

The Watchtower



RÉSEAU DE RECHERCHE EN SANTÉ
BUCCODENTAIRE ET OSSEUSE

FOREWORD

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.

ART & SCIENCE

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*

THE WATCHTOWER



ROBERT DURAND, D.M.D.

Associate Professor, Faculty of Dentistry, Université de Montréal

From the top of his watchtower at the Université de Montréal, Dr. Robert Durand tries to find the best dental care possible, between two electric guitar solos!



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/](https://www.instagram.com/dvhcomics/)

MONTREAL, 2002.

CLUB SODA.

"THERE MUST BE SOME WAY OUT OF HERE"
SAID THE JOKER TO THE THIEF ...

ALONG WITH 3 OTHER STUDENTS,
ROBERT DURAND PERFORMS BOB
DYLAN'S ALL ALONG THE WATCHTOWER
FOR THE DENTAL FACULTY'S TALENT SHOW.

DURAND

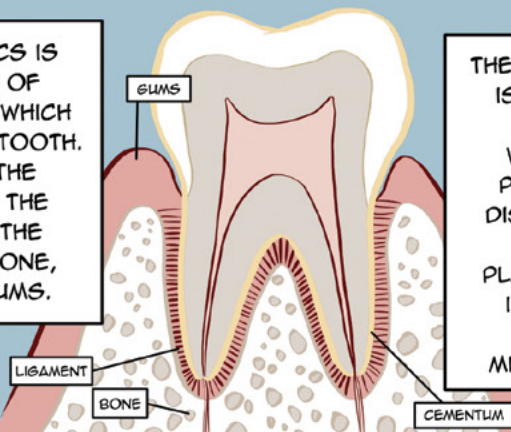
MONTREAL, 2019.

UNIVERSITY OF MONTREAL.

NOW A PROFESSOR OF PERIODONTICS, HE
TELLS ME ABOUT HIS WORK AND EXPLAINS
THE PROGRESSION OF A RESEARCH PROJECT.

WHAT IS A
PERIODONTIST?
WHAT IS
PERIODONTICS?

PERIODONTICS IS
THE STUDY OF
THE TISSUES WHICH
SUPPORT THE TOOTH.
THEY ARE THE
CEMENTUM, THE
LIGAMENT, THE
ALVEOLAR BONE,
AND THE GUMS.



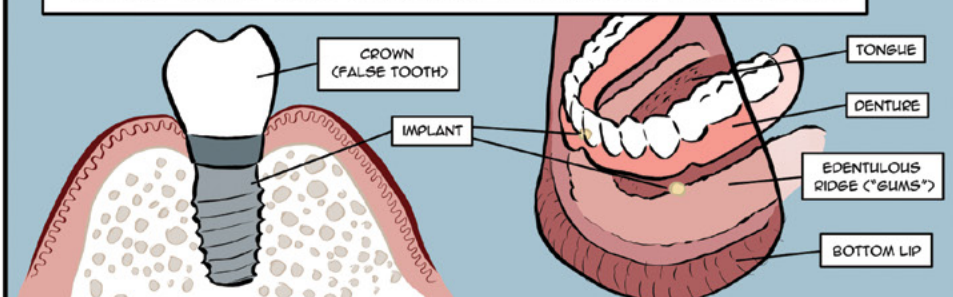
THE PERIODONTIST
IS THE DENTAL
SPECIALIST
WHO TREATS
PERIODONTAL
DISEASES. THEY
CAN ALSO
PLACE IMPLANTS
IN ORDER TO
REPLACE A
MISSING TOOTH.

