# Road Injury, Trauma and Rehabilitation 22 & 23 October 2015

# Greeting

Dear students, dear colleagues,

On the occasion of the closing of the "European Rehabil-aid project", the Laboratory of Health and Road Safety (LaHeRS) of the Technological Educational Institute of Crete and the Medical Schools of the Universities of Pavia and Hannover, organize the International Conference "Road Crashes, Trauma and Rehabilitation" with the participation of scientists and researchers from several Greek and foreign Universities and Hospitals. Our main objective is to illustrate the different aspects, factors and parameters involved in road crashes as well as the post-crashes state of health and the rehabilitation of all the victims admitted in the Emergency Units of the Hospitals of Crete, Pavia and Hannover. This illustration of the aspects, factors and parameters in question, will be realized through the presentation of the results of the "European Rehabil-aid project", a study that has taken place in Greece, Italy and Germany, as well as through the presentation of the recorded experiences of orthopedic surgeons, doctors, nurses, psychologists, social workers and other specialized health professionals, operating in the field of trauma rehabilitation and post-traumatic care.

The Conference Curriculum will comprise presentations, work-shops and seminars for health professionals and students.

Additionally, within the effort of road-crash prevention, the work of prominent researchers in the field of driving psychology and drivers' behavior management, will be presented.

Hoping that we will do our best to present precious knowledge, necessary for the scientific community researching in the field of road crashes victims' health rehabilitation and care, we invite you in the Conference Hall of the Heraklion Chamber of Commerce, and we encourage you to read our papers and to actively participate in our events and work-shops, designed to raise public awareness and sensibility about our topic.

#### On behalf of the Scientific Committee

#### Joannes Chliaoutakis, Maria Papadakaki

Organisational Committee	Scientific Committee
Aggelopoulou Vassiliki Anipsitaki Marilena Lioliou Stavroula Maragaki Pagona Mastoraki Anna Mavrovounioti Theofano Papadakaki Maria Papanikolaou Maria	Androulaki Zacharenia Chliaoutakis Joannes Kioulpalis Anestis Lajunen Timo Morandi Anna Ntzilepi Penelope Otte Dietmar Özkan Türker
Pervolaraki Maria	Porter Bryan

Porter Bryan Papadakaki Maria Taubman Ben Ari Orit Tzamalouka Georgia Zacharopoulos Georgios

# Thursday 22 October 2015

00 20 00 00	Dedictration
08.30-09.00	Registration
09.00-09.30	Welcome session
09.00-09.30	welcome session
	Archbishop of Crete Mr Erinaios
	Prof. Evangelos Kapetanakis, Rector of the TEI of Crete
	Stavros Arnaoutakis, Regional Governor of Crete
	<ul> <li>Lefteris Avgenakis, Member of the Greek Parliament</li> <li>Vasilis Kegkeroglou, Member of the Greek Parliament</li> </ul>
	Round Table #1
	"The Rehabil AID project"
Chair	
Joannes Chli	aoutakis
	& Road Safety, Dept. of Social Work, TEI of Crete, Greece
Coordinator o	of the Rehabil-Aid Project
09.30	"Overview of the REHABIL-AID Project"
	Joannes Chliaoutakis
	Lab of Health & Road Safety, Dept. of Social Work, TEI of Crete, Greece
09.40	"Health outcome scales: description and evidence of the Rehabil road users cohort"
09.10	Ottavia E. Ferraro
	Department of Public Health, Experimental and Forensic Medicine, University of Pavia,
	Italy
09.50	"The German investigation of long term follow up results of intensive care patients"
	Dietmar Otte
	Accident Research Unit, Medical School, University of Hannover, Germany
10.00	"Long term economic costs of severe injuries sustained in road traffic crashes: One year
10.00	follow up of road traffic victims"
	Maria Papadakaki
	Lab of Health & Road Safety, Dept. of Social Work, TEI of Crete, Greece
10.10	"Rehabilitation services after a road injury: suggestions and further questions"
	Timo Lajunen
	Department of Psychology, Norwegian University of Science and Technology
	Traffic Research Center of Finland Ltd
10.20	"A literature review and recommendations for read man of vehabilitation after a read
10.20	"A literature review and recommendations for road map of rehabilitation after a road traffic accident"
	Türker Özkan
	Safety Research Unit, Department of Psychology, Middle East Technical University
	Traffic Research Center of Finland Ltd

