This year’s *Nobel Prize in Physiology or Medicine* the world’s most prestigious award in the field of medical research has been awarded to three American scientists who unlocked the details of the human body’s transport system.

So whats the big deal? NYC’s MTA transports more than two and a half billion passengers a year, and balances an annual operating budget of more than thirteen billion dollars, and they don’t get a $1.2 million prize or international recognition.

To put things in perspective, an average human cell has a diameter of approximately one hundredth of a millimeter, and you could line up *twenty five thousand* of them in a straight line one inch long. Each of these tiny cells has literally hundreds of thousands of different chemical reactions happening inside of it at any given time making the human cell an enormous factory in a microscopic space. For a cell to stay healthy all the hundreds of thousands of reactions must be coordinated perfectly; a single reaction out of sync could throw the whole cell into turmoil, while on the other hand a medication may heal disease by directly affecting just one of these reactions. This coordination depends on extensive transport of chemicals, and precise communication.

As an example, one major communicator in the body is the hormone insulin. If the microscopic human cell were a large factory, insulin would be about the size of a can of coke; approximately one ten-millionth of an inch in diameter and it looks something like this:



[<http://www.intechopen.com/source/html/38455/media/image8.jpeg>]

It is a key that has to interact perfectly with the right lock (insulin receptor) in precisely the correct three-dimensional orientation to produce its effect. Any slight change in the complex structure of the insulin molecule could render it ineffective and result in disease.

Another extensive communicator in the body is the potassium ion. It is structurally simpler, but measures only *five billionths* of an inch in radius and needs to be managed and transported appropriately..

These are only two very basic examples of countless details in the communication system of the human body. Suffice it to say that the system is ridiculously complex, and must function with exquisite precision for us to be healthy. The management and execution of the transport of these messengers as well as literally countless other compounds is at least equivalent in complexity and precision. In the words of the Nobel Assembly “Without this exquisitely precise organization, the cell would lapse into chaos“. Considering that the transport system also has to function perfectly, consistently throughout the entire body which is made up of approximately two hundred types of cells, totalling *tens of trillions*, I vote that the guys that revolutionized our practical understanding of this system deserve their award.

I also vote that we take a minute to think about the fact the the human being is a tiny individual in an enormous universe, and this same degree of exquisite precision exists in every reaction that occurs around us. Indeed it exists in the mechanics of concepts; of thoughts and emotions, and in the physiology of the spiritual.

It feels great to make global plans and that is an excellent place to start strategizing major progress, but it is imperative that we pay due attention to the little practical details that really make us grow and actually make the world a better place. While big goals may be what keep us motivated and striving forward, it is the minutiae that actually take us there. Through the little things that count we grow and make progress. The people around us can walk away better off, and the entire universe sees an actual benefit. Lets remember never to dismiss a detail for the smallness of its size, or our lack of appreciation of its significance.