

# CEPOL ANNUAL EUROPEAN POLICE RESEARCH AND SCIENCE CONFERENCE



## *Evidence-based policing: New perspectives of cooperation between practice, education and police science.*

### PROGRAMME AND ABSTRACTS

**5-8 October 2015**

*Edifício-sede Polícia Judiciária, Rua Gomes Freire, 174, Lisboa,  
PORTUGAL*

#### Supporting institutions



## PROGRAMME

**MONDAY, 5<sup>TH</sup> OCTOBER 2015**

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### **14:00-14:30 (Auditorium 1) – Opening ceremony**

Paula Teixeira da Cruz, *Portuguese Minister of Justice*  
Manuel Mateus Costa da Silva Couto, *General Commander of Guarda Nacional Republicana*  
José Almeida Rodrigues, *National Director of Polícia Judiciária*  
Detlef Schroeder, *Deputy Director of the European Police College*  
Carla Falua, *Director of Escola de Polícia Judiciária*

### **14:30-15:30 (Auditorium 1) – Opening address**

**Evidence-based policing and police-led research: An introduction**  
*Peter Neyroud, CBE QPM PhD (University of Cambridge)*

### **15:30-16:00 – Coffee break**

### **16:00-18:15 (Auditorium 1) – Evidence-based policing: From theory to practice**

**Session moderator:** *Professor Maurice Punch (London School of Economics and Political Science)*

**'I honestly don't see the point in this': the (continuing) challenges of integrating research evidence into police decision-making**  
*Professor Jenny Fleming (University of Southampton) and Professor Nick Fyfe (University of Dundee)*

**Tackling the paradox of policing research**  
*Professor Nick Fyfe (University of Dundee) and Professor Jenny Fleming (University of Southampton)*

#### **Open floor**

**Panel discussion** with *Maurice Punch, Jenny Fleming and Nick Fyfe, moderated by Detlef Schroeder, CEPOL Deputy Director*

**TUESDAY, 6<sup>TH</sup> OCTOBER 2015**

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### **09:00-10:45 (Auditorium 1) – Evidence-based policing: Transference challenges**

**Session moderator:** *Professor Jack Greene (Northeastern University)*

**The Scottish Community Engagement Trial (ScotCET): The challenges of replication in experimental studies of policing**  
*Dr Ben Bradford (University of Oxford)*

**Connecting evidence and experience in policing: the role of police-academic partnerships**  
*Professor Nick Fyfe (University of Dundee)*

**'What Works for Crime Reduction' – Linking Research to Policing**  
*Dr Nicky Miller (Research Evidence Partnership Manager, UK College of Policing)*

**Open floor**

**10:45-11:15 – Coffee break**

**11:15-13:00 (Auditorium 1) – Research projects: Methods and findings**

**Session moderator:** *Commandant Jean-Marie Fiquet (École Nationale Supérieure de la Police)*

**The CODISP (Concept and Tools for the Development of Intelligence-led Policing) Project**

*Dr Thierry Delpuech (Centre Marc Bloch) and Professor Jacqueline Ross (University of Illinois)*

**Is it just a British thing? Examining the wider European relevance of evidence on the effects of mounted police deployments in the UK**

*Dr Chris Giacomantonio (RAND Europe), Dr Ben Bradford (University of Oxford) and Mathew Davies (RAND Europe)*

**Communities, social media, and police accountability: Findings from EU research projects**

*Professor Joachim Kersten (German Police University)*

**Open floor**

**11:15-12:45 (Auditorium 2) – Open session on crime prevention and investigation**

**Session moderator:** *Professor Shane Johnson (University College London)*

**Trawling the research base for the Crime Reduction online toolkit**

*Lisa Thompson, Jyoti Belur, Tanya Le Sage, Shane Johnson, Kate Bowers, Aiden Sidebottom, Nick Tilley and Gloria Laycock (University College London Department of Security and Crime Science)*

**Turning a Social Problem into a Cultural Opportunity: Crime Prevention Project 'SOS AZULEJO'**

*Leonor Sá (Escola de Polícia Judiciária)*

**The importance of street crime context**

*Ana Neves (doctoral researcher at Universidade Nova de Lisboa)*

**Cognitive Issues and Criminal Investigations: How to Handle Errors**

*Hans Ditrich (Institute for Science and Research, Dept. I/9 – SIAK)*

**The Reform of Lithuanian Detective Force: Approach Based on Evidence**

*Žaneta Navickienė and Ingrida Kairienė (Mykolas Romeris University)*

**Open floor**

## **11:15-12:15 (Auditorium 3) – Open session on prevention and investigation of sexual offences**

**Session moderator:** *Associate Professor Ksenija Butorac (Police College of Croatia)*

### **Multiple agency management of sex offenders: evidenced based evaluation**

*Dr Mary Walker (Garda Síochána Research Unit)*

### **Decision Support, Crime Linkage and Analysis**

*Dr Don Casey, Professor Phillip Burrell (London South Bank University) and Detective Chief Inspector Nick Sumner (Metropolitan Police Service)*

### **Child and adolescent Internet sexual offending: offenders typologies, use of pornography and images severity**

*Raqueel Guerra and Dr Cristina Soeiro (Escola de Polícia Judiciária)*

**Open floor**

## **12:30-14:00 – Lunch break**

## **14:00-15:45 (Auditorium 1) - Law enforcement research and development: The role of International and European agencies**

**Session moderator:** *Professor Joachim Kersten (German Police University)*

### **Fostering (more) thoughtful policing – how the European Police College embraces research and police science**

*Dr Detlef Nogala (European Police College)*

### **European police research and science: The role of EUROPOL (provisional title)**

*Barbara Celis (senior analyst, EUROPOL)*

### **An evidence-based approach to European border policing? The challenge of the unknown, the human factor, expert judgement and self-fulfilling prophecies**

*Dr Monica Gariup (Senior Research Officer, Frontex Research and Development Unit)*

### **INTERPOL's approach to promoting evidence-based policing at the international level**

*Dieter Korhummel (INTERPOL Assistant Director, Capacity Building, Training, Research and Accreditation)*

**Open floor**

## **14:00-15:45 (Auditorium 2) – Open session on police management, training and performance (1)**

**Session moderator:** *Dr Mari Koskelainen (Poliisiammattikorkeakoulu)*

### **How do police officers perceive certain characteristics of the formal police management?**

*Associate Professor Ksenija Butorac, Dr Ante Orlović and Assistant Professor Joško Sindik (Police College of Croatia)*

### **Managerial Influences on Police Discretion**

*A. R. Parsons (doctoral researcher at the Institute of Criminology, University of Cambridge)*

**Simulation: The Changing Face of Police Training**

*Dr Gregory Kratzig (Training, Innovation and Research, RCMP)*

**Planning and assessment of collective action policing**

*Dr Luís Elias, Dr Sérgio Felgueiras and Dr Lúcia G. Pais (Instituto Superior de Ciências Policiais e Segurança Interna)*

**An international comparison of the composition and motivations of volunteer police officers in a UK and US police force**

*Dr Ian K. Pepper (Department of Law, Policing and Investigation, Teesside University) and Dr Ross Wolf (Department of Criminal Justice, University of Central Florida)*

**Practical implications of critical incident's studies in the Portuguese crime investigation police**

*Guida Manuel (Escola de Polícia Judiciária)*

**Open floor**

**14:00-15:45 (Auditorium 3) – Workshop on national police research policies, resources and roadmaps**

*Workshop animators: European Police College Research & Science National Correspondents*

**15:45-16:15 – Coffee break**

**16:15-18:00 (Auditorium 1) – Research projects: Innovative methods and instruments**

*Session moderator: Dr Ben Bradford (University of Oxford)*

**Developing injury surveillance through ambulance data: A 'proof of concept' approach**

*Dr Chris Giacomantonio and Dr Alex Sutherland (RAND Europe) and Chief Inspector Dave Twyford (West Midlands Police)*

**Introducing EMMIE: An evidence rating scale to encourage mixed-method crime prevention synthesis reviews**

*Professor Shane Johnson, Professor Nick Tilley and Professor Kate Bowers (University College London)*

**Empirical research for identifying minimum operational standards in EU Common Security and Defense Policy (CSDP) trainings: the European Police Services Training (EUPST) 2011 - 2013 experience**

*Lt. Col. Renato Raggi (Centre of Excellence for Stability Police Units)*

**Open floor**

**16:15-18:00 (Auditorium 2) – Open session on forensics**

*Session moderator: Lt. Col. Cesare Vecchio (Carabinieri Scientific Headquarters)*

**Evaluation of cross-contamination of nylon bags with heavy loaded petrol fire debris and with automotive paint thinner**

*Filipa Belchior and Stephen P. Andrews (University of Central Lancashire)*

**Fingerprint *minutiae* distribution by finger and pattern type in a sample of Spanish population**

*Gutiérrez-Redomero, E., Alonso-Rodríguez, C., Rivaldería, N., Sánchez-Andrés, A., Fernández-Peire, MA., Rodríguez-Villalba, JL., Morillo RE., Nieva, J. and Comendeiro, J. (Universidad de Alcalá)*

**Remanufactured toner study by Fourier Transform Infrared Spectroscopy (FTIR)**

*A. C. Almeida Assis and C. Farinha (Scientific Police Laboratory of Polícia Judiciária) and T. Gomes and R. Fausto (Chemistry Department of Faculdade de Ciências e Tecnologia da Universidade de Coimbra)*

**Physical-Chemistry Study of Line Crossings**

*Daniela Djidrovska (INTERPOL's Counterfeit and Security Documents Branch)*

**Forensic analysis as support for network applications in the age of cloud computing**

*César Arturo de la Torre (Escuela Politécnica Del Ejército Del Ecuador) and Marco de la Torre (Wroclaw University of Technology)*

**Open floor**

**16:15-18:00 (Auditorium 3) – Workshop on Experiences of Police-Academic Partnerships**

*Workshop animators: Peter Neyroud, Jenny Fleming, Nick Fyfe, Nicky Miller and Matthew Bacon*

**20:00-21:30 – Welcoming dinner**

**WEDNESDAY, 7<sup>TH</sup> OCTOBER 2015**

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**09:00-10:45 (Auditorium 1) – Transnational organised crime: Research, practice and roadmaps**

*Session moderator: Dr Reinhard Kreissl (Vienna Centre for Societal Security)*

**Financing organised crime**

*Professor Michael Levi (Cardiff University)*

**Organised and transnational crime in Europe**

*Professor Vincenzo Ruggiero (Middlesex University London)*

**The infiltration of organised crime in the legitimate economy: how can research help investigation and asset recovery?**

*Adjunct Professor Michele Riccardi (Università Cattolica del Sacro Cuore)*

**Open floor**

**09:00-11:00 (Auditorium 2) – Open session on police management, training and performance (2)**

*Session moderator: Major-General Rui Fernando Batista Moura (Guarda Nacional Republicana)*

**Public Value: A new means to peel an apple?**

*Ian Hesketh (Lancashire Constabulary) and Professor Jean Hartley (Open University)*

**“Corporate Police Stories” – About the Impact and the Capabilities of Police History on Policing, Police Training and Communication**

*Dr Patricia Schütte-Bestek (Ruhr-Universität Bochum) and Dr Andreas Pudlat (Universität Hildesheim)*

**Lisbon Community Policing – The challenge of the intercultural and mediation approach**

*Mónica Diniz and Claudia Santa Cruz (Polícia Municipal de Lisboa)*

**Knowledge-based decision-making: Evidence-based medicine as a model for police-commanders in high-risk situations?**

*Torben Lehberg (German Police University)*

**The impact of physical activity and nutrition on sleep quality of police officers**

*P. Guimarães, L. Monteiro and M. Cardoso (Instituto Superior de Ciências Policiais e Segurança Interna)*

**Management and mental health prevention in French police stations**

*Jean-Sébastien Colombani (doctoral researcher at École Nationale Supérieure de la Police)*

**Open floor**

**09:00-10:45 (Auditorium 3) – Open session on police learning and training**

**Session moderator:** *Lt. Col. Renato Raggi (Centre of Excellence for Stability Police Units)*

**The ELEES Project: Preliminary findings**

*Dr André Konze (German Police University)*

**Evaluation of basic police training – objectives, methods and results**

*Dr Albin Muff (Präsidium der Bayerischen Bereitschaftspolizei)*

**Police decision making in major events: A research programme**

*Dr Lúcia G. Pais and Dr Sérgio Felgueiras (Instituto Superior de Ciências Policiais e de Segurança Interna)*

**SAFECITI - context and objectives**

*José Francisco López Sánchez (Innovation and Development Service of the Spanish National Police)*

**Dealing with victims of sexual crimes: a learning and training project in the Portuguese Judiciary Police**

*Dr Cristina Soeiro and Raquel Guerra (Escola de Polícia Judiciária)*

**A comparison between Swedish and Catalan Police Students**

*Thomas Bäck (Umeå University) and Lola Vallès (Catalan Police Academy)*

**Open floor**

**10:45-11:15 – Coffee break**

## **11:15-12:45 (Auditorium 1) – Terrorism: Research, practice and roadmaps**

**Session moderator:** *IC João Paulo Ventura (Polícia Judiciária)*

### **Terrorism, mass surveillance and civil rights**

*Dr Reinhard Kreissl (Vienna Centre for Societal Security)*

### **Radicalisation: Lessons learned from the French experience**

*Jean-Pascal Mariani (Unité de Coordination de la Lutte Anti-terroriste)*

**Open floor**

## **11:15-12:45 (Auditorium 2) – Open session on intimate partner violence**

**Session moderator:** *João Lázaro (Associação Portuguesa de Apoio à Vítima)*

### **Intimate Partner Femicide, Risk Factors and Dynamics, and Implications for Policing**

*Professor Dr Claudia Kestermann (Hochschule für Öffentliche Verwaltung)*

### **Femicide Criminal Psychological Profiling: An Assessment of Risk Factors**

*Dr Iris Almeida, Dr Cristina Soeiro and Dr Maria Luísa Lima (Instituto Superior Egas Moniz)*

### **Mind the Gap! Improving intervention in Intimate Partner Violence against older Women – The role of law enforcement agencies**

