

PPAR- γ Regulatory Networks in Bone Metabolism And Mineralization

Propositions

1. A major regulator of fat cell differentiation is up-regulated in differentiating human osteoblasts. (*This thesis*)
2. Stimulation of osteoblast differentiation is not always a positive feature for bone formation. (*This thesis*)
3. Aging-related lineage skewing can be caused by changes in key transcription factor expression controlling lineage commitment and / or by changes in the lineage-specific susceptibilities to oxidative stress. (*This thesis*)
4. An insulin sensitizer accelerates pathological mineralization. (*This thesis*)
5. The detrimental effects of thiazolidinediones on bone and the vasculature can be prevented by improving mitochondrial function and reducing oxidative stress. (*This thesis*)
6. Advancing mathematical modeling approaches contribute, next to the ongoing technical analytical developments, to the most important scientific proceedings of the current century.
7. Still, it lies beyond all reasonable doubt that no single idea has had a more profound or ubiquitous impact on what the human race has become, or what it has worked upon the face of the planet, than the vesting of authority in experiment. (*Richard Powers, New York Times Magazine*)
8. We must not cease from exploration and the end of all our exploring will be to arrive where we began and to know the place for the first time. (*T.S. Elliot, 1888-1965*)
9. Every science begins as philosophy and ends as an art. (*Will Durant, 1885-1981*)
10. Academic science will flourish once it will have truly arrived in the knowledge worker era.
11. Do not dream your life but live your dreams.