Greetings from the IALM President

Dear Colleagues and Friends,

It is my pleasure to welcome you all to the Special Issue of the IALM Bulletin, entirely dedicated to the Intersocietal IALM Symposium that recently took place at the Lido di Venezia from the 21st to the 24th of June.

As you know, our Academy has a longstanding history in organizing interdisciplinary Congresses and single-issue Symposia; however, the Intersocietal Symposium was the first of its kind, both in the history of IALM and that of our discipline, gathering together, in the shared pursuit of a common scientific objective, 17 prestigious international Scientific Societies operating in the forensic and bio-medicolegal fields.

In my role as President of IALM and of the Symposium, I deeply thank the Presidents of the 18 Scientific Societies & Partners, the Scientific Committee, the Panel of Reviewers as well as the local Scientific Secretariat and Organizational Committee for making it possible for more than 800 scientists, coming from 65 different Countries, to meet, exchange information and discuss the present and future of the Bio-medicolegal Sciences.

Special thanks go to the 252 Lecturers and Chairpersons for the outstanding quality of their scientific contribution, distributed over 43 sessions, including the IALM Symposium, 3 Satellite Meetings, 9 Parallel Session and 6 Workshops, and to the many
scientists involved in the 549 oral and/or poster communications. Thanks to the IALM President and the generosity of the Academy, four outstanding presentations were awarded in the categories Best Oral, Best Poster, Best Oral/Poster by a Colleague under 35 years of age and Best Oral/Poster by a Colleague from a least developed Country.

I would like to acknowledge all of those who actively participated in this valuable scientific endeavour, that will be reported and enriched in extended form in a Monograph entitled “P5 Medicine & Justice”, which enshrines the ambition of envisioning the future, both near and distant, of our discipline.

Finally, I wish you all the best for the upcoming vacation period, hoping to meet many of you on the occasion of the 24th IALM Congress, which will take place in Fukuoka in 2018.

S. Davide Ferrara
IALM President
Opening Ceremony

On Tuesday the 21st of June 2016, in the Palazzo del Cinema, the President of the International Academy of Legal Medicine, Prof. Santo Davide Ferrara, in his role as President of the Symposium, welcomed all of the Authorities, the Presidents and Representatives of the IALM Scientific Partners, together with the hundreds of Scientists and Colleagues, to the 2016 IALM Intersocietal Symposium in Venice.

He acknowledged and gave thanks to the Presidents and Representatives of the IALM Scientific Partners, namely:

- **Kris Cunningham**, International Association of Forensic Sciences;
- **Kathryn Stewart**, International Council on Alcohol, Drugs and Traffic Safety;
- **Thomas Noguchi**, World Association for Medical Law;
- **Peter Mygind Leth**, International Society of Forensic Radiology and Imaging;
- **Morris Tidball-Binz**, Forensic Coordinator of the International Committee of the Red Cross Assistance Division;
- **Markus Baumgartner**, Society of Hair Testing;
- **Vilma Pinchi**, International Organization for Forensic Odonto-Stomatology;
- **Mohd Shah Mahmood**, Asia-Pacific Medico-Legal Agencies;
- **Mohammed Ranavaya**, American Board of Independent Medical Examiners;
- **Dina Shokry**, New Mediterranean Academy of Forensic Sciences;
- **Duarte Nuno Vieira**, European Council of Legal Medicine;
- **Peter Schneider**, European Forensic Genetics Network of Excellence;
- **Annalisa Angelini**, Association for European Cardiovascular Pathology;
- **Cristina Cattaneo**, Forensic Anthropology Society of Europe;
- **Luc Bourguignon**, European Association for Forensic Entomology;
- **Alberto Salomone**, European Workplace Drug Testing Society;
- **Bruno Grignon**, European Association of Clinical Anatomy.
All of the aforementioned Presidents were invited in order to discuss the evolution of Personalized Medicine in the Post-genomic Era of precision medicine, that is, personalised, preventive, predictive and participatory medicine (P4 framework), where the further added value of “Protection (the 5th P)” looks toward the future for the attainment of “Justice”.

As explained by Prof. Giuseppe Zaccaria in his brilliant key-note speech, the syntagma “Personalized Justice” is only a seeming paradox of a plurimillenial historical parabola which concludes with the current definitive affirmation of “personal and group identity”, the “entitlement to rights to differences”, while guaranteeing protection equal and without differences of the freedom, dignity and defence of the Person, also taking the form of a “just trial”.

A just trial in which, according to Prof. Gabrio Forti, “science and law are divided in their objectives”, “the criminal law must stick to and lag Science, not lead it and the Judge must be a consumer not a producer of scientific knowledge, (...) in order to comply with the principle of legality and human rights (...) and in order to build legal foundations sound in science as well in law”.

The President also cited Prof. Reinhard Dettmeyer, who states that, beyond reaffirming the right to protection from “torture, cruel, degrading treatment or punishment”, it is necessary to preserve the “freedom and independence of forensic medical experts” and to establish “additional provisions relating to the collection of evidence”; and Prof. Giovanni Comandè, who emphasised the right and duty to “recognize compensation for personal injury damages and for non-pecuniary harms, characterizing new interests in every legal order”.
In line with tradition and with the view outlined by the illustrious Maestro Prof. Stefan Pollak, affirming that “to overcome Future Challenges one has to be aware of the past”, President Prof. Santo Davide Ferrara stated that the Bio-medicolegal Sciences are undergoing an epochal challenge with the real danger of a fragmentation of the sub-disciplines into separate entities. Thus, it is necessary to re-establish a new Unitariness based on molecular evidence, from which naturally arise transdisciplinary innovation and forensic evidence from the other Biomedical sciences, in particular, the OMIC and IMAGING sciences.

Aft er a brief welcome address by the Rector Magnificus of the University of Padova, Prof. Rosario Rizzuto, President Santo Davide Ferrara explained the ethos and guiding principle of the Symposium, that is, the syntagma “Innovation – Unitariness – Evidence” to be deepened in the various fields and topics of the Bio-medicolegal Sciences, from Forensic Pathology and Anthropology on the Dead Person, to Clinical Legal and Forensic Medicine on the Living Person, including interpersonal violence, personal injury and damage ascertainment, medical malpractice, in addition to Medicolegal Laboratories, such as Anthropology, Entomology, Genetics, Molecular Pathology and Toxicology.

The President informed all of the participants that in the last two Sessions, at the conclusion of the Symposium, Chairman Rapporteurs would draft a brief “Report” to be presented and discussed and subsequently included in the “Monograph P5 Medicine and Justice”, the publication of which has already been planned.

Delegates of the Scientific Societies dealing with Human and Health rights (Thomas Noguchi – WAML), Humanitarian Actions (Morris Tidball Binz – ICRC), Personal damage (Mohammed Ranavaya –
ABIME), Torture (Duarte Nuno Vieira and Miguel Lorente – ECLM and United Nations Delegates), Primary Identification and Humanitarian Emergency (Cristina Cattaneo – FASE), Mediterranean Refugee Crisis (Mete Korkut Gulmen – nMAFS) took the floor for a brief welcome address.

