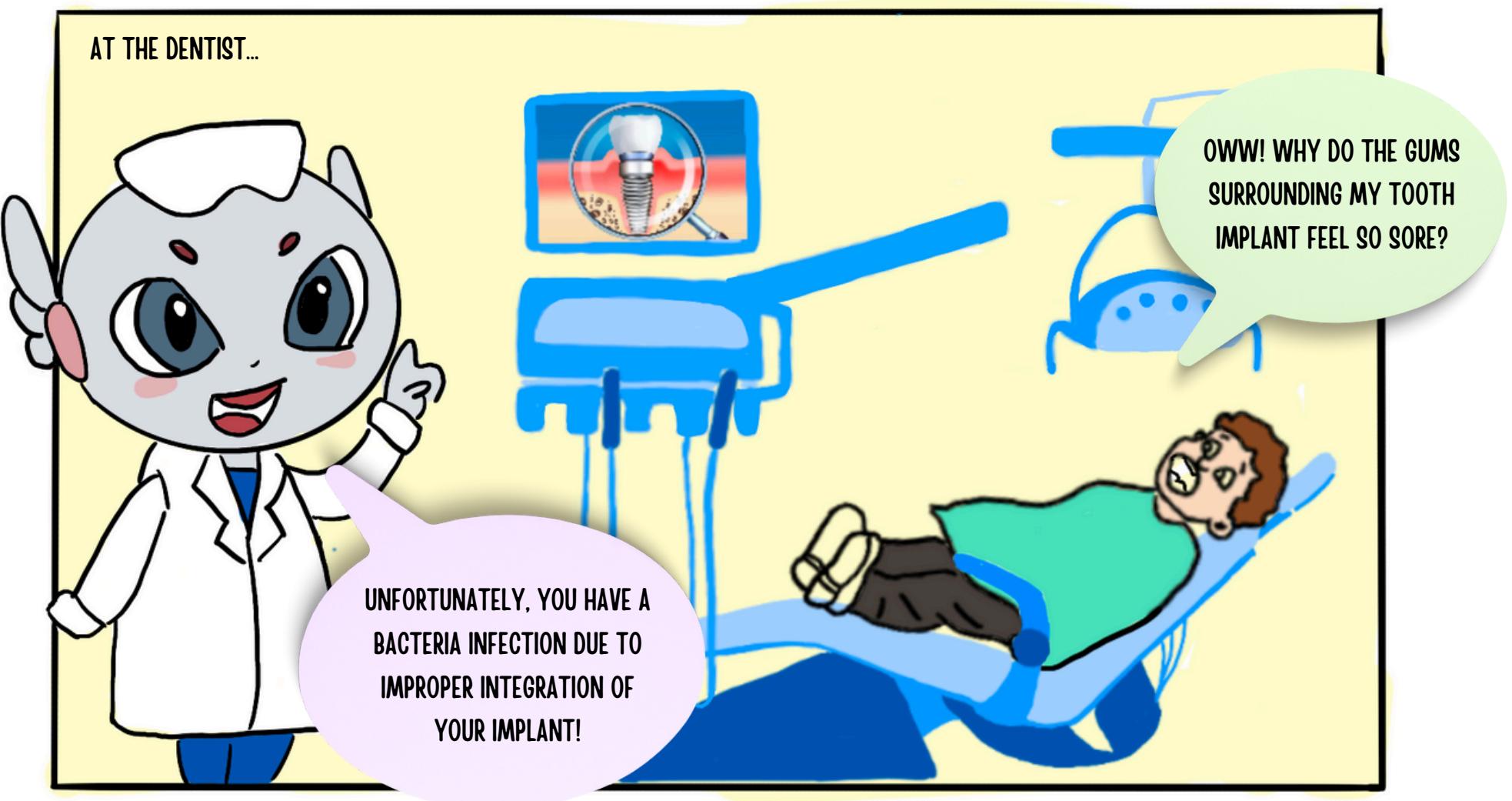




# METHODOLOGY STUDIES ON THE ENCAPSULATION OF SILVER NANOPARTICLES USING TiO<sub>2</sub>- COATED CeO<sub>2</sub> NANOCONTAINERS