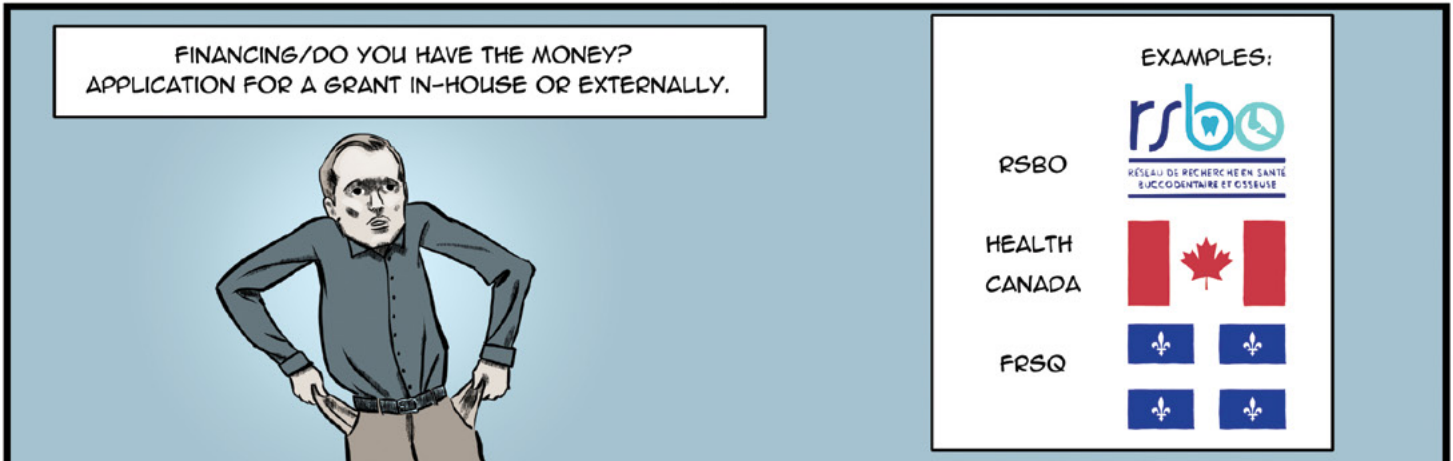
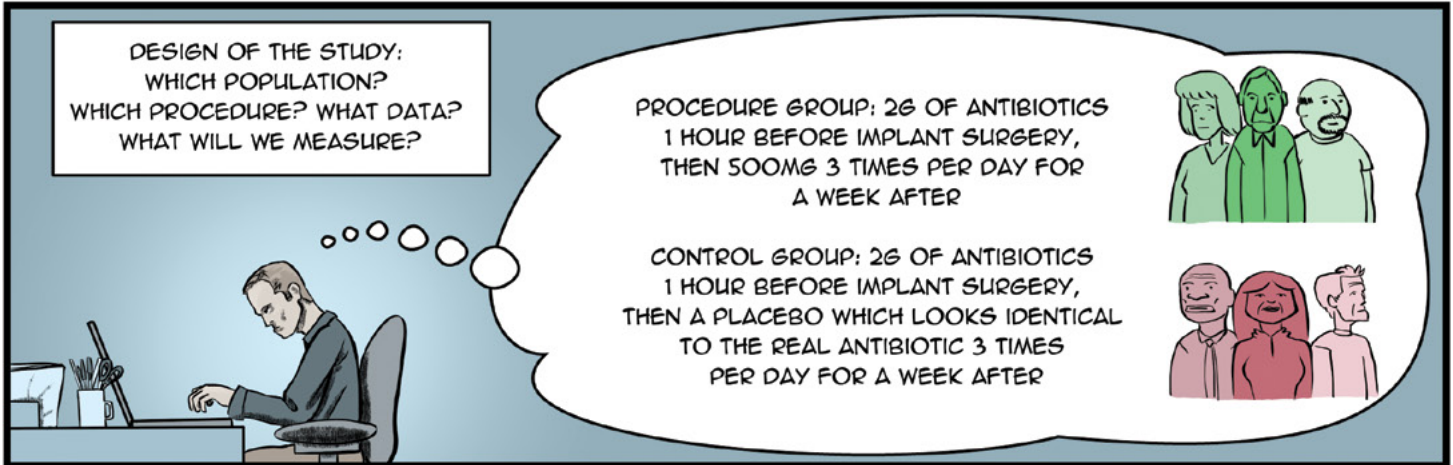
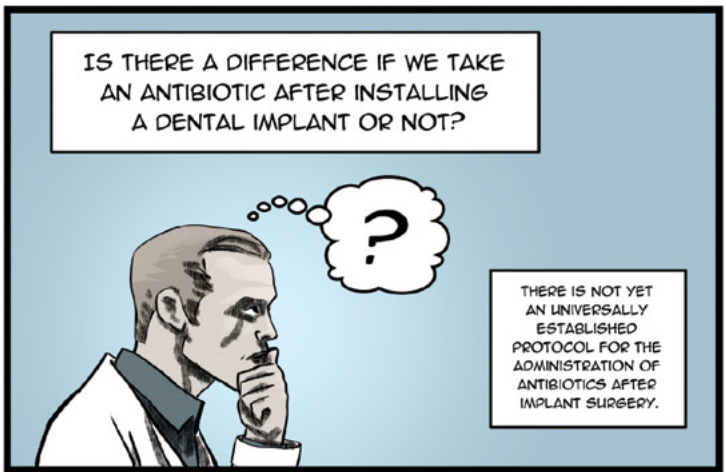
WHAT ARE
YOUR
CURRENT
PROJECTS?

