

ageLOC Summary

- **What is ageLOC?**
 - ageLOC slows aging and even reverses signs of aging by attacking the sources of aging
- **How does ageLOC do this?**
 - By identifying age-related youth gene clusters and then supporting the functionality of the “youth gene clusters” that preserve youth.
- **Where are these Youth Gene clusters found?**
 - There are several Youth Gene Clusters and they are all located in the human genome.
- **Why are these Youth Gene clusters so important?**
 - They control the aging process.
- **How did you find these YGCs responsible for aging?**
 - Decades of study on biological aging, combined with the sequencing of the human genome in 2003 and the advent of modern computer technologies enables the identification of groups of genes that we call “Youth Gene Clusters.” The key insight originated from 30 years of research on caloric restriction, the only method validated by science to preserve youth. Such research has been the focus of our partners, LifeGen Technologies. Caloric restriction revealed that humans live longer and tissues work better when caloric intake is restricted. In subsequent caloric restriction studies, the molecular mechanism is then shown to be related to a profound effect on certain genes.
- **Are there patents covering these key insights?**
 - Yes, one of the major patents is US Patent 7,041,449 entitled “Methods of screening for compounds that inhibit expression of biomarker sequences differentially expressed with age in mice, Prolla et al.” Several provisional patents have also been filed at the US Patent Office.
- **Why are they called Youth Gene Clusters?**
 - Aging is never caused by a single gene. YGCs consist of multiple genes, the activity of which is either reduced or increased as we age.
- **With this key insight, how do you then affect YGCs to produce an anti-aging effect?**
 - By resetting YGCs to their youthful state with ageLOC ingredients that are carefully blended to give an optimal effect.
- **Do you have any published data substantiating ageLOC science?**
 - The following papers described the foundational science behind ageLOC:
 - *Human Genome:*
 - Nature 2001; [409](#)
 - Science 2001; [291](#)
 - *Caloric Restriction*
 - Science 2009; [325](#), 201
 - Science 1999; [285](#), 1390
 - *Youth Gene Clusters*
 - Aging Cell. 2009; [8](#), 484.
 - Bioinformatics 2009; [25](#), 875
 - Experimental Gerontology 2008; [43](#), 859
 - Cell Cycle 2008; [7](#), 556
 - GENES & DEVELOPMENT 2007; [21](#), 1
- **How are ageLOC products different from the competition?**
 - Lancome Genefique does not offer a complete regimen of skin care products addressing genes, we do.
 - Lancome Genefique analyzed 4,400 genes for activity, Nu Skin analyzed over 20,000 genes.
 - Lancome Genefique analyzed 1,300 proteins, Nu Skin analyzed over 15,000 proteins.
 - Lancome Genefique is linking their product to a few genes, ageLOC addresses hundreds of genes related to YGCs.
 - Lancome Genefique has single gene boosting activity, whereas ageLOC dual gene boosting activity.