Moreover, in light of the presence on the stage of Prof. Mete Korkut Gulmen, President Santo Davide Ferrara took the opportunity to express to the entire Turkish Academic Community the deepest solidarity in relation to the struggle currently underway in their Country to defend freedom of thought, supported by the Academic Community for the benefit of the rights and values of the Turkish people. A warm standing ovation was dedicated to the Turkish Community present in the Sala Grande of the Palazzo del Cinema, and the President informed the audience that a document of solidarity was to be drafted and signed by the Members of the IALM Presidium.

President Santo Davide Ferrara paid homage to his Maestro Prof. Francesco Introna and gave a special mention to the Maestros Professors Paolo Arbarello, Tullio Bandini, Antonio Farneti, Angelo Fiori, Patrice Mangin, Thomas Noguchi, Stefan Pollak, and Enrique Villanueva, presenting a medal of the University of Padova to each of them.

Before giving the floor to the Lectio Magistralis, President Santo Davide Ferrara asked the young Colleague Dr. Alessia Viero to announce the creation of the IALM Youth Section dedicated to those Colleagues of less than 35 years of age, who will be the protagonists of the future of the Academy. He then congratulated the work of the Scientific Committee, Scientific Secretariat and Organizing Committee of the Symposium, as well as that of the Panel of Abstract Reviewers. He gave special thanks to Prof. Ambrogio Fassina for the organisation of the Sacred Music Event and to co-workers at the University of Padova, Professors Massimo Montisci, Donata Favretto and Guido Viel and Drs. Alessandro Amagiani, Giovanni Cecchetta, Thomas Dewis, Rossella Snenghi and Claudio Terranova for their invaluable efforts and assistance in the organization of the Symposium.
President **Cuno Jakob Tarfusser** was then welcomed onto the stage to give the Lectio Magistralis entitled “Scientific Evidence and Proof. Towards a Personalized Justice”.

In his brilliant speech, Judge C.J. Tarfusser clarified that he was not in fact giving a lectio magistralis, because of the non-academic nature of his position and work experience. He then stated that he would prefer to amend the title of the lecture, by placing a question mark at the end: “Scientific evidence and Proof. Towards a Personalised Justice?”, since without a question mark the title seemed to imply a certainty, the certainty that the two concepts of “Personalised Medicine” and “Personalised Justice” are indeed overlapping and also the certainty that, similarly to the developments taking place in the field of medicine, the field of justice is also in a phase of developing personalisation.

Judge C.J. Tarfusser analyzed the evolution of personalized medicine in the post-genomic era and anticipated his conclusion affirming that there is no doubt that the paradigm of Personalized Medicine, as set out previously, cannot be applied to the field of Justice.

By way of principle, Justice and Personalization are two antithetical concepts. Justice is symbolized as a blind goddess holding a sword and scales. All of these three symbols strongly militate against any personalisation: the goddess is unable to see who is being judged, the scales are balanced and the use of a sword implies the implacable inflexibility of justice.

Medicine and Justice are fields of human knowledge ontologically distant from each other:

- **Medicine** is a science, **Justice** is not;
- **Medicine** is universal, **Justice** is systemic (common and civil law);
- **Medicine** is transnational, **Justice** is the expression of State sovereignty;
- **Medicine** is progress, **Justice** is conservation;
- **Medicine** is (implies) illness, **Justice** is (implies) conflict;
- **Medicine** has a Nobel prize, **Justice** does not.

Furthermore, while in the field of medicine all actors involved (doctors, patients, health administrations, relatives of the patient, etc.) pull the same strings and therefore the subject of personalization is clearly identified, justice is ontologically a field of controversy, of mutual dispute, of thesis and antithesis where a third party has to find the synthesis (be it in criminal or civil cases).

After highlighting the dividing elements between Medicine and Justice from the perspective of Personalization, Judge C.J. Tarfusser turned to the unifying elements that tie together Medicine and Justice, stating that the core of both Medicine and Justice is comprised of individuals, their lives, and their destinies. And that Personalised Justice, admittedly not known under such a heading, is normal practice in the field of Justice.

The fundamental rights of any accused person to a fair and expeditious trial, to remain silent, and to a technical defence, are examples of personalization. Additionally, and more specifically, the numerous factors and circumstances that characterise actual proceedings and which the parties in their submissions and observations and the judge in his/her decisions have to take into account, so as to adapt the cold and abstract legal provisions to the facts and responsibilities under scrutiny, are examples of Personalized Justice (i.e. aggravating and mitigating circumstances, which can be objective or subjective).

Judge C.J. Tarfusser highlighted the risk of linking the concept of scientific evidence in relation to Justice with the concept of “personalization”, instead of with the concept of “certainty”, proposing to reformulate the title of his speech as “Scientific Evidence and Proof. Towards a more Certain Justice”.

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More and more judicial decisions rely and are based on evidence that has nothing to do with so-called “traditional evidence” (e.g., testimonies of persons, eye witnesses, etc.), which are too unreliable, controversial, weak, and easily influenced. Instead, such decisions are based on genuine and solid scientific evidence regarding the proof of the crime, the conduct, the facts on the one hand, and the assessment of the criminal liability of the suspect, the accused on the other side.

When judging scientific evidence there is no doubt that reliability is the key word: the reliability of the science and the reliability of the scientist, the expert; there is also no doubt that it is necessary that science should be adequately understood by the non-scientist involved in the proceedings, be it the Prosecutor, the Defence lawyers or the Judges.

The Lecturer C.J. Tarfusser stated that the necessary pre-condition is knowledge, “mutual knowledge”, which can be achieved only through understandable communication and through common training.

This training of actors in the judicial system needs to be more broadly oriented to include lawyers, who need to have a better understanding and knowledge of the most likely scenario in which an investigation will unfold, including of the continuously advancing technological and scientific findings which can be of interest to justice. At the same time, forensic scientists must be trained on the very strict procedures they have to follow, on what is expected of them in terms of their written analysis, on the modalities in which they may be required to be confronted in court with the results of their consultancy, but also on judicial and deontological ethics.

The Lecturer C.J. Tarfusser concluded his brilliant opening speech with a concrete proposal:
• to draft a sort of manual of forensic (medical) sciences written by forensic scientists for the use of lawyers, in which the nature of the various scientific fields is explained, including what they can achieve and how they need to be taken into account in the context of evolving investigations;
• to establish a sort of international board of experts in forensic sciences, divided into the different branches of Forensic Sciences, and regulated in its admission by way of evaluation and continuous performance control, perhaps through appraisals by those who have benefited from the expert.

All of the aforementioned should be accessible on-line and continuously updated, amended and implemented by the users.