*Dr Heloísa Perista (Centro de Estudos para a Intervenção Social)*

### **Victim's views on policing partner violence**

*Kate Butterworth (Durham University), Nicole Westmarland (Durham University) and Helen Murphy (Durham Constabulary)*

### **A systematic review of motivational approaches as a pre-treatment intervention for domestic violence perpetrator programmes**

*Carol Vigurs (University College London)*

**Open floor**

## **11:15-12:00 (Auditorium 3) – Open session on police ethics**

**Session moderator:** *IC Carlos Costa (Escola de Polícia Judiciária)*

### **Challenges and possibilities for the implementation of policing codes of ethics**

*Anja Schaefer (the Open University), Dr Owain Smolović Jones (the Open University) and Gerald Murray (Police Service of Northern Ireland)*

**Open floor**

## **12:00-13:00 (Auditorium 3) – Open session on new technologies and special investigation methods**

**Session moderator:** *Professor Filipe Mota Pinto (Instituto Politécnico de Leiria)*

### **Preconditions for the long-term use of new technologies by law enforcement agencies**

*Caroline Goemans-Dorny and Sabine Berghs (INTERPOL)*



**Police, camera, evidence; a collaborative evaluation of the impact of body worn video**

*Inspector Ben Clark and Superintendent Adrian Hutchinson (Metropolitan Police Service)*

**Regulating the Gray Zone: A Comparative Look at Undercover Policing in the United States, Italy, Germany, and France**

*Professor Jacqueline Ross (University of Illinois)*

**Open floor**

**13:00-14:30 – Lunch break**

**14:30-16:15 (Auditorium 1) – Cyber crime: Research, practice and roadmaps**

**Session moderator:** *Peter Neyroud, CBE QPM PhD (University of Cambridge)*

**The Changing Cybersecurity Threat Landscape and the Challenges for Policing Cybercrime in the EU**

*Professor David S. Wall (University of Leeds)*

**Building bridges: recent lessons learned in evidence based research involving law enforcement**

*Professor Joseph Cannataci (University of Groningen)*

**Cyber crime: research evidence and roadmaps for applied research with science researchers and law and enforcement agencies**

*Professor Filipe Mota Pinto (Instituto Politécnico de Leiria)*

**Open floor**

**14:30-15:45 (Auditorium 2) – Trafficking in human beings: Research, practice and roadmaps**

**Session moderator:** *Dr Heloísa Perista (Centro de Estudos para a Intervenção Social)*

**New Directions in Research on Human Trafficking**

*Professor Dina Siegel (University of Utrecht)*

**Trafficking in Human beings: Country-specific law enforcement practices in Europe**

*Dr Madalena Duarte (Universidade de Coimbra)*

**Open floor**

**16:00-16:30 – Coffee break**

**16:30-17:30 (Auditorium 1) – Open session on ‘what works’ and on ‘what really matters’**

**Session moderator:** *Professor Maurice Punch (London School of Economics and Political Science)*

**In search of good evidence-based policing, a UK perspective**

*Dr Denise Martin (University of the West of Scotland)*

**Evidence-based policing through Consortium research**

*Jean Hartley and Dr Owain Smolović Jones (The Open University)*

**What *really* matters in policing? And why “what works?” alone is simply not enough**

*Auke van Dijk and Frank Hoogewoning (Dutch National Police)*

**Open floor**

**16:30-17:45 (Auditorium 2) – Open session on organised crime**

**Session moderator:** *CIC Manuela Marta (Polícia Judiciária)*

**Leading industry of economic crises: organized crime? - The Hungarian organized crime in the past two decades**

*Tamas Bezsenyi (National University of Public Service, Faculty of Law Enforcement)*

**Human trafficking for the purpose of sexual exploitation: Organisational structures and modus operandi of the perpetrators**

*Bettina Zietlow (Kriminologisches Forschungsinstitut Niedersachsen) and Matthias Radtke (Criminological Research Institute of Lower Saxony)*

**Trafficking in Human Beings – Extending the concept of vulnerability to the territory**

*Rita Penedo (Observatory on Trafficking in Human Beings/Ministry of Internal Administration)*

**Counterfeit plant protection products: a mixed-methods study of an emerging crime threat to the UK agricultural industry**

*Christopher Sambrook (Harper Adams University)*

**Open floor**

**16:30-17:15 (Auditorium 3) – Open session on terrorism**

**Session moderator:** *IC João Paulo Ventura (Polícia Judiciária)*

**Evidence-based counter-terrorism policy**

*José María Blanco (Guardia Civil) and Jessica Cohen (Private sector analysis)*

**Cybercommunication as a Jihadi Strategic Tool**

*Dr Felipe Pathé Duarte (Instituto Superior de Ciências Policiais e Segurança Interna)*

**Open floor**

**20:00-22:00 – Conference official dinner**

**THURSDAY, 8<sup>TH</sup> OCTOBER 2015**

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**09:15-11:15 (Auditorium 1) – Evidence-based policing: A new perspective of cooperation between practice, education and police science?**

Session moderator: *Professor Jenny Fleming (University of Southampton)*

**Measuring and Understanding What the Police Do: Balancing Prediction and Meaning in the Rise of Police Science**

*Professor Jack Greene (Northeastern University)*

**What *really* matters in policing?**

*Professor Maurice Punch (London School of Economics and Political Science)*

**Open floor**

**Panel discussion** with *Jenny Fleming, Jack Greene, Maurice Punch, Ben Bradford, and Peter Neyroud, moderated by Detlef Nogala (European Police College)*

**11:15-11:45 Coffee break**

**11:45-12:30 (Auditorium 1) - Closing ceremony**

*Pedro do Carmo, Deputy Director of Polícia Judiciária*

*Carla Falua, Director of Escola de Polícia Judiciária*

*Detlef Nogala, European Police College*

*Eduardo Viegas Ferreira, Conference manager, Escola de Polícia Judiciária*

*Jean-Marie Fiquet, École Nationale Supérieure de la Police*

**POSTERS (6<sup>th</sup> October, main atrium and Auditorium 3, from 09:00 to 11:00)**

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**‘Virtual session’ on police management, performance and health**

**Stress among police officers: a comparative study between begin/end of shift during two weeks**

*Iolanda Braga Pereira and Cristina Queirós (Universidade do Porto) and António Leitão da Silva (Polícia Municipal do Porto)*

**Coping strategies among police officers: a comparative study with civilians**

*Iolanda Braga Pereira and Cristina Queirós (Universidade do Porto) and António Leitão da Silva (Polícia Municipal do Porto)*

**Psychological wellbeing and psychopathology symptoms among police officers**

*Cristina Queirós (Universidade do Porto), Maria Cristina Castro (Universidade do Porto e Universidade Federal de Santa Catarina, Brasil) and Guida Manuel and Cristina Soeiro (Escola de Polícia Judiciária)*

**From the sources of stress to well-being: The protective role of personal, social and organizational resources**

*Sónia P. Gonçalves (Instituto Piaget) and Fátima Ferro (Centro de Psicologia e Intervenção Social da GNR)*

**Psychopathological symptoms as predictors of burnout among police officers with different years of experience**

*Joana Rosa and Fernando Passos (Polícia Segurança Pública) and Cristina Queirós (Universidade do Porto)*

**Some aspects of police actions during criminal investigation of domestic homicides**

*Dr Lana Milivojevic (Ministry of the Interior of the Republic of Croatia, Police College)*

**Conflicts in the national police of São Tomé e Príncipe**

*Percile Pires dos Santos and Sónia Morgado (Instituto Superior de Ciências Policiais e Segurança Interna)*

**POSTERS (7<sup>th</sup> October, main atrium and Auditorium 3, from 14:30 to 16:00)**

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**‘Virtual session’ on new technologies, police intelligence and terrorism**

**UAV’s in PSP: Vantages and disadvantages in the Portuguese context**

*Rui Alfaro and Sónia Morgado (Instituto Superior de Ciências Policiais e Segurança Interna)*

**Facebook as intelligence: A challenge to police forces**

*Rui Ferraz and Sónia Morgado (Instituto Superior de Ciências Policiais e Segurança Interna)*

**Some factors that have an influence on writing police intelligence information in the Republic of Croatia**

*Dr Josip Pavliček, Simona Strmečki, M.A. & Marica Mravak (Police College, Mol, Republic of Croatia)*

**Contemporary Fear of Terrorism - Research with Particular Regard to Europe: An Ongoing Research Project**

*Hanns Matsiek (Bundesministerium für Inneres Sicherheitsakademie, Institut für Wissenschaft und Forschung)*

**‘Virtual session’ on forensics**

**Writing instrument inks microspectrophotometry forensic analysis and characterization**

*A.C. Almeida Assis and C. Farinha (Laboratório de Polícia Científica, Polícia Judiciária) and F. Inácio and J. Seixas de Melo (Department of Chemistry, University of Coimbra).*

**Forensic Analysis of Unknown Materials: a different vision of Questioned Documents**

*A.C. Almeida Assis, M.F. Barbosa and C. Farinha (Laboratório de Polícia Científica, Polícia Judiciária)*

**Near infrared hyper spectral imaging as a promising tool to differentiate counterfeit clothes**

*P. Prego Meleiro (Department of Analytical Chemistry, Multipurpose Building of Chemistry, University of Alcalá), F. Ortega-Ojeda and C. García-Ruiz (University Institute of Research in Police Sciences, University of Alcalá)*

**Dismantling Illicit Laboratories**

*Ana Isabel Alves (Laboratório de Polícia Científica, Polícia Judiciária)*

**New Psychoactive Substances: The role of the Scientific Police Laboratory in overcoming new challenges**

*Ana Matias, Algina Barbosa, Andrea Alexandre, Gonçalo Sousa, Joana Alegre, José Prospéri, José Rodrigues, Maria João Caldeira, Paula Costa, Raquel Ferreira, Sandra Medeiros and João Rodrigues (Laboratório de Polícia Científica, Polícia Judiciária)*

## ABSTRACTS

**MONDAY, 5<sup>TH</sup> OCTOBER 2015**

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### **16:00-18:15 (Auditorium 1) – Evidence-based policing: From theory to practice**

#### **'I honestly don't see the point in this': the (continuing) challenges of integrating research evidence into police decision-making**

*Professor Jenny Fleming (University of Southampton) and Professor Nick Fyfe (University of Dundee)*

In 2013, the Economic and Social Research Council and the College of Policing partnered with a university consortium across the UK as part of a three year programme of work to build evidence around what works in reducing crime. The What Works Centre for Crime Reduction draws upon international good practice to build on and enhance the UK's capacity to develop, disseminate and apply evidence-based approaches to policing and crime reduction. As part of the preliminary research associated with this task the authors undertook a series of focus groups to ascertain police officers' understanding of using knowledge and evidence-based research to inform practice and policy. The focus groups, across all ranks were held in four constabularies across the UK between May and July 2014 and this presentation reports on the findings. The research suggests that the concept of 'evidence-based policing' is not generally understood. Those who did demonstrate understanding and a willingness to embrace evidence-based practice were identified as those who had been involved in evidence-based activities elsewhere. A number of challenges for implementing evidence-based approaches to policing are identified.

#### **Tackling the paradox of policing research**

*Professor Nick Fyfe (University of Dundee) and Professor Jenny Fleming (University of Southampton)*

In their reflections on the condition of contemporary criminology, Loader and Sparks (2011) highlight a paradox of 'successful failure' (p.11). On the one hand, criminology as an academic discipline is expanding, with more students, larger conferences and bigger professional associations. Yet, on the other hand, criminal justice policy in western societies remains relatively uninformed by criminological research findings and the demand for evidence to inform policy is still weak. A similar paradox appears to be true of police research. There has been a significant expansion in policing research in recent years in Europe, North America and Australia yet many would claim that the impact of research evidence on policing policy and practice remains limited. Researchers in the United States, for example, have struck a consistently pessimistic note over the last fifteen years regarding the integration of research-based knowledge into routine police practice. Bayley (1998) writing in the late 1990s observed that 'research may not have made as significant, or at least as coherent, an impression on policing as scholars like to think'; and more recently Lum *et al* (2012) have acknowledged that 'the notion that science should matter is often trumped by the reality that public opinion, political will, or consensus-based opinions about best practices are what should underpin and drive police practices'. In this paper we examine some of the barriers (both individual and institutional) that exist to achieving greater integration of research evidence into police decision-making and consider some recent innovations in improving the accessibility of research findings for police organisations. In particular, we emphasise the importance of evidence-based judgement in police decision-making rather than simply the notion of evidence-based policing and, following Mark Moore (2010), we argue that academics and practitioners '*have to learn to work together in kind of intellectual and practical partnerships to solve problems as best they can – not compete with each other over whose knowledge is more authoritative*'.

**TUESDAY, 6<sup>TH</sup> OCTOBER 2015 (MORNING)**

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### **09:00-10:45 (Auditorium 1) – Evidence-based policing: Transference challenges**

#### **The Scottish Community Engagement Trial (ScotCET): The challenges of replication in experimental studies of policing**

*Dr Ben Bradford (University of Oxford)*

Aiming to replicate the Queensland Community Engagement Trial (QCET), ScotCET tested whether the introduction of improved mechanisms for communicating procedural justice during routine encounters between police and public can influence public trust and enhance police legitimacy. This presentation outlines the process and pitfalls of

replication and explores implications for future research and policy. Results demonstrate the difficulty in translating experimental interventions across policing contexts, and challenge the notion that public perceptions may be improved through a simple, additive approach to the delivery and communication of procedural justice.

#### **Connecting evidence and experience in policing: the role of police-academic partnerships**

*Professor Nick Fyfe (University of Dundee)*

This paper will examine the role played by police-academic partnerships in developing evidence-based approaches to policing. The paper explores three key themes: Contesting evidence; Co-producing evidence; Connecting evidence. The paper will conclude by reflecting on the future of police-academic partnerships in an era of austerity and police reform. It will consider the role that research can play in helping to professionalize the police service but also warn against an over-reliance on science. There is a need for both 'practical wisdom' as well as the insights of academia.

