

Erev Rosh Hashanah 5769

For the last couple of years I have had the privilege of sitting on the Alfred Hospital Medical Ethics committee with doctors, scientists, lawyers and lay people.

Once a month we gather in one of the board rooms at the hospital and review a slew of research proposals to be undertaken at the Alfred and partner institutions.

Our job is to try to ensure that the research being proposed is worthwhile and that it is conducted in accordance with sound ethical principles.

In the last two years on the committee I've been blown away by the incredible strides being made in so many areas of medicine.

Of course, the precise details of what we review each month is confidential.

What I can tell you is that we've reviewed studies looking at new types of therapies for hard to treat cancers;

We've looked at novel devices that may avoid the need for certain types of major surgery;

One study even looked at the effect of hospital food on patient outcomes...[finally]!

But one area that is developing at an especially rapid rate is the area of neurology and neuropsychiatry.

New ways of imaging the functioning brain - looking at it closely while it's doing its job - have been developed over the last decade or so.

These new ways of looking at the brain have enabled researchers to see the working brain in action in ways that were previously only dreamed of.

Forty years ago such imaging techniques were impossible.

That was about when Pedro Bach-Y-Rita, a previously healthy widower still working in his late 60's in New York, suffered a massive stroke. Initially Pedro underwent the then standard rehabilitation process. After some weeks the doctors called one of his sons, George, a medical student, to arrange for his father to be managed in a nursing home. Pedro couldn't move. George was told that his father needed high level.

Back then, George didn't know anything about the accepted forms of rehabilitation.

He took his dad home and he made a decision.

Basically he said, "Papa, you learned to walk as a baby first by crawling, we're going to do that with you now."

Much to the outrage of the neighbors, who couldn't believe what this son was inflicting on his father, George put his dad on the floor and over months encouraged him first to reach objects and then to crawl for objects.

Next he got him up, cruising along walls.

In a similar way Pedro gradually, step by step, re-learned to walk, re-learned to type on a typewriter, and after a year or so he was even able to return to work and remarry.

What a remarkable recovery.

Pedro lived another active seven years of life.

He was climbing a mountain in Columbia when he suffered a massive heart attack and died.

The autopsy showed something astonishing.

The area of the brain affected by the stroke remained scarred.

All the areas usually in charge of movement were clearly damaged beyond hope of repair.

Over that year of intensive rehabilitation Pedro's brain had apparently completely rewired itself around the damaged area.

Pedro's other son, Paul, was a neuroscientist.

He looked at his father's brain and made this fascinating observation – his father's brain had rewired itself to work around the damaged area so that he could regain function.

It has been the accepted wisdom for centuries in medicine that once we reach adulthood our brains are more or less fixed.

But Paul Bach-y-Rita, became a champion of "late-brain plasticity", the notion that even adult brains can significantly rearrange their workings under the right circumstances.

Paul Bach-y-Rita's theories about neuroplasticity were ridiculed at first by his neuroscientist colleagues.

But of late, his ideas have gained wider acceptance.

Norman Doidge, a psychiatrist at Columbia University and University of Toronto, who was recently in Australia, published a book about the theory.

That book, "The brain that Changes itself" (Penguin Books, 2007) became a New York Times best seller and conveys the message that our brains have a larger capacity for change than we previously thought possible.

Such massive re-wiring as seemed to have occurred for Pedro Bach-y-Rita may remain rare but the profound lesson for all of us is this:

Our brains can change – well into late adulthood.

The adage you can't teach an old dog new tricks may just be a false lesson in self-defeating rhetoric.

It seems to be in fact that you can teach an old dog new tricks – provided you're patient and the dog wants to learn.

If a stroke sufferer can gradually regain function as a result of brain plasticity, think what we can do with all the bad habits and negative thinking that gets in the way of living life to its fullest!

And friends, thinking about what we can do with all our bad habits and negative thinking is what we are doing here this evening.

