Science is intimidating for the average person. Scientific studies are all too often explained in a clinical manner, the subject matter is advanced and complicated to understand... Consequently, it is easy to believe, wrongly, that researchers are disconnected from the general public. Their projects, therefore, remain generally unrecognized and unappreciated, while false information flourishes and becomes more attractive.

Research into oral and bone health is particularly unpopular. There is a general tendency toward denial: this field of expertise elicits aversion, since it is too often associated with pain (fractures) or even disgust (oral infections, oral cancer, etc.).

This collection has the mission of reversing this tendency by informing you of major advances in the field. We want to show you what health research is and share our passion with you. Research is one of the drivers of humanity, but researchers must better communicate and explain how their work contributes to the welfare of individuals, the environment, and society.

In order to highlight the research and its members in an original way, the Network for Oral and Bone Health Research (RSBO for “Réseau de recherche en santé buccodentaire et osseuse”) retained two artists in residence, Daniel Ha and Martin PM. For more than a year, Daniel and Martin met with our researchers across Quebec and visited their labs. In the following pages, you can read and enjoy their comics, and thereby discover along with them, the extraordinary work being done by our researchers.

We hope that these pages will inspire you and allow you to see the scientific research in the field of oral and bone health with new eyes. Perhaps it will elicit among the younger crowd the desire to study the sciences and, who knows, become researchers themselves?

RSBO Art and Science Committee
Dr. Christophe Bedos, RSBO Director
Dr. Argerie Tsimicalis, Researcher and RSBO Member
Dr. Marta Cerruti, Researcher and RSBO Member
Dr. Andrée Lessard, RSBO Manager
Martin Patenaude-Monette, RSBO Artist in Residence
Daniel Ha, RSBO Artist in Residence
WHAT IS IT?

WHAT IS THE RSBO?

For more than 25 years, the Network for Oral and Bone Health Research (RSBO for “Réseau de recherche en santé buccodentaire et osseuse”) tirelessly supports Quebec researchers and their students in the pursuit of excellence in fundamental, clinical, and epidemiological research. The Network numbers more than 100 researchers and over 300 students predominantly from McGill University, Université de Montréal and Laval University, as well as their affiliated hospitals (notably CHU Sainte-Justine, Shriners Hospitals for Children-Canada, Montreal General Hospital, Jewish General Hospital and Montreal Sacred Heart Hospital).

The RSBO network is funded primarily by the “Fonds de recherche du Québec – Santé” (FRQS). It also relies on partnerships with associates from different backgrounds, notably professional organizations in the field of oral and bone health as well as associations which represent the most underprivileged people in our society. This is how the RSBO network brings together the stakeholders in our social fabric – scientific community, clinicians, populations and users of healthcare services, as well as administrators, decision makers and industries – with an eye toward producing knowledge on health and oral and bone diseases, but also to take this knowledge and apply it.

The actions of the RSBO network fall within the national strategies for promoting health as well as those set forth by the World Health Organization. The Network aims to promote the health and welfare of the Quebec population, to reduce inequalities in healthcare, but also to contribute to the economic and social vitality of Quebec. Actions taken by the RSBO network can, in fact, stimulate the retention or return to employment of more vulnerable people, develop highly qualified personnel, generate the development of new technologies, or encourage scientific entrepreneurship and the production of patents.

Transmitting knowledge is one of the major goals of the RSBO network. This is why we created the Art and Science Committee, which promotes scientific research and health of the Quebec society through the arts. The RSBO network considers that sciences and the arts, far from being antithetical, can in fact mutually feed each other, combine, and ultimately, benefit the entirety of the population.
This comic collection is a creative and original way to raise awareness in our fellow citizens about research done here, especially on a subject like oral and bone health, which can be quite off-putting for the uninitiated. And yet, the research we are doing is fundamental for all of us.

The idea of doing a collection of comics is exactly right coming from the RSBO Art and Science Committee, and a great approach to demystifying everything that happens in our mouth, from the effect of sugar on our teeth to oral ecology, as well as 3D technology to foster stronger bones, and other activities which take place between our nose and our chin...

Due to its excellence in research, the Network is supported by the “Fonds de recherche du Québec – Santé” (FRQS). It seems so very pertinent and important to me that the general public better understand the research being done since, in the end, it is they who benefit from it, even if they don't realize it.

At a more basic level, it is important to raise awareness concerning science and research in the general population: the methods, approaches, questions, and uncertainly, but also the discoveries, results, and accomplishments! It is important to increase the number of opportunities to present science to the population, young or old, so that scientific expertise becomes the first instinctive source we turn to when we ask questions on any particular subject. Calling on art is definitely a good way to stimulate curiosity.

I commend the Network for its initiative in raising awareness for its expertise and projects, and perhaps generating interest among the new generations of students who are wondering about their future. Who knows? Perhaps, despite a little bit of apprehension, this comic collection might help you better appreciate your next visit to the dentist!

Rémi Quirion,
Chief Scientist of Quebec
ARGERIE TSIMICALIS, R.N., PH. D.

