* Worms body undergoes extension, anchoring, and contraction
  + Peristalsis
    - Waves of alternating contraction and relaxation of muscles move along the length of a radially flexible tube
    - Radially expanded regions anchor the organism while the radially contracted regions advance
  + Extending the body, anchoring it to a surface with setae, and contracting body muscles
* Begins at interior end and travels posteriorly
  + Circular muscles at the anterior end contract, extending the head forward
  + Wavelike contraction originating in the circulatory muscles then passes toward the posterior end
  + When the wave nears the mid-region of the body, longitudinal muscles contract, shortening the region
  + A wave of contraction of longitudinal muscles follows
  + Retrograde waves
* Travels about 25-30cm in one minute
* Made up of segments
  + Segmented worm
* Rhythmic and metachronal
* Hydrostatic skeleton
  + Movement based on the changing of dimensions and deformations of body segments
* The stride length of a hydrostat is the distance traveled during one cycle of peristalsis
* Stride period is the duration of one stride, which for an earthworm can be divided into two parts
  + Protrusion time when the segments are advancing over the substratum
  + Stance time when the segments are anchored against the substratum
* Approximately 145 segments that advance and anchor at different times
* “EARTHWORMS DO NOT PERFORM WELL ON TREADMILLS” – A REAL PAPER
* Body wall extends by more than 10%
* Increase stride length in order to increase crawling speed, but smaller worms had a slightly greater tendency than larger worms to increase their frequency in order to increase their speed
* Did not change gaits as speed is increased
* Large earthworms crawl at a greater absolute speed than small earthworms, but at the same relative speed and do so by taking slightly longer strides at a slightly lower frequency
* Kinematically similar when the motions are normalized by body length
* In general no good overall scaling of size with speed





