## Final report of the 14th International Junior Academy in Budapest, from 8.-10. August 2024

**Introduction**: The journey to the 14th International Junior Academy, held in Budapest from August 8th to 10th, 2024, began with an inspiring recommendation from my colleague, Dr. Chamali. Having attended the 13th International Junior Academy in German. Dr. Chamali spoke highly of the conference's value and impact on young pathologists.Dr. Chamali's positive experience with the previous conference highlighted the importance of such gatherings for emerging professionals in the field of pathology. Eager to expand my knowledge and share my work, I decided to submit a case study for the upcoming conference.

I submitted a rare case of Primary uterine lymphoma, specifically Diffuse Large B-cell Lymphoma (DLBCL). Given the complexity and rarity of this case, my submission had been accepted for presentation at the upcoming conference. This acceptance was a significant milestone in my professional journey, providing an excellent opportunity to showcase my presentation and engage with experts in the field. This report highlights the key insights and discussions from the conference, underlining their importance in advancing clinical practice.

**Challenges and Support**: Despite my enthusiasm, attending an international conference posed a considerable challenge due to the costs associated with travel and accommodation. As a young pathologist, managing these expenses was a difficult task. Fortunately, my application for a travel grant from the Vladimir Totović Foundation was approved. This financial support was instrumental in making my attendance possible. It not only alleviated the financial burden but also reinforced my commitment to contributing to the field of pathology.

Conference based on: The 14th International Junior Academy, was particularly notable for its emphasis on lymphoma, Mediastinal Pathology, Molecular pathology and liquid biopsy in lung cancer, Mesenchymal tumours and Breast pathology.

Lymphoma was a focal point of the conference, reflecting its critical role in hematopathology. Computer generated normal structure and its deviations were nicely described by Prof Martin-Leo-Hansmann Key presentations and discussions centered on, advancements in Diagnostic Techniques including new molecular and immunohistochemical methods and computer generated techniques models in lymphoma diagnosis (Ex;AI). The conference showcased importance of developments in targeted therapies and immunotherapy for lymphoma. Advances in digital pathology and artificial intelligence (AI) are enhancing the accuracy of lymphoma diagnosis and grading. The use of AI to assist pathologists in evaluating tissue samples is improving diagnostic efficiency and consistency.

Mediastinal Pathology was another important area of focus, done by Prof Philipp Strobel with discussions emphasizing, Thymoma and Thymic Carcinoma, characterization of thymic tumors are aiding in better diagnosis and personalized treatment approaches. The link between thymic pathology and autoimmune conditions, such as myasthenia gravis, was explored. Understanding these connections is essential for developing integrated treatment approaches for patients with concurrent thymic pathology and autoimmune disorders. Surgical techniques and adjuvant therapies were discussed, offering new options for managing thymic tumors and improving patient outcomes.

**Liquid-Based Molecular Pathology**: The advent of liquid biopsy technology and molecular pathology done by Prof Aurelie Fabre, was a significant theme at the conference, Liquid biopsies, including the analysis of circulating tumor DNA (ctDNA) and RNA, provide a non-invasive method for early cancer detection and monitoring. The ability to track genetic mutations in real-time allows for dynamic treatment adjustments and better management of disease progression. The integration of liquid-based molecular pathology into routine practice is enhancing our ability to personalize treatment based on the specific molecular profile of each patient's cancer. This approach is showing promise in improving therapeutic outcomes and minimizing side effects.

Discussions also addressed the current limitations and challenges in liquid biopsy technology, such as sensitivity, specificity, and standardization. Future research will focus on overcoming these challenges to fully realize the potential of liquid-based diagnostics.

