

September 14, 2023

Dear Friend,

There is a chance that you and I might have passed each other in the hallway at Ajax Pickering Hospital or maybe in the aisle of the grocery store, and not realized how important we are to each other...

I'm Nabeel. I work in the lab at Ajax Pickering Hospital.

Thirty years ago when my family moved to Ajax, I had no idea that one day I would be working at the hospital, caring for my neighbours and playing a vital part in their cancer journeys.

And <u>I personally know how important it is to have great health care close to home</u> because, over the years, my loved ones have had to use our hospital too.

So as I raise my young family in Ajax, I feel that it is an honour to serve my community... even if we never get to meet!

And for cancer patients, the lab is the first stage in their journey.

That is why I'm asking you today to make a generous donation to the Ajax Pickering Hospital to help fund even more life-changing equipment for our hospital, like the tissue processor that I use in the lab every day.

Everyone in the team feels the weight that we bear as we go about our work. The results that we find either mean that a patient is at the start of perhaps a hard & intense treatment experience or will soon feel the relief of an all clear.

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After a patient has their biopsy, the retrieved tissue is immediately sent to the lab.

The Ajax Pickering Hospital has a pathology laboratory on-site so that we can start work immediately on your biopsy.

We work to reveal their secrets.

But first, the tissue sample has to be prepared properly.

To do this, we use the tissue processor.

And believe me when I say that this piece of equipment is a workhorse! It is one of the most used tools in the lab, and is incredibly important to my work and, ultimately, to the patient!

That is why your support is so important, because it will help ensure that we have the best equipment running in the lab.

Because if the tissue processor doesn't do its job properly (maybe it is malfunctioning or starts producing less accurate results because of old technology), every step of the diagnosis process is impacted and takes more time... which means that the patient is waiting even longer, getting more stressed and worried about a possible earth-shattering diagnosis.



Here I am, slicing the tissue into very thin sections before they are placed on a slide.

This piece of equipment prepares the tissue sample through a complex series of chemical events that change the cells but does not alter their shape & structure. Then it dehydrates the tissue before the tissue itself is infiltrated with wax and finally embedded into a wax block. (The wax stabilizes the tissue and makes easier to work with.)

Now it's my turn to really concentrate as I manually shave down the excess wax until the tissue is exposed before slicing the tissue into very thin sections that will be placed onto a slide (about the width of a thread in a spider's web).

Next the slide is stained, which means solutions are added that will make the tissue different colours giving more visual cues for the pathologist to examine.

And when the pathologist looks through their microscope at the tissue, they are looking for the tiniest sign of cancer.

And to find that speck, they need to be able to clearly see the cells and their intricate patterns, which is why the preparation process has to be the best it can be.

They are looking at the cells' shapes and sizes to determine how different they are from "normal" cells, of if they have changed. The smallest indication can confirm the type of cancer the patient has and even where the cancer originated.

Each day, I'm preparing slides from about 200-250 blocks. Some days, those blocks might represent a lot of patients; some days just a few. Regardless, I work hard to do the best work I can because so many people are relying on me.

Cells that the pathologist is looking at under the microscope are about 6-8 micrometres in size. One micrometre is 1,000 times smaller than a millimetre.

That's really tiny!

And to understand how small, here are some comparisons:

- A thread of a typical spider's web ~ 4 micrometres
- A human hair ~ 80 micrometres
- A grain of sand ~ 100 2,000 micrometres
- A dime ~ 1,000 micrometres thick (or 1 millimetre)

Sometimes I recognize the street where the patient lives. I wonder about their life and their family. I feel a connection with them, even though they are strangers. I want them to have a good & healthy life.

But, when needed, I also want our patients to have access to great health care close to home. I want them to confidently come to Ajax Pickering Hospital for their biopsy, cancer diagnosis and surgery. I want them to know – I want you to know – that a great medical team is here to look after them, to support & guide them as they deal with the life-changing impact that cancer has.

Of course, the whole lab team and I wish that every time we run our tests we are assured to produce a negative result, to joyfully know that the patient will be told that their biopsy was benign and that their life can continue on as normal.

But cancer is not discriminating.

It does not care who you are or the life that you have led.

And every day that goes by without having a diagnosis is another day too long.

That is why every part of the lab process has to be efficient and accurate.

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That is why I have to always be top of my game, and the equipment I use must be the most state-of-the art.

And your donation today will help fund more equipment in the lab, like the tissue processor, that will help patients receive their diagnostic results faster, either enabling their treatment to begin sooner or for the relief of the all clear to be felt earlier.

Unfortunately, I can't stop you from getting cancer. And I won't know how your treatment and recovery goes. But, I am committed to making sure that my lab colleagues & I will work hard to ensure you will receive the best health care close to home at Ajax Pickering Hospital.

We know that you are relying on us.

Yours sincerely,

Nabeel Siddiqui

Medical Lab Technologist Ajax Pickering Hospital

PS. Your important donation today will help fund more equipment in the lab, like the tissue processor, that will help patients receive their cancer results faster, either enabling their treatment to begin sooner or for the relief of the all clear to be felt earlier.

Thank you for helping me provide quick and accurate cancer diagnoses for everyone in our community.