#### **'What Works for Crime Reduction' – Linking Research to Policing**

*Dr Nicky Miller (Research Evidence Partnership Manager, UK College of Policing)*

"Alone we can do so little; together we can do so much" (Helen Keller). It has only been fairly recently that evidence-based policing have gained traction in the UK. One of the roles of the College of Policing is as a catalyst for the development and use of knowledge and research by and for those working in policing. In partnership with Forces, academia and crime reduction partners, the College is helping to develop the understanding and use of research in policing; widen understanding of evidence-based approaches to solve problems and, where there are gaps, develop and build new evidence-based approaches and share learning and knowledge. This is achieved with a range of initiatives through the What Works Centre for Crime Reduction (WWCCR) which is hosted by the College. These initiatives will be highlighted in this presentation.

### **11:15-13:00 (Auditorium 1) – Research projects: Methods and findings**

#### **The CODISP (Concept and Tools for the Development of Intelligence-led Policing) Project**

*Dr Thierry Delpuech (Centre Marc Bloch) and Professor Jacqueline Ross (University of Illinois)*

CODISP is a cultural and social science project on recent forms of knowledge management work in the law enforcement organisation. The aim is to analyse the way knowledge management in law enforcement (its methods and forms, as well as the means and degree of knowledge sharing), on the one hand, and the knowledge-based law enforcement work (in regard to social environments and types of tort), on the other hand, interact. CODISP provides an opportunity to take time to reflect, exchange ideas, come up with critical thoughts and learn. Overall, CODISP extends the repertoire of the day-to-day work of law enforcement personnel. We seek to promote democratic, integrated law enforcement governance structures that are sensitive to social environments.

#### **Is it just a British thing? Examining the wider European relevance of evidence on the effects of mounted police deployments in the UK**

*Dr Chris Giacomantonio (RAND Europe), Dr Ben Bradford (University of Oxford) and Mathew Davies (RAND Europe)*

This presentation examines the wider European relevance of an 18-month study into mounted policing in the UK. This was a mixed-methods project undertaken in partnership with UK police forces that *inter alia* demonstrated a particular value for police on horseback when deployed in a public-engagement role. The study's findings suggest a British public that is mostly receptive to both the symbolism and the routine practice of mounted policing. Further, the use of mounted police can have positive knock-on effects in terms of police visibility, trust and confidence through relatively low levels of additional patrol activity. However, this study was conducted in the UK, and similar results may not be found in other jurisdictions. Indeed, through a survey of mounted police officers across 26 police forces in 14 countries, conducted as part of the wider study, the research shows that police in other national jurisdictions exhibit some differences with the UK model of mounted police deployment as well as important points of confluence between the ways in which police in the UK and police elsewhere in Europe use – and understand the use of – mounted police resources. This presentation first offers an overview of the main results and conclusions from the UK study, and outlines the points of differentiation and similarity revealed by the international survey of mounted police officers. From this, the presentation examines the underlying mechanisms through which mounted police may 'succeed' in public engagement – such as visibility and approachability – that may have wider relevance to policing, whether or not horses are involved.

## **Communities, social media, and police accountability: Findings from EU research projects**

*Professor Joachim Kersten (German Police University)*

Based on comparative research into police and minorities ([www.corepol.eu](http://www.corepol.eu)) and recently started Horizon 2020 work on community policing (CP) and social media ([www.inspec2t.eu](http://www.inspec2t.eu)) this presentation will address questions of police accountability and oversight. In US police studies CP is regarded as a strategy to increase police accountability and to curtail police abuse of power (Corsianos 2012). Can this also be shown for EU policing? Is there any evidence for EU-wide standards regarding CP practice? In which ways does CP challenge traditional images of police as masculine 'crime fighters'? Does CP practice in EU countries indicate an enhancement of police accountability and police oversight? Is this experience shared by communities, NGOs, and minority organizations? What will be the role and impact of social media in the future development of CP strategies?

## **11:15-12:45 (Auditorium 2) – Open session on crime prevention and investigation**

### **Trawling the research base for the Crime Reduction online toolkit**

*Lisa Thompson, Jyoti Belur, Tanya Le Sage, Shane Johnson, Kate Bowers, Aiden Sidebottom, Nick Tilley and Gloria Laycock (University College London Department of Security and Crime Science)*

One of the key components of the UK What Works Centre in Crime Reduction has been the creation of a Crime Reduction online toolkit. This aims to provide practitioners with easy access to the crime reduction evidence base, allowing them to weigh up the evidence on the impact, cost and implementation of different interventions through the framework of EMMIE. This presentation will describe our experiences in assembling the crime reduction evidence base for the toolkit, and appraising this evidence in terms of information that is relevant to practitioners. In particular, it will highlight that historically there has been a scarcity of evidence syntheses on interventions the police can realistically be expected to implement. Our key point is that the majority of the crime reduction evidence is not presented in a manner that enables practitioners to see how an intervention might be made to work in the context of their own policing area. In light of this, we propose that a fundamental shift in criminal justice research is needed to build an evidence base that can become an integral part of the dialogue in police decision-making.

### **Turning a Social Problem into a Cultural Opportunity: Crime Prevention Project 'SOS AZULEJO'**

*Leonor Sá (Escola de Polícia Judiciária)*

Because the Judiciary Police (PJ) has the exclusive competence for crimes related to cultural heritage in Portugal, the PJ Museum decided to implement a crime prevention project against theft, traffic and vandalism of Portuguese historic and artistic tiles which is simultaneously a campaign for the conservation of this cultural heritage. Name of the Project: "SOS AZULEJO". With the help of various public Partners (including other Portuguese police forces - PSP and GNR) and Partners coming from different thematic areas, this interdisciplinary project has reached measurable positive results such as a more than 70% reduction of registered *azulejos* thefts.

### **The importance of street crime context**

*Ana Neves (doctoral researcher at Universidade Nova de Lisboa)*

In 2013 the Portuguese Ministry of Home Affairs has published a CPTED guidebook: "CPTED – *Prevenção Criminal Através do Espaço Construído: Guia de Boas Práticas*" to facilitate the access to this approach, in Portuguese, which is based on those principles that have proven to reduce crime and improve citizens' life quality. Just recently (April, 2015) and for the first time, Portugal has integrated CPTED in the Housing National Strategy when applying for European funds in urban rehabilitation. The prevention of crime requires a broader and multidisciplinary approach. Urban projects to succeed need to understand the context and integrate the different areas of knowledge from architecture to sociology, not forgetting the police, which should not be the last one to arrive to the crime scene, but the first one to arrive to the scene before the crime. The main focus of this paper is to demonstrate some conclusions of this research, once identified the hotspots of street crime in two main areas and its relation with the context, based on the CPTED approach, adding suggestions to improve citizens' quality of life.

### **Cognitive Issues and Criminal Investigations: How to Handle Errors**

*Hans Ditrich (Institute for Science and Research, Dept. I/9 – SIAK)*

It is not possible to maintain a 100% error free procedure in criminal investigations - as in every other human

activity. Still, many quality control programs, good practice protocols, standard operating procedures, etc. attempt to ensure correct processing of penal offences. In interviews with highly experienced, leading crime scene officers, several misconceptions were identified as highly influential to a criminal investigation. The officers evaluated statements from a list of cognitive errors in medical sciences that were adapted to a legal investigation context. From the perspective of their practical experience, the following issues were selected for their frequent appearance and their adverse effect on crime solving: selective perception, expectation and confirmation bias, anchoring to inappropriate information as well as shifting the burden of proof from the investigator to the suspect were regarded as most significant. However, also several other sources of misconceptions were identified and can be attributed to individual as well as organizational factors. Training should alert police officers as well as other persons (forensic experts, coroners, prosecutors, judges, etc.) involved in a criminal investigation to the perils of cognitive bias. Furthermore problems, experiences and hopefully solutions should be discussed in peer cycles of investigators - thus distributing information "horizontally" instead of reporting only to superiors. Additionally, it seems worthwhile to investigate error-prone processes in criminal prosecution on a systematic, organization-wide basis.

### **The Reform of Lithuanian Detective Force: Approach Based on Evidence**

*Žaneta Navickienė and Ingrida Kairienė (Mykolas Romeris University)*

To optimize the organisation of criminal acts investigation and use the available human resources more rationally, the unit of inner and outer reasons has determined the most considerable necessity of the reform of Lithuanian Detective Force. First, the reconnaissance function has been concentrated in the general police offices of regions to optimize the detective force practice since the 1<sup>st</sup> of January 2015, which was filled in the territorial police offices too. The subdivisions have been formed according to the special tendencies of reconnaissance practice and pretrial investigation. Secondly, the priority of criminal acts investigation has been exercised. It makes a reach for rational human and financial resources management, active and well-balanced subject's cooperation, and systematic attitude formation towards the intensity of criminal acts investigation. It is significant that the lower priority of pretrial investigations could not be completely down-graded; in accordance with the regulations of CPC of the Republic of Lithuania every activity should be examined. Therefore, the lower priority of pretrial investigations does not absolutely have to eliminate the investigation of inoffensive criminal acts and has to remain as legitimate as other higher priorities of pretrial investigations. Thirdly, the experiment has been carried out in the force by responding to incidents when it is expected to strengthen all links of organisation of a pretrial investigation in parallel with the reaction to the events till the case completion by bringing the up-to-date management culture into the organization of criminal acts investigation such as the centralist practice size, model of active cooperation of subjects of a pretrial investigation, the consolidation of these subjects qualification in one range. However, there are some potential weak points on this practice such as the strong growth of workload, high responsibility and quick planning rate, which could become a load to inexperienced workers, shift work influence on the quality of a pretrial investigation and etc.

## **11:15-12:15 (Auditorium 3) – Open session on prevention and investigation of sexual offences**

### **Multiple agency management of sex offenders: evidenced based evaluation**

*Dr Mary Walker (Garda Síochána Research Unit)*

This communication presents findings in relation to evaluations of the national pilot for risk assessing and managing sex offenders, who live in the community (SORAM). The research includes two evaluations of SORAM in 2011 and 2015, and PhD research on multi-agency management. Four main areas are focused on: risk assessment, risk management, multi-agency working (SORAM) and sex offender perspectives. This research is a resource not only for the five countries involved but a guide for any countries who are considering introducing sex offender management strategies.

### **Decision Support, Crime Linkage and Analysis**

*Dr Don Casey, Professor Phillip Burrell (London South Bank University) and Detective Chief Inspector Nick Sumner (Metropolitan Police Service)*

A dataset of solved stranger rapes provided by the Serious Crime Analysis Section (SCAS) of the U.K. National Crime Agency (NCA) has been represented and partitioned, in terms of the behavioural dimensions suggested by Grubin et al. (2000), using Decision Support and AI techniques, i.e., fuzzy clustering algorithms and fuzzy rule sets (Casey & Burrell, 2013). The U.K. Metropolitan Police have now released a new dataset of 4,000 stranger rapes from their live database to develop this research with the aim of building a Decision Support System that will assist in indicating valid links between offences for every crime contained within the database and at the time that it is entered onto



the system. The authors explore other Decision Support techniques used to assist with crime linkage and describe the techniques that will be used to investigate the Metropolitan Police dataset and the development of the proposed Decision Support System.

### **Child and adolescent Internet sexual offending: offenders typologies, use of pornography and images severity**

*Raquel Guerra and Dr Cristina Soeiro (Escola de Polícia Judiciária)*

This communication presents the results of an exploratory study of sexual offenders against children and adolescents with Internet practice as a way to establish contact with the victims, and support the possession and sharing of pornographic material. Given the heterogeneity of sex offenders it is possible to identify typologies on the behaviour of online sex offenders, since they use the Internet with different motivations and purposes. With regard to the importance of pornography possession, we must consider that the analysis of the type/severity and way of use of this material contributes to the assessment of the level of risk of sexual violence. The possession of pornography of children and adolescents in sexual assault may hold the increasing number of assaults committed against children and adolescents, as well as increasing recidivism of sexual assaults committed by offenders already identified in the justice system. In this research, the sample is composed by 30 children and adolescents sex offenders, who were arrested by the Portuguese Judiciary Police, since 2012. The typology is developed by the criminal profiling technique and the use and severity of the images were analysed by the methods proposed by Krone (2004) and Taylor and Quayle (2003).

## **TUESDAY, 6<sup>TH</sup> OCTOBER 2015 (AFTERNOON)**

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### **14:00-15:35 (Auditorium 1) - Law enforcement research and development: The role of International and European agencies**

#### **An evidence-based approach to European border policing? The challenge of the unknown, the human factor, expert judgement and self-fulfilling prophecies**

*Dr Monica Gariup (Senior Research Officer, Frontex Research and Development Unit)*

The aim of the presentation is to introduce the challenges of applying an evidence-based approach to border policing in general and to the specific tasks of frontline border checks in particular. After a short introduction to Frontex and Schengen border control, the discussion will focus on the current availability (or lack thereof) of quantitative and qualitative data on frontline border checks practices and its implications for the evaluation of the effectiveness of operational and capacity-building measures. Particular attention will be devoted to the lack of a ground truth, the importance of human perceptions under time constraint as well as the growing reliance on technology in first line decision-making. The results of two controlled observational studies conducted by Frontex on the performance of border guard officers (the “human”) and automated systems (the “machine”) in the area of document authentication and deception detection/credibility assessment will also be presented.

#### **INTERPOL’s approach to promoting evidence-based policing at the international level**

*Dieter Korhummel (INTERPOL Assistant Director, Capacity Building, Training, Research and Accreditation)*

Led by Secretary General Jürgen Stock, INTERPOL is currently rebalancing strategic objectives in an effort to expand the organization’s endeavors in the area of research-based policing and bring them to the forefront of INTERPOL’s contributions to the global police community. In an effort to support ongoing rebalancing process and prioritization of research, we have recently launched several related initiatives. For example, we aim to establish an INTERPOL research community in order to strengthen internal networks and promote collaboration among the specialized crime units and individual officers working on research projects. In addition, we are creating a centralized mapping of all INTERPOL research projects, enabling us to have a bird’s-eye view of each project’s respective objectives, project points of contact and status. In the near future, the INTERPOL Global Complex for Innovation (IGCI) in Singapore is expected to house a unit that is explicitly dedicated to innovation in policing. Its thematic range shall be broad, from reviewing the relevant findings in the realm of scientific research over to leadership and technology studies. We will discuss further with the stakeholders in our member countries how to shape this new unit, bearing in mind that INTERPOL’s classic mandate is to bridge gaps between diverse judiciaries and disparities in policing. INTERPOL aims to support the collective law enforcement research community’s endeavors in the discovery of knowledge and help ensure that research in this area yields tangible benefits for police in the field. Over the long-term, for example, the community’s findings might guide the iterative development of international policing standards to improve the interoperability of the heterogeneous criminal jurisdictions within our member countries.