Associate Professor, Ingram School of Nursing at McGill University

Who said that nurses don't do research? That is false and thankfully so! As a matter of fact, no one is better placed for understanding the physical and mental suffering of patients, and to give them a voice. This is extremely important, especially when dealing with children. Discover Dr. Tsimicalis’ strategies for communicating with sick children. They are quite similar to the point guard in basketball, in other words, the player who makes the perfect pass to the one who scores.

DANIEL HA

Daniel Ha, also known as Daniel Vinh Ha Thé or Hà Thế Vinh, turns out to be a type of hermit who is ordinarily found huddled in his cavern. In the wild, he can sometimes be seen in a metro car. He is distinguished by the quality of being a rare Homo sapiens who prefers the pages of a real book (a comic book in his case) to the screen of a cell phone. In order to earn his daily bread, he palpates tongues, uses a powerful blue laser capable of transforming viscous matter into a solid block, and accepts being splashed with saliva and blood on his face, neck and forearms. From time to time, he draws, but receives no financial benefit from it.

www.dvhstudios.com
instagram.com/dvhcomics/
Once upon a time, there was a point guard who worked in a hospital.

What is a point guard?

A point guard (sometimes called a “floor general”) ...

... who specializes in passing ...

... is a basketball player ...

... and dribbling the ball.

When a pass leads to your teammate scoring a basket, we call that an assist.

The point guard is the assist expert!
At the hospital, she noticed that when doctors were treating sick children, they would often only speak to the parent.

But I'm the sick one! Don't you wanna hear what I have to say? How I feel?

So she assisted on a Sisom study.

What is Sisom?
Sisom comes from the Norwegian phrase “Si det Som det er,” which means “Tell it how it is.”

It is an interactive communication tool.

The children create an avatar of themselves...

... and visit five islands:
- My Body
- About Managing Things
- At the Hospital
- Things One Might Be Afraid of
- Thoughts and Feelings

Where they answer questions by choosing one of the five emojis.

Eventually, they get a full report.

Full report

- How is it for you to get treatment?
- Things one might be afraid of
  - Are you afraid of being alone?
  - Are you afraid of dying from the illness?

It was a slam dunk!
She was the floor general on a study about the cost of childhood cancer.

When your child is diagnosed with cancer, you’re rendered impoverished. One of the parents has to quit their job. The caregiving is time-demanding, it is not predictable, ...

That’s without mentioning the repercussions in school attendance, performance and activities of the sick child and of their siblings.

In lower middle income countries (such as India), cost of treatment is lower but with low wages and limited insurance, few families can afford treatment. Some families have to abandon their child’s treatment, meaning they take their child home to die.

So depending on where you live, you get to live or die.

Our colleagues in these countries are working hard, but they need our help. We can work together to make treatment more affordable for poor families. We can save many more children with cancer.
She was also on the team developing MyHealth Passport for children with OI, ...

... which is a card with a patient’s medical information.

<table>
<thead>
<tr>
<th>Name</th>
<th>DOB</th>
</tr>
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<tbody>
<tr>
<td>Date of Birth</td>
<td>1st of March</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>Osteogenesis Imperfecta Type I - Mild, Back Pain</td>
</tr>
<tr>
<td>Decisions</td>
<td>I am my own decision maker</td>
</tr>
<tr>
<td>WARNING!</td>
<td>I have Osteogenesis Imperfecta! I fracture easily! Be gentle when moving me!</td>
</tr>
<tr>
<td>Date Created</td>
<td>9/8/2020 <a href="http://www.sickkids.ca/myhealthpassport">www.sickkids.ca/myhealthpassport</a></td>
</tr>
</tbody>
</table>

Very helpful when one changes doctors or visits the emergency room.

Osteogenesis imperfecta (OI) is a genetic disorder (prevalence: 1:10,000), leading to bone fragility, frequent fractures, and varying degrees of physical limitations.

It can be detected during pregnancy and the parents can decide to terminate or not.

I hired a former patient with OI to teach me about it and I trained her in research to help her apply for a PhD in pediatric psychology.

My hope is to bring her back to the hospital to be the psychologist for children. There is a tremendous amount of meaning that different types of people bring to this world, and you’re telling me she does not deserve to live?
Another great assist!

Who is this special point guard you might ask?

Her name is Argerie Tsimicalis, she is the first Nurse Scientist ...

... at the Shriners Hospitals for Children-Canada.

You can find out more about Dr. Tsimicalis and her work here:
https://argerietsimicalis.com/

Dr. Tsimicalis would like to thank:
Dr. Cornelia Ruland (creator of Sisom)
CanKids...KidsCan(https://www.cankidsindia.org)
Donors: Tunis Shriners, Newton Foundation
and Scotiabank®
Dr. Tsimicalis is the recipient of a Fonds de recherche Québec-Santé(FRQS) Junior 1 Award
www.rsbo.ca
The RSBO network thanks its partners

Daniel Ha

I would like to thank the RSBO network (especially CB and AL) for having given me this opportunity. Without the talent, know-how, and experience of my colleague Martin, I am convinced this book would not exist. Diego, Aya and JS gave me their precious time and constructive advice. My parents, my sister and my brother have delivered groceries and meals during lockdown (OK, they did so during normal times, too). Thanks to M. Hay for their participation. Thanks to CB (a different one) for their collaboration, and for having made us look good. And finally, thank you to MGT, my haven.

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