Finally, C.J. Tarfusser concluded that a first step to finding a better mutual language and understanding for Justice and Science, which may eventually contribute to a more certain Justice, had perhaps been made, since he, a lawyer by profession, had been given the privilege and the honour of speaking at an International and Interdisciplinary Symposium of Legal Medicine.
In this Section of the Bulletin a synthesis of the Reports given on Friday 24th of June during the last Session of the Symposium is presented. Through this epicrisis the Reader will be able to follow the logical structure of the Scientific Sessions of the Symposium and focus on the main themes and take home messages offered by the Lecturers and Chairmen.

Session 1
Technological Innovation and Epistemological Perspectives
Rapporteur: Prof. A. Carracedo

The first session began with an opening lecture by Prof. Rosario Rizzuto concerning the origin of personalized medicine and the system biology revolution. The aim of personalized medicine is to find the right drug for the right person at the right dosage, and to understand this we need to understand that the disease is complex and perhaps the main paradigm received in medicine has been the change of the concept of the disease from symptoms and signs to the etiopathogenic mechanism of the disease. To be able to do this we need biomarkers that are able to divide diseases into different classes and also to find biomarkers of response to the treatments. In relation to this we learnt that a variety of biomarkers exist and it seems that genomics is currently offering perhaps the greatest number of biomarkers, for the most part thanks to the introduction of next generation sequencing technologies. But not only genomics but transcriptomics, metabolomics and imaging are all contributing to the discovery of biomarkers that should be combined in a single framework through the use of system biology approaches.

The second talk, by Prof. Thomas Illig addressed metabolomics, which aims at a comprehensive view of all metabolites in a living system. Metabolites are the end points of biological processes and now we have robotic technologies that are able to offer us a view of all the metabolites related to diseases in any given moment. Metabolomics is an ideal source of marker and is very much correlated to genomics. Prof. T. Illig explained to us that by using genome wide association studies in a large German cohort, the KORA cohort, it was possible to correlate genomic variations with metabolite concentrations, and this offered an incredible range of new biomarkers for the understanding of diseases. This should also be combined with molecular imaging, in addition to current technologies such as PET, MRI, US and CT. New real-time methods with non-radioactive labelling or new infra-reds with no side effects are available and thus the combining of omics with molecular imaging could eventually achieve this goal of personalized medicine.

And from personalized medicine we move to personalized justice. Prof. A. Carracedo was very impressed by the presentation of Prof. Giuseppe Zaccaria, who presented a view of justice from its very beginnings, explaining that the recognition of rights is the most important achievement of our civilization and that everything began with Aristotle when he stated that the equal is the just.
However, from the idea that human rights are natural rights we are now moving towards the idea that differences are important aspects of human beings and from an abstract view of the human being to that of a man in the various phases of his life, including the context in which he lives and his particular characteristics. The right to differences must also be taken into account and we need to understand that ethical agreement on rights is a structural phenomenon. Although it will not be easy, in order to move to a personalized justice we should put more focus on individual differences, while acknowledging that the difficulty of the application of personalized justice is related to the key principle of equality before the law. Perhaps it will be necessary to modify this principle slightly, and Prof. G. Zaccaria mentioned some ways to achieve this as an alternative to mediation.

Session 2
Bio-Medicolegal and Criminological Sciences
Rapporteur: Prof. G. Viel

The first lecturer, Prof. Santo Davide Ferrara, highlighted that in the course of the 20th century medico-legal knowledge progressively fragmented due to technological progress and the hyper-specialization of some sub-disciplines. The unity of the discipline has been guaranteed, up until now, by methodology. However, in the current post-genomic era such historical unity is no longer sufficient and the bio-medicolegal sciences must unite around the concept of molecular evidence. To this end it will be necessary to import from biomedicine, which is undergoing the fastest scientific progress, some new techniques of imaging and bio-analysis, such as omics, genomics, proteomics, metabolomics and peptidomic technology. Prof. Ferrara highlighted the necessity so as to increase diagnostic efficiency in the various sectors, to integrate imaging platforms with analytical ones, both in the living (with non-invasive techniques), and in the cadaver. An integration of analytical and radiological techniques defined by Prof. Ferrara with the neologism "RADIO-OMICS" which could combine morphological information, that is, spatial and anatomical location, with analytical information. All with the ultimate goal of increasing diagnostic accuracy and precision and therefore the scientific evidence to bring to trial. So it will be essential to implement a masterplan with interdisciplinary

On Wednesday, the 22nd of June, the IALM President in his role as President of the Symposium offered to all the participants of the Symposium the possibility to attend to an exclusive Sacred Music Event in the Chiesa of “Santa Maria del Rosario”, also known as “Chiesa dei Gesuati”. Two Composers, Antonio Vivaldi and Johann Sebastian Bach, who have marked the History of Music met each other during the Concert. The Pollini Orchestra executed several marvellous pieces, such as the “Magnificat dominum anima mea” (J.S. Bach), the “Gloria in excelsis Deo” (A. Vivaldi), and the “Sicut erat” (J.S. Bach). The hundreds of participants who were present enjoyed so much the performance that the Maestro and Director of the Orchestra, Paolo Faldi, was forced to concede two bis at the audience.
working groups aimed at the scientific validation, certification and quality accreditation of these new technologies in order to carry legal medicine into the P3 era, that is, of personalized medicine and justice. The second lecturer, Prof. Kent Kiehl addressed the subject of criminology and of how techniques of functional imaging and neuroimaging are of ever greater assistance in the diagnosis of psychopathy, antisocial personality disorders, substance abuse, and externalizing disorders. The presentation, of extraordinary impact and efficacy, gave an overview on the hard work done by Prof. K. Kiehl and his research group in building up the huge database of magnetic resonance brain images of more than 3500 offenders. Through this database it was possible to investigate the capability of MRI to predict the age of the offender, to identify ant psychopathy traits and to predict recidivism. Obviously, these methods are actually used and applied in the research arena and a thorough validation is needed for forensic and judicial applications. The lecture however has envisioned that the near future will bring a better understanding of the interaction between brain function, genetics, and environmental factors, ultimately informing improved interventions and prevention strategies and promoting better mental health as a whole. The third lecturer, Prof. Gabrio Forti, a distinguished Jurist and Full Professor at the Law Faculty of the Catholic University of the Sacred Heart in Milan, addressed the subject of the long-standing and delicate issue of the use of scientific evidence as scientific proof in trial. Highlighting how lawyers and Judges turn to science on a variety of legal subjects, from intention and causation to insanity and standards of care. With the Judge acting as a gatekeeper assessing the scientific validity of the proffered scientific evidence, and complying with the need that criminal liability requirements be proved beyond any reasonable doubt. Prof. Forti’s interesting speech highlighted the difficulties encountered by courts in sorting through scientific knowledge, above all when “new” scientific technologies are introduced or when unpublished data or practice knowledge is discussed. Moreover, the speech addressed the issue of the utilization of clinical practice guidelines in criminal trials, emphasizing a number of strategies, which could prevent a clinical epistemic injustice.
Professor Stefan Pollak, in his keynote speech entitled “Historical Roots and Modern Evolution of Forensic Pathology” provided a brief historical overview of development of forensic pathology, including role of Platter, Rokitansky, Virchow and Hoffmann; discussed changes in patterns identified with deaths due to poisons, drug toxicities, helium suffocation, plant toxins; the decreased incidence of illegal abortions and neonatocide and the evolving role in criminalistics (e.g. time since death, wound interpretation). He also discussed how Forensic pathology provides practical basis for evolution of scientific knowledge (i.e. a unity exists between practice, teaching and research). Finally the Lecturer noted that a tension is growing between personal experience needed to conduct forensic pathology and the death of the autopsy internationally.

