Personalized (Precision) Medicine

The global initiative to develop personalized (precision) medicine through population health initiatives is missing the crucial link; converting biomarkers into epigenetic data that signals all changes in "genes" and "proteins."

Corporations are collecting biomarker data (yes - no determination) from patient records as the means of identifying the causes of chronic diseases.

Today, technology exists for the biosensor and smartphone transmission using wearables can collect and correlate the "right data." Currently, biomarkers on wearables allow for yes - no determinations that a chronic disease exists but not its cause. The right data is epigenetic; not genetic because the DNA alphabet limited to A-C-T-G has been irrefutably proven to be incomplete (a 5^{th} nucleobase was missed).

Modification of wearable devices using the appropriate sensors to collect and interpret the right data will create precision (personalized) health data for use with the general public globally.

Note: To avoid misunderstandings due to terminology, the following must be discussed verbally with the MCFIP team.

Epigenetic Signaling Examples

The following list is an example of epigenetic signaling from more than 1,000 that can be verified in terms of roles, interaction to form pathways and mechanisms as well as their constituents (elements and amino acids that regulate on - off - modulating activities). Monitoring of changes that can cause chronic diseases is crucial for assessing personalized medicine for cancers as well as neurological, vascular and metabolic diseases.

- POLR3A, POLR3B and POLR3C

- PPAR alpha, beta and gamma
- HIV-1 p7, HIV-1 p17 and HIV-1 p24
- PKD1- PKD-2 and PKD3
- APAF1 – 3
- Bcl-2, Bcl-2xl and Bcl-w
- Stat-1, Stat-2 and Stat-3
- PIAS1 – 3
- FTO1 - 3
- c-Myc, n-Myc, L-Myc
- HMGA1A – B – C
- ALDH1A - H2A - H3A
- PPP3CA – CB - CC
- FOXO 1 – 3
- Serine/Threonine Protein Kinases 1 – 3
- P-Rex1 – 3
- a-Raf - bRaf- cRaf-
- CDKN1A (p21)- CDKN1B (p27)- CDKN1C (p57)
- TNNC1- 3
- TNNI1- 3
- TNNT1- 3
- HRas – Kras – NRas
- BRCA1 – BRCA2 – BRCA3