**Transcript**

***Dr Yossi Rathner – Brain regulation of brain adipose tissue metabolism***

I’m interested in how the nervous system, part of the nervous system called the autonomic nervous system regulates energy metabolism. And specifically I’m interested in how the nervous system controls a specialised set of tissue called brain adipose tissue. Activity in brain adipose tissue is basically wasting energy by producing heat, consuming energy to produce heat. So, I’m interested in how the brain controls the activity of brain adipose tissue.

If we can show the neural pathways which activate brain adipose tissue and we can separate the pathways where brain adipose tissue is activated for maintenance of body temperature as opposed to in response to metabolic demands of the body. If we can show that these are separate pathways then we might actually have a handle where we can design pharmacological treatments that will activate brain adipose tissue without having adverse physiological consequences.

If we make such a discovery we have the potential pharmaceutical or pharmacological tag which we can use to address obesity.