Neurophysiological age differences during task-performance in a stereoscopic VE"*

2:50 **Genevieve Quintin MA**  
University of Toronto  
Division of Life Sciences  
*"Spatial navigation of an immersive virtual environment: differences related to age and Alzheimer's disease"*

3:10 **DISCUSSION**

3:25 **BREAK**

***CyberTherapy in Clinical Psychology I***

**Moderator: Cristina Botella PhD and  
Carlo Galimberti PhD**

3:40 **Gabriele Optale MD**  
Association of Medical Psychotherapists VEPSY Project Site Coordinator  
*"Male sexual dysfunctions and multimedia immersion therapy"*

4:00 **Gian Luca Cesa MS**  
Applied Technology for Neuro-Psychology Lab, Istituto Auxologico Italiano  
*"The use of experiential cognitive therapy in the treatment of obesity: a controlled study"*

4:20 **Francesca Morganti, MS**  
Applied Technology for Neuro-Psychology Lab, Istituto Auxologico Italiano  
*"The use of technology supported mental imagery in neurological rehabilitation: a research protocol"*

4:40 Presentations of the VEPSY Young  
**Researchers Award Winners**

**Mauro Leoni MS**

Department of Psychology  
Parma University, Italy

*"Psychonaut 2002: the role of cyberspace in assessing and modifying drug scenarios"*

**Corrado Lo Piore PhD**

Presidio di Riabilitazione Extra-Ospedaliera "Paolo VI," Casalnoceto (AL), Italy

*"Is 'presence' a key factor for the effectiveness of cognitive rehabilitation of executive functions? Experience with V-STORE, a new immersive virtual reality based tool"*

5:10 **DISCUSSION**

**Giuseppe Riva PhD**

**CYBERARIUM: 6-9pm**

**Dave Warner MD PhD &**

**Brenda K. Wiederhold PhD MBA BCIA**

**Poster Presentations:**

**Christina Aderklou, PhD Candidate**

Halmstad University, Sweden

*"Chat-On-Play Experiences (COPE) by VR to achieve new patterns of capacities in child-rehabilitation"*

**"Mariano Alcañiz PhD**

Universidad Politécnica de Valencia

*"Self-help system for phobia to small animals treatment with 3D virtual environments via the Internet"*

**Monica Bacchetta PsyD**

Applied technology fo Neuro-psychology Lab, Istituto Auxologico Italiano

*"Experiential-Cognitive Therapy: an innovative approach for the treatment of eating disorders and obesity"*

**Cristina Botella PhD**

Universitat Jaume I

*"The use of virtual reality for the treatment of panic disorder and agoraphobia"*

**Claudio Buselli**

Web Applications dept, ELSAG spa

*"VEPSY Web Site: an example of health services provided through the web"*

**James A. Carter PhD**

Dartmouth Medical School

*"An interactive multimedia system for psychosocial support on long-duration space flights"*

**Gianluca Castelnuovo MS**

Istituto Auxologico Italiano

*"Using technological tools in psychotherapy: possible integration between traditional techniques and new shared hypermedia in the clinical setting"*

**Sara Conti MS**

Applied Technology for Neuro-Psychology Lab Istituto Auxologico Italiano  
*"Virtual reality in the treatment of binge-eating disorders"*

**Roberta DeFerrari**

Corporate & Business Dept: ELSAG spa  
*"VEPSY Business Model: strategies to exploit VEPSY virtual reality tools"*

**Eamon Doherty PhD**

Fairleigh Dickinson University  
*"Creating a system using a robotic arm and mental/EMG interface to help the quadriplegic person eat independently"*

**Andrea Gaggioli MS**

Applied technology of Neuro-psychology Lab, Istituto Auxologico Italiano  
*"VR For psychotherapists: what is hot?"*

**Carlo Galimberti PhD**

Università Cattolica del Sacro Cuore  
*"Artifact based trust in on-line Interactions"*

**Simon Graham PhD PEng**

Sunnybrook and Women's College Health Sciences Centre  
*"Integrating shape tape with experiments involving virtual reality and fMRI"*

**Evelyn Klinger ENG**

*Institut des Sciences de la Matière et du Rayonnement (GREYC)*  
*"Designing virtual environments for the treatment of social phobia"*

**Jeonghun Ku PhD Candidate**

Dept. of Biomedical Engineering  
Hanyang University  
*"Tactile illusion in a real hand evoked by a synchronous visual stimulus on a virtual hand"*

**Jeonghun Ku PhD Candidate**

Dept. of Biomedical Engineering  
Hanyang University  
*"Development of a system for assessing and training the driving ability of brain injury patients"*

**Alexander Libin PhD**

Department of Psychology  
Georgetown University  
*"Persons And Their Artificial Partners: Robototherapy as an Alternative Non-pharmacological Approach in Therapy"*