Other thematic areas of interest for us include transnational standards for secure law enforcement communication or the secure exchange of human identifiers such as biometric information.

## **14:00-15:45 (Auditorium 2) – Open session on police management, training and performance**

### **How do police officers perceive certain characteristics of the formal police management?**

*Associate Professor Ksenija Butorac, Dr Ante Orlović and Assistant Professor Joško Sindik (Police College of Croatia)*

The main objective of the research was to establish the relationship between certain perceived characteristics of police management and relevant characteristics of police officers (potentially related to these perceptions). Specifically, we have determined the correlation between police officer's age and work experience and perceived level of the development of the individual characteristics (together with the estimated importance of these characteristics) of police managers (knowledge/skills), as well as with perceived organisational and legal characteristics of the police system (the principles of the appointment and dismissal of police managers). Moreover, we have determined the gender differences in perception of abovementioned characteristics of the police management, as well as differences according to the category of police department where police officers are working. The sample examined in this study comprised 132 police officers, who are currently attending the study programme of Criminal Investigation at the Police College in Zagreb, Croatia. This study revealed that social skills (as the component of the principles of the appointment and dismissal of police managers) are the only dependent variable that distinguish the perception of according to independent variable police department (in the second category of the police department, the highest mean is revealed, while the lowest mean is found in the fourth category). No gender differences are found. Neither age nor experience have statistically significant correlations, nor with the characteristics associated with knowledge / skills of police managers, nor with the principles of the appointment and dismissal of police managers.

### **Managerial Influences on Police Discretion**

*A. R. Parsons (doctoral researcher at the Institute of Criminology, University of Cambridge)*

The study incorporates empirical research funded under the auspices of the Wakefield Scholarship. The implementation of Community Resolution in Sussex Police in 2011 (which allows officers greater discretion to resolve minor criminal matters) illustrates the theory. By means of a 'before and after survey' differences were noted in officer attitudes and work motivations after the grant of greater operational discretion. Findings demonstrated changes in perceptions of organisational policing priorities, with a significant shift from 'meeting targets' to 'victims' needs'. 'Cultural dissonance' could be measured where data showed a gap between the force's articulated objectives/priorities as perceived by officers ('the descriptive'), and the objectives and priorities as officers would wish to see them ('the normative'). Interestingly, the most important thing survey respondents needed from their police force 'to do their policing job well' was 'being trusted to make the right decision', suggesting that giving officers greater scope to exercise discretion will not of itself increase levels of organisational commitment or job satisfaction nor eradicate the 'target-mentality': officers need to both give and receive trust to develop confidence in their authority, fundamental to police legitimacy and effectiveness.

### **Simulation: The Changing Face of Police Training**

*Dr Gregory Kratzig (Training, Innovation and Research, RCMP)*

While flight simulation is a standard training tool for both commercial and military pilots, medical mannequins, heavy artillery, and interview simulators are now heavily relied on in multiple professions, most police training occurs in a classroom, a gymnasium or firearms range. The RCMP has led several research projects designed to explore ways in which simulation can be used in both induction training and in the field with operational members. This presentation will provide the empirical evidence that was used to migrate training from a traditional environment, to an environment that provides for more training flexibility, training efficiency, and in many cases provides for more realistic training than could be provided in the past. Also to be discussed are the barriers that exist when significant change is being proposed and how science is being used to change biases.

### **Planning and assessment of collective action policing**

*Dr Luís Elias, Dr Sérgio Felgueiras and Dr Lúcia G. Pais (Instituto Superior de Ciências Policiais e Segurança Interna)*

The Major Events Laboratory (MEL) started functioning at the very beginning of 2011 at the Higher Institute of Police Sciences and Internal Security. Its primary objective is to develop research in what concerns the security of major events. Secondly, it aims to contribute to modernizing police activity and the definition of good practices. The year of 2012 was a particular one regarding political protest in Portugal, when some of the constraints imposed by the “Troika” became evident for all citizens. The diversity of the collective actions performed requires deeper attention. By analysing four of the most prominent political demonstrations which took place during 2012, the ultimate objective is to set up a more objective metric for the planning and assessment phases, when collective action policing is at stake. The research project is to be presented. Legal framework and social and political climate will be examined in order to sustain the subject’s relevance. The details of the methodological planning will be discussed, mainly the triangulation of data collection methods: IPO model, interviews, and analysis of the media.

### **An international comparison of the composition and motivations of volunteer police officers in a UK and US police force**

*Dr Ian K. Pepper (Department of Law, Policing and Investigation, Teesside University) and Dr Ross Wolf (Department of Criminal Justice, University of Central Florida)*

The aim of this research project was to compare the composition of the part-time volunteer police services in Cleveland Police, UK and the Orange County Sheriff’s Office, Florida, USA. This included the uniformed volunteer’s employment status, age, gender, years of experience, motivations for volunteering and the hours volunteered. The project was established to identify areas of similarity and differences, to enable further research, which could be used to inform both strategy and practice. The findings add further support to the motivations for volunteering as a part-time volunteer police officer identified by Gaston and Alexander (2001) and Pepper (2014). The research has demonstrated that there are many similarities between the composition and motivations of the volunteers within these police agencies on either side of the Atlantic.

### **Practical implications of critical incident’s studies in the Portuguese crime investigation police**

*Guida Manuel (Escola de Polícia Judiciária)*

The aim of this research was to identify and characterise the main critical incidents experienced by the Portuguese criminal investigation police officers and the related stress reactions, to organise a critical incidents intervention program to support those police officers. The data was collected using the Critical Incidents Questionnaire for Criminal Investigation (Manuel & Soeiro, 2009), through 604 individual interviews. The participants described two critical incidents involving operational work, evident human suffering, firearms, difficult/violent individuals and car accidents. Some of the findings may be pertinent for future research to understand the impact of serious crime investigations on individuals. It also reminds us of the importance of stress, burnout and coping research increase in police forces.

## **16:15-18:00 (Auditorium 1) – Research projects: Innovative methods and instruments**

### **Developing injury surveillance through ambulance data: A ‘proof of concept’ approach**

*Dr Chris Giacomantonio and Dr Alex Sutherland (RAND Europe) and Chief Inspector Dave Twyford (West Midlands Police)*

Violence reduction is a global issue. What is increasingly evident is many jurisdictions have moved from seeing the problem simply as a policing and justice issue to a health issue. Since the 1990s, police in the UK have used emergency department (ED) data as a source of ‘injury surveillance’ that can assist police in reducing violence. In what is commonly known as the ‘Cardiff Model’ of violence prevention, receptionists in emergency departments produce an anonymised dataset for use of the police, which can be used to identify patterns of assault and other interpersonal violence that may have been unknown from police data. Ambulance data – collected routinely as a result of emergency call-outs – has been identified as possibly providing additional valuable data in helping police and other public agencies better understand the types and levels of violence in their jurisdictions, and ambulance data may offer some benefits over the traditional Cardiff Model approach. West Midlands Police (WMP) is implementing and evaluating the use of ambulance data to support injury surveillance. In this presentation, the research partners from WMP and RAND Europe outline the rationale for using ambulance data as well as the implementation and evaluation approach being pursued within this project. This is presented as an ‘in progress’ research partnership, and as such findings will not be presented. Instead, the presentation will provide insights into the development of the project, the implementation and evaluation strategy including how impacts will be measured and validated, and the structure of the research partnership across the multiple public and research agencies involved. From this, the presentation will consider issues for wider application of this data-sharing model within the UK as well as elsewhere in Europe.

## **Introducing EMMIE: An evidence rating scale to encourage mixed-method crime prevention synthesis reviews**

*Professor Shane Johnson, Professor Nick Tilley and Professor Kate Bowers (University College London)*

Crime reduction practitioners are faced with a torrent of 'evidence' to inform their decisions. Systematic reviews have emerged as a means for summarizing what can be concluded from such evidence. However, reviews vary in quality and the issues they speak to. This paper proposes a set of criteria against which the quality of existing systematic reviews can be assessed, and that can be used to inform the production of new reviews and the primary studies on which they are based. We review the literature on the conduct of reviews and primary studies, and propose an 'EMMIE' scoring system for rating systematic reviews. EMMIE refers to a) Effect size (as stressed in systematic reviews), b) Mechanism/s or mediator/s activated, c) Moderators/contexts for the activation of the mechanism/s, d) Implementation conditions that support/obstruct program delivery, and e) Economic assessment of interventions. We propose two components to EMMIE, EMMIE-E relates to the 'Evidence' that emerges from reviews, EMMIE-Q to the 'Quality' of it. Both are needed for prospective users to gauge what is (not) known with what confidence in deciding when to draw on review findings. The importance of criteria b-e has been acknowledged for nearly three decades, but under-emphasized in systematic reviews. Their prominence in EMMIE is intended to facilitate informed research use in policy and practice. EMMIE informs the activities of the UK What Works Centre for Crime Reduction including the conduct of new systematic reviews and the rating of those existing.

## **Empirical research for identifying minimum operational standards in EU Common Security and Defense Policy (CSDP) trainings: the European Police Services Training (EUPST) 2011 - 2013 experience** *Lt. Col. Renato Raggi (Centre of Excellence for Stability Police Units)*

The EUPST 2011 – 2013 has been the largest Police training for deployment in CSDP Civilian Crisis Management (CCM) Missions. Financed by the European Commission (EC), it has involved 2.500 Police Officers from 67 Countries who practised together all possible activities of executive/non-executive operations. A Consortium of five EU Police Services/Forces has organized the training with the co-ordination role played by the Italian *Carabinieri*, in particular by the "Centre of Excellence for the Stability Police Units" (COESPU) in Vicenza. In the timeframe of almost four years, seven training sessions have been implemented in Europe and in Africa (Cameroun, Kenya). A relevant part of this huge activity was also the collection of Best Practices in use with the aim of identifying minimum training and operational standards in terms of Tactical and Technical Procedures (TTP) to be used by Police in EU CSDP missions. The research and the doctrinal analysis was carried out by a Lessons Learned Joint Working Group (LLJWG) composed by experts from the Consortium partners – CEPOL included - and chaired by the writer. The major problem posed at the beginning has been the choice of a controlled methodology to be used for collection of raw data in a context where there are not doctrinal documents foreseeing common standards of Police TTPs in CCM. The only existing "common" standards are those in use by the Police components of the United Nations Peacekeeping Operations that partially matched the activities trained in the EUPST. Taking them as a reference, a checklist/matrix has been developed, to be used as a guide for validating the effectiveness in a EU context, observing inconsistencies, and fostering solutions. This job was carried out by "External Evaluation Teams" (EETs) that, session after session, had the task of practically observe and collect data in dedicated reports to be presented to the LLJWG. The LLJWG proceeded in identifying minimum standards, commonly and effectively used, covering from crowd and riot control to forensic investigations. In order to accomplish such task, some filters have been used. The most important one has been the respect for Human Rights in Police activities as recognised by many reference publications, with a particular attention to the use of force and to the treatment of arrested people. Best Practices have been collected in an "Handbook for Police Officers deployed in EU CSDP missions" that has been presented, along with other detailed publications, to the EC to be evaluated by the decision-making bodies of the Council to become EU official doctrine.

## **16:15-18:00 (Auditorium 2) – Open session on forensics**

### **Evaluation of cross-contamination of nylon bags with heavy loaded petrol fire debris and with automotive paint thinner**

*Filipa Belchior and Stephen P. Andrews (University of Central Lancashire)*

Nylon bags are used for packaging fire debris in several countries. Cross-contamination of two brands of nylon bags in normal casework conditions was studied using simulated heavy loaded fire debris. Experiments were carried out using as sample a piece of cotton fabric soaked with petrol, and another one using automotive paint thinner (oxygenated solvent). The sample was sealed in a nylon bag and stored in contact with bags filled with air, in crates typically used in the UK to transport evidence from the fire scene to the laboratories. The bags containing air were analyzed at regular intervals for a period of time using SPME and GC/MS. Cross-contamination was found for components of petrol (toluene and C2-alkylbenzenes), in the two brands of nylon bags used, after significantly

different periods of time, 4 days and 2 weeks. Cross-contamination using automotive topcoat thinner was detected in one brand after 2 days.

#### **Fingerprint *minutiae* distribution by finger and pattern type in a sample of Spanish population**

*Gutiérrez-Redomero, E., Alonso-Rodríguez, C., Rivaldería, N., Sánchez-Andrés, A., Fernández-Peire, MA., Rodríguez-Villalba, JL., Morillo RE., Nieva, J. and Comendeiro, J. (Universidad de Alcalá)*

The study sample consisted of inked ten-print records of 100 Spanish Caucasian men (all born in Spain). This amounted to a total number of 1,000 fingerprints that were digitalized on the premises of the General Commissary of Scientific Police of Madrid. The identification of the *minutiae* was based on the classification used by the Spanish Scientific Police. A total of 20 types of *minutiae* were identified and visually quantified over the full area of the print. The results showed that, on every finger, the most frequent type of *minutiae* was ridge ending, followed by bifurcation and convergence; other types exhibited remarkably lower frequencies. A significant association was found between the fingerprint pattern type and the frequency of the different types of *minutiae*. The comparison between fingers and type of *minutiae* (ridge endings, bifurcations and convergences) was carried out by a correspondence analysis. The results showed a significant association, whose first component separated the fingers of the right hand (associated with ridge endings and convergences) from those of the left hand, associated with bifurcations. The findings reported in this paper are the first obtained by finger for this population and show that there are significant differences in frequency of the various types of *minutiae*, as well as finger differences regarding its distribution.