ONE OF THE PROJECTS IS
ABOUT THE EFFECTS OF
ANTIBIOTICS ON IMPLANTS.



A DENTAL IMPLANT IS A SORT OF SCREW WHICH REPLACES
THE ROOT OF A TOOTH. ON TOP OF THIS SCREW, WE CAN
CEMENT OR SCREW ON A CROWN (FALSE TOOTH) OR THE
IMPLANT CAN BE USED TO IMPROVE THE STABILITY OF A DENTURE.





THE TEAM:
OFTEN ASSEMBLED BEFORE THE GRANT REQUEST,
IN THIS STUDY THERE WERE SEVERAL DENTISTS AND
HYGIENISTS, A STATISTICIAN, A GRADUATE STUDENT, ...



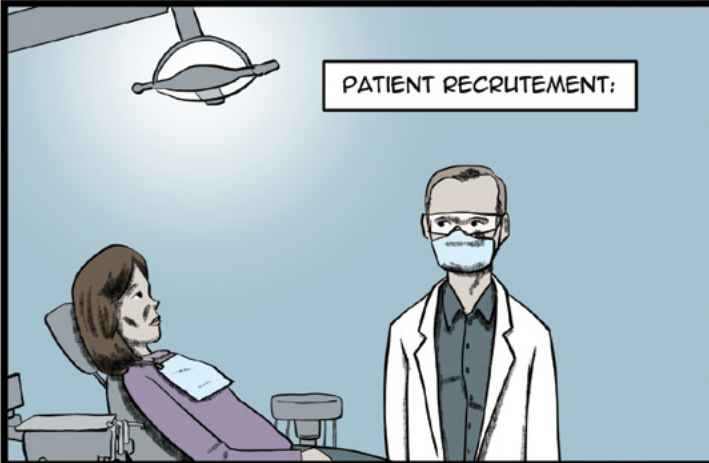
U OF M FACULTY OF DENTISTRY:

ROBERT OURAND
ISSAM KERSHEH
NATHALIE REI
PIERRE BODRIAS
PIERRE ROMPRÉ
RENÉ VOYER

U OF M HOSPITAL
RESEARCH CENTRE:

MATTHIEU SCHMITTBUHL
THIERRY CRESSON

PATIENT RECRUTEMENT:



Université
de Montréal

Répertoires | Facultés | Bibliothèques | Plus

THE PATIENTS WERE RECRUITED FROM
THE DENTAL IMPLANTOLOGY CENTRE
OF THE UNIVERSITY OF MONTREAL.

