



Press Release from the Institute of Forensic Medicine, Ministry of Justice

Date of Issuance: June 17, 2023

Issuing Unit: Institute of Forensic Medicine, MOJ

Contact Person: Jui-An Chang, Technical Specialist of the
Forensic Pathology Division

Phone No.: 02-22266555#502

Institute of Forensic Medicine Appoints Technical Specialist, Jui-An Chang to Attend 2023 75th Anniversary Conference of American Academy of Forensic Sciences, Strengthen International Collaboration

To advance the quality of Taiwan's forensic examinations and learn about worldwide trends in forensic science and technology, the Institute of Forensic Medicine designated Jui-An Chang, a technical specialist of the Forensic Pathology Division, to travel overseas and attend the 75th Anniversary Conference of the American Academy of Forensic Sciences (AAFS) in February 2023. The headquarters for the annual conference is located in Colorado Springs, Colorado. Its members include cross-disciplinary experts and scholars, including forensic pathologists, toxicologists, physicians, forensic scientists, educators, and lawyers. Each year, the conference would gather approximately 5,000 notable researchers worldwide who not only would publish the latest discoveries from their respective professional fields, but also present the latest research and developments in each field and general interpretations of forensic results. The conference can be regarded as one of the most important annual conferences in forensic medicine.

This year's conference was held at the Rosen Shingle Creek Convention Center in Orlando, Florida from February 13 to 18, 2023, for a total of six days. The scope of discussion encompassed 14 domains, including anthropology, criminalistics, digital and multimedia sciences, engineering sciences and applied sciences, forensic nursing science, general forensics, jurisprudence, forensic odontology, pathology/biology, psychiatry and behavioral science, questioned documents, and toxicology.

The theme for this conference was "Science Works." Keynote speaker, Kay Scott Griffi shared hidden scientific theories and explained the necessity of avoiding systemic, individual, and organizational biases. By reducing error and enhancing reliability, effectiveness could therefore be enhanced. The exposure to the conference is helpful to the Institute of Forensic Medicine in gaining a better understanding of laboratories' organization, planning, and weaknesses. The key topic of this year's conference was "The Role of Forensic Medicine in Forensic Science." Pamela King, a sitting judge, shared the contents of a verdict, "We need experts to be devoted to maintaining objectivity from start to end. When preparing reports, they must not be influenced by investigators, prosecutors, and defendants. At any time, they must remain objective and neutral as much as possible." Pamela King said, "In court, forensic examiners are there for science, not for the prosecutors or the defendants. Rejecting biases and pressure from prosecutors, defense attorneys, and the media is your duty as forensic scientists and examiners. The most important thing that you can do is to stay true to what you witness, devote yourself to your work, and meticulously inspect your work, to ensure that you can present a fair opinion."

Through attending the 75th anniversary conference, the Institute of Forensic Medicine has gained exposure to the latest research developments in international forensics and interacted with foreign forensic experts and

scholars. The institute consolidated its research results in advance during the previous year and submitted an article to the academy. Following an approval from the academy's board of review, the institute was honored to display its results in a poster presentation and published one research article at the 2023 conference: "An Epidemiology Analysis of a Medical-Legal Investigation of Child and Adolescent Fatalities in Taiwan." The article features a project that established a database of necropsy and autopsy information on child and adolescent fatalities to facilitate operational efficiency in public health statistics and conduct trend analyses on child abuse fatalities. In the process of creating the retrospective database, the institute also used modern forensic pathology technologies to resolve past doubtful cases. Details from dossiers and other related information regarding the deceased victims of abuse, the perpetrators' roles, and risk factors associated with abuse cases are integrated comprehensively in the database. Database archival and mortality analysis by year for the different age groups were performed. The ultimate goal is to analyze and study risk factors such as alcoholism, substance abuse, and psychiatric disease in the parents or primary caregivers contributing to homicide fatalities in child abuse cases, such as domestic violence, neglect, and filicide-suicide. These results may also provide a reference for front-line health care providers for child protection, or the promotion of child abuse prevention or formulation of other related policies. Such measures seek to protect the well-being of children and adolescents, and enforce judicial preservation of human rights for the people. This study completed a retrospective statistical analysis of deaths among infants and children under 6 years of age over the span of a decade. It found that the distribution of manners of death and death patterns showed a high correlation with age. Compared to typical mortality statistics, the epidemiological analysis for deaths under 6 years of age indeed requires age stratification. In addition, statistics gathering on perpetrator information,

and infant and child homicide cases due to substance abuse, including substance types and patterns of abuse, warrant further attention in subsequent projects.

The opportunity to attend the AAFS annual conferences every year allows the institute to present its latest research articles. Engaging in exchanges with experts and scholars throughout the world will increase the visibility and international status of Taiwan forensic study. By attending this international conference, the institute hopes not only to obtain invaluable opinions and feedback during the international conference, but also to further refine and apply research results to effectively resolve many difficult problems in practical casework. Constrained by operational pressures such as insufficient manpower and limited funding, the institute relies on technological projects to obtain research funding so as to consistently enhance its forensic quality. The Institute of Forensic Medicine would like to thank the Ministry of Justice in particular for supporting the institute every year in developing forensic technologies and participating in international conferences. Engaging with experts and scholars throughout the world can further increase Taiwan's visibility on the international stage, thereby creating a win-win situation.

Poster presentation displaying of the institute's research results