#### **Remanufactured toner study by Fourier Transform Infrared Spectroscopy (FTIR)**

*A. C. Almeida Assis and C. Farinha (Scientific Police Laboratory of Polícia Judiciária) and T. Gomes and R. Fausto (Chemistry Department of Faculdade de Ciências e Tecnologia da Universidade de Coimbra)*

The use of laser printing devices has increased significantly in recent years due to technological innovation and accessibility to the consumer. Documents obtained through electrophotographic printing are used in numerous crimes, such as counterfeiting, threatening letters, employment contracts, among others. The identification of a document produced by monochromatic electrophotography origin is very complex. This contributed to a growing need for the development and implementation of black toners spectra database. Previous studies conducted in the Forensic Science Laboratory of the Portuguese *Polícia Judiciária* characterized 138 toners from 18 different brands on the Portuguese market. This study focused on the characterization of existing remanufactured toners in the national market by Infrared Spectroscopy Fourier Transform (FTIR) in order to complete the database of existing toners in our forensic lab. Remanufactured toner samples were analyzed (52 in total) and comparisons with the original brands were made.

#### **Physical-Chemistry Study of Line Crossings**

*Daniela Djidrovská (INTERPOL's Counterfeit and Security Documents Branch)*

One of the most frequently requested forensic document examinations is to determine the date when a particular signature or piece of writing was made. There are no reliable techniques for dating ink on paper despite the efforts of forensic scientists over the last thirty years. Once an ink line is made on a piece of paper, certain volatile components of the ink disperse into the atmosphere – much effort has been made to determine the rate at which these volatile components do so over time. For example phenoxyethanol present in ballpoint pen ink decreases very rapidly immediately after writing and then more slowly over a longer period. The objective of this scientific research project on line crossings is to answer the question whether or not visible and/or non-visible ink migration can be used for ink dating. Non visible migration is influenced by the chemistry of the paper, the chemistry of the inks, the chemistry of the luminescent agent, and the stability of the components. The value of non-visible migration in certain types of ink could be correlated with the age of the ink line and it could be taken into account for “ink dating”. Scientific protocol of the project developed by INTERPOL and the International Academy for Handwriting and Documents (AIEED) could provide a solution of determining age of inks and is aiming to properly train forensic document examiners as well as to provide valuable information in their investigations of fraud and forgery.

#### **Forensic analysis as support for network applications in the age of cloud computing**

*César Arturo de la Torre (Escuela Politécnica Del Ejército Del Ecuador) and Marco de la Torre (Wrocław University of Technology)*

Today, networks are faster than ever, simultaneously the increase of cloud-computing applications demands of maximum security over public network infrastructure; becomes more difficult to troubleshoot. Every year there is progressive increase of mobile devices sharing network traffic, consisting of media applications such as VoIP and video; the traffic of file shares and data applications is also enormous. Therefore, operating with reduced defense

against IT security attacks and network downtime is costly. These days, network administrators are interested in delivering high performance in network cores and edges and guarantee optimal visibility of cloud services and simultaneously reduce to minimum the IT risk against network downtimes; besides it is important reducing to minimum the incidence of hacker attacks. Network forensics contribute to achieve the following important benefits to cloud applications and services: design map dependencies among the elements involved in delivery services, which reduces downtime and increase productivity; classify traffic along each service delivery path; contribute for a faster characterization and remediation of security attacks; have a better utilization of network resources, supported by adequate measures of traffic with respective reporting and planning.

### **16:15-18:00 (Auditorium 3) – Workshop on Experiences of Police-Academic Partnerships**

**Workshop animators:** *Peter Neyroud, Jenny Fleming, Nick Fyfe, Nicky Miller and Matthew Bacon*

The aim of this open workshop session is to discuss experiences and case studies of police-academic partnerships and research coproduction. It will address different models of relationships and mechanisms for delivery, how well they work, and lessons that can be drawn from the personal experiences of police researchers, scientists, trainers, educators and officers, as well as scholars from academia. It will also provide an opportunity to discuss the work of the N8 Policing Research Partnership (N8PRP) and their programme of research coproduction and knowledge exchange with policing partners across the north of England.

## **WEDNESDAY, 7<sup>TH</sup> OCTOBER 2015 (MORNING)**

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### **09:00-10:45 (Auditorium 1) – Transnational organised crime: Research, practice and roadmaps**

#### **Financing organised crime**

*Professor Michael Levi (Cardiff University)*

In the discussions about money laundering and asset recovery, the importance of how and how much people have to find funds to finance crimes has been neglected. Another aspect of contemporary obsessions has been the rise of crypto-currencies like BitCoin as ways of bypassing anti-money laundering controls. This presentation will examine what is known about the financing of crime and in the light of the author's recent research on cyber-economic crimes, will cast doubt upon the importance of crypto-currencies as generators of risk-free money laundering, noting that at some stage, almost all online as well as offline crimes have to go offline to enjoy the fruits of crime.

#### **Organised and transnational crime in Europe**

*Professor Vincenzo Ruggiero (Middlesex University London)*

There are vexed questions with respect to our understanding of organised crime, particularly around its definition, the classification of the different forms it assumes and the specific functions it performs. This contribution will address them only after providing some material for reflection which derives mainly from two types of sources. The first source is to be identified with a variety of official organisms investigating, studying and combating organised crime and its activities. These include the United Nations Office on Drugs and Crime (UNODOC), the European Commission, the European Central Bank, Europol and the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). The second source used in this chapter is constituted by a range of independent research studies conducted in specific countries. The examination of the material presented will help to highlight the dilemmas, the controversies and, indeed, the vexed questions that still adumbrate our understanding of organised crime, while it will pave the way for a tentative classification that can clarify, at least partially, the contours of the subject matter.

#### **The infiltration of organised crime in the legitimate economy: how can research help investigation and asset recovery?**

*Adjunct Professor Michele Riccardi (Università Cattolica del Sacro Cuore)*

Recent studies and police evidence show the interest of organised crime groups (OCGs) for infiltrating legal businesses and laundering their proceeds in the European legitimate economy. OCGs investments range from real estate properties to a wide variety of business sectors: restaurants, construction companies, wholesale and retail trade, renewable energy, transports. The negative impact of OC infiltration in terms of market competition, stability of the financial system and consumers' security is significant. However, despite this evidence, the confiscation of OC proceeds across EU countries is often limited to cash and movable assets, while there is almost no confiscation of companies. Why? How to improve the tracing and the investigation of the businesses infiltrated by OC groups? How to improve the recovery of these assets? What can be the role of research in this field? What analyses and tools could researchers provide to support LEAs' activity?

## **09:00-11:00 (Auditorium 2) – Open session on police management, training and performance**

### **Public Value: A new means to peel an apple?**

*Ian Hesketh (Lancashire Constabulary) and Professor Jean Hartley (Open University)*

This paper examines the public value framework developed by Moore (1995, 2014) and Benington and Moore (2011) as a way to address demand in policing and prioritise and justify actions. It is therefore a potential tool for evidence-based policing. This paper reviews literature and analyses some case studies, mainly but not exclusively from the UK. It examines the policing context in which the public value framework may be useful, and then examines existing theory and evidence about its use in policing.

### **“Corporate Police Stories” – About the Impact and the Capabilities of Police History on Policing, Police Training and Communication**

*Dr Patricia Schütte-Bestek (Ruhr-Universität Bochum) and Dr Andreas Pudlat (Universität Hildesheim)*

As research shows, especially European police organizations (POs) engage and have already for some time been engaging in different approaches related to the handling of their past. Hence, a vast number of police museums opened after WWII in Europe that relates the histories of individual POs to societal as well as regional developments at that time. Furthermore, the organizational past has also been used in publications such as chronicles or member magazines of POs. It can be assumed that these approaches - intended or not - can be seen as integral part of internal and external POs' communication or “corporate stories”, which portrait the individual organizations with its values, development and tasks. As this field of research has still to be further explored and expanded, the evidence-based presentation aims to answer the following questions: How and Why Do European Police Organizations Use their Pasts in their Public Relations Strategies, Policing Strategies and their Police Training? Which strategic and tactical capabilities can be indentified within policing, police communication and training contexts? Additionally, it will also be looked at how this is then formed into ethical and educational guidelines for police communication and training.

### **Lisbon Community Policing – The challenge of the intercultural and mediation approach**

*Mónica Diniz and Cláudia Santa Cruz (Polícia Municipal de Lisboa)*

The community policing model implemented by the Lisbon Municipal Police (LMP) since 2009 is on the edge of a new challenge to improve the police-citizens relationship - placing emphasis on a crucial aspect - an inside look at its human capital and the need to develop new competences on intercultural mediation. In community policing territories, where police officers are more integrated in the social tissue, and therefore acting as social cohesion agents, there is an increasing need of the police to use a preventive and mediation approach, namely on developing police officers skills to sustain and enhance the police-citizen relationship, especially in cultural diverse communities. The findings of this model of policing recommends that, for the police to be able to articulate with the citizens and to establish a trusting relationship in diverse cultural contexts, it is important a training-action strategy focused on intercultural and mediation learning skills targeting jointly police officers, community mediators and local partners on intercultural competences and mediation skills, promoting an exchange of visions and perspectives that enable community policing teams to work closer with community mediators and local partnerships, building together safer neighbourhoods.

## **Knowledge-based decision-making: Evidence-based medicine as a model for police-commanders in high-risk situations?**

*Torben Lehberg (German Police University)*

In the complex and dynamic situation of a kidnapping or hostage taking, the police commander will sometimes have to make decisions which might even affect human survival. This study takes a look at Evidence-based medicine (EbM) based on a mix of literature analysis and interviews with seven experts (police commanders and physicians). Several aspects of decision-making by police-commanders in Germany are pointed out: law, organizational frame, personal skills, communication, management of information, practice of decision-making. On the other hand, it is shown how physicians try to transfer knowledge by the use of EbM and what it is criticized for.

## **The impact of physical activity and nutrition on sleep quality of police officers**

*P. Guimarães, L. Monteiro and M. Cardoso (Instituto Superior de Ciências Policiais e Segurança Interna)*

The purpose of this study was to characterize police officers physical activity (PA), sleep quality (SQ) and eating habits (EH) and furthermore, verify the analyze of the effect of PA and EH on SQ of police officers who perform shift work. Sample consisted of 933 officers from the Portuguese police force. The data collection instruments used were the Food Frequency Questionnaire (Willett et al., 1985) to measure EH, the International Physical Activity Questionnaire - short version (Craig et al., 2003; Hagstromer, 2006; Bauman et al., 2009) to measure PA, and the Pittsburgh Sleep Quality Index (Buysse et al., 1989) to measure SQ. The statistical analysis shows that police officers have good levels of physical activity divided evenly between moderate (48.8%) and vigorous activity (40.3%). The majority of the police officers lack sufficient hours of sleep but have fairly good EH except for fats, salt and saturated fatty acids. With increasing age, the levels of physical activity and food intake decrease, with no major changes in body composition, the weight and the alcohol consumption increases and sleep quality tends to deteriorate. With the increase in physical activity in MET, the tendency is to consume more nutrients, with the exception of alcohol, and improve some components of SQ. We also find evidence that the level of physical activity and eating habits are the major predictors of sleep quality, as well as the age and body mass index.

## **Management and mental health prevention in French police stations**

*Jean-Sébastien Colombani (doctoral researcher at École Nationale Supérieure de la Police)*

Interviews and observations on the job of police men and women of all ranks have been conducted in police stations. A number of semi-structured interviews have also been conducted with socio-medical workers, management trainers and top ranking officials. Many risk prevention measures have finally been scrutinized (training, psychosocial risks prevention cells, etc.). Our observations are in line with many scientific researches on similar police issues and show that the French police men and women are particularly exposed to risk factors for their mental health. We also found that, the police superintendents, who are stuck between powerful top and bottom levels, are in a particularly complex situation which includes for example limited room for manoeuvre, isolation and a fragile professional identity. This specific situation has a negative influence on management, prevention and could bring to the implementation of inadequate solutions.

## **09:00-10:45 (Auditorium 3) – Open session on police learning and training**

### **The ELEES Project: Preliminary findings**

*Dr André Konze (German Police University)*

The following preliminary findings will be presented: Police training and education all over Europe has developed extraordinarily since the Bologna process has started. Even from the time when the last survey has been conducted, the number of institutions and programmes/courses that are accredited has increased enormously; the educational requirements for middle and senior ranked law enforcement officials have risen since the implementation of the Bologna process. Although educational programmes/courses have been harmonised in terms of using comparable degrees and similar credits all over Europe, the exchangeability of degrees is still very limited; the opportunities to participate in another country's police programme are still limited to courses that are not accredited, according to the Bologna process.

### **Evaluation of basic police training – objectives, methods and results**

*Dr Albin Muff (Präsidium der Bayerischen Bereitschaftspolizei)*

The government of every country invests a lot of manpower and money in the basic training of police recruits. It's a difficult task to verify, if the police training is successful or not, and if the intended goals are achieved. The Bavarian



Police, which is responsible for the basic training of nearly three thousand police recruits, is using and developing a system of examinations, questionnaires and other instruments to evaluate the effects of the basic police training. The presentation will give an overview of the status quo and planned activities for the future.

#### **Police decision making in major events: A research programme**

*Dr Lúcia G. Pais and Dr Sérgio Felgueiras (Instituto Superior de Ciências Policiais e de Segurança Interna)*

The Major Events Laboratory (MEL) started functioning at the very beginning of 2011 at the *Instituto Superior de Ciências Policiais e Segurança Interna* (High Institute of Police Sciences and Internal Security). Its primary objective is to develop research in what concerns the security of major events. Secondly, it aims to contribute to modernizing police activity and the definition of good practices. Descriptive studies have been conducted using the naturalistic decision making (NDM) approach: some of them on the field – major political events, major sports events (football); and, another one at the MEL's simulation room – traffic control and monitoring operations. First results are presented and implications for the learning and training process are discussed.