13.15-14.00 <b>Lunch Break</b>	
12.45	"From the accident scene to the intensive care unit (ICU): Multitrauma patient treat- ment and the role of different medical specialties" <b>Evangelos Volakakis</b> Intensive Care Unit, Venizeleio General Hospital, Heraklion, Greece
12.30	"Real facts on rehabilitation care of traffic injured in Greece" <b>Xanthi Michail</b> European Academy of Rehabilitation Medicine TEI of Athens, Dept. of Physiotherapy, Greece
12.15	"Neurological predictors of patients' outcome with acute traumatic brain injury" Efmorfia Kondili Pediatric Intensive Care Unit, Faculty of Medicine, University of Crete, Greece
12.00	"Hospital management of multi-trauma patients" <b>Katerina Vaporidi</b> Pediatric Intensive Care Unit, Faculty of Medicine, University of Crete, Greece
11.45	"Clinical protocols and guidelines on the treatment of children with severe trauma" <i>Giorgos Briasoulis</i> <i>Pediatric Intensive Care Unit, Faculty of Medicine, University of Crete, Greece</i>
11.30	"Approach, assessment and treatment of multi-trauma patients sustaining injuries in road traffic crashes" <i>Nikolaos Yannakoudakis</i> <i>National Emergent Aid Center, Heraklion, Crete, Greece</i>
Stratis Cha	<b>ulpalis</b> General Hospital, Heraklion, Greece. <b>tzicharalampous</b> t of Health Promotion & Prevention, Directorate of Primary Health Care, Ministry of Health,
	Round Table #2 "Trauma Treatment and Rehabilitation"
	11.00-11.30 <b>Coffee Break</b>
10.30	Keynote Speech "The Need of Injury Data: The German In-Depth Accident Study GIDAS as One Tool for the Description of Injury Pattern and Accident Circumstances" Dietmar Otte Accident Research Unit, Medical School, University of Hannover, Germany

14.00	<b>Keynote Speech</b> 'Traffic Safety Culture: a holistic approach to promotion of safety and health" <b>Timo Lajunen</b> Department of Psychology, Norwegian University of Science and Technology, Norway Traffic Research Center of Finland Ltd
	Round Table #3 "Injury Management and Prevention: A Policy Perspective"
Ioannis Ts	<b>tropakis</b> Tare Administration, Region of Crete, Greece <b>ikandilakis</b> Pharmaceutical Association, Greece
14.30	"Convergence or divergence of policies for the prevention and management of road traffic crashes and fatalities in primary health care" <b>Stratis Chatzicharalambous</b> Department of Health Promotion and Prevention, Directorate of Primary Health Care, Ministry of Health, Greece
14.45	"Mapping the RTCs impact on public health system of the 7 <sup>th</sup> health Region of Crete" Anna Trichopoulou Health Region of Crete, Ministry of Health, Greece
15.00	"The anatomy of prevention" <i>Charis Vavouranakis</i> <i>Heraklion Medical Association, Greece</i>
15.15	"Road accidents' pathway in the court room; civil and criminal liability of the parties involved" Giorgos Geronimakis Board of the Heraklion Bar Association, Greece
	15.30-16.00 <b>Coffee Break</b>
	Round Table #4 "Road Safety and Injury Risk"
Manolis Ko	echnical Chamber of Greece - Eastern Crete Section
16.00	"Positions of the Hellenic Institute of Transportation Engineers for Road Safety" <i>Anastasia Pnevmatikou</i> HITE, <i>Traffic &amp; Transport, Nea Odos S.A, Greece</i>