Professor Toshikazu Kondo, in his lecture entitled “New Molecular and Imaging Innovations in Forensic Pathology” discussed development of biomarkers to facilitate relevant forensic questions:

- wound age determination – changes in cytokine / growth factor profiles; changes in expression of fibrocyte and endothelial progenitor cell markers;
- changes in expression of markers for aging thrombus;
- changes in expression of markers to investigate fresh vs. salt water drownings as well as neck compression;
- changes in expression of ‘clock gene’ markers to estimate time of death.

He discussed growing applications of post mortem CT to ballistic analysis, degree of coronary stenosis and evolution of the virtual autopsy, concluding that the development of molecular mechanisms of biological processes will more precisely address questions of forensic significance. Finally, imaging will enable pathologists to better document and quantify structural changes at autopsy and provide reviewability for a process that is inherently destructive in nature.

Professor Marcel Verhoef in his lecture entitled “Current Practice of Forensic Anthropology on Dead Bodies” reviewed the relevant roles for forensic anthropology in postmortem age estimation and identification.

A particular focus was addressed on demographic information (e.g., sex determination, body height, biological age and ancestry) as well as on means to establish a positive identity (e.g., DNA, dental, radiocarbon dating, digital skull-photo superimposition).

The lecturer discussed also the evolution of postmortem CT to osteological analysis in terms of morphometric measurements, improving detail and reviewability, concluding that forensic anthropology provides a critical role in death investigation with strong application of basic techniques as well as advanced technology to question of forensic relevance.

Professor Cristina Cattaneo in her lecture entitled “Future Innovation of Postmortem Anthropology” focussed on the need to strengthen knowledge of pathology identified in bone and for improved collaboration between forensic anthropologists and forensic pathologists. The lecturer provided examples of osteological pathology that may be provided with forensic anthropology expertise (on dry bone):

- assessment of vascular disorders where calcification and sclerosis of tissues was present;
- characterization of proliferative vs. lytic lesions in cancer;
- aging and characterization of healing fractures and calluses – in particular a prominent role for histology.
Professor C. Cattaneo provided perspective of the evolving role of postmortem CT as being very useful adjunct, yet not a replacement, for classical forensic anthropological assessments. Finally the speech concluded that an improved collaboration between forensic pathology and anthropology would enhance characterization of decedent from a pathological perspective, utilizing forensic anthropological expertise to provide relevant information from osteological remains.

Professor Kristopher Cunningham in his lecture entitled “Impact of Innovation in Future Evidence at Trial”, specifically looking at the role of molecular autopsy, highlighted complex and challenging science to interpret with careful assessment of cardiac pathology and molecular genetic analysis required. The lecturer discussed the evolution of interpreting cardiac pathology as a consequence of looking at it through a molecular genetic lens, outlining the challenge for courts to understand potential role of arrhythmogenesis and genetic mutations in deaths where a structurally normal heart was identified – particularly for circumstances involving assault, police restraint deaths, taser usage, and excited delirium. Professor K. Cunningham recommended also that pathologists carefully explain in courts the nature of the underlying issues to understand death, the scientific underpinnings and limitations on interpreting opinions proffered.

Session 5 – 6 – 7  
Clinical Legal and Forensic Medicine  
Violence – Personal Injury  
Medical Malpractice  
Rapporteur: Prof. M. Ranavaya

Professor Duarte Nuno Vieira in his opening key-note speech entitled “Forensic Examination of the Living. From Violence to Injury and Damage” gave an excellent overview on clinical legal and forensic medicine depicting the state of the art of the forensic examination in the living, covering all the
aspects from personal injury to damage.

Professor Pietro Pietrini in the lecture entitled “OMICS and Functional Imaging for Predicting Violence” discussed the actual and potential future role of in vivo diffusion tensor magnetic resonance imaging (DT-MRI) tractography to analyse the microstructural integrity of the uncinate fasciculus in psychopaths, with convictions that included attempted murder, manslaughter, multiple rape with strangulation and false imprisonment.

The lecturer pointed out a correlation between measures of antisocial behaviour and anatomical differences in the uncinate fasciculus, stating how the results suggest that abnormalities in a specific amygdala-orbito-frontal cortex limbic network underpin the neurobiological basis of psychopathy.

He concluded that current work by his research theme demonstrates that brain structural changes are associated with specific alterations at behavioral level.

Professor Miguel Lorente, in the speech entitled “Current Evidence in Personal Injury and Torture Medicine” provocatly defined “Torture medicine” as a “modern type of torture” because too often injuries are undetectable, and there are difficulties in verifying the victim's allegations. The lecturer underlined the necessities of producing guidelines and interdisciplinary training courses for educating physicians.

Moreover, the prevention of torture medicine must imply teaching human rights and social health behaviours to medical students, particularly where medicine can be used for torture.

Professor Reinhard Dettmeyer in his lecture entitled “Current and Future Evidence in Personal Injury Ascertainment under Criminal Law” stated that: the examination and documentation of injuries of victims of violence should be included in medical training and continuing medical education; victims of violence should always have access to a medical or forensic medical examination; detainees should also always have access to a medical examination (so-called prison medicine); national and international standards should be created; physicians should be allowed to practice their profession without fear of repression. He concluded that the implementation of guidelines on the examination, documentation, and appraisal of injuries of victims of violence is either incomplete or unsatisfactory and that the forensic expert who performs the ascertainment and evaluation should be neutral, objective, independent, expert, and capable of self criticism (i.e. recognizing his own limits).

Professor Mohammed Ranavaya presented an interesting overview on the methods of ascertainment and criteria of evaluation currently used in personal injury and damage assessment under civil-tort law presenting the sixth edition of the Guide of the American Medical Association (i.e. AMA Guide) which could be a valid tool for harmonizing personal injury assessment around the world.

In the session about personal injury and damage there was also a fascinating paper presented by Professor Giuseppe Sartori on malingering, which as we know is a big and critical issue in any area of forensic medicine. Various validated tools that could be used to flash out individuals who had exaggerated in their claim were presented and critically discussed.

Professor George Mendelson gave a lecture entitled “Current and Future Evidence in Personal Damage Evaluation” discussing the legal frameworks of the main civil law and common law Countries and the current levels of evidence in personal injury ascertainment and evaluation.