Faculté
de médecine
dentaire

NOUVEAUX

RECHERCHE SCIENTIFIQUE

VIE ÉTUDIANTE

FACULTÉ

DONS

NOUS JOINDRE

La Clinique dentaire de l'Université de Montréal

NOT DU DIRECTEUR

PATIENT SCREENING.

INCLUDE IF:
GOOD HYGIENE
GOOD QUALITY AND
QUANTITY OF BONE
CONSENT
ETC...

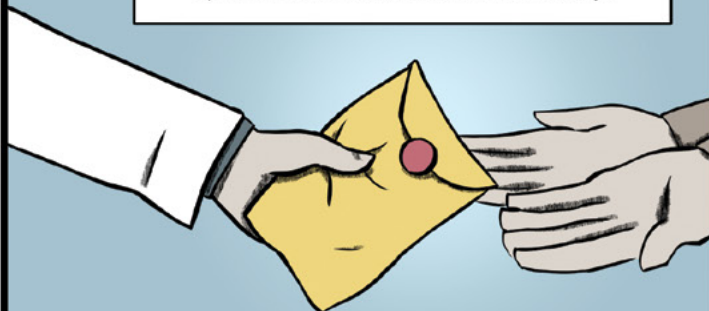
yes

no

EXCLUDE IF:
SMOKER OR DRUG
ADDICTED
ALLERGIC TO
ANTIBIOTICS OR
ANTI-INFLAMMATORY
AGENTS
BAD HEALTH
ETC...

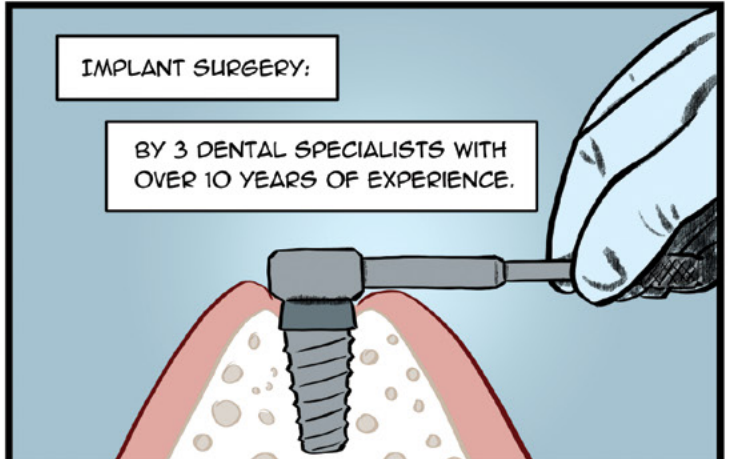


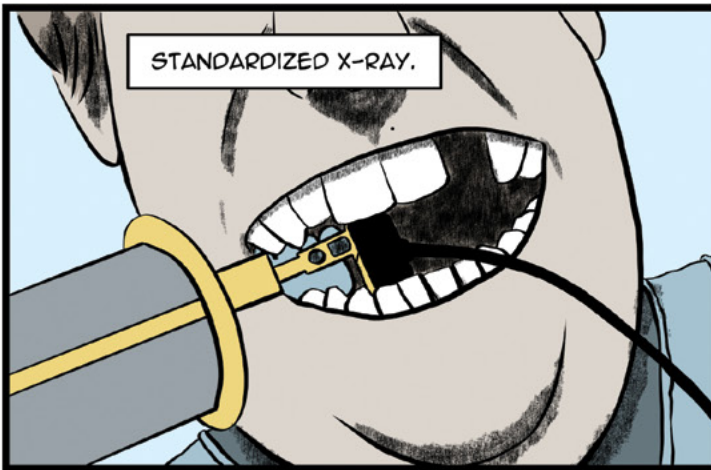
SEALED ENVELOPE WITH EITHER PLACEBO
OR ANTIBIOTIC GIVEN TO PATIENTS
(CONTENTS ARE NOT DISCLOSED).