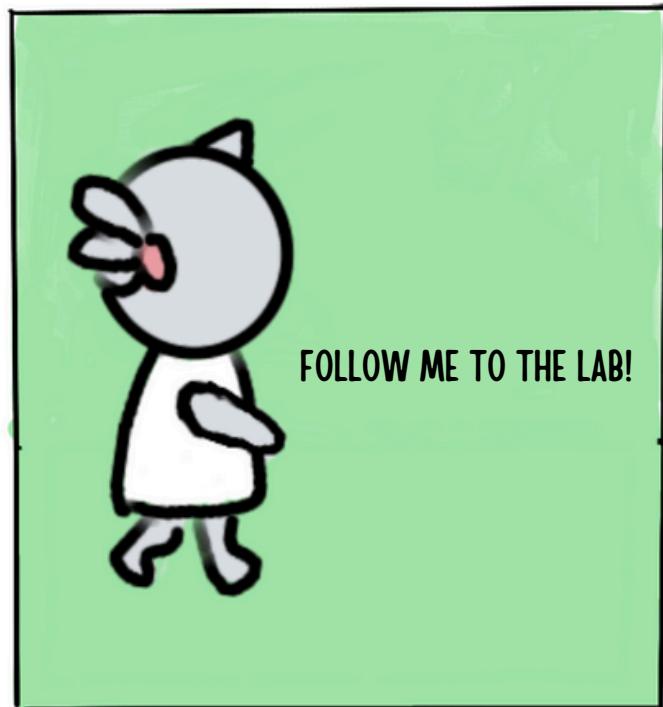
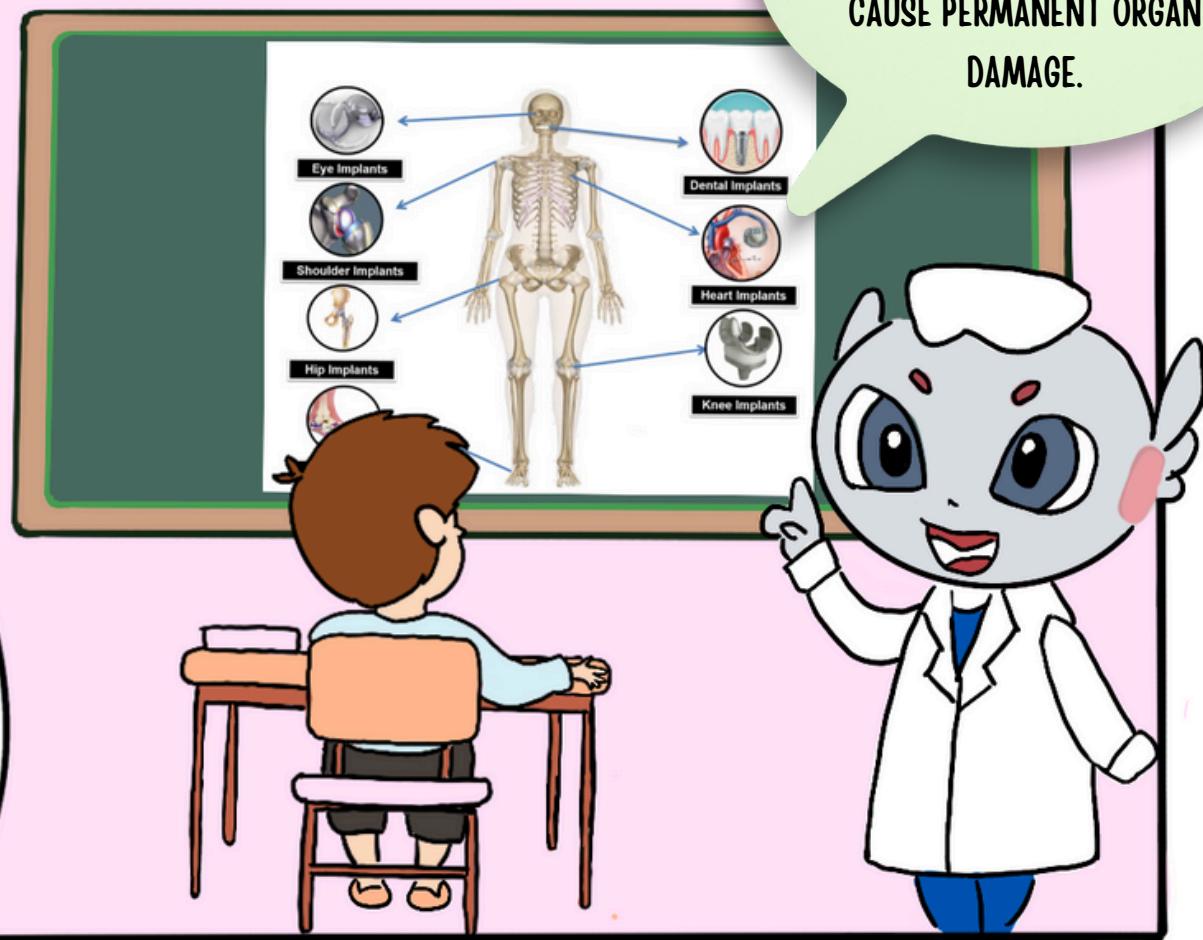