#### **SAFECITI - context and objectives**

*José Francisco López Sánchez (Innovation and Development Service of the Spanish National Police)*

SAFECITI is a 24 months R&D project consisting in the development of “serious game” technology for Police analysts training and managing protests and crowds in an urban environment. SAFECITI is a simulation platform that addresses the requirements of the civil security intelligence analysis community for the specific problem of crowd safety and anticipated threat control in cities. The platform is not only a “game” in the context of serious game technology, but an advanced simulator that aims to predict the complex behaviour of the crowd and to provide the analysts with new technology to improve the tactics and operations that are used in real situations.

#### **Dealing with victims of sexual crimes: a learning and training project in the Portuguese Judiciary Police**

*Dr Cristina Soeiro and Raquel Guerra (Escola de Polícia Judiciária)*

This communication aims at presenting the Portuguese project implemented in *Polícia Judiciária (PJ)* to improve the quality of the assistance services to the victims of sexual crimes, offered by police officers, at a national level. The CSBP project has, as a main goal, promoting the development and standardization of the professional working practices of the police criminal investigators dealing directly with sexual crime, bearing in mind the complexity of the phenomenon.

#### **A comparison between Swedish and Catalan Police Students**

*Thomas Bäck (Umeå University) and Lola Vallès (Catalan Police Academy)*

The overall aim of this study is to compare how Swedish and Catalan police students value various forms of competence in relation to their future profession and if the valuation of these competences changes during the police basic training program. The empirical data is based on identical (translated) questionnaires to police students in Sweden and Catalonia. This study is part of the European cooperation project *Recruitment, Education and Career in the Police – A European Longitudinal Study* (RECPOL), a research on how police recruits are shaped by police education and socialization into the profession. The results show that there are some significant differences between police students from these European countries.

### **11:15-12:45 (Auditorium 1) – Terrorism: Research, practice and roadmaps**

#### **Terrorism, mass surveillance and civil rights**

*Dr Reinhard Kreissl (Vienna Centre for Societal Security)*

In the on-going controversy over civil rights and mass surveillance an important aspect of police work to combat terrorism is overlooked. This paper will discuss the question whether more data or better analysis of available intelligence is the key to successful strategies in this area. Based on results from a study of the Austrian situation it will be argued that improving internal organizational structures and providing training for law enforcement experts will yield higher returns for Law enforcement than expanding the data bases used to identify and prevent terrorist acts and offenders. This approach also entails a shift in the operational philosophy of combating terrorism, from a strict prosecution of offenders to a more diagnostic early warning alert. Law enforcement organizations operate on the basis of a cognitive division of labour. A better understanding of the processes of what could be called collective cognition in the domain of law enforcement can help to improve overall performance while at the same time providing for a good protection of citizens' civil rights.

## **Radicalisation: Lessons learned from the French experience**

*Jean-Pascal Mariani (Unité de Coordination de la Lutte Anti-terroriste)*

As everyone knows, France has been dramatically hit by religious motivated terrorism during the last three years. From Toulouse to Paris, the French approach in the fight against terrorism that had been a major success with no terrorist attack on its territory between 1996 and 2012, has once again adapted itself to the rapidly evolving terrorist threat. With the current change of paradigm of terrorism and the tremendous amount of foreign terrorist fighters leaving EU Members States (and even countries located far away from the combat areas), many countries concerned with this phenomenon have implemented various solutions. Today, a representative from the French National Counterterrorism Coordination Unit will provide with insight of the French approach in preventing and combating radicalisation.

## **11:15-12:45 (Auditorium 2) – Open session on intimate partner violence**

### **Intimate Partner Femicide, Risk Factors and Dynamics, and Implications for Policing**

*Professor Dr Claudia Kestermann (Hochschule für Öffentliche Verwaltung)*

In the last decades research in the domain of intimate partner violence and intimate partner homicide consistently has increased. Even if homicide rates have decreased through the years, intimate partner homicide or especially femicide is a severe phenomenon and needs further attention regarding risk factors, dynamic, risk assessment and policing. In this paper current rates of intimate partner femicide in Germany will be presented. This paper refers to an empirical study of our Institute of Police and Security Research that examines the files of N=69 intimate partner femicide cases (Greuel et al. 2010). Certain frequently described risk factors, like intimate partner violence, separation and stalking, will be analyzed, as well as the observed dynamics in these cases. Finally, it will be discussed if intimate partner femicide is a discrete phenomenon, and to what extent a certain dynamic of conflict or crisis affects lethal violence. Implications for risk assessment and policing are considered.

### **Femicide Criminal Psychological Profiling: An Assessment of Risk Factors**

*Dr Iris Almeida, Dr Cristina Soeiro and Dr Maria Luísa Lima (Instituto Superior Egas Moniz)*

This study intends to explore the variables associated with femicide, particularly identifying a typology and femicide risk factors, combining the offenders and victims' characteristics and this criminal phenomenon. From the analysis of 125 femicide cases, were identified four different criminal profiles that define the existence of different motivations and risk factors associated with each criminal profile. In a global analysis of the criminal profiles obtained, it appears that each of them identifies specific risk factors that may be prevented. In fact, these profiles allow to aid professionals and institutions to have a deep knowledge about the risk of lethal violence.

### **Mind the Gap! Improving intervention in Intimate Partner Violence against older Women – The role of law enforcement agencies**

*Dr Heloísa Perista (Centro de Estudos para a Intervenção Social)*

The Daphne project *Mind the Gap!* aimed to increase the capacity of law enforcement and social support organisations to tackle intimate partner violence against older women, in addition to increasing public awareness of the issue and reaching out to the victims. This presentation will summarise the main findings of the research conducted in Portugal comprising the quantitative and qualitative analysis of public prosecutors case files, reinforced by national workshops and consultation with experts, professionals and practitioners. Special emphasis will be given to the role of law enforcement agencies in dealing with cases of intimate partner violence against older women.

### **Victim's views on policing partner violence**

*Kate Butterworth (Durham University), Nicole Westmarland (Durham University) and Helen Murphy (Durham Constabulary)*

The latest Her Majesty's Inspectorate of Constabulary for England and Wales (HMIC) report (2014), 'Everyone's business', highlighted that police forces across the United Kingdom were not responding satisfactorily to victims of domestic abuse, and have little understanding of coercion and control. The report suggested forces find more innovative ways of training officers to improve responses. A 1 week snapshot of domestic abuse was carried out at Durham Constabulary, which involved interviewing victims, who had reported domestic abuse to the police, as well as police and support organisations. 24 victims were spoken to about their recent experiences with the police. Responses were mixed, with victims reporting positive, negative and satisfactory experiences. A number of police,

who were interviewed, reported their knowledge of coercion and control was more limited than that of general domestic abuse, and they found it difficult to identify these behaviours, when responding to incidents. Organisations also called for police to have more understanding of coercion and control. Findings from all interviews will be considered side by side to help shape a new drama-based training programme, which will be rolled out to police to address gaps in knowledge.

### **A systematic review of motivational approaches as a pre-treatment intervention for domestic violence perpetrator programmes**

*Carol Vigurs ((University College London)*

This presentation will report on the findings from a systematic review of motivational interviewing or other motivational enhancing interventions that were adjuncts to domestic violence perpetrator programmes. The evidence to date regarding the efficacy of domestic violence perpetrator programmes for domestic violence has shown little clear success (Vigurs et al 2015). However, One review (Eckhardt, 2013) included in the systematic review of reviews (Vigurs et al 2015) found that interventions that focused on stages-of-change motivational interviewing group sessions had lower rates of recidivism compared to a traditional Duluth model programme and informed the basis of this systematic review.

### **11:15-12:00 (Auditorium 3) – Open session on police ethics**

#### **Challenges and possibilities for the implementation of policing codes of ethics**

*Anja Schaefer (the Open University), Dr Owain Smolović Jones (the Open University) and Gerald Murray (Police Service of Northern Ireland)*

This paper reports on the preliminary findings of an exploratory research project into the experiences of the Police Service of Northern Ireland (PSNI) in implementing a Code of Ethics (CoE), since 2003. The project was concerned with deepening and enriching current perspectives and learning from the evidence as a basis for improving future practice. An exploratory, qualitative methodology, based on in-depth interviews with 35 members of PSNI was adopted. The interviewees were mostly police constables but also include several more senior officers as well as administrative and support staff, selected and approached with the help of three members of PSNI, who were the researchers' main contacts. While the data is still being analysed, some very tentative first conclusions offer themselves. A code of ethics seems to interact at some level with individuals' moral identity but it doesn't seem to function as a strong piece of moral or organisational identification. Internally, implementation of a code of ethics as disciplinary technology seems to be somewhat incompatible with it being received as a positive means for change. A code of ethics in a policing context can be strongly politicised – the development and implementation of a CoE can be as much a symbol aimed at an external political context as an internal means of change. CoEs can also be crystallisation points for internal politics or tensions, particularly in an organisation undergoing significant change. We identify these latter points of as existing within a framework of an organisation transitioning into a context of the contemporary, publicly accountable bureaucracy (du Gay, 2000). We consider some of the identity and developmental implications of viewing CoEs as enmeshed within a transition to bureaucracy.

### **12:00-13:00 (Auditorium 3) – Open session on new technologies and special investigation methods**

#### **Preconditions for the long-term use of new technologies by law enforcement agencies**

*Caroline Goemans-Dorny and Sabine Berghs (INTERPOL)*

As part of the research conducted for the EU funded projects on Scalable Measures for Automated Recognition Technologies (SMART) and Rules Expectations and Security through Privacy-Enhanced Convenient Technologies (RESPECT), it was determined that surveillance technologies are often implemented merely because the technology exists or because local and national governments want to appear to be acting against crime. The latter is, for instance, often the case when it comes to CCTV surveillance. In this regard, INTERPOL conducted a survey within its 190 member countries in the framework of the above mentioned projects. The implementation of smart and often extensive surveillance technologies is, however, usually not linked to an evidence-based decision and, thus, is often not effective or efficient in the long run.

### **Police, camera, evidence; a collaborative evaluation of the impact of body worn video**

*Inspector Ben Clark and Superintendent Adrian Hutchinson (Metropolitan Police Service)*

Committed to enhancing the evidence base for policing – the MPS (Metropolitan Police Service), the Mayor’s Office for Policing and Crime (MOPAC), and the College of Policing (College) have designed and implemented the largest Randomised Controlled Trial (RCT) of Body Worn Video (BWV), to test its impact on a range of outcomes, including: Criminal Justice Outcomes (arrests, charges, convictions); Complaints made against the police; Stop & Search; Officer attitude; Public Experience. The MPS has 32 distinct boroughs, or areas, and BWV was piloted across 10 of these boroughs. Two randomly assigned emergency response teams (ERTs) on each borough were issued cameras, with the remaining three teams providing the control group. ERTs were chosen for the pilot as they are the first responders to incidents, where good evidence collection may impact later criminal justice outcomes, and they also conduct regular stops and searches, as well as being in a good position to explore the impact on complaints. The presentation will cover the benefits of collaboration in undertaking research, for the MPS, MOPAC and the College of Policing – and how the team worked together to deliver the RCT. It will go on to set out the RCT itself, and the results. Finally, it will cover learning for the force and next steps for the MPS in rolling out BWV. This presentation offers a practical demonstration of the College’s work to support evidence-based approaches in police forces across England and Wales, set out in the paper delivered by Dr. Miller, earlier in the Conference.

### **Regulating the Gray Zone: A Comparative Look at Undercover Policing in the United States, Italy, Germany, and France**

*Professor Jacqueline Ross (University of Illinois)*

This paper contrasts the regulatory approach to undercover policing in the United States, where the legality of undercover tactics is taken for granted, despite the lack of statutory regulation, with the regulation of undercover policing in Italy, Germany, and France, where three very different statutory schemes subject undercover policing to a strict warrant requirement, requiring judicial oversight and authorization. It also contrasts the very different notions of entrapment and provocation that characterize these legal systems, and suggests a historical explanation for trans-Atlantic differences in the regulation of undercover tactics. In particular, it contrasts the role of private detective agencies in pioneering undercover tactics in the United States with the strict state monopoly of undercover tactics in France. Finally, it is suggested that American regulation of undercover tactics represented efforts to tame private sector uses of undercover tactics, while European regulation of undercover investigations tended to focus on taming the uses of such tactics by the state.

## **WEDNESDAY, 7<sup>TH</sup> OCTOBER 2015 (AFTERNOON)**

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### **14:30-16:15 (Auditorium 1) – Cyber crime: Research, practice and roadmaps**

#### **The Changing Cybersecurity Threat Landscape and the Challenges for Policing Cybercrime in the EU**

*Professor David S. Wall (University of Leeds)*

In this talk I shall, as the title suggests, look at the changing cyber security threat landscape and the challenges that it poses for policing cybercrime and ask the question “when does cybercrime become a problem?” In the first part I shall look at the ways that the threat landscape is changing and how it impacts upon policing. In the second, I shall then look at how we can reconcile practically the definitional issue as to what cybercrimes are before, in the third part, exploring the various avenues by which our knowledge of cyber security and cybercrime is formed - how we know actually about cybercrimes and who tells us? Finally, in part four, I shall argue that we need to separate politics from practice in the cybercrime debate and agree on systems for collecting information to inform future policing policy in the EU.

#### **Building bridges: recent lessons learned in evidence based research involving law enforcement**

*Professor Joseph Cannataci (University of Groningen)*

For more than eight years the LexConverge network has steadily pursued a strategy of designing and submitting collaborative research projects largely in the fields of surveillance and with a special focus on the intersection of privacy and security. This has resulted in over forty million Euros of funding being attracted to some ten different projects covering a range of themes ranging from consent in on-line social networks (CONSENT), through surveillance (RESPECT), smart surveillance (SMART), speaker identification (SiiP), subcutaneous biometrics (INGRESS) to the use of smart apps in community policing (CITY CoP) and disaster recovery (CARISMAND). Each of these projects sought to contribute to the evidence base required for major new policy decisions including the

development of a major new pan-European Law on surveillance. This paper examines some key lessons learned in the major projects tackled between 2008 and 2015 including the iter to developing national and regional legal instruments covering the use of personal data by law enforcement agencies (LEAs). It also suggests that, in the post-Snowden era, the bridges to be built are no longer exclusively between law enforcement and academia but are now tripartite with the regular inclusions of Security & Intelligence Services (SIS). Amongst other things, this presentation will also discuss how this process within LexConverge was influenced by the development and principles of idMAPPING: an inter-disciplinary Methodology for the Analysis of Privacy, Personality, Identity, and Networks & Governance. This is built around the science and possibly the art of bringing together a number of disciplines in order to better map out and dissect the privacy conundrum. These disciplines include but are not limited to: social anthropology, cultural anthropology, sociology, social psychology, cognitive science, history, information communication technologies science, legal theory, technology law and especially data protection law. IdMAPPING borrows tools from each of these disciplines and more in its quest to map out what Privacy really is, where and when. The latter dimensions of place and time are fundamental to the way that the methodology is structured. Equally fundamental to the idMAPPING approach is the fact that, by design, Privacy is never investigated in isolation but as much as possible together with other characteristics such as personality and identity irrespective of whether the individual or the collective are interacting in physical networks or on-line networks. Finally, the presentation will also briefly discuss the implications of these findings for placing police science in the wider context of security science.