16.15	"The road safety management in Gr <i>Alexandra Laiou</i> Department of Transportation Plann ty of Athens, Greece	eece" ning and Engineering, National Technical Universi-
16.30	"Perspectives on Greece and Road Safety - an EU comparison" <i>Luana Bidasca</i> <i>European Transport Safety Council, Belgium</i>	
16.45	"Management of road traffic acciden <b>Nikos Eliou</b> The Road Safety Observatory of the " Civil Engineering Department, Univer The Laboratory of Road Construction	Technical Chamber of Greece ersity of Thessaly
17.00	"Road Crash: Consequences" <i>Emmanouil Chrisos</i> Traffic Police Department, Heraklion	1
17.15	"The Hellenic police and the traffic accident: actions and responsibilities" <i>Giorgos Eleftherakis</i> <i>Traffic Police, Hellenic Police Headquarters</i>	
17.30-20.30 <b>Training Courses</b> Free of charge - registration required Maximum number of participants: 40 Priority order maintained		
"Diagnosis and treatment approach of the neu- ropsychological and mental consequences of trauma" "How prevention reduces the cases of road traf- fic incidents: the concept of pre-hospital man- agement of the injured"		
Charis Bastas, Psychiatrist, Greece Sofia Tsiraki, Psychologist – Neuropsychologist, Greece		
PAGNI General University Hospital, Heraklion,		George Sotiropoulos, EKAB, PHTLS-TFR, Greece Michalis Markakis, EKAB, PHTLS-TFR, Greece
Kastelakis Room Karouzos Room		

Friday 23 October 2015	
08.30-09.00	Registration
09.00	Keynote Speech         "Family Climate for Road Safety among Young Drivers and their Parents as the Ground for Avoiding Injury in Traffic Crashes"         Orit Taubman Ben Ari         The Louis and Gabi Weisfeld School of Social Work         Bar-Ilan University, Israel
	Round Table #5 "Road Injury :The victim's perspective"
Lecturer, Nursi <b>Vassiliki Dan</b>	<b>afakis - Sfakianakis</b> ing Dept., TEI of Crete, Greece <b>nelli-Mylona</b> bard of Directors, The Road Safety Institute Panos Mylonas, Athens, Greece
09.30	"Road Accident: The day after" <b>Mantha Ziogou</b> Road Accident Victims' Support Association – Road Safety Observatory, Rhodes, Greece
09.45	"Traffic incidents: The Cretan reality" <i>Ioannis Lionakis</i> <i>E.SY.PRO.TA Voluntary organization of road accident prevention, Heraklion,</i> <i>Greece</i>
10.00	"Road Safety: A matter of education, culture and development" <b>Vassiliki Danelli-Mylona</b> The Road Safety Institute Panos Mylonas, Athens, Greece
10.15	"The social and economical consequences of road accidents for the fami- lies" Stavros Polentas Panhellenic Association of Assistance and Solidarity for Families of Road Accident Injured, Greece
10.30	"Post crash: trip into the dessert" <i>Giorgos Kouvidis</i> Panhellenic Association SOS-Road Traffic Crimes, Greece
	10.45-11.15 <b>Coffee Break</b>