THESE SILVER CONTAINING  
IMPLANTS ARE TOO SOLUBLE AND  
EXTENDED EXPOSURE MIGHT  
CAUSE PERMANENT ORGAN  
DAMAGE.

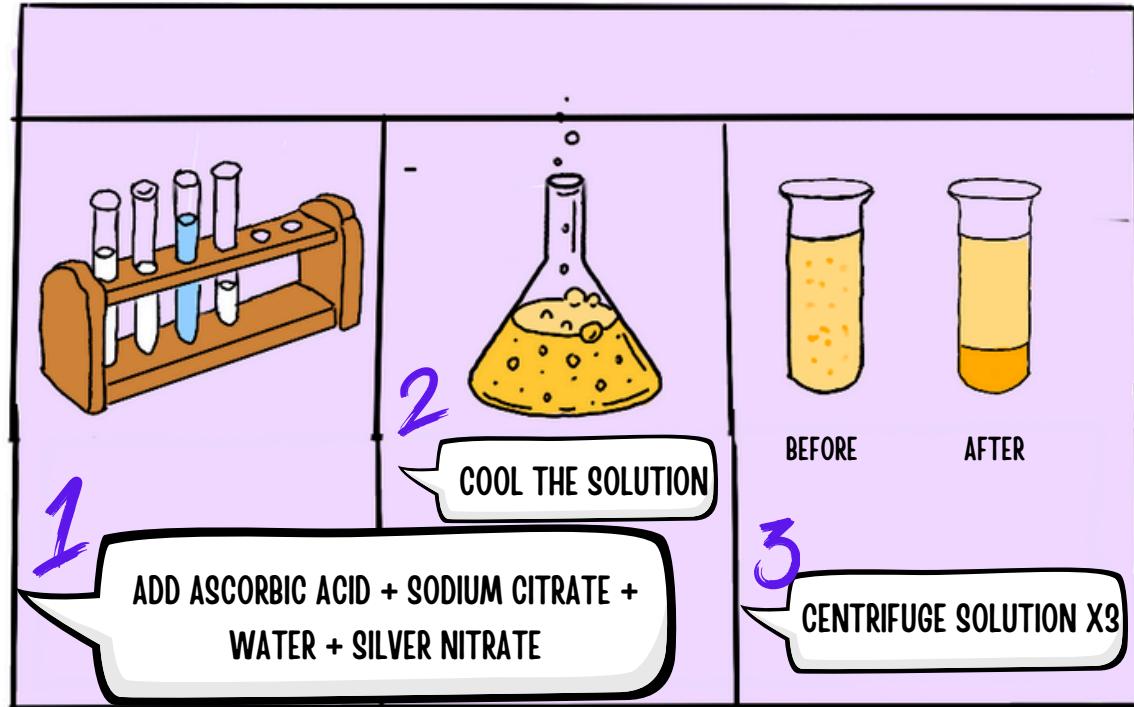


I HAVE A SOLUTION!

