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Microwave-Assisted Tissue Processing

In the MW introduction I would like to include following:

Why we need the MW in life science EM
- Reduction of turnaround time (clinical EM = "same-day diagnosis")
- Difficult samples
- Improved quality of sample preservation
- Immunogold-labelling (antigen retrieval)

The principles how MW works
- The physics of MW radiation
- dichotomous nature of the MW radiation
- internal heating
- non-thermal effects
- relevance for EM sample processing

Short overview of available MW-assisted tissue processors
- The rationale of different concepts
- Benefits and limitations

For the MW application part
- Examples of diagnostic samples
- Examples of samples with bioterroristic potential (eventually)
- ….