### **Cyber crime: research evidence and roadmaps for applied research with science researchers and law and enforcement agencies**

*Professor Filipe Mota Pinto (Instituto Politécnico de Leiria)*

Considering that research centers and researchers are usually focused on pursuit of new insights or findings to improve methodologies, methods and results on their science area, and considering law and enforcement agencies that are fully compromised on crime combat and that their agents are to put their efforts to fight the best way possible the crime, this work presents a possible framework in order to approach both important actors on cyber crime context throughout an exploration of possible convergence of interests and challenges. Along this demonstration, both actors' work will be contextualized and aligned based on common interests and challenges. Also it will be proposed a possible roadmap in order to concretize and empower both practitioners' work. To that end it will be presented a real case of applied research result of the collaboration developed among Portuguese law and enforcement policies and Polytechnic Institute of Leiria researchers.

### **14:30-15:45 (Auditorium 2) – Trafficking in human beings: Research, practice and roadmaps**

#### **New Directions in Research on Human Trafficking**

*Professor Dina Siegel (University of Utrecht)*

Human trafficking is a crime of mobility. New forms, structures, modus operandi, but also intern dynamics of the human trafficking networks are changing as a result of the recent political and economic developments, in particular in the EU. This mobile activity of transnational organized crime demands reconsidering existing images and models in study of human trafficking and its theoretical explanation on both horizontal and vertical levels.

#### **Trafficking in Human beings: Country-specific law enforcement practices in Europe**

*Dr Madalena Duarte (Universidade de Coimbra)*

Human trafficking in its various forms has received unprecedented media coverage in recent years and is now a central topic on the political agenda of various governments and organizations, both regional and international. The publication of a number of international reports indicating that the number of trafficked persons has been consistently increasing, as well as growing investigative journalism coverage, have helped to heighten the interest of various governments in this phenomenon, a reality that constitutes a serious violation of human rights. This is a complex topic and multidisciplinary reflection on the current state of contemporary societies is certainly needed. Although the problem is by no means new, the last decade has seen the reinforcement of legislation devoted to fighting human trafficking. This reinforcement has mainly involved the criminalisation of human trafficking and its active agents, along with an increase in the rights and support given to victims. While some see this as the best course of action, others argue that there are other aspects which must be addressed so that the measures to fight trafficking and protect its victims can be truly effective. The aim of this presentation is to discuss some of the problems in the law, but mainly in its application.

## **16:30-17:30 (Auditorium 1) – Open session on ‘what works’ and on ‘what really matters’**

### **In search of good evidence-based policing, a UK perspective**

*Dr Denise Martin (University of the West of Scotland)*

In times of austerity and drive to improve service delivery and deal with multiple demands, it is critical that police carefully consider where and how they use their resources. Finding out what works and where, therefore has become even more essential. In addition for researchers in police studies the need to demonstrate impact is critical. Therefore, the desire to gather evidence and have knowledge of what is effective now informs much police research in the UK. However, while this has led to increased opportunities to conduct studies on police matters, a number of dilemmas still remain, primarily what makes good evidence and how do we ensure that we collect this evidence. This is not just a debate about favouring one method over others or picking from a select menu, it is making sure that in designing research we think about why we are researching it, when, where and under what conditions the outcomes are produced. Drawing on recent research on Emergency Service Collaboration, this presentation will critically explore what makes good evidence in policing.

### **Evidence-based policing through Consortium research**

*Jean Hartley and Dr Owain Smolović Jones (The Open University)*

This paper argues that close understanding of different models of creating and using research, along with careful attention to divergent as well as shared interests, will help the relationship be beneficial to both parties. Mode 1 is traditional academic-led research, while Mode 2 is increasingly being used as a means of drawing on the strengths of both academics and practitioners, in order to design research that invites both parties to participate collaboratively (Tranfield and Starkey, 1998; Huff, 2001; Alferoff and Knights, 2009; Hartley and Benington, 2000, 2006; Hodgkinson, 2001). The paper outlines why and how a consortium facilitates the production of Mode 2 research, not solely Mode 1 research. It examines the benefits but also the risks to each party, and the practices and structures which are needed to address differences of interest and, sometimes, goals in order to achieve outputs relevant to both parties without sacrificing rigour or relevance.

### **What really matters in policing? And why “what works?” alone is simply not enough**

*Auke van Dijk and Frank Hoogewoning (Dutch National Police)*

Policing is at a vital turning point and the pace of change is accelerating, with a renewed emphasis on crime reduction yet with austerity and reduced resources. Several countries - including the UK (within its constituent police systems), the Netherlands, the Scandinavian societies, Finland and Austria - have been going through their most profound changes in decades. These changes have the danger of taking policing backwards if decision-makers overlook the fact that the police is a unique agency with exceptional powers. In this new climate, however, there is a tendency to turn to a narrow, instrumental, calculative emphasis on ‘what works?’. For all its potential value to the profession and practice of policing, we maintain that the key question has to be - ‘what matters in policing?’ - and that this always over-rides ‘what works?’. Our concern is that there needs to be a counterbalance to the current misinterpretation of the police role in certain government and police circles by appreciating the specific nature and culture of police work and organization; the challenges that policing faces in its institutional and operational functioning; and how within a complex, shifting and at times perilous environment police leaders have to juggle constantly in trying to cope with the dilemmas and resilient issues that confront them. We propose, then, a comprehensive paradigm – built around the three main pillars of policing: (1) crime and security management; (2) social-welfare and community outreach; (3) order maintenance – which provides a sound basis for confident and competent police leaders to shape policing in the 21st-century.

## **16:30-17:45 (Auditorium 2) – Open session on organised crime**

### **Leading industry of economic crises: organized crime? - The Hungarian organized crime in the past two decades**

*Tamas Bezsenyi (National University of Public Service, Faculty of Law Enforcement)*

The following research is based on a tight cooperation with Pest County Police Headquarters. Criminal files about organized crime gangs, after the regime change, were analysed. The main question of the research was: what sociological and economical factors contributed to the strengthening of organized crime in Hungary? Where can we discover the responsibility of the State? How did the State regulation affect organized crime? Due to the economic crisis of 2008 and the emergence of political extremism, the organized crime groups became number one public

enemies, who are again using the same methods that were successful during the early 1990's. A kind of semi-legal market and entrepreneurship has developed since 2008.

### **Human trafficking for the purpose of sexual exploitation: Organisational structures and modus operandi of the perpetrators**

*Bettina Zietlow (Kriminologisches Forschungsinstitut Niedersachsen) and Matthias Radtke (Criminological Research Institute of Lower Saxony)*

Knowledge about victims of human trafficking can be retrieved from previous studies. Yet, no independent study has so far solely focused on research about the perpetrators. There is only a little bit of information about the demographic features of the perpetrators - for example about their origin and that over 70% is male. Information about the modus operandi of recruitment, the movement and accordingly the execution of the exploitation in Germany, is rare. Hence, the German- Austrian joint research project „ Prävention und Intervention bei Menschenhandel zum Zweck sexueller Ausbeutung (PRIMSA)“ (Prevention and Intervention in Human Trafficking for the purpose of sexual exploitation), which is financed by the German ministry for science and technology and the Austrian federal ministry for traffic, innovation and technology, will within its framework concentrate mainly on investigating the perpetrators. However, it will also consider other questions.

### **Trafficking in Human Beings – Extending the concept of vulnerability to the territory**

*Rita Penedo (Observatory on Trafficking in Human Beings/Ministry of Internal Administration)*

Framed within the evolution of the THB concept, and considering the relevancy of the Space where THB happens – the physical space as the directly observable, and the social space, not directly observable but in which social representations and social relations are built and can be assessed (in dimensions such as social control, victimization, vulnerability to risks...) – this paper aims to discuss how vulnerability is being theorized and how can a socio-ecological approach contribute further to this debate.

### **Counterfeit plant protection products: a mixed-methods study of an emerging crime threat to the UK agricultural industry**

*Christopher Sambrook (Harper Adams University)*

The aim of this study was to produce data that was clear and verifiable, such that the extent of the threat posed to the UK agricultural industry by this crime could be ascertained. This was achieved by taking a blended approach, a strategy endorsed by the IPO as a means of more accurately capturing the true nature of a counterfeiting problem. The study was convergent parallel mixed method in design, an approach not previously tested in the context of the UK agrochemicals market. The results of the study suggest that the industry and media narrative is a reasonable reflection of the UK counterfeit pesticide problem, at least to the extent that it recognises the typical modus operandi. However, the study also highlighted a number of characteristics of UK rural policing which essentially excluded this, and other emerging technical crimes, from the rural policing agenda. Primary amongst these was an actuarial influence, meeting the perceived risk as portrayed by those engaged in insuring against loss, which has significantly narrowed the rural policing focus. Overall, the study suggested the need for an evidence-based approach, not just for this particular crime but in the wider context of offending in the rural setting. The results of the study will therefore be framed to support such an approach.

## **16:30-17:15 (Auditorium 3) – Open session on terrorism**

### **Evidence-based counter-terrorism policy**

*José María Blanco (Guardia Civil) and Jessica Cohen (Private sector analysis)*

This study discusses existing gaps in the evaluation of counter terrorism policies and the main challenges facing evidence-based policing of terrorism. The absence of a framework, the lack of applied research and the need of specific methodologies are highlighted, and a model is proposed.

### **Cybercommunication as a Jihadi Strategic Tool**

*Dr Felipe Pathé Duarte (Instituto Superior de Ciências Policiais e Segurança Interna)*

The “Islamic State” (IS) took communication and the spread of information as essential to its strategy. Cyber platforms appear as a tool for both external and internal communication. The IS has in its structure a sophisticated content production unit, critical to internal and external communication. In parallel to the concept of *jihad*, which involves the use of violence, is the *dawah*, which literally means proselytizing. For *jihadis* this is equivalent to the

information spectrum used to propagate the message and convince Muslims to reject Western values and “apostate” regimes. Can range from the traditional predications by imams in mosques to multimedia formats distributed on-line. Cyber communication, more than a component, also becomes a basis for new *jihadi* self-assembled emerging structures.

**THURSDAY, 8<sup>TH</sup> OCTOBER 2015**

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**09:15-11:15 (Auditorium 1) – Evidence-based policing: A new perspective of cooperation between practice, education and police science?**

**Measuring and Understanding What the Police Do: Balancing Prediction and Meaning in the Rise of Police Science**

*Professor Jack Greene (Northeastern University)*

Police research has developed and matured over the past 100 years. The richness of the police research tapestry gives it gravitas precisely because of its many underlying theoretical linkages as well as differing ways of understanding the police and policing. Despite the richness of police research, in recent years it has become tied to ideas of evidence; rooted in experimental methods and addressing instrumental questions. The rise of the “medical model” in police research has important implications for what we know, yet adoption of this model has shifted the discourse on police research creating a narrow “cognitive lens” through which to judge policing and police research. This presentation considers some of the upsides and downsides of the “new” police science epistemic community movement, in the hope of constructing a bridge between the ardency of focus on experimental methods as the singular path to understanding the police to considering the expansion of what might be termed a broader police research community; that is a scientific community of interests which together with policymakers shapes police practices in their many varieties, with many constituents and through many research lenses.

**What really matters in policing?**

*Professor Maurice Punch (London School of Economics and Political Science)*

This presentation will examine the methodology of evidence based policing, the political context promoting its adoption and its diffusion within the police organization. Running through it there are three themes which have coloured my recent work and publications with my Dutch colleagues, Auke van Dijk and Frank Hoogewoning. Firstly, that 70 years of police research has produced a body of knowledge drawing on multiple methods – observation, interviews, surveys, historical work – which also provides diverse forms of “evidence”: it may be viewed as “useless knowledge” regarding direct utility but it is vital to understanding policing. Secondly, policing is complex and demanding and we should look at what police actually do and what public expectations of them are and then focus on competences to develop confident officers and leaders at all levels. A fixation on crime reduction in political circles and research agendas threatens to distort the relationship with the public and to diminish the skills of officers trying to cope with multiple demands. The Dutch officers, dealing with the MH17 crash in the Ukraine as a result of a rocket attack in a conflict zone with much loss of life, for example, were instantly faced with unprecedented challenges. “What works?” had to be constructed pragmatically, daily and on the hoof: crime reduction was far from their minds unless it refers to the Kremlin. What drove them were prior learned skills, an institutional capacity to adapt and a philosophy of a caring and compassionate duty of care to the families and friends of the victims: that was what *really* mattered. And thirdly, and finally, policing is inextricably tied to issues of rights, diversity, equity, justice and use of force and is laden with significance in the vital relationship of the citizen to the state. In brief, “what works?” is clearly important and valuable but – given the nature of policing – it always remains subordinate to the pivotal issue, “what *really* matters?”



