

WORKSHOP REPORT

16th Histopathology Workshop at the 22nd International Conference on Diseases of Fish and Shellfish

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The Histopathology Workshop of the 22nd International Conference on Diseases of Fish and Shellfish was held in Heraklion, Greece, on 31st August 2025, one day prior to the main conference. Organized by Barbara Nowak, Heike Schmidt-Posthaus, Diane Elliott, and Patricia Noguera, the event brought together international diagnosticians, researchers, educators as well as students with a shared interest in histopathology. This year's theme focused on finfish gill—an essential subject for diagnostics, research, and the aquaculture industry. The workshop included a keynote lecture, five introductory talks, and fourteen case presentations from contributors around the world. The next workshop is scheduled for 2027.

The 22nd International Conference on Diseases of Fish and Shellfish, held in Heraklion, Greece, from September 1st to 4th, brought together researchers, diagnosticians, and aquatic animal health professionals from around the globe. With over 500 participants representing institutions and laboratories from every continent, the event showcased the strong international collaboration driving progress in aquatic animal health research and diagnostics.

A day before the main conference, the 16th Histopathology Workshop offered a focused opportunity for training, information exchange, and discussion on diagnostic and research histology. Histopathology expertise has long been central to advancing aquatic animal medicine, shaping our understanding of how pathogens, toxins, and environmental stressors affect fish and shellfish at the organ and tissue level. It remains indispensable today for accurate diagnostics in aquaculture and wildlife health, helping identify infectious agents, emerging diseases, subtle toxicologic injuries, and complex environmental impacts. As global challenges continue to intensify, skilled histopathologic interpretation will be increasingly vital for diagnostics, research, toxicology, and evidence-based management of aquatic ecosystems. The workshop, organised by fellow EAFP members since 1993, has consistently contributed to this goal, by sharing knowledge among colleagues and helping with the training of the younger generations of fish histopathologist.



This year's theme, "*Gill*", explored both normal gill anatomy and key pathological mechanisms affecting the gills and pseudobranch. The workshop featured several high-quality introductory lectures, including a keynote presentation by Dr Jeffrey Wolf, who addressed common artefacts and pitfalls in histopathological interpretation, emphasizing the need for continuous education and training in this specialized field. The keynote was followed by a number of invited presentations, including "Gill normal structure and common pathology" (Dr Hamish Rodger), "Immune cells and structures in fish gills" (Professor Erling Koppang), "Melanomacrophages and melanin in gills" (Dr Havard Bjorgen), "Pseudobranch – normal structure and pathology" (Dr Johanna Baily) and "Gill neoplasms" (Professor Heike Schmidt-Posthaus).

Over 50 participants from Austria, Finland, France, Greece, Hungary, Ireland, Italy, Norway, Spain, Switzerland, Turkey, UK, Argentina, Canada, US, Australia, Japan, and South Africa particularly appreciated the interactive format, which encouraged the exchange of experiences and discussion of challenging diagnostic cases. The workshop also included 14 case presentations covering a broad spectrum of host species and gill conditions associated with infections by a range of pathogens and non-infectious causes, as well as a "mystery case". The lively discussions among participants highlighted the importance of diagnostic reasoning and interdisciplinary collaboration in aquatic pathology.

Overall, the Histopathology Workshop provided a vibrant platform for professional development, knowledge sharing, and advancing the global understanding of fish and shellfish diseases.

The 17th Histopathology Workshop will be held in Bergen in 2027, with “*Kidney*” as topic. We look forward to welcoming as many participants as possible.

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