# Round Table #6 "Injury Prevention: The Role of Education"

Chairs Ioannis Lionakis President, E.SY.PRO.TA Voluntary organization of road accident prevention, Heraklion, Greece Emmanuel Drakakis Head of the School of Engineering, TEI of Crete, Greece		
11.15	"Driving Simulation - based training tions" <b>Pierro Hirsch</b> Virage Simulation Ltd., Canada	g scenarios for diverse driver popula-
11.30	"Training of all traveler groups via t accidents prevention and road safe	the use of novel tools aiming at traffic ty promotion"
	<b>Dr. Evangellos Bekiaris</b> Centre for Research and Technology Hellas (CERTH) Institute of Sustainable Mobility and Transport Networks (HIT),Greece	<i>Efmorfia Blana</i> Road Safety Department and Traffic Regulations General, Directorate of Road Traffic and Safety, Ministry of In- frastructure Transport and Networks, Greece
12.00	"Road Safety: Causes and preventio <b>Diamantis Eliades</b> National Federation of Driving Instruct	
12.15	"Injury risk in emerging adulthood: <i>George Kritsotakis</i> Dept. of Nursing, TEI of Crete, Greece	clusters of accident risk behaviours"
12.30	"The Greek educational system and Eleftherios Michelakis National Federation of Driving Instruct	
12.45	"Eco mobility and free mobility" <b>Thanos Zafiropoulos</b> Ecocity, Urban nonprofit company Gree	ce
13.00	Greece" Georgia Tzamalouka	A tool to promote injury prevention in te and Medical Faculty of Athens, Greece
13.15-14.15 Lunch Break		

14.15	Keynote Speech"Reducing psychosocial costs of road traffic crash injuries: Why? How?For Whom? What's Next?"Bryan PorterDepartment of Psychology, Old Dominion University, USA
	Round Table #7 "Psychosocial Rehabilitation in road traffic injuries"
Maria Papadak	TEI of Crete, Greece
14.45	"Psychological and emotional effects of child trauma" <i>Katerina Bitzaraki</i> <i>Child Guidance Centre, Venizeleio General Hospital, Heraklion, Greece</i>
15.00	"Integrated healthcare for rehabilitation after injury" <i>Georgia Tzamalouka</i> <i>Lab of Health &amp; Road Safety, TEI of Crete and Medical Faculty of Athens, Greece</i>
15.15	"Addressing the post – traumatic sock using a driving simulator" <b>Stavroula Lioliou</b> Lab of Health & Road Safety, Dept. of Social Work, TEI of Crete, Greece
15.30	Interactive exercise"Disability resulting from a car accident: Understanding the psychosocial needsof the victim and the family members"Stavroula Lioliou, Maria PapadakakiOn behalf of the Lab of Health & Road Safety, Dept. of Social Work, TEI of Crete, Greece
	Round Table #8 "Nursing Diagnosis and Care in trauma patients/victims"
<b>Michalis Rovithis</b> Dept. of Nursing, TEI of Crete, Greece <b>Pinelopi Ntzilepi</b> Nursing Department, Intensive Care Unit, University Hospital, Heraklion, Greece	
16.00	"Nursing care of injured patients, by road accidents" <i>Michalis Zografakis - Sfakianakis</i> <i>Dept. of Nursing, TEI of Crete, Greece</i>

16.15	"The role and duties of the trauma team in the Emergency Department" <b>Victoria Katsouli</b> , Louros Liberis Pediatric Surgery Clinic, General University Hospital, Heraklion, Greece
16.30	"Traffic Accident and Children: Nursing Care" <b>Eirini Tsatsaraki,</b> Maria Liritsaki, Blevrakis Evangelos General University Hospital, Heraklion, Greece
16.45	"Mutitrauma management in Emergency Department Unit" <b>Marina_Karavitaki,</b> Katerina Lavrentaki, Panagiotis Fovakis, Maria Charitaki Venizeleio General Hospital, Heraklion Greece
17.00	"Airway management and assessment of the multitrauma patient" <b>Eleftheria Markaki</b> , Stylianos Stavroulakis Department of Anesthesiology, Venizeleio General Hospital, Heraklion, Greece
	17.30-20.30
	Training Course
	Principles of Basic Life Support (BLS) on Children
	Free of charge - registration required
Maximum number of participants: 40 Priority order maintained	
<b>Giorgos Briasoulis</b> Faculty of Medicine, University of Crete and Pediatric Intensive Care Unit, General University Hospital, Heraklion, Greece <b>Marianna Spanakis</b> Pediatric Intensive Care Unit, General University Hospital Heraklion, Greece	
	Karouzos Room