Professor Giovanni Comandé in his lecture entitled “International Juridical Overview” described the heterogeneity existing in the various civil legal frameworks on medical malpractice and personal injury compensation and underlined the need for blame schemes based on no fault compensation. The delivery of health care indeed can never be without risks. The lecturer expressed his personal convincement that consideration should be given to the establishment of risk, reducing those
procedures that should be utilized by all institutions delivering healthcare. Additionally, he believes that more efforts should be made in any case of accident to support and fairly compensate the victim and to establish and/or strengthen a culture of safety.

Professor Thomas Bajanowski in his lecture entitled “New Methods of Ascertainment in Medical Malpractice” showed that European systems on medical malpractice are very heterogeneous and that the International IALM guidelines need to be systematically applied to uniform the methods of ascertainment and the criteria of evaluation.

Professor Peter Vanezis in his lecture entitled “Current and Future Evidence in Medical Malpractice” stated that the way forward should be for Defendants to speed up disclosure of medical records, admit liability at any early stage and thus avoid trials which would cut costs not only in obtaining expert evidence but in legal fees and reduce the number of claims relating to brain damaged babies. Recruitment of more experienced and specialist nurses and medical staff is also necessary to prevent medical accidents.

Session 8
Clinical Legal and Forensic Medicine
Personal Identification - Age Estimation
Rapporteur: Prof. D. Cusack

The session included four invited lectures on the topic of personal identification and age estimation. The first lecture was given by Prof. Eugenia Cunha on historical routes and current practice. Eugenia Cunha, from Portugal, set out identification in the context of modern disasters and, tragically, we have recently seen the practical application of this, particularly with regard to transport, be they through accident or terrorism. The lecturer said that these kinds of events have become significant challenges and then set out some of the traditional methods of identification: by physical characteristics, by DNA, by odontology, and also secondary identifiers when tissues are not available. She illustrated that forensic anthropology may move from a secondary identifier to a primary identifier, based on actual imaging databases.

Professor Silke Grabherr, from Switzerland, addressed radio-diagnostic and molecular innovation in personal identification, and particularly looked at modalities of computerized tomography and virtual anthropology, focusing on three aspects. Are we able to see changes that will identify people based on previous surgery or known lesions or injuries and also compare previous images we have of a given person to be identified prior to death and after death? She also discussed MRIs, looking at epiphysis and the risks as well as new aspects emerging in relation to the clavicle and also the knee. Finally, the use of Genetic analysis coupled with the aforementioned techniques in relation to constructive and reconstructive identifications were discussed.
Professor Maurizio Clementi looked at future trends in molecular age estimation from his perspective as a geneticist, in relation to the identification of cadavers and remains, but also in terms of age estimation of the living, who may not have identification documentation, which is the case of those who have to abandon their homes and become international migrants. He discussed telomere shortening and mitochondrial DNA and pointed out the shortcomings or limitations in relation to their application, as well as the methylation of different parts of the cells, in addition to the subject of epigenomics. He pointed out very clearly the differences between biological age and chronological age, which the next speaker expanded upon. The fourth lecture was on current and future evidence in personal identification and age estimation by Prof. Roberto Cameriere, who was part of the age estimation project. He took a historical prospective and stated that up until the 19th century most people did not have precise dates and did not carry documents. However, in the 19th century we moved on to civil registration, industrial requirements and x-rays, so that now we are precise in chronology. He spoke about the treatment of immigrant minor young people, touching on ethical aspects regarding how we investigate. Finally, he also posed the question as to why there are differences between criminal case requirements for identification (beyond any reasonable doubt) and the civil case requirements (on the balance of probabilities).

Session 9-10
Forensic Genetics and Genomics
Rapporteur: Prof. A. Carracedo

The Rapporteur Prof. Angel Carracedo very much appreciated that President Santo Davide Ferrara invited the EUROFORGEN group to meet here at this Symposium and also to organize a forensic genetics and genomics session, because it was a huge opportunity to meet colleagues from other parts of the world and especially from other medico-legal specialties that do not usually attend meetings in forensic genetics. During the Genetics and Genomics Session on Friday morning there were four speeches from Professors Angel Carracedo, Manfred Kayser, Walther Parson and Peter Schneider.

An historical view on how we moved from blood groups and polymorphic proteins to DNA systems was given. In addition, the DNA field that started at the beginning of the 1980s has made a lot of changes during the last 30 years. We started analyzing what we called DNA fingerprints using mini satellites, namely, large repetitions in the genome to short repetitions, because in DNA it is related to degradation, which is the main problem that we have in forensics. And so tandem repeats are shorter than mini satellites, and that was a big revolution. In the 1990s we were able to analyze a total profile from an individual from a bloodstain the size of a pin head. From that moment we made a lot of progress, especially in standardization, and have come to the conclusion that it is necessary for every country to use the
same types of marker in order to have the same quality control systems and to be able to give second opinions. We are now using the same system with more accuracy and more sensitivity. We are progressing as well in relation to the mitochondrial DNA and the Y chromosome, especially in the first case from hair shafts and in the second case for male/female mixtures. And the new revolution has arrived in the form of new technologies and especially from new types of marker called SNPs, which are very small DNA polymorphisms. With SNPs we are now able to identify and obtain much better results in degraded minimal amounts of DNA. In addition to this we are able to offer new ideas in terms of the research/investigative elements of the procedure.

For instance, we are able to discover the geographic origin of a person and the organic content of a person. This has already been applied to many important legal cases. In addition to this we are also quite competent at identifying some physical traits, especially eye colour, hair colour and skin colour. We still need to make progress in relation to other physical traits, but the field is growing rapidly and we are now able to identify more and more physical traits and predict them from a bloodstain or from a contact sample. Even now we can do it using methylation markers, in relation to age determination. We have a more or less random error of plus/minus two years at median ages and that is quite important, but all these new applications and aspects bring with them some ethical and legal problems that we were also analysing. However, this should not be an obstacle to the current use of this type of methodology. An interesting talk concerned the “innocence project”.

The innocence project is a project in the USA trying to exonerate, through the use of DNA, people wrongly accused of having committed crimes. Up until this time the project has been able to exonerate more than 200 people. It is interesting to note that most of the people were not guilty, and the main factor that led to such wrongful convictions was that of eyewitness misidentification.

This is why the new technologies are so important. I think that metagenomics represents the future, since we have more bacterial DNA than human DNA and also single DNA molecular sequencing. We are soon going to be able to analyze a single DNA molecule and such a development is opening up new applications and new perspectives in our field.
Session 11-12
Forensic Toxicology
Rapporteur: Prof. K. Stewart

The Rapporteur was particularly fascinated by the toxicology session, which gave insight into the enormous complexity and necessary dedication to a refined understanding that is needed to truly make appropriate use of these tools.

The morning began with a presentation by Prof. Hans H. Maurer that emphasized the many different genetic, biological and environmental factors that can affect toxicological results. He underlined not only the possibility of personalization of the science but the real necessity of doing so if we are to have true justice. Professor Donata Favretto continued that theme describing many of the advances that make our current tools so powerful. She especially emphasized the importance of a systems approach to toxicology looking at the characteristics of the person, the substance, and the environment.

