

# CYTOTECHNOLOGIST

St. Boniface Hospital Site

Submitted by:

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Being a cytotechnologist is as rewarding as it is misunderstood by the general public. Even our lab discipline of cytology is often misconstrued as having to do with psychology, because they sound so alike. In truth, we get the name 'cyto' because it means 'cell'.

Our training and daily work revolves around observing human cells and the way they change when undergoing both benign and malignant processes. These microscopic changes can be very subtle, so we rely on a complex staining procedure named after the founder of cytology, Dr. Papanicolau.

His ground-breaking work in the 1950s led to the introduction of the pap smear, which has had tremendous success in reducing cervical cancer mortality.

Even today, cytology is still focused around routine and high-risk pap smear screening. Our complex pap stain uses three different cytoplasmic stains, and one very important nuclear stain.

To us, the most important part of each cell is its nucleus. A cell's nucleus tells us if the cell is normal, reactive, or potentially cancerous. In general, the darker a nucleus stains the greater the chance the cell is abnormal. When such a cell is found, the cytotech will place an ink dot directly above the cell for the pathologist to review. All pap smears that are currently or have recently been called abnormal by a cytotech are then sent to a pathologist for review and final diagnosis.

Outside of the pap smear, we also receive cellular samples that have been taken from other parts of the body. Cells that exfoliate

into urine or a body cavity fluid, or cells that are directly aspirated by a fine needle, are processed and microscopically examined. It is often part of our job to be present as the needle aspirations are being performed.

After screening the slides for malignant cells, we then enter our diagnosis into the computer, and a pathologist will review the case afterwards. Often a pathologist will ask for special ancillary studies or additional stains to be completed on the case before signing it out with their final diagnosis.

is currently offered through Red River College, with the practical component done in the cytology lab at Health Sciences Centre. This arrangement is due to change, however, with applicants soon requiring to go through Michener.

Just as our work is rewarding, it is also very crucial to patient care, with diagnostic decisions literally a matter of life and death. Consequently, we are also trained to pay very close attention to detail within our policies and procedures. Our Quality Control measures



As cytotechnologists, we spend a great deal of time at the light microscope, so liking microscopes is definitely a prerequisite to our training. Being from Ontario, I completed the 2-year Diagnostic Cytology diploma program at the Michener Institute for Applied Health Sciences in Toronto. In Manitoba, the course

include in-depth documentation of our Standard Operation Procedures (SOPs), safety requirements, turnaround times, staff proficiency testing and professional development opportunities. The expectations and challenges in the field of cytology are great, but there is nothing like being on the front lines in the battle against cancer.