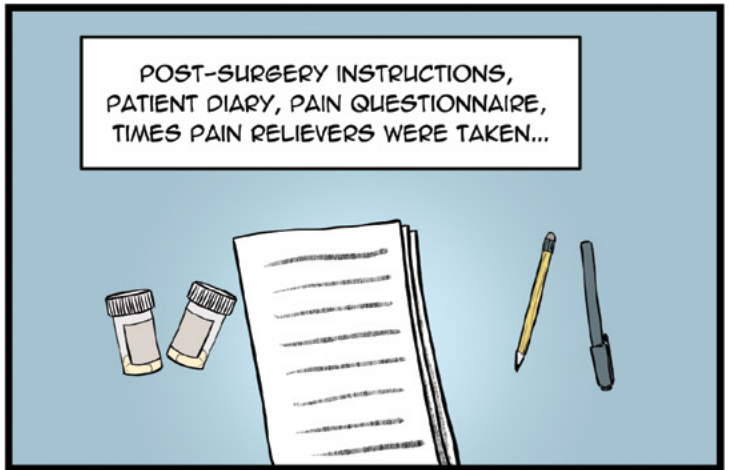
IMPLANT SURGERY:

BY 3 DENTAL SPECIALISTS WITH
OVER 10 YEARS OF EXPERIENCE.





STANDARDIZED X-RAY.



POST-SURGERY INSTRUCTIONS,
PATIENT DIARY, PAIN QUESTIONNAIRE,
TIMES PAIN RELIEVERS WERE TAKEN...



STANDARDIZED X-RAY AND PROBING
(MEASURING THE DEPTH OF
THE GUMS) 4 MONTHS LATER.

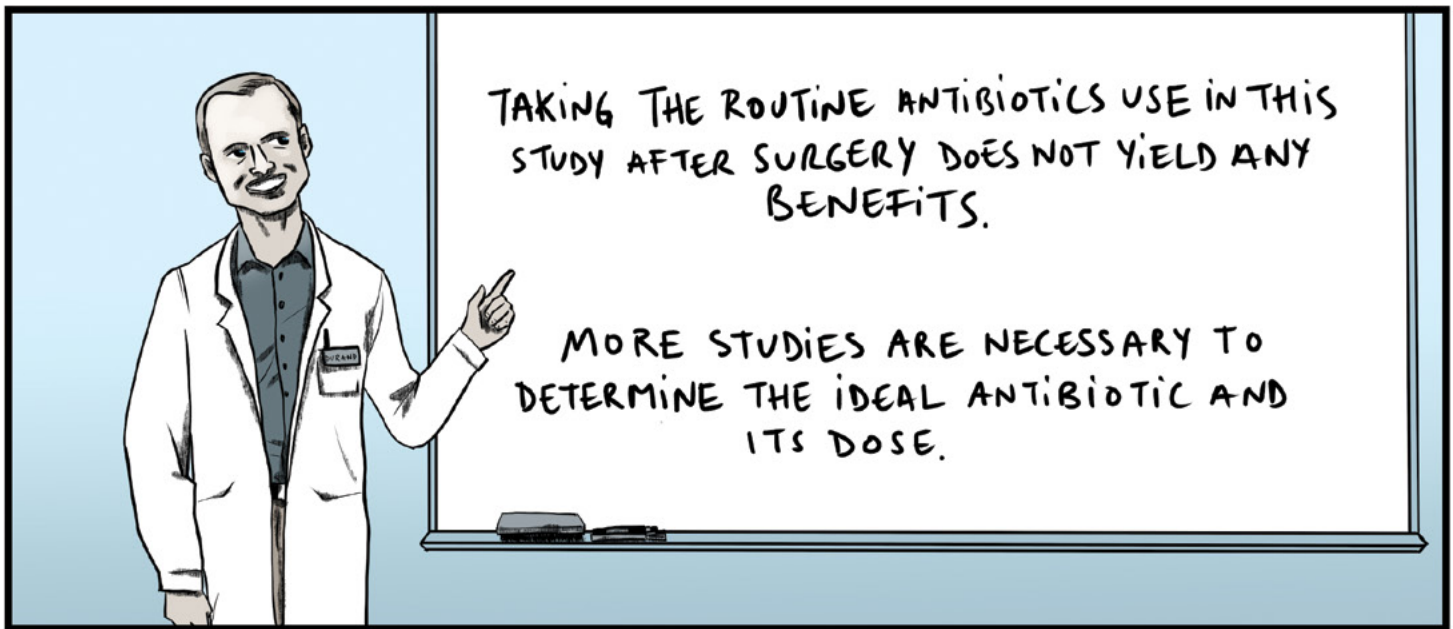
DATA COLLECTION BY AN
EXAMINER WHO IS UNAWARE
OF THE ANTIBIOTIC DOSE.



