

PROPOSITIONS ACCOMPANYING THIS THESIS

1. MCT8 and MCT10, by virtue of their bidirectional thyroid hormone transport, have a much greater effect on intracellular T3 availability at the cell periphery than at the cell nucleus. (This thesis)
2. TH analogs may be targeted to specific tissues, depending on the transporters they express. In this, it is important to understand the mechanisms of action of these transporters and their tissue specificity. (This thesis)
3. The severity of the clinical phenotype of RTHa patients seems to be associated with the location and type of mutation in *THRA*. (This thesis)
4. Levothyroxine treatment of especially young RTHa patients with mild mutations can ameliorate some of the symptoms associated with RTHa. (This thesis)
5. RTHa should be suspected in subjects when even mild clinical features of hypothyroidism are present along with a normal TSH, a high serum T3/rT3 ratio, and anaemia. (This thesis)
6. For most diseases (both common and complex disorders), prediction of clinical and treatment prognoses is challenging because of complex genetic mechanisms and variable expressivity and penetrance. (J.T. Lu, NEJM 2014; 371:593-596)
7. The development of the RNA-guided CRISPR-Cas9 genome editing system has spurred a remarkable increase in research but also raises important questions about human genome editing. (R.O. Hynes, JAMA 2017;317(18):1829-1830)
8. Evidence-based medicine and shared decision making are both essential to quality health care, yet the interdependence between these two approaches is frequently underexposed. (T.C. Hoffmann, JAMA 2014;312(13):1295-1296)
9. Translational research gets lost in the citation valley. (Science in transition, 20 October 2016)
10. Medical science is making such remarkable progress that soon none of us will be well. (Aldous Huxley)
11. To advance world class research clinicians should get into bed with basic scientists (adapted from Weaner L. Arch Dis Child 2005;90;991-992)