### **'Virtual session' on police management, performance and health**

#### **Stress among police officers: a comparative study between begin/end of shift during two weeks**

*Iolanda Braga Pereira and Cristina Queirós (Universidade do Porto) and António Leitão da Silva (Polícia Municipal do Porto)*

This study aims to identify stress levels during two working weeks, among police officers from Municipal Police of Porto, comparing the begin and the end of daily shifts. Data was collected among a sample of 65 police officers, all males, with mean age of 46 years old, which voluntarily fulfilled a small questionnaire before and after daily shift work. Using an individual code, they answered 4 questions about physical and psychological symptoms of stress (muscular tension; physical fatigue or body pain; thinking difficulty; anger, stress or nervous), already used among fire fighters (Gomes et al., 2012; alpha 0.90 and significantly correlated). Each question was evaluated on a 5 points Likert scale, when 1 means little and 5 much of symptom intensity, and 482 answers were collected. Results showed statistical differences for all the 4 questions, with the end of the shift presenting higher values during all the two weeks, with statistical significant differences. Begin versus end of the shift was for: muscular tension, 1.81 vs. 2.52; physical fatigue or body pain, 1.94 vs. 2.80; thinking difficulty, 1.81 vs. 2.60; and anger, stress or nervous, 1.88 vs. 2.78. No statistical significant differences were found when comparing the first and last day of two weeks data collection, suggesting that stress levels were constant, thus chronic, and on a long term, having the risk to elicit burnout (Kelty, 2015; Kuo, 2015; Maslach, 2011).

#### **Coping strategies among police officers: a comparative study with civilians**

*Iolanda Braga Pereira and Cristina Queirós (Universidade do Porto) and António Leitão da Silva (Polícia Municipal do Porto)*

This study aims to identify coping strategies used by police officers from Public Security Police (*PSP - Polícia de Segurança Pública*) working on Municipal Police of Porto or on other police departments, and to compare them with a group of civilians outside of these police forces. Results showed the predominance of task orientated strategies ( $M=3.75$ ), followed by emotion orientated ( $M=2.49$ ) and avoidance ( $M=2.22$ ). Difference between groups were found for task and emotion orientated strategies, with police officers presenting statistically significant lower values than civilians ( $M=3.59$  and  $M=2.25$  respectively for task and emotion strategies for police officers, and  $M=3.91$  and  $M=2.74$  for civilians). No significant correlations between strategies and age were found, and gender differences only appear on civilians group, with women using more emotion orientated strategies.

#### **Psychological wellbeing and psychopathology symptoms among police officers**

*Cristina Queirós (Universidade do Porto), Maria Cristina Castro (Universidade do Porto e Universidade Federal de Santa Catarina, Brasil) and Guida Manuel and Cristina Soeiro (Escola de Polícia Judiciária)*

This study presents preliminary results of a small sample of 78 Portuguese police officers, collected with Self-Reporting Questionnaire (SRQ-20, Harding et al., 1980; Santos, Araújo & Oliveira, 2009) and Brief Symptom Inventory (BSI, Derogatis, 1982; Canavarro, 1999) Portuguese versions questionnaires. Results revealed low presence of psychopathological symptoms. However, the existence of 10% of participants above cut-off points on mental health symptoms and the major contribution of depression alerts for the need to survey regularly police officers, trying to avoid pathological situations.

#### **From the sources of stress to well-being: The protective role of personal, social and organizational resources**

*Sónia P. Gonçalves (Instituto Piaget) and Fátima Ferro (Centro de Psicologia e Intervenção Social da GNR)*

This study is part of a major project and presents data collected through a questionnaire aimed at motivations, health and aspirations. The sample comprised 403 students and the main goal was to test if personal (self-efficacy and resilience) and social resources have a buffer effect in the relationship between job demands (sources of stress) and well-being. Results support this hypothesis.

### **Psychopathological symptoms as predictors of burnout among police officers with different years of experience**

*Joana Rosa and Fernando Passos (Policia Seguranca Pública) and Cristina Queirós (Universidade do Porto)*

This study aims to identify and compare burnout and psychopathological symptoms among 3 groups of police officers from Portuguese National Police (PSP - *Polícia de Seguranca Pública*): students, working at their first year and working with more experience years. The study also aims to know the relationship between burnout and psychopathological symptoms, checking if psychopathological symptoms are burnout predictors. Results revealed low burnout levels and low presence of psychopathological symptoms. Emotional exhaustion presents a mean of 0.88 (using a 0-6 point scale) depersonalization mean was 0.68 and professional achievement mean was 4.73. All psychopathological symptoms' dimensions presented low intensity, being less than 1, using a 0-4 point scale. Regression analysis revealed that psychopathological symptoms explain 32% of emotional exhaustion, 15% of depersonalization and 11% of professional achievement, with no differences between groups.

### **Some aspects of police actions during criminal investigation of domestic homicides**

*Dr Lana Milivojevic (Ministry of the Interior of the Republic of Croatia, Police College)*

Purpose of research was to find out if there are any differences, and if they are, which are the differences in police officers' actions taken during criminal investigation in cases of completed/attempted domestic homicides, in relation to the degree of urbanization of the area where a domestic homicide was committed/attempted (urban/rural area) and in relation to information about the perpetrator (perpetrator was known at the a beginning of the criminal investigation; perpetrator was revealed afterwards).

### **Conflicts in the national police of São Tomé e Príncipe**

*Percile Pires dos Santos and Sónia Morgado (Instituto Superior de Ciências Policiais e Seguranca Interna)*

In the present exploratory study was applied a qualitative approach using a content analysis to the interviews applied to officials in function of National Police São Tome and Príncipe, graduated by ISCPSP. Results show that conflict has its manifestation due to inter-relationship (83%) and to financial nature (17%). This conclusion consolidates Dreu's (2008) findings.

## **POSTERS (7<sup>th</sup> October, main atrium and Auditorium 3, from 14:30 to 16:00)**

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### **'Virtual session' on new technologies, police intelligence and terrorism**

#### **UAVs in PSP: Vantages and disadvantages in the Portuguese context**

*Rui Alfaro and Sónia Morgado (Instituto Superior de Ciências Policiais e Seguranca Interna)*

The objective is to study the advantages and disadvantages of Unmanned Aerial Vehicles in PSP. Results show that the use of UAV in PSP context is unlimited. Combining their capability with the need to allocate efficiently financial resources, these units offer the perfect solution for police intervention (Langton, 2014) for better outcomes. In face of this, we advocate that PSP is no exception in this field.

#### **Facebook as intelligence: A challenge to police forces**

*Rui Ferraz and Sónia Morgado (Instituto Superior de Ciências Policiais e Seguranca Interna)*

Qualitative and quantitative techniques have been used to gather information and results suggest that Facebook is already considered as an important element for intelligence, as it allows an overview of group's dynamics and the established relations that might directly affect the publicsecurity and public-order.

#### **Some factors that have an influence on writing police intelligence information in the Republic of Croatia**

*Dr Josip Pavliček, Simona Strmečki, M.A. & Marica Mravak (Police College, Mol, Republic of Croatia)*

The subject of this research was the attitudes of police officers in relation to the writing of police intelligence information. The main aim of the research was to establish the influence of some factors (motives, negative factors, education, sources of information, reliability of handling with intelligence information) on the frequency of

writing police intelligence information. Additionally, the aim was also to determine the important factors that will help increase the number of intelligence information and their quality.

### **Contemporary Fear of Terrorism - Research with Particular Regard to Europe: An Ongoing Research Project**

*Hanns Matsiek (Bundesministerium für Inneres Sicherheitsakademie, Institut für Wissenschaft und Forschung)*

Our research focuses on several questions surrounding the topic of fear of contemporary terrorism in Europe, including aspects such as: Intensity, contributing factors, temporal and spatial patterns and demographic risk groups. By reviewing, comparing and analyzing the plethora of existing research in this field, we seek to identify common features but also to identify discrepancies among the results. In doing so, we inter alia built on the analytic framework of *fear of crime* research. We draw on the distinction between cognitive (rational), affective (emotional) and cognitive (behavioral) dimension on the individual and social (collective) level. Most interesting are psychological effects of terrorism (e.g. PTSD, national trauma), defensive behavior (e.g. avoidance behavior) and the influence of the cultural and historic background in collective and individual responses to terrorism. At this stage, our findings include: (1) especially in regions with low risk of victimization from terrorism, people tend to overestimate risk exposure. This observations underscores that fear of terrorism has become a latent issue across European societies. (2) Factors such as cost, vulnerability, trust, control, media coverage and familiarity with terrorism reduce risk perception in the general public. (3) Previous experiences with terrorism can reduce the intensity and duration of stress reactions. (4) Terrorist attacks leave more persistent psychological effects within the population than natural disasters.

### **‘Virtual session’ on forensics**

#### **Writing instrument inks microspectrophotometry forensic analysis and characterization**

*A.C. Almeida Assis and C. Farinha (Laboratório de Polícia Científica, Polícia Judiciária) and F. Inácio and J. Seixas de Melo (Department of Chemistry, University of Coimbra).*

One of the aspects of the questioned documents analysis is to detect evidence of tampering. This kind of alterations where a different ink of a manual writing instrument, although of the same colour, has been used, is very common and involves overlap and add features, obliteration and insertion of new entries and signatures for various types of documents such as checks, invoices and contracts. The inks involved in these processes are analyzed using several analytical techniques, including the microspectrophotometry. The purpose of this study was to characterize and create an absorption spectra database in the visible region of writing instruments such as ball pens, gel pens, felt-tipped pens or fountain pens. This study consisted in the analysis of 168 inks from 35 different brands commonly used in the national and international markets. Twelve dyes were also analyzed for characterization and identification of the main absorption bands.

#### **Forensic Analysis of Unknown Materials: a different vision of Questioned Documents**

*A.C. Almeida Assis, M.F. Barbosa and C. Farinha (Laboratório de Polícia Científica, Polícia Judiciária)*

One of the biggest challenges in forensic analysis is the correct identification of unknown materials found in a crime scene, or crime scene related. Forensic analysis comprises the characterization, identification and differentiation of various materials such as inks, paper, glues, coatings, laminates, waxes, among others. To respond to this type of analysis is necessary to use advanced analytical methodologies. In the present study, some unknown materials were correctly identified and characterized using techniques such as Fourier Transform Infrared Spectroscopy (FTIR), Scanning Electron Microscopy with Energy Dispersive X-Ray Spectroscopy (SEM / EDX) and High Performance Liquid Chromatography (HPLC) analysis, as well as the analysis of morphology and other physicochemical characteristics inherent to the suspicious material under study. Through the presentation of some case studies, the significant contribution of this kind of identification to the criminal investigation will be shown.

#### **Near infrared hyper spectral imaging as a promising tool to differentiate counterfeit clothes**

*P. Prego Meleiro (Department of Analytical Chemistry, Multipurpose Building of Chemistry, University of Alcalá), F. Ortega-Ojeda and C. García-Ruiz (University Institute of Research in Police Sciences, University of Alcalá)*

The differentiation between textile materials has high importance for distinguishing allegedly counterfeit clothes, thus is imperative to continue developing non-destructive analytical techniques capable of differentiating the diverse textile polymers used in garments manufacturing. The near infrared hyperspectral imaging (NIR-HSI)

technique basically explores the sample's surface by scanning and generating 2D maps along the infrared (IR) spectral range. In this way, a complete spectrum along the desired wavelength range is measured for each spatial pixel. The resulting 3D IR maps, or hyper cubes, contain the 3D distribution of the sample's chemical components. This work used NIR-HSI for analysing clothing fragments of cotton and polyester with similar colour. The hyperspectral images were registered between 1000 and 1700 nm using a NIR-HS camera. The information from the captured images was mathematically prepared, pre-processed and chemometrically analysed using algorithms written in Matlab. The applied treatments included standard normal variate (SNV) normalization, smoothing with either Savitzky-Golay or first derivative methods, mean-centring, and Fourier transforming. The study continued with the elaboration of sample masks and reference classes for each of the components to detect, *i.e.*, polyester and cotton. After that, a PLS-DA model was created and cross-validated using the created classes. In order to assess the proposed data treatment method, a test set was used for prediction against the PLS-DA model. Finally, one protocol was selected as being capable of unequivocal differentiation of the textile nature of the cloth fragments.

### **Dismantling Illicit Laboratories**

*Ana Isabel Alves (Laboratório de Polícia Científica, Polícia Judiciária)*

*Dismantling Illicit Laboratories* aims to provide the necessary knowledge to the dismantling of clandestine laboratories, thus allowing the identification and handling of products and equipment used in the synthesis of illicit synthetic substances. Knowledge of the synthesis methods of different synthetic drugs (Amphetamine, MDMA and Methamphetamine), precursors (APAAN), as the equipment used in its production, and planning a raid on a clandestine laboratory are essential points to ensure all safety measures necessary to the teams involved in the action. Dismantling laboratories takes place in six phases: Pre-explore; checking results of taken safety measurements; Registration of the situation; Technical collection of evidence; Dismantling and removal and Aftercare. All of this information is extremely important, since the dismantling of clandestine laboratories involves risks both from the point of view of safety of teams, such as the environmental point of view. It is pointed out as well, all need to create competence in this area, through courses / training, whether the police or the forensic experts, including those who work in the narcotics scope.

### **New Psychoactive Substances: The role of the Scientific Police Laboratory in overcoming new challenges**

*Ana Matias, Algina Barbosa, Andrea Alexandre, Gonçalo Sousa, Joana Alegre, José Prospéri, José Rodrigues, Maria João Caldeira, Paula Costa, Raquel Ferreira, Sandra Medeiros and João Rodrigues (Laboratório de Polícia Científica, Polícia Judiciária)*

The toxicology laboratory of the Scientific Police Laboratory of Polícia Judiciária (LPC-PJ) is the only laboratory that performs all required chemical and physical analysis of materials seized in Portugal suspected of containing narcotic drugs or psychotropic substances. The detection of licit and illicit substances is held in order to attain scientific based data which is of crucial importance as evidence in court for prosecution in drug trafficking cases. During the last years, the emergence of New Psychoactive substances (NPS or the so-called "legal highs") brought new challenges to police enforcement and to the work at forensic laboratories. The speed at which new substances appear (and the absence of previous chemical data or standards), the chemical similarity of many NPS and the demanded promptitude and accuracy of results, brought a new reality to the daily work at our laboratory. Moreover, the application of new legislation in Portugal in 2013 lead to an overturn in the previously established panorama of NPS, with the shutdown of smart shops and the transition of these substances to the illicit market. Now, more than ever, it is important to take lessons from our daily casework in order to build more effective ways to overcome present and future challenges.