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Interview with Michael Pollanen*

Michael S. Pollanen is a Canadian medical doctor with over twenty years of experience as a forensic pathologist and Professor at the University of Toronto. His main area of expertise is the application of forensic medicine to investigating human rights abuses, with a focus on clinical and autopsy investigations of torture, extrajudicial killing, and death of detainees, and humanitarian action. He is also dedicated to forensic capacity development in resource-limited settings in order to strengthen medico-legal systems. He has consulted for various organizations and is a past president of the International Association of Forensic Sciences. Michael has worked in over twenty countries and has published over 100 peer-reviewed articles.

Keywords: humanitarian forensics, forensic medicine, medico-legal systems, ICRC, missing and disappeared persons, armed conflict, natural disasters.

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* Interview conducted by the *Review* team.

Can you describe your career and job in forensic medicine?

I trained both as an anatomical pathologist and research scientist before specializing in forensic pathology. I started as a full-time forensic pathologist in Toronto and became the founding Chief Forensic Pathologist of our provincial medico-legal system, which is a statutory entity known as the Ontario Forensic Pathology Service. My administrative duties include overseeing 11,000 medico-legal autopsies conducted annually by our service. My professional and administrative duties run parallel with my academic duties as a Professor in the Faculty of Medicine, including educational and research endeavours. My work also includes conducting medico-legal autopsies myself, rather than just supervising others conducting autopsies. I also testify in Court.

A major part of my career has been spent working in forensic pathology in the international context. I have worked in several countries and with a variety of organizations including the International Committee of the Red Cross [ICRC], the United Nations and the International Criminal Court. This work has ranged from capacity development (teaching autopsy methods and helping to develop medico-legal systems) to humanitarian responses (identification after mass fatality) and forensic work in criminal investigations after massacres or other atrocities.

What is forensic medicine and how is it applied across the world?

Forensic medicine is a specialized branch of medicine that uses the tools and knowledge of science and medicine to explore injury and death in the setting of legal systems. The medical doctors that practice forensic medicine obtain postgraduate training after completing medical school to become specialists in this area of medical practice. The precise pathway to becoming a forensic medical practitioner varies from country to country. In most Western countries, forensic medical practitioners are forensic pathologists. Forensic pathologists complete specialized training in pathology (the study of disease) before obtaining additional postgraduate training in forensic pathology, which concentrates on conducting autopsies. In most other countries, forensic medical practitioners train directly in general forensic medicine, which includes training in autopsy. Both pathways to forensic specialization provide similar expertise.

The primary duties of forensic medical practitioners include examination of the living and the dead. The clinical forensic examination of living people with injuries and who are often victims of crime is one important duty. The other major responsibility is the forensic examination of people who have died unexpectedly – a medico-legal autopsy. Expert opinions from clinical forensic examinations and medico-legal autopsies are used in broader investigations and by courts. Unfortunately, there is a worldwide shortage of forensic specialists. As

a result, many countries have few forensic medical specialists and poorly resourced medico-legal systems to conduct forensic work.

What is humanitarian forensics?

Humanitarian forensics is the application of forensic medicine and science to helping families and communities after an unexpected loss of life. The loss of life typically occurs after armed conflict or natural disaster. One of the challenging aspects is the timescale. Forensic humanitarian actions may require immediate response after a sudden climate crisis (tsunami, typhoon) or sudden geopolitical crisis (war), but more often, the humanitarian forensic response is to an enduring crisis related to missing people. Therefore, one of the common denominators in humanitarian forensic work is identification of the dead and linking that process with the process of documenting and tracking missing people. The challenge is that the situations involved are so diverse, including war, disaster, migration and detention. For example, there is a natural interdependency between missing persons, detention and forensic medicine. This is because missing people are often "disappeared", are unlawfully detained, die in detention, have their bodies disposed of in graves, and are then exhumed and examined by forensic specialists who can assist in reuniting the deceased person with their family.

What role has the ICRC played in defining humanitarian forensics?

The ICRC has promoted, supported the development of, and continues to sustain humanitarian forensics. It is the international focal point for humanitarian forensic activities and is the main thought leader in the field. The concept grew out of the ICRC's 2003 initiative on "The Missing" and has developed ever since that inaugural event. Many key ICRC staff have contributed to humanitarian forensics; in my opinion, the most important defining contributor was Morris Tidball-Binz, the former ICRC head of forensics.

How have you been involved in the field of humanitarian forensics with the ICRC?

I have been involved with ICRC humanitarian forensic activities for many years. My participation as a member of the Forensic Advisory Board of the ICRC was to assist in charting its direction and providing input on the forensic strategy and operations of the ICRC. My work as an external consultant has focused on Iraq, intermittently during 2014–17 and again in 2024. The ICRC's forensic accomplishments in Iraq have been groundbreaking and probably represent the best contributions to humanitarian forensics in human history. Activities in this regard have included facilitating identification of combatants from the Iran–Iraq War; huge accomplishments in humanitarian forensics during the rise of the so-called Islamic State of

Iraq and Syria; institutional capacity development of the Medico-legal Directorate in Baghdad; facilitating the development of forensic pathology and forensic anthropology; and increased DNA laboratory capacity – the list goes on. The effective and remarkable collective efforts of over twenty ICRC staff and more than fifteen external consultants have been an inspiration to the international forensic community.