FOLLOW-UP 1-2 YEARS AFTER SURGERY.



CONCLUSION:

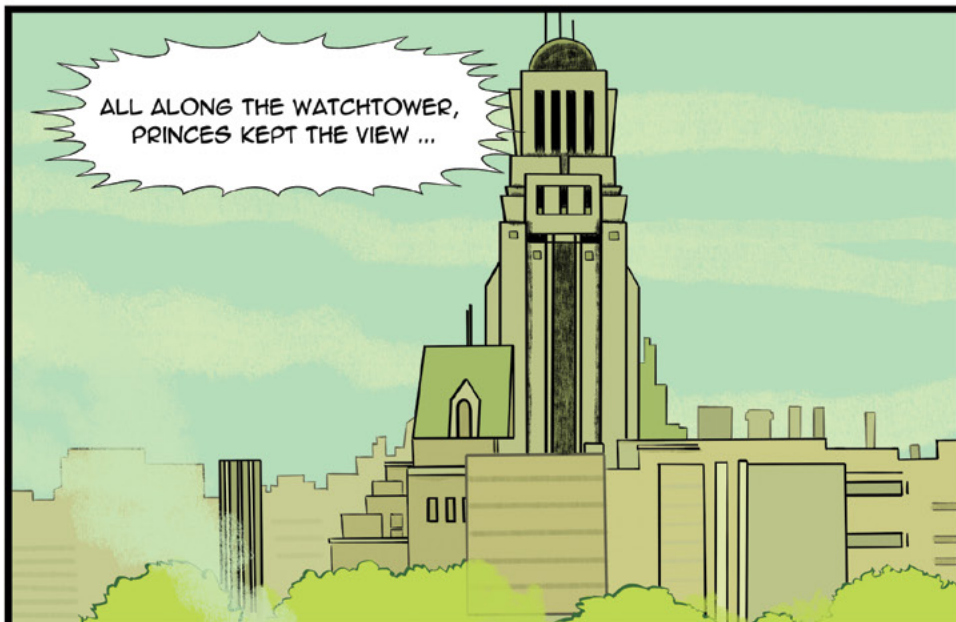


TAKING THE ROUTINE ANTIBIOTICS USE IN THIS STUDY AFTER SURGERY DOES NOT YIELD ANY BENEFITS.

MORE STUDIES ARE NECESSARY TO DETERMINE THE IDEAL ANTIBIOTIC AND ITS DOSE.



BUT YOU AND I, WE HAVE BEEN THROUGH THAT
AND THAT IS NOT OUR FATE
NOW, LET US ALL NOT TALK FALSELY NOW
BECAUSE THE HOUR IS GETTING LATE



ALL ALONG THE WATCHTOWER,
PRINCES KEPT THE VIEW ...

FOR MORE INFORMATION ABOUT
DR. DURAND AND HIS WORK:

[HTTPS://WWW.MEDENT.
UMONTREAL.CA/FR/
FACULTE/PROF/
ROBERT.DURAND/INDEX.HTM](https://www.medent.umontreal.ca/fr/faculte/prof/robert.durand/index.htm)

rsbo
COMICS

WWW.RSBO.CA

ACKNOWLEDGEMENTS

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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