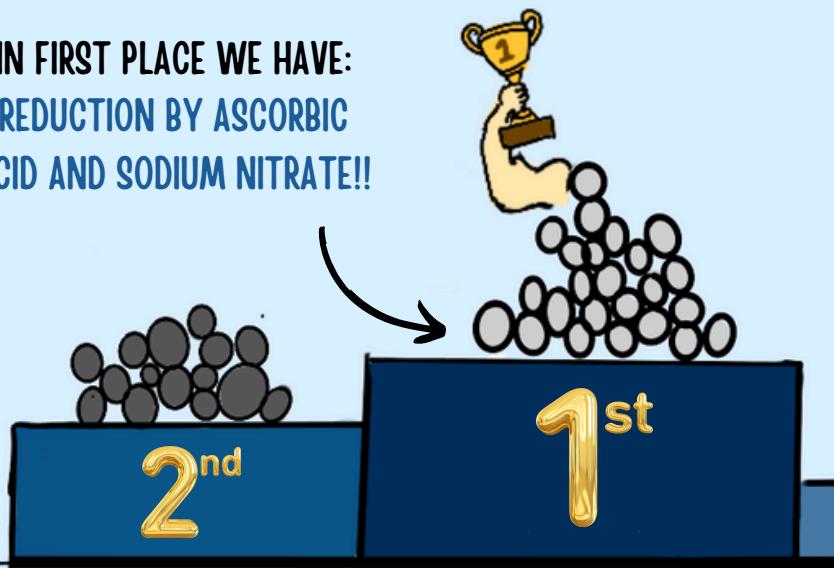
LETS USE SILVER  
NANOPARTICLES TO PREVENT  
INFECTIONS ON BIOMEDICAL  
IMPLANTS SINCE IT'S KNOWN  
THAT THEY CAN TREAT  
BACTERIAL INFECTIONS!



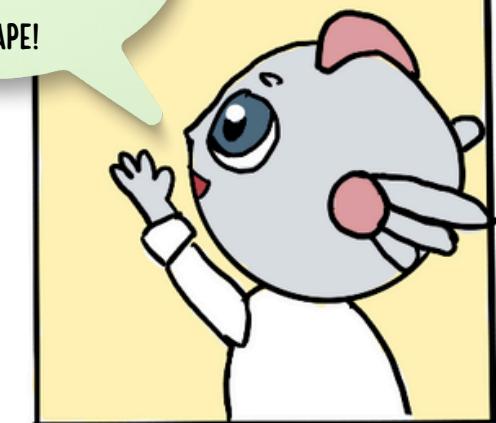
FOLLOW ME TO THE LAB!



IN FIRST PLACE WE HAVE:  
REDUCTION BY ASCORBIC  
ACID AND SODIUM NITRATE!!



YAY!! 90% OF THE  
NANOPARTICLES PRODUCED  
ARE SIMILAR IN SIZE AND  
SHAPE!