How is your current job different to what the forensic staff do at the ICRC?

There are similarities and differences. Work in domestic systems is empowered by legislation to investigate unexpected deaths and directly involves undertaking investigations and autopsies, and testifying in courts. The ICRC forensic specialists work in delegations and use forensic expertise to advance the mandate of the ICRC in that context. ICRC forensic specialists mostly coordinate and implement forensic activities without directly substituting for local forensic specialists in a country. Some of the most effective forensic initiatives in the history of the ICRC include management of the dead after natural disasters, participation in mechanisms to identify and repatriate individuals who have died in armed conflict, helping to strengthen professional development, and providing physical resources for managing the dead.

Is humanitarian forensic action part of your duties in your daily job?

The three main daily humanitarian actions that operate in the domestic medico-legal context relate to provision of services to families. First, we seek to identify unidentified bodies as soon as possible. This often involves coordinating our activities with the actions of the police, such as obtaining fingerprint comparisons on databases and searching the records of missing persons to identify possible matches. Second, we seek the truth behind what caused the death in each case, and we transparently provide that information to families. This is because families have the right to know what happened to their loved ones, including the details about injuries. Third, one of our guiding principles is to strive to ensure equity in our services. Specifically, in Canada, our geography is huge and communities in the north are often remote, adding to the logistical challenges of providing rapid and seamless services. In addition, many of these remote communities are home to Indigenous people who have not been treated fairly in Canadian history. On this basis, we are always trying to improve our responsiveness to Indigenous people.

From your perspective, how have you seen this field evolve over the past ten years?

Humanitarian forensics officially emerged in 2003 and then developed and fully differentiated itself as a discrete sub-discipline over the subsequent ten to fifteen years.

In that time period, the ICRC expanded its own forensic institutional capacity in delegations and recruited many forensic experts. This set the stage for effective development in the last decade, during which humanitarian forensics has advanced in three main technical areas. First, there have been ongoing advances in identification, mostly related to a multidisciplinary, integrated approach to managing *ante-mortem* and *post-mortem* data, and DNA technology has also grown. It is beyond the scope of this interview to get into the technical details, but there is a current shift from simply using forensic genetics to using forensic genomics. This increases both the scope and power of DNA analysis. Second, there has been progress in applying the dead body management standards promulgated by the ICRC after mass disasters. Third, there is sustained development of forensic medicine for the investigation of human rights abuses such as torture and extrajudicial execution, using the Istanbul and Minnesota Protocols. In addition, as an overarching theme, the last decade has seen the increasing use of forensic methodology by other international organizations such as the International Criminal Court, often capitalizing on the multidisciplinary model.

Have you seen greater recognition of humanitarian forensics in the wider forensic community?

There has been a slow but inexorable uptake in the concept of humanitarian forensics in the global forensic community. Despite this growing awareness, however, there is much work to be done – specifically, to develop methods and systems to identify the dead in domestic systems. The ICRC is the leader in this domain. The realization of the importance of identification has been fuelled by disasters such as the 2004 Indian Ocean tsunami, the 2010 earthquake in Haiti, and tropical storms in the global South. The current ongoing conflicts also highlight this need. Another important factor in the global development of humanitarian forensics is the recognition that disaster preparedness and humanitarian forensics go hand in hand as national priorities for all countries.

What is the current cutting edge in humanitarian forensics?

The "cutting edge" is mostly linked to the development of technical expertise and new methodologies, but the other main issue at present is the interrelationship between forensic activities harnessed for humanitarianism and activities used for international criminal justice. There is a necessary firewall between the two activities to protect the principled activities of impartial humanitarian organizations, such as the ICRC, under international humanitarian law. However, families of missing people want not only identification of the dead but also knowledge about what happened to their loved ones (cause of death and signs of ill-treatment), as well as justice, including prosecution for crimes. This issue will only become more important as the international community cries out against impunity in ongoing armed conflicts.

There will be increasing pressure to ensure that humanitarian objectives are compatible with international criminal justice efforts. This may require new levels of interaction between relevant organizations, while ensuring respect for respective mandates.

From your perspective, what would be the main priority to develop in the field of humanitarian forensics?

The single most important strategic priority is to help strengthen medico-legal systems in resource-limited countries. Unless medico-legal systems are properly staffed with adequate facilities, then identification of the dead and determining what happened to these individuals cannot be sustainably achieved. This has an unfortunate domino effect on families, local communities and the international community. First, without routine daily identification of dead bodies in mortuaries throughout the world, the number of missing people will never be reduced. For example, in Africa, the chronic inability to identify bodies has resulted in the recognition of a public health emergency. Second, most people who are missing or unidentified are among the most vulnerable people in society, so failure to identify these people widens the gap between those with and without resources, much to the detriment of society in general. Finally, global society is weakened by the constant failure to protect the most vulnerable among us. Humanitarian forensics capacity development can help level the field. We must continue to try.