**Breast pathology** and mesenchymal tumours were extensively covered, reflecting its importance in oncology and diagnostic pathology. The two lectures done by Prof Janina Kulka and Dr Magali LACROIX TRIKI. It highlighted recent advancements in understanding the molecular subtypes of breast cancer and their implications for prognosis and treatment. There were significant discussions on the role of immunotherapy and targeted therapies in breast cancer treatment. The development of new therapeutic agents and combination therapies is providing more options for managing resistant or advanced cases. **Diagnosing mesenchymal tumours**: This lecture simply described of mesenchymal tumours with morphological, every aspect relevant immunohistochemical and molecular findings. Prof Eva Wardelmann did an excellent work with emphasizing the importance of molecular pathology in diagnosing mesenchymal tumours.

The insights gained from the conference are pivotal in shaping the future of these fields, driving forward more precise diagnostics, innovative treatments, and improved patient outcomes. As emerging technologies and research continue to evolve, the integration of these advancements into clinical practice will be essential for addressing the complex challenges of modern pathology.

Attending the 14th International Junior Academy Conference in Budapest was an enriching experience that extended far beyond the confines of the conference sessions. The event provided

a platform for engaging with a diverse array of international participants and exploring both professional and cultural aspects of Budapest.

**Diverse International Exposure**: The conference brought together pathologists from various countries, including Morocco, Algeria, Austria, France, Germany, the UK, Ireland and Ukraine. This multicultural environment facilitated meaningful exchanges about unique challenges and advancements in pathology. Discussions spanned a wide range of topics, from specific diagnostic challenges to broader issues like healthcare disparities and financial constraints faced in different regions.

Cultural and Social Insights: The opportunity to interact with peers from different countries provided valuable insights into various social and cultural practices. For instance, experiencing different dining etiquette and diverse diets was a highlight. The variety in table manners enriched my understanding of global practices and preferences. Such as outdoor dinners, fostered relaxed discussions and networking opportunities, making it easier to build connections and share experiences.

**Navigating Budapest**: While the conference offered extensive professional development, managing practical aspects of Budapest presented its own set of challenges. Navigating Budapest's public transport system was a learning curve, particularly due to the language barrier. English is not widely spoken, which made it essential to familiarize myself with local transportation options and routes beforehand.

A guided city tour provided a fascinating exploration of Budapest's rich history and architectural heritage. Learning about the historical landmarks and cultural significance of the city added an invaluable dimension to my visit, blending professional growth with cultural enrichment.

## **Conclusion:**

Attending the 14th International Junior Academy Conference in Budapest was a transformative experience, made possible by the encouragement from Dr. Chamali and the generous support of the Vladimir Totović Foundation. The opportunity to present my case study and engage with leading pathologists from around the world was invaluable. This experience has greatly enriched my professional development and has motivated me to continue advancing in the field of pathology.

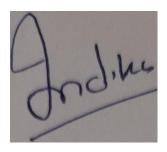
The 14th International Junior Academy Conference in Budapest was not only a platform for professional development but also a gateway to diverse cultural experiences and practical challenges. Engaging with an international community of pathologists, navigating a new city, and experiencing local traditions greatly enhanced my overall experience. The conference underscored

the importance of global collaboration in pathology while also highlighting the value of cultural exchange and adaptability in a new environment.

I would like to express my heartfelt appreciation for Mrs. Martina, the Director of the IAP. Her exceptional leadership and dedication were evident throughout the event. Mrs. Martina's friendly demeanor created a welcoming atmosphere for all attendees. Her constant smile and readiness to assist, whether before, during, or after the conference, were truly commendable. She provided clear guidance and support, ensuring that all aspects of the conference ran smoothly. Additionally, she generously provided all the presentations discussed during the conference for future reference, greatly enhancing the value of the experience for all participants.

I must emphasize that, without the support provided, it would have been impossible for me to attend the 14th International Junior Academy Conference. My sincere gratitude goes to the Vladimir Totović Foundation for their generous travel grant and accommodation support, which made my participation feasible. I would also like to extend a heartfelt thank you to all the professors and doctors who presented their lectures and case reports. Your contributions significantly enriched the conference and provided invaluable insights.

Finally, the 15th International Junior Academy Conference, hopefully to be held in France, and I am confident it will be an equally successful and enriching experience.



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