## LEADERBOARD

### ENCAPSULATION METHODS



CEO<sub>2</sub> NANOCONTAINER

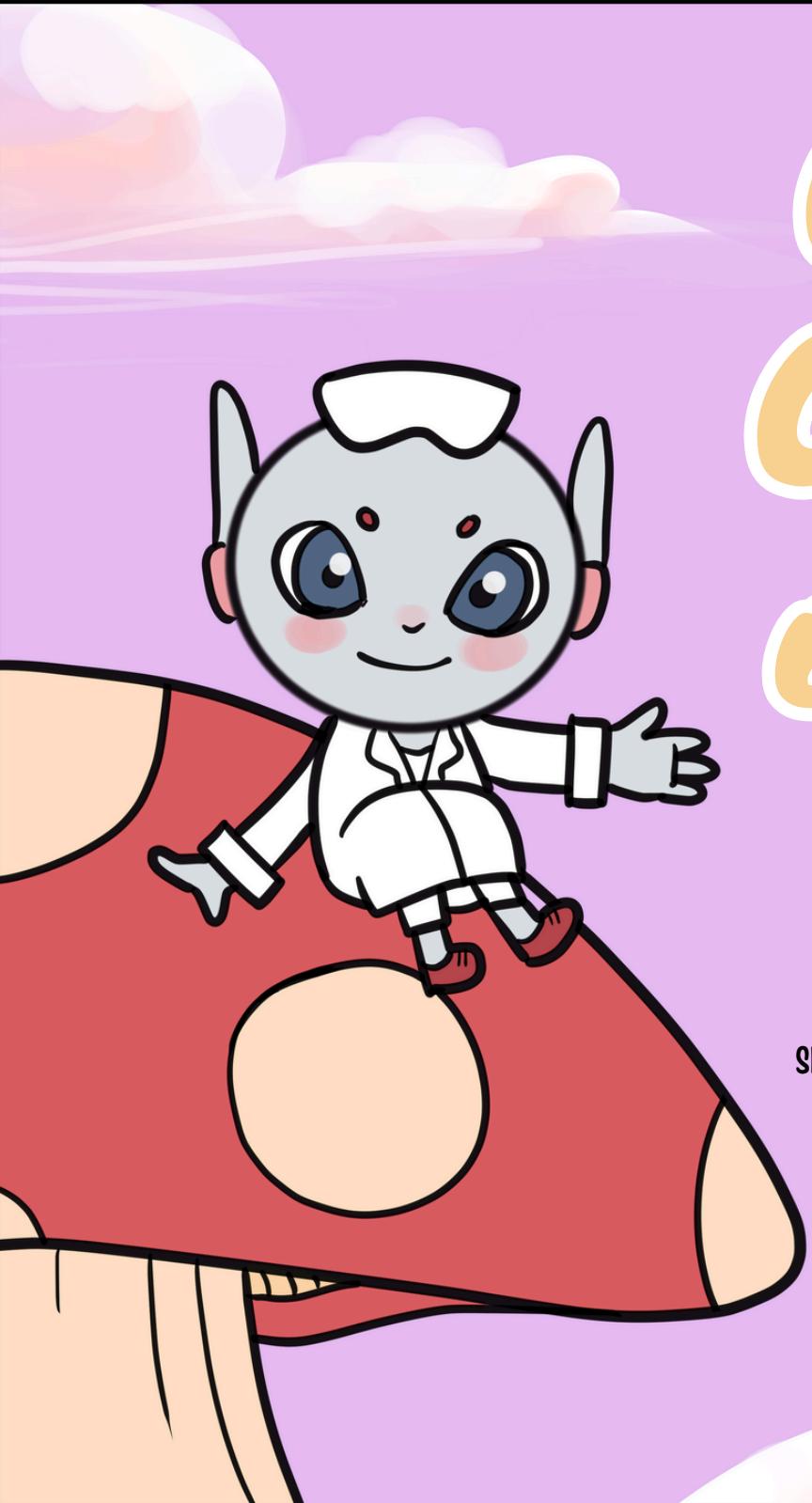
THANKS TO THEIR ROUGH  
SURFACE, THEY ARE STABLE  
AND HAVE MINIMAL ADVERSE  
BIOLOGICAL EFFECTS!

AFTER REPLACING HIS OLD SILVER IMPLANT...



NOW, YOU WONT HAVE ANY  
MORE PROBLEMS WITH YOUR  
TOOTH IMPLANT!





*Curious?  
Come find  
out more!*

READ MORE ABOUT THIS RESEARCH ON OUR WEBSITE AT  
[HTTPS://AYRJ.ORG/ !](https://ayrj.org/)

ARTICLE TITLE: METHODOLOGY STUDIES ON THE ENCAPSULATION OF  
SILVER NANOPARTICLES USING TiO<sub>2</sub>-COATED CeO<sub>2</sub> NANOCONTAINERS

AUTHORS: IVIE POH YONG QI, ZEE NING WOON

COMIC DRAWN BY: VALERIE CHAN