Tonight we have gathered to welcome in Rosh Hashanah, 5769.
We gather together as a community.
A community bound by ties of culture, values, and of spiritual outlook.

Rosh Hashanah has several names, one of which is Yom HaDin.
The Day of Judgment.

A day of spiritual reflection.

A day that really kicks off 10 days of considering our past actions, our patterns of behaviour, our values, our conduct.

Of looking at those bad habits that are dragging us down and preventing us from being the best we can be.

This day invites us to focus our attention on the amazing power we have inside us - to readjust our behavior, to reinvent ourselves.

To start afresh in the New Year.

When we realize just how much our brains can change, our eyes are opened up to see the great possibility we each have to make meaningful change in our lives.

Where do we start?

I'd like to suggest that the answer lies in three questions; questions that each of us can reflect on over these *Yamim Nora'im*..

The first is: How can I be more healthful in 5769?

Our lives are so busy, so filled with To Do lists that our bodies often don't get the care and nurturing they require.

RH invites each one of us to take a deep breath, to reconnect to the finely tuned body that we have each been given, and to become someone who makes the time to nurture it.

We don't have to wait for the secular New Year to roll around to start some New Year resolutions.

Rosh Hashanah invites us to commit to feeding ourselves and our families a variety of healthy foods.

To make the time to put some moderate exercise into our schedule.

To take time out on a regular basis for much needed rest and relaxation.

The second question is: How can I be more helpful in 5769?

It's easy to get caught up in our own everyday pursuits and forget that there are people around us who could use our help.

Rosh Hashanah invites each one of us to regularly take our hands away from our own tasks and become someone who reaches those hands out to others.

To invite someone new over to join us for a Shabbat or festival meal.
To make a phone call to say "Hi" to someone we know might be lonely.
To help out at the shul by being a *shammash*, or planning an event or reading from the Torah, or giving a lift to an elderly community member who can't otherwise get to shul.

There is certainly no shortage of ways that we can be more helpful in 5769

The Third Question is: How can I be more hopeful in 5769?

There's so much going on around the world that can drag us down.
Wars...the threat of terrorism....natural disasters...economic turmoil...
human-induced climate change....

It's so easy to become disheartened by all the bad news in the world.

To become cynical and pessimistic.

To lose sight of the possibility of something better.

Rosh Hashanah invites each one of us to try to clean the slate and become someone who sees the world through optimistic eyes once again.

To taste and really soak in the sweetness of the apple and honey,
to notice the miracle of nature's re-birth in spring.

To have the audacity to hope for a future that is better than the past.

To have the chutzpah to imagine ourselves as part of that exciting,
hope-filled future.

Watching our daughters grow up, Adira over the past almost 3 years, and Noa over the last almost 10 months, has been a profound blessing and an immense learning experience. Rayna and I have marveled at how they have gradually developed step by step. Each day Noa's curiosity helps her edge closer to crawling. Adira's speech is exploding... as are her powers of reasoning... and argumentation.

As I watch the two of them, I can't help but think of Pedro Bach-y-Rita and the year he spent going back to the beginning and learning so much of what we take for granted. Anyone who has battled through months or years of painstaking rehabilitation knows how hard and frustrating it can be. But the lesson from the field of rehabilitation and the growing credence to theories of neuroplasticity is that we all have a profound capacity for change – in the ways we think and the ways we act.

I'd like to suggest that we all take the time over the course of Rosh Hashanah and the next 10 days to think about these questions.

In the year 5769:

1. How can we be more healthful?
2. How can we be more helpful?
3. How can we be more hopeful?

This Rosh Hashanah we are blessed once again with the opportunity to probe our minds, to pick our own brains and think about what we ought to work on.

Change for the better may not be easy but it is always possible.

Like play dough, our minds, our spirits are plastic.

They can be molded.

We can always improve ourselves.

Young and Old, we can all learn new tricks.

May we always learn new tricks that make us better human beings.

And may 5769 be a year in which we all become more healthful, helpful and hopeful. Amen