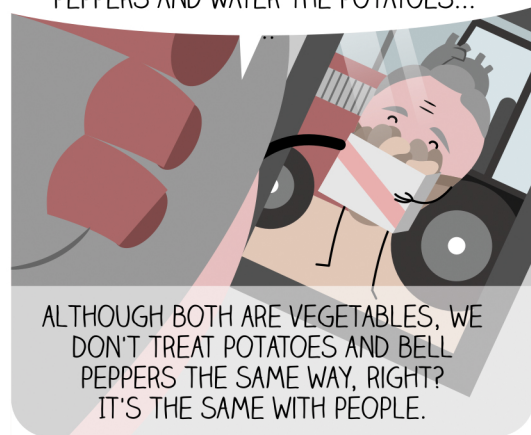


HE'S GOT A PACEMAKER IMPLANTED, WE'LL SEE. THE WORST PART IS THAT THEY TOLD HIM HE CANNOT DRIVE ANYMORE...

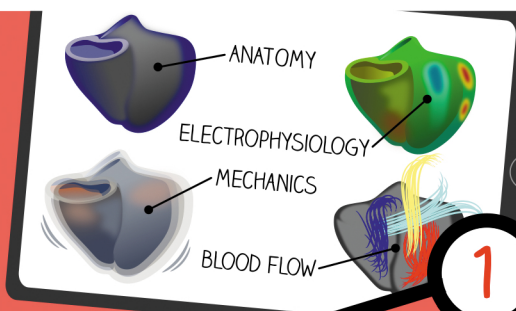


TODAY I SHOULD FERTILISE THE BELL PEPPERS AND WATER THE POTATOES...



IMAGINE THAT YOU COULD TRY DIFFERENT TREATMENTS IN A VIRTUAL VERSION OF YOUR HEART TO SEE WHICH ONE WILL WORK BETTER. TO ACHIEVE THAT, 15 PHD STUDENTS OF DIFFERENT DISCIPLINES ACROSS EUROPE ARE WORKING TOGETHER IN THE **PIC (PERSONALISED IN-SILICO CARDIOLOGY)** PROJECT!

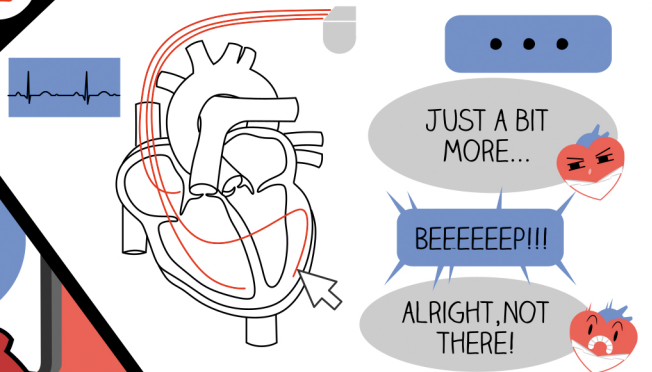
FIRST, THEY COLLECT CLINICAL DATA TO FIND INDICES ABOUT THE HEALTH STATUS OF THE HEART.



PATIENTS' INFORMED CONSENT, DONE!

WITH THAT DATA AND INDICES, THEY CREATE MODELS OF A PATIENT'S HEART IN THE COMPUTER TO DIAGNOSE DISEASES AND TO TEST TREATMENTS. FOR EXAMPLE, THEY CAN DESIGN PACEMAKERS WITH SENSORS TO COLLECT THOSE INDICES AND PLACE THEM AND CONFIGURE THEM IN A PERSONALISED WAY.

LASTLY, THEY CHECK IF THE PREDICTIONS AND TREATMENTS HAVE WORKED IN THE COMPUTER MODELS OR IN ANIMALS AND THEY USE THE RESULTS TO IMPROVE THEM MORE EVERY TIME.



EVERY YEAR, ALMOST 2 MILLION PEOPLE DIE IN EUROPE DUE TO CARDIOVASCULAR DISEASES. CURRENTLY WE USE POPULATION DATA TO DIAGNOSE, TREAT AND PREVENT DISEASE, BUT THANKS TO THE TECHNOLOGICAL ADVANCEMENTS WE NOW HAVE THE OPPORTUNITY OF DOING THIS IN A PERSONALISED WAY.

WITH THE RESULTS FROM PIC, THE NEXT STEP WILL BE TO DO CLINICAL TRIALS IN DIFFERENT HEALTH CENTRES. LET'S KEEP RESEARCHING!



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