Professor Markus Baumgartner described the amazing information that can come from a single strand of hair. Hair is a particularly valuable medium for analysis because it can provide analysis over time. It has many practical applications in things like re-granting of drivers licenses, workplace testing, and other situations where monitoring over a period of time is appropriate.

In the following oral communication session we had a wide variety of presentations that took us from the basic development of techniques to how they are codified into standards and regulation. These detailed discussions led us to the issues related to practical implementation in the field: the police officer standing by the side of the road in the dark trying to determine if a driver is impaired, the person trying to determine whether a parent can safely care for a child or a grieving relatives trying to understand why a loved one died. In the course of these presentations, we covered the three pillars on which the field must be based going forward:
1) science to develop these tools - and understand their uses and limitations;
2) education that can gives policy makers and users the knowledge they need to apply the tools appropriately;
3) practice- implementing and utilizing these tools to promote safety and justice.

Session 13-14
Forensic Imaging
Rapporteur: Prof. S. Grabherr

The Session was opened with a lecture from Prof. Hermann Vogel, the radiologist working in Hamburg. His topic was the history and the current state of forensic imaging and standard radiology, starting with the history of Rontgen and the discovery of X rays in 1895. He showed the impact that this had on various people and communities, since in the beginning many seemed to think that by using X-rays everything would be possible. He also presented some images showing how radiology is not only used by legal medicine and radiologists, but even by the art world. For example, in some of Van Gogh's paintings there is more than one image, and those that are “hidden” are only visible through the use of X-rays. Professor Vogel presented some interesting historical cases, such as the Ruxton case, a case of a homicide committed by a doctor in Leicester, as well as the case of Henry IV’s head, which was finally found but had never been ascertained as genuine. Finally, thanks to the superimposition of the x rays of his mummified head and to images of the king it was possible to identify him correctly and this was verified by DNA. A very modern case was then discussed concerning the reconstruction of a case of a shooting in a taxi in Hamburg, with an explanation of how imaging is used today in modern forensic imaging. He also showed the different applications according to the investigation of body packers and the use of x rays in airports and also about post mortem angiography. Very modern techniques such as fibre tracking for detecting post-traumatic
stress disorders were discussed, showing that even in psychiatry and psychology imaging is used. He summed up his lecture with the statement that “imaging is and will be a part of forensic science. You cannot get rid of it, and anyway, it does not mean that we will get rid of other techniques, especially not that of autopsy”.

The next speaker was Fabrice Dedouit, the head of the forensic imaging unit of Lausanne and Geneva. He spoke about post-mortem forensic imaging today and he gave an overview concerning the limits and the advantages of the different techniques. He talked about post-mortem CT and post-mortem CT angiography, and also about post-mortem MRI. He explained the differences that can be seen if only a simple CT scan is used, or if it is enhanced with contrast agents, which permit an increase in the number of findings as well as the sensitivity of the radiological exam. Concerning MRI, he focused on neural images, heart investigation and the identification of myocardial infarctions, the investigation of foetuses and the very new combination of MRI with angiography. Finally, he moved on to 3D surface scanning, explaining this new technique and the various possibilities that it offers, especially in reconstructions of different crime scenes and in the comparison of injuries with their cause. He then mentioned forensic anthropology and the use of imaging in paleopathology, also in cases where he has investigated deformed mummies and in identification. He concluded his presentation with the interesting statement that “advances in forensic imaging is a world of prominent changes”, and he said that if he were to give the same talk ten years later it would perhaps be completely different.

Professor Kathrin Yen from Heidelberg addressed the subject of clinical forensic imaging. She focused on the different techniques used in clinical forensic imaging, from CT to MRI, and the various mechanisms of these techniques, looking at their advantages and limitations, but also the ethical, legal, regulatory and security issues involved. For example, it is not possible to use a CT installed in a forensic unit on a living person, since there are completely different security measurements. She mentioned that the most modern techniques, meaning the new techniques of CT dual energy, and of the new high resolution MRI scans (e.g., the 7 tesla MRI) are able to find micro haemorrhages, for example in the brain. She then finished the talk by addressing imaging of the blood, where it is possible to see how blood changes over different periods of time. This means that we will be able to date hematomas by using MRI in order to understand if the hematoma is fresh or if it is old, and also to have some volume measurements about such hematomas. She then moved on to fracture dating, and whether MRI could precisely date fractures in cases of child abuse. The first results are very promising. In relation to forensic age estimation Professor Yen stated that MRI will again be the new method that should replace the CT and x ray examinations currently performed on living subjects. Finally, she also showed the improvement in forensic reconstructions by giving an interesting example of a 3D printed skull that can be used in court, showing that it is feasible to bring evidence into trial.

Professor Guy Rutty from Leicester addressed the issue of evidence in forensic imaging and future evidence, beginning with a very challenging statement that autopsy is no longer the “gold standard”, since so many things are missed through the use of autopsy. Thus, the biggest problem today seems to be to find a new “gold standard”, and we have to solve this problem in order to go forward in the future, even if medicine is aversive to change. He has no doubt that PMCT will become the norm in the future, combined with other methods, including autopsy as well as other forensic examinations. Finally, he stated that we should change from evidence-based research and look at how can we increase the quality of the examination and learn from the PMCT, so as to use it on living patients. According to Professor Rutty, the most important issues are education, how to bring these images into court, and how to set standards with regard to the new techniques.
Satellite Meetings

Three Satellite Meetings, organized by the European Forensic Genetics Network of Excellence (EUROFORGEN-NoE), the New Mediterranean Academy of Forensic Sciences (nMAFS), and the IALM Working Group on Personal Injury and Damage took place on Thursday the 23rd of June.

International Dissemination EUROFORGEN Conference

This interdisciplinary Satellite Meeting, entitled “Forensic DNA analysis in the light of the new security needs” divided into three sessions, “From Crime scene to Court room”, “From Genotype to Phenotype” and “Science in Society” opened with a key-note speech by P. Schneider and involved lectures by W. Branicki, J. Butler, S. Chu, P. Gill, H. Machado, E. Murphy, C. Phillips, L. Prieto, K. Reed, T. Spector, M. Wienroth, and R. Williams.

The numerous participants including police officers, medical examiners, forensic scientists, jurists and lawyers have had the opportunity to get an update on the state of the art in the rapidly evolving field of forensic genetics, and to attain the fundamental notions on genetic evidence collection, analysis and phenotype reconstruction.

7th nMAFS International Meeting

This Satellite Meeting, entitled “Mediterranean Countries and the Refugee Crisis. Emerging Issues and Potential Solutions” opened with a key-note speech by M. Tidball-Binz on the contribution of International Forensic Societies and Academies for the development of an efficient humanitarian action, involved lectures by C. Cattaneo, A. Chadly, N. Daglioglu, M.K. Gulmen, H. Keles, A. Samarji, and D. Shokry, followed by more than 20 interesting oral communications.