## Participants:

## **Bastas Charis**

Psychiatrist, Heraklion, Greece

# **Bekiaris Evangellos**

Mechanical engineer, PhD, Research Director, Centre for Research and Technology Hellas (CERTH)

Institute of Sustainable Mobility and Transport Networks (HIT), Greece

## Bidasca Luana

Project Officer, European Transport Safety Council, Belgium

## Bitzaraki Katerina

Child Psychiatrist, Head of Child Guidance Centre of Heraklion, Venizeleio General Hospital, Heraklion, Greece

## Blana Efmorfia

Civil Engineer – Transportation, PhD, Road Safety Department and Traffic Regulations General, Directorate of Road Traffic and Safety, Ministry of Infrastructure Transport and Networks, Greece

## Briasoulis Giorgos

Professor, Head of Pediatric Intensive Care Unit, Faculty of Medicine, University of Crete, Greece

# Chatzicharalampous Stratis

Head of the Department of Health Promotion and Prevention, Directorate of Primary Health Care, Ministry of Health, Greece

# Charonitis Ioannis

Chair, Board of Technical Chamber of Greece - Eastern Crete Section

# Chliaoutakis Joannes

Head of the School of Health and Social Welfare, TEI of Crete, Coordinator of the Rehabil-Aid Project

#### **Chrisos Emmanouil**

Commander, Traffic Police Department, Heraklion Hellenic Police

# Danelli-Mylona Vassiliki

President of Board of Directors, The Road Safety Institute Panos Mylonas, Athens, Greece Drakakis Emmanuel

Head of the School of Engineering, TEI of Crete, Greece

# **Eleftherakis Giorgos**

Commander, Traffic Police, Hellenic Police Headquarters

#### **Eliades Diamantis**

Presidents, National Federation of Driving Instructors, Greece

#### Eliou Nikos

Coordinator, The Road Safety Observatory of the Technical Chamber of Greece Professor, Civil Engineering Department, University of Thessaly Director, the Laboratory of Road Construction and Road Safety

#### **Epitropakis Spyros**

Director of Social Welfare Administration, Region of Crete, Greece

#### Ferraro E. Ottavia

Junior Researcher, Centre of Study and Research on Road Safety, Department of Public Health, Experimental and Forensic Medicine, University of Pavia, Italy

#### Geronimakis Giorgos

Lawyer, Member of the Board of the Heraklion Bar Association, Greece

#### Hirsch Pierro

PhD, Director of Road Safety Research, Virage Simulation Ltd., Canada

#### Karataraki Maria

DPpsych, Clinical Psychologist, Scientific Fellow of Psychiatric Department of PAGNI General University Hospital, Heraklion, Greece

#### Karavitaki Marina

Nurse, Venizeleio General Hospital, Heraklion Greece

#### Katsouli Victoria

Nurse, Pediatric Surgery Clinic, PAGNI General University Hospital, Heraklion, Greece

#### **Kioulpalis Anestis**

Head of Intensive Care Unit, Venizeleio General Hospital, Heraklion, Greece

#### Kondili Efmorfia

Ass. Professor in Intensive Care, Faculty of Medicine, University of Crete, Greece

#### Koudoumas Manolis

Professor, Electrical Engineering Department, TEI of Crete, Greece

#### Kouvidis Giorgos

President, Panhellenic Association SOS-Road Traffic Crimes, Greece

#### Kritsotakis George

Assistant professor in Public Health Nursing, Dept. of Nursing, TEI of Crete, Greece

# Laiou Alexandra

*Civil - Transportation Engineer MSc, Department of Transportation Planning and Engineering, National Technical University of Athens, Greece* 

# Lajunen Timo

Professor, Department of Psychology, Norwegian University of Science and Technology Director, Traffic Research Center of Finland Ltd