**Fabrizia Mantovani PhD**

Applied Technology for Neuro-Psychology Lab, Istituto Auxologico Italiano  
Department of Psychology  
Università Cattolica del Sacro Cuore  
*"Virtual Training in Health-Care: Enhancing Skills Acquisition and Transfer of Knowledge through Learning Experience in Virtual Environments"*

**Shelley Santrach BS EE**

Sister Kenny Institute  
*"Balancing the needs and objectives of research and service delivery in the quest for subjects"*

**Susan M. Schneider PhD, RN, AOCN**

Duke University

*"Effect of virtual reality on fatigue in breast cancer patients"*

**Francesco Vincelli PhD**

Department of Psychology

Università Cattolica

Laboratorio di Psicologia, Istituto Auxologico Italiano (IRCCS)

*"Experiential Cognitive Therapy for the treatment of panic disorder with agoraphobia: a preliminary controlled trial"*

## **MONDAY, 20th January 2003**

### ***CyberTherapy in Clinical Psychology II***

**Moderators: Hunter Hoffman PhD &**

**Dave Thomas PhD**

8:00 **WELCOME**

8:05 **Susan M. Schneider PhD, RN, AOCN**

Duke University

*"Virtual reality intervention for older women with breast cancer"*

8:25 **Mimi M.Y. Tse RN, BSN, MsC**

School of Nursing,

The Hong Kong Polytechnic University

*"Visual stimulation as pain relief for Hong Kong Chinese patients with leg ulcers"*

8:40 **Hunter G. Hoffman PhD**

Human Interface Technology Lab University of Washington

*"Water- friendly VR pain control during wound care in the hydrotank: a case report"*

9:00 **Bruce Thomas PhD**

School of Computer and Information Science, University of South Australia

*"Immersive virtual reality for reducing pain during physical therapy in a cerebral palsy patient"*

9:20 **Sheldon Brown MFA BFA**

University of California at San Diego

Center for Research in Computing

and the Arts

*"Smoke and Mirrors: a virtual reality debunking environment"*

9:40 **DISCUSSION**

9:55 **BREAK**

### ***Emerging Topics in CyberTherapy I***

**Moderators: Mariano Alcañiz PhD and**

**Monica Bacchetta PsyD**

10:10 **Giuseppe Riva PhD**

Applied Technology for Neuro-Psychology Lab, Istituto Auxologico Italiano

*"Ambient intelligence in health care"*

- 10:30 **Anna Spagnoli PhD**  
 Department of General Psychology  
 University of Padua  
*"New dimensions of "system usability": performing an ergonomic evaluation of virtual environments designed for clinical use"*
- 10:50 **Gianluca DeLeo MSc Engg**  
 Department of Communication  
 University of Genoa  
*"A virtual reality system for the training of volunteers involved in health emergency situations"*
- 11:10 **Carlo Galimberti PhD**  
 Università Cattolica del Sacro Cuore  
*"3D virtual environments for cybertherapy: a psychosocial approach to effective usability"*
- 11:30 **Marita Canina MS**  
 Politecnico di Milano  
 Dipartimento di Meccanica  
 Milan, Italy  
*"Biorobotic research for neurological rehabilitation: a new device (DAPHNE) for finger control"*
- 11:50 **DISCUSSION**
- 12:05 **LUNCH with Carol LeBeau**  
 KGTV-10 News Anchor  
*"Erasing the stigma of mental illness"*

***CyberTherapy in Neuropsychological Assessment and Rehabilitation II***

**Moderators: Albert "Skip" Rizzo PhD &  
 Dave Warner MD PhD**

- 1:30 **Heidi Sveistrup PhD**  
 School of Rehabilitation Sciences University of Ottawa  
*"Experimental studies of virtual reality delivered exercise programs compared to conventional exercise programs for rehabilitation"*
- 1:50 **Cheryl Trepagnier PhD**  
*"Design and evaluation of a virtual environment for teaching nonverbal communication"*
- 2:10 **Pier Antonio Piccini**  
 Centro Sistemi Virtual Reality-CSVR  
 Opera Diocesana Assistenza  
*"The integrated virtual reality profile: a VR- based assessment tool for cognitive impairments"*
- 2:30 **Rachel Kizony MSc**  
 School of Occupational Therapy  
 Hebrew University Jerusalem, Israel  
*"Virtual reality provides leisure time opportunities for individuals with physical and intellectual disabilities"*
- 2:50 **Walter Greenleaf PhD**  
 Greenleaf Medical  
*"Neuralplasticity and virtual environments: implications for physical medicine and rehabilitation"*
- 3:10 **DISCUSSION**