The numerous international forensic scientists and medico-legal experts who intervened discussed the role of forensic anthropology, pathology and genetics for identifying living and deceased migrants, fighting refugees trafficking and building up an efficient humanitarian forensic action capable of confronting the Refugee Crisis.

Italian Satellite Meeting

The Italian Satellite Meeting entitled “From personal injury to impairment and compensation. The methodology of ascertainment and the criteria of evaluation” dealt with the issue of personal injury and damage assessment under civil-tort law. Organized by the IALM International Working Group on “Personal Injury and Damage Ascertainment”, founded in 2014 by President S.D. Ferrara the Italian Satellite Meeting has debated the recent IALM Guidelines on the Methods of Ascertainment, and has compared the various national evaluation systems and models for personal injury compensation.

The interesting lectures by F. Avato, E. Baccino, C. Buccelli, G. Comandé, F. Corte-Real, N.M. Di Luca, R. Domenici, E. Keller, F. Marozzi, S. Martin De Las Heras, G. Mendelson, G.A. Norelli, E. Pedoja, V. Pinchi, M. Ranavaya, E. Ronchi, G. Sartori, P. Vanezis, Y. Vermylen, and R. Zoia depicted the wide heterogeneity, both at an intra-national and inter-national level existing in the definition and application of personal damage categories, particularly among immaterial damages (i.e. “non-pecuniary damages” or “intangible losses”).

The session promoted an in-depth analysis of the International State of the Art on Personal Injury and Damage Ascertainment, and paved the way for the creation of a Unified Model of Evaluation (e.g. Compensation Table) of damage to health, including “pain and suffering”, as well as “loss of amenity of life” and “existential damage”.

Bulletin of the International Academy of Legal Medicine
Parallel Sessions

During the three days of the Intersocietal Symposium, 9 Parallel Sessions, organized by the Association for the European Cardiovascular Pathology (AECVP), the European Association of Clinical Anatomy (EACA), the European Association of Forensic Entomology (EAFE), Forensic Anthropology Society of Europe (FASE), the International Council on Alcohol, Drugs and Traffic Safety (ICADTS), the International Committee of the Red Cross (ICRC), the International Organization For Forensic Odonto-Stomatology (IOFOS), and the International Society of Forensic Radiology and Imaging (ISFRI) took place.

Association for the European Cardiovascular Pathology

This Parallel Session entitled “Autopsy Pathology of Sudden Cardiac Death” involved lectures by J. Banner, C. Basso, G. D’Amati, J. Lucena, K. Michaud, M. Sheppard, G. Thiene, and A. Van der Wal offering an update on cardiomyopathies, coronary artery disease, valve and congenital diseases, and mechanical sudden cardiac death. It concluded with a video demonstration on how to dissect the heart in the suspicion of a sudden cardiac death. The theoretical and practical notions presented by the renowned AECVP lecturers were much appreciated by the numerous medical examiners, forensic scientists, and medico-legal experts who attended this interesting session.

European Association of Clinical Anatomy

This Parallel Session entitled “Forensic Clinical Anatomy” involved lectures by G. Anastasi, N. Apaydin, R. De Caro, B. Grignon, M. Loukas, V. Macchi, A. Porzionato, J.R. Sanudo, M. Snosek, and C. Stecco discussing the definitions and methodologies to be used in forensic clinical anatomy along with the role of novel imaging techniques. The interesting presentations highlighted the role of anatomical variability in medical malpractice and the importance for the ascertaining expert to properly consider the anatomical bases of iatrogenic injuries in the various systems, giving further instruments for the ascertainment and evaluation of medical liability from both clinical and medico-legal points of view.

European Association of Forensic Entomology

This Parallel Session on Forensic Entomology involved lectures by J. Amendt, L. Bourguignon, V. Bugelli, D. Charabidze, and S. Vanin discussing the main theoretical and practical issues to be confronted when collecting entomological evidence for reconstructing time since death and/or gaining information on the genetic and toxicological profiles of the victim.

Forensic Anthropology Society of Europe

This Parallel Session entitled “The role of Anthropology in Personal Identification” involved lectures by E. Baccino, C. Cattaneo, E. Cunha, Y. Schudler, and F. Taroni bringing together forensic practitioners, researchers and representatives of international organisations involved in the identification of human cadavers and skeletal remains. In light of the recent humanitarian emergency of mass migrants deaths in the Mediterranean this session has focused on how forensic anthropology can contribute to the identification process, and elaborated a consensus document on the use of anthropological findings for personal identification when traditionally primary identifiers are unavailable.
International Council on Alcohol, Drugs and Traffic Safety


Both sessions focused on the impact of medicines, which impair driving, on the rules to be adopted when prescribing these medicines, and on the evaluation of the impact of the newly developed ICADTS Guidelines on Medicines and Driving.

International Committee of the Red Cross

This Parallel session entitled “Humanitarian Forensic Action. A new field in Forensic Sciences” included lectures by S. Cordner, M.D. Morcillo, J.L. Prieto, M. Tidball-Binz, D. Ubelaker, and D.N. Vieira discussing the relevant normative and practical issues related to the recovery, documentation, management and identification of deceased people from armed conflicts and catastrophes.

The Session has impacted the forensic community by providing an updated review of the current knowledge and practice in humanitarian forensic action worldwide, including trends and opportunities for forensic scientists and practitioners.

International Organization for Forensic Odonto-Stomatology

The IOFOS Parallel Session was articulated into four parts including lectures by H. Bernitz, H. Brkic, R. Lessig, V. Pinchi, P. Thevissen, Y. Vermyleen and 16 oral communications on the topics of personal identification, age estimation, mass disasters, and medical malpractice.

This Session impacted the forensic community with an update on the precious role of forensic odontology for solving medico-legal issues in both the criminal and civil legal frameworks, proposing clear indications on the qualification, expertise and standards needed to act as a forensic odontologist in Court.

International Society of Forensic Radiology and Imaging

The ISFRI Parallel Session entitled “Post-mortem Computed Tomography and other Imaging Methods” included lectures by A. Brough, C.G. Busk, S. Grabherr, W. Haakma, S. Kottner, P.M. Leth, C. Lombardi, C. O’Donnell, R. van Rijn, K. Wozniak, and K. Yen discussing the current role of post-mortem computed tomography for the identification of the cause of death and the reconstruction of the mechanism of death along with its limits and the predictable future developments. During the second part of the Session novel imaging techniques such as high accuracy MRI, diffusion tensor magnetic imaging, micro-CT and optical coherence tomography have been presented and critically discussed.
Workshops
On the first day of the Symposium, prior to the Opening Ceremony, the American Board of Independent Medical Examiners (ABIME), the Asia-Pacific Medico-Legal Association (APMLA) together with the International Association of Forensic Sciences (IAFS), the Association for the European Cardiovascular Pathology (AECVP), the International Committee of the Red Cross (ICRC), the International Organization For Forensic Odonto-Stomatology (IOFOS), and The European Workplace Drug Testing Society (EWDTS) jointly to the Society of Hair Testing (SoHT) organized 6 Workshops with a closed number of participants.