# Lioliou Stavroula

Psychologist, MSc, Scientific collaborator of the Lab of Health & Road Safety, Department of Social Work, TEI of Crete

# Lionakis Ioannis

President, E.SY.PRO.TA Voluntary organization of road accident prevention, Heraklion, Greece

## Maragaki Pagona

Social Worker, Social Service of Red Cross, Department of Crete, Greece

## Markaki Eleftheria

Nurse, Department of Anesthesiology, MSc, Venizeleio General Hospital, Heraklion, Greece

## Markakis Michalis

Paramedic EKAB crew, PHTLS-TFR, Greece

# Melidoniotis Evangellos

Nurse RN, MSc Department of anesthesiology, PAGNI General University Hospital, Heraklion, Instructor Candidate PHTLS-TFR, Greece,

# Michail Xanthi

M.D, PhD, Physiatrist President of European Academy of Rehabilitation Medicine Immediate Past President of ESPRM and Past President of European Board of UEMS of Physical and Rehabilitation Medicine Emeritus Professor of Rehabilitation Medicine, TEI of Athens, Dept. of Physiotherapy, Greece

# **Michelakis Eleftherios**

Driving and Traffic Education Instructor National Federation of Driving Instructors, Department of Heraklion, Greece **Ntzilepi Pinelopi** Head of Nursing Department, Intensive Care Unit, PAGNI University Hospital, Heraklion, Greece

# Otte Dietmar

Professor, Accident Research Unit, Medical School, University of Hannover, Germany

# Özkan Türker

Associate Professor, Safety Research Unit, Department of Psychology, Middle East Technical University

Traffic Research Center of Finland Ltd

# Papadakaki Maria

Lecturer, Lab of Health & Road Safety, Department of Social Work, School of Health and Social Welfare, TEI of Crete, Greece

# Polentas Stavros

President, Panhellenic Association of Assistance and Solidarity for Families of Road Accident Injured, Greece

# Porter Bryan

Professor and Ph.D. Programs Director, Department of Psychology Old Dominion University, USA

# **Rovithis Michalis**

Lecturer, Nursing Department, School of Health and Social Welfare, TEI of Crete, Greece

#### Sotiropoulos George

Paramedic EKAB crew EKAB Instructor PHTLS-TFR, Greece

# Spanakis Marianna

Child Intensive care specialist, Pediatric Intensive Care Unit, PAGNI General University Hospital Heraklion, Greece

#### Taubman Ben Ari Orit

Professor, the Louis and Gabi Weisfeld School of Social Work Bar-Ilan University, Israel

#### Tsikandilakis Ioannis

President of Heraklion Pharmaceutical Association, Greece

# Trichopoulou Anna

Deputy Manager, Health Region of Crete, Ministry of Health, Greece

# Tsatsaraki Eirini

Nurse, PAGNI General University Hospital, Heraklion, Greece

# Tzamalouka Georgia

Dr. in Social Psychology, Research Fellow, Lab of Health & Road Safety, TEI of Crete and Medical School of Athens, Greece

#### Tziraki Sofia

Psychologist –Neuropsychologist MSc, Greece

## Vaporidi Katerina

Ass. Professor in Intensive Care, Faculty of Medicine, University of Crete, Greece

## Vavouranakis Charis

Orthopedic Surgeon, President of Heraklion Medical Association, Greece

## Volakakis Evangelos

Surgeon, Intensive Care Unit, Venizeleio General Hospital, Heraklion, Greece

## Yannakoudakis Nikolaos

Head of National Emergent Aid Center, Heraklion, Crete, Greece

## Zafiropoulos Thanos

Chair, Board of Ecocity, Urban nonprofit company Greece

## Ziogou Mantha

General Secretary, Road Accident Victims' Support Association – Road Safety Observatory, Rhodes, Greece

## Zografakis – Sfakianakis Michalis

Lecturer, Nursing Dept., TEI of Crete, Greece