Humans may have more genes than we thought-and why it matters

Estimates for the number of genes in the human genome have been trending downward, from 50,000–100,000 (a figure widely cited in the years preceding the Human Genome Project), to 20,000–25,000 (a figure proposed in 2004); to as few as 19,000–20,000 (a range reflecting recent surveys that have made use of improved analytical technology). A brand-new survey, however, indicates that the estimated gene count should rise a bit. This survey, from researchers based at Johns Hopkins University, says that there are 43,162 genes, of which 21,306 are protein-coding genes and 21,856 are noncoding genes.

These numbers are of more than academic interest. They establish a baseline that is used to orient genetic studies of many kinds...

The new findings were generated by the computational biology lab of Johns Hopkins' Steven L. Salzberg, Ph.D., a professor of biomedical engineering, computer science, and biostatistics. Dr. Salzberg and colleagues presented their findings May 28 on the bioRxiv website...

Nonetheless, the authors also insist that their approach has led to a more comprehensive catalog of genes and splice variants, one that should provide a better foundation for RNA-seq experiments, exome sequencing experiments, genome-wide association studies, and many other studies that rely on human gene annotation as the basis for their analysis.

Read full, original post: Human Genes More Plentiful in New Catalog