American Board of Independent Medical Examiners
This closed workshop aimed at training the participants in the ascertainment and evaluation of personal injury and damage following the Guide of the American Medical Association (AMA Guide). The lecturer M. Ranavaya, President of ABIME, illustrated the key-concepts of the sixth edition AMA Guide and trained the participants on real forensic casework using the “hands-on” methodology.

Association for the European Cardiovascular Pathology
This Workshop entitled “Forensic clinico-pathological cases of complications versus errors in interventional cardiology and cardiac surgery” included lectures by A. Angelini, J. Banner, C. Basso, R.H. De Gouveia, K. Michaud, M. Montisci, M. Sheppard, G. Thiene, and A.C. van der Wal discussing the impact of modern cardiac surgery on forensic cardiovascular pathology and particularly on the identification and evaluation of medical malpractice. During the Workshop seven real forensic cases were critically discussed with the participants.

Asia-Pacific Medico-Legal Association & International Association of Forensic Sciences
The Workshop entitled “Mass disasters and Terrorist attacks” jointly organized by the Asia-Pacific Medico-Legal Association (APMLA) and the International Association of Forensic Sciences (IAFS) included lectures by N. Chung, K. Cunningham, O. Finegan, K. Gruspier, S. Jang, A. Kumar, M.S. Mahmood, A. Miyata, H. Park, J. Park, and E. Untoro discussing the most efficient forensic approach to mass disasters, with casework examples (e.g., the Japanese Earthquake, the airplane crash in Delhi, the Sewol ferry disaster, etc.). The Session concluded with a practical exercise simulating a terrorist attack in Venice.

International Committee of the Red Cross
The Workshop entitled “Challenges and recommendations for the forensic management and identification of decedent migrants” organized by the International Committee of the Red Cross (ICRC) focused on the integration of various forensic disciplines for the search, recovery, analysis, identification and management of decedents in humanitarian operations for the proper disposal of the dead and address to the needs of the bereaved. This interesting workshop comprised lectures by C. Cattaneo, P. Miniati, J.L. Prieto, Y. Schuliar, M. Tidball-Binz, and D.N. Vieira, discussing the normative and practical issues related to the identification of dece-dents migrants and the search for missing people.
International Organization for Forensic Odonto-Stomatology

The Workshop entitled “Dental age estimation assessment of asylum seekers and dental malpractice” was divided into two parts, the first focussing on age estimation of asylum seekers by means of forensic odontology and the second one on dental medical liability. The Workshop included lectures by G. Comandè, V. Pinchi, F. Pradella, P. Thevissen, and Y. Vermyleen providing practical information to the attendees on how to perform odontological age estimations and analyse a case of suspected odontological medical liability.

Society of Hair Testing & European Workplace Drug Testing Society

This joint Workshop devoted to hair analysis for forensic purposes involved lectures by R. Agius, B. Appenzeller, M. Baumgartner, D. Favretto, C. Jurado, P. Kintz, R. Kronstrand, L. Morini, H. Sachs, A. Salomone, and M. Yegles discussing the current challenges in interpreting hair concentrations in the living and deceased with regard to drugs of abuse and ethanol. The attendees had the opportunity to listen to an updated overview on the current guidelines and protocols for hair analysis for the identification of chronic alcohol abuse, exposure to doping agents and the demonstration of abstinence.
Final Session
&
Closing Ceremony

During the final Session, the Rapporteurs Professors Angel Carracedo, Guido Viel, Kristopher Cunningham, Mohammed Ranavaya, Denis Cusack, Kathryn Stewart and Silke Grabherr summarized the main findings and statements that emerged during the Symposium and expressed their personal reflections on the present and future of the Bio-medicolegal disciplines.

As expressed by Professors Santo Davide Ferrara and Gabrio Forti, in the course of the Symposium the need for a collective, interdisciplinary work became apparent, in which all stakeholders operate together to promote the use of new technologies, methods and imaging procedures integrated with bio-analytical platforms in order to validate these new tools in terms of reliability, accuracy, precision and error rate, so that the judge can make use of them as real scientific evidence.

A joint effort that, as hoped for in this Intersocietal Symposium, will focus on the ultimate goal of personalization, prediction and protection of human rights.

As Professors Giuseppe Zaccaria and Gabrio Forti and Judge Cuno Jakob Tarfusser brilliantly expressed in their keynote speeches forensic scientists and jurists will have to work together in order to strengthen the exchange of information and share the theoretical and practical knowledge of the Bio-medicolegal and juridical sciences. This, with the final hope to achieve a personalized justice understood as the protection of the fundamental rights of the citizens as an essential foundation on which to build a truly effective protection of human, universal and personal rights.

The lectures, the reports, and the concluding remarks will be enriched in a Monograph entitled “P5 Medicine & Justice”, which will be published during 2017.
Furthermore, Professors Eric Baccino, Philip Beh, Angel Carracedo, Giovanni Comandè, Denis Cusack, Eva Keller, Toshikazu Kondo, Aurelio Luna, Miguel Lorente, Hans H. Maurer, Morris Tidball-Binz, Peter Vanesiz, Rosario Rizzuto, Duarte Nuno Viera, Giuseppe Zaccaria, a great number of participants of the Symposium, among whom are included the Members of the IALM Presidium and the IALM Scientific Committee, the Presidents of the invited Scientific Societies, in addition to Speakers and Chairpersons have personally expressed to the President and the Scientific Secretariat of the Symposium their sincerest congratulations and warm thanks for the extraordinary Scientific and Cultural content of the Symposium, as well as the high quality of the Social Events and Hospitality, hoping that similar events shall be organized in the future.

Many other pictures of the Symposium and the related Social Events are visible and can be downloaded from the IALM official web-site www.ialm.info
In relation to the struggle currently underway in Turkey to defend freedom of thought, the IALM Presidium and several IALM Members drafted and undersigned the following document to express the deepest solidarity to the Academic Turkish Community and support their fight for the benefit of the rights and values of the Turkish people.

The circumstances that are currently affecting the Turkish Academic Community, many representatives of whom are also Colleagues and Members of IALM, certainly merits our attention and shared concern.

Therefore, the Academy, in line with the aims embodied in its Statute, cannot but express its solidarity with those Academics whose freedom of speech has been curtailed.

No occasion could be more propitious than this Intersocietal Symposium, the ethos of which is centered on the value of the “Protection” of the freedom and the dignity of the Person, as implied by the concept of P5 Medicine and Justice.

Therefore, in the hope that such a serious issue, which directly undermines the basis of the Spirit and Culture of Science, is resolved in accordance with the fundamental Human Rights sanctioned by the Universal Declaration of 1948, the following Members of the Presidium undersign the present statement on behalf of the International Academy of Legal Medicine.