3:25 **BREAK**

***Emerging Topics in CyberTherapy II***

**Moderators: Sun I. Kim PhD &  
Alex H. Bullinger MD MBA**

- 3:50 **Joann Difede PhD**  
Weill Medical College of Cornell University  
The New York Presbyterian Hospital *"Virtual reality exposure therapy for World Trade Center post traumatic stress disorder"*
- 4:10 **Elena Libin MA**  
Institute of Robotic Psychology and Robotherapy at the Complex Interactive Systems Research, Inc.  
*"The use of interactive artificial creatures in psychological practice: robothrapy"*
- 4:30 **Alex H. Bullinger MD MBA**  
Center of Applied Technologies in Neuroscience (COAT-Basel)  
University of Basel  
*"The ISLANDS- project: Integrated System for Long distance psychiatric Assistance and Non-conventional Distributed health Services"*
- 4:50 **Ioannis Tarnanas MSc**  
Aristotle University of Thessalonica *"Virtual reality as psychosocial coping environment"*
- 5:10 **DISCUSSION**  
**Mark D. Wiederhold MD PhD FACP**

**TUESDAY, January 21st 2003**

***CyberTherapy in Clinical Psychology III***

**Moderators: Walter Greenleaf PhD &  
Sheldon Brown MFA BFA**

- 8:00 **Elena Fedorovskaya**  
Eastman Kodak Company  
*"Affective imaging: a concept for image- based therapeutic procedures"*
- 8:20 **Jeonghun Ku PhD Candidate**  
Dept. of Biomedical Engineering  
Hanyang University  
*"A virtual reality system for the cognitive assessment of schizophrenia"*
- 8:40 **Jang Han Lee PhD**  
Dept. of Biomedical Engineering  
Hanyang University  
*"Cue exposure system using virtual reality for nicotine craving"*
- 9:00 **Albert "Skip" Rizzo PhD**  
University of Southern California  
*"Virtual reality in ADHD"*

9:20 **Brenda K. Wiederhold PhD MBA BCIA**  
The Virtual Reality Medical Center  
*"Adding personality characteristics to an existing framework for VR therapy"*

9:40 **Mark D. Wiederhold MD PhD FACP**  
The Virtual Reality Medical Center *"Similarities between training and therapy: lessons learned from TADMUS and VRMC"*

10:00 **DISCUSSION**

10:15 **BREAK**

### ***The Future of CyberTherapy***

**Moderator: Mark D. Wiederhold MD PHD FACP**

10:30 **Luciano Beolchi**  
*"CyberTherapy in future EU research calls"*

10:50 **Harvey Magee**  
TATRC  
*"Funding opportunities available at TATRC"*

11:10 **Dave Thomas PhD**  
National Institute of Health  
National Institute on Drug Abuse  
*"Progress and opportunities in virtual reality research at the National Institute on Drug Abuse"*

11:30 **Shakeh Kaftarian PhD**  
National Institute of Health  
National Institute on Drug Abuse  
*"Funding opportunities available at NIDA"*

11:50 **DISCUSSION**

12:10 **LUNCH ON YOUR OWN**

### ***The Future of CyberTraining***

1:30 **CDR Kurt Henry, MD**  
*"Funding opportunities available at DARPA, DSO"*

1:50 **CDR Ralph Chatham, PhD**  
*"Topics of interest to DARPA funders"*

2:10 **LCDR Dylan Schmorrow, PhD**  
*"Funding opportunities available at DARPA, IPTO"*

2:30 ***Spatial Disorientation Panel***  
**Moderator: LCDR Dylan Schmorrow, PhD**

2:50 **Chair: LT Joseph Cohn, PhD**  
*"Spatial disorientation introduction"*

#### **Panelists:**

**Dennis McBride PhD**  
Potomac Institute for Policy Studies  
*"On the etiology of spatial disorientation"*

- Erik Viirre MD PhD**  
University of California San Diego  
*"Virtual reality and vestibular disorders"*
- CDR Michael Hoffer MD**  
Department of Defense  
Spatial Orientation Laboratory  
Naval Medical Center, San Diego  
*"Virtual reality in the diagnosis and treatment of vestibular disorders"*
- Keith Brendley**  
Artis, LLC  
*"Treating for motion sickness while moving using a motion coupled virtual environment"*
- Bob Cheung PhD**  
Disorientation Countermeasures  
& Vestibular Studies  
Aerospace Life Support  
Defense Research and Development Canada - Toronto  
Department of National Defense  
*"Disorientation countermeasures - the cognitive cockpit concept"*
- Bernard D. Adelstein PhD**  
NASA Ames Research Center  
Human Factors Research and Technology  
*"Latency assessment and management for perception and performance tasks in virtual environments"*
- 4:50 **Joe Kirschvink PhD - DISCUSSANT**  
California Institute of Technology  
*"Spatial disorientation"*
- 5:20 **Jack Rudloe and  
Thomas Herbert PhD**  
LampI Herbert Consultants  
*"The lesser electric ray, *Narcine brasiliensis*, a potential biomagnetic sensory platform"*
- 5:40 **DISCUSSION**