



# SenSelpha

*empowering.Sense.of.Self*

**SenSelpha** = Intelligence Enabling Apps, Wearables and Knowledge Resources that empower  
*Sense of Self in Personal Health, Wellness and Appearance*

## **Company, Mission, Product**

SenSelpha produces modular devices and software applications that are fully compliant and integrated with conventional, mass-market internet, wi-fi, and cloud computing. These are focused upon providing people – and institutional users – with intelligent and practical tools for deepening and strengthening awareness and “sense of Self” with respect to My Health, My Appearance, My Vitality, My Energy, My Vibrancy.

Our devices employ both conventional protocols and styles in their electronic and software architectures, including everything that is commonplace and standard within the world of smartphones, tablets, common wearable devices, and personal computers. We introduce and use the Qoin architecture for compact wearable modular internet devices. We interface with open standard protocols for sharing of data among internet devices and for inclusion of electronic and personal health records in those applications where EHR is important.

SenSelpha has a family of products, both devices and apps. All communicate and share information with each other, and all can be part of proprietary, regional, national, and global databases and knowledge engines for health, environment, and safety information. We introduce SenSelpha and our family through one particular member of the product family, a one-of-a-kind personal measurement device that addresses one of the most universal and readily-accessible indicators of a person's health and future well-being.

### ***We Begin with Skin.***

We start with anti-oxidant measurements (“AOA”) that tell about oxidative stress, free radicals, and other important indicators and trend-setters for health, disease-resistance, vitality, fertility, and youthfulness.

SenSelpha-AOA is safe, inexpensive, attractive, sleek, “sexy” as a product, in its use, and in its results.

**Problem:** An excess of free radicals in our foods, drinks, and within our bodies as a result of lifestyle, diet, environmental exposures and stress, has been implicated decisively in the pathogenesis of many disorders and diseases that are linked with reduced lifespan, low energy, degraded lifestyle, and a number of particular severe diseases. These conditions include acute coronary syndrome, strokes, kidney and lung disease as well as type-2 diabetes, cancers, autoimmune disorders and certain neurological diseases including depression.

Frequency and diversity of measurement plus intelligent analysis that couples AOA (anti-oxidant analysis) with personal, environmental, population, and systemic data, provides a medically cogent and scientifically sound approach to understanding what AOA measurements and trends of change in oxidative stress levels within the body can mean as indicators and predictors for health, disease control, therapy, and cosmetic quality of life. Existing methods of measuring oxidative stress levels are laborious, expensive and require qualified specialist personnel. SenSelpha introduces a (r)evolutionary alternative, with improvements in accuracy, speed, analysis, ease of use and cost.

**Solution:** The proven potentiometric method of AOA measurement presents a way for persons and institutions to perform real-time on-demand measurements and the analytical process of cloud-based “big data” integration and interpretation of AOA information extends the utility of measured data in ways not previously possible. AOA is now something that can be practically, sensibly, intelligently used by anyone with the simplicity and accuracy of such other commonplace biomedical readings as temperature, pulse and blood pressure. This is an integral component of modern personalized, predictive, precision medicine.

*The contributing role of free radicals is demonstrated in widespread and diverse aspects of medicine; oxidative stress is implicated in matters of inflammation, bacterial and viral infection variances and immune system weakness, and in disorders of the reproductive system, oncogenesis, atherogenesis. There are strongly linear links affecting the overall process of aging including non-pathological, natural degenerative processes that diminish youthful appearance.*

With all of these there is, of course, no panacea, no instant-cure, no super-drug, no super-fix, no dramatic reversal. With respect to chronic disease, long-term recovery and terminal illness, every single thing that

providers-helpers-caregivers can do, for the benefit of the emotional and overall psychological environment of the patient, is a key part of the therapeutic, healing, making-whole process. The ability of both healthy and ill persons to participate and see gainful results in something such as the AOA-vitality measurement process is a strong positive we can deliver to people in all ages and stages of life.

#### ***We Pioneer and Progress with Foods and Lifestyles.***

We are able to take all this advanced, compact, high-powered and convenient AOA, other sensing and measurement, and artificial intelligence technology and now place it into the hands of diverse users in the food, beverage, and healthy lifestyles market spaces. We serve not only professionals and consumers in fields of medicine and healthcare but in agriculture, food processing, winemaking, brewing, distilling, and production of coffee, tea and other beverages.

Prior to SenSelpha coming on the scene, the process of analysis and prediction for harvesting, storage, quality assurance and control, taste, aroma, and many other essential factors in production, storage, distribution and consumer use all depended upon seasoned and rare individual expertise and/or the use of complex, laborious, expensive, cumbersome instrumentation and procedures. Now, for instance, key qualities in high-value, high-sensitivity fruits and produce such as grapes and cherries can be optimized and ensured by tests which can be performed with the ease and simplicity of a smartphone or pad directly in the vineyard, orchard, warehouse or processing plant.

SenSelpha-AOA is simple, sleek, inexpensive, quintessentially accurate as a product, in its use, and in its results.

#### ***We Keep Things Simple , Easy, and Accurate***

Through the Qoin architecture, our devices, commencing with the AOA unit, are compact, hand-held, pocket-sized, smooth, sleek, low-power, long-duration, "no muss no fuss" in operations, and low-cost. We bring the sophistication and accuracy of laboratory instrumentation into the hands of Everywoman and Everyman.

Through the LUX software architecture that underlies all of the interactive and analytical software apps in our products, we produce compact, high-performance, reliable, and highly secure algorithms and interfaces. All of our software is designed to flow and work seamlessly with Android, iOS, Windows, and other mainstream operating environments, to be compliant with the latest in WWW standards for responsive web technology, and to stand sturdy and resilient with the ever-changing landscape of the internet.

SenSelpha products may be used with smartphones, tablets, laptops, and in emergency situations, the Qoin-based units can communicate with others when standard wi-fi internet/cellular networks are disabled or absent.

#### **SenSelpha Management Team**

**Dr. Michael Locker MD:** Physician and pharmaceutical-industry specialist in field-based medical groups, precision therapies and clinical trials (phases II, III, IV) within cardiovascular, oncological, pulmonary, infectious disease, with research and clinical accomplishments in neurotrauma and anesthesiology. A graduate of Harvard, Yale and post-doctoral programs at NYU and Cornell, with over sixteen years in the pharmaceutical industry. Broad exposure including management, entrepreneurial, financial and corporate analysis on Wall Street and within major pharma industrial leaders.

**Brad O'Sullivan JD,MBA:** Managing Director & General Counsel with a sterling record in business development and management, turn-arounds, and financial consulting, specializing in securities transactions, M&A, litigation services support, multi-party IP and patent issues, and international joint ventures. Strategic partnerships in US and PRC (China) spanning from micro-cap to SME to multi-billion-dollar credits and investor relations.

**Bruce Joliff CPA,CFE:** Financial and accounting specialist in SOX and SEC reporting and filings. Certified in fraud and audit procedures, compliance, grants and contracts development, financial forecasts and risk management. CFO and controller for medical device and isotope-based therapeutics firms, with extensive governmental, joint-venture and international financing.

**Ms Lane JaBaay, MS,MBA:** Information technology executive with more than 20 years experience in large-systems, database management and operations. Ms. JaBaay is a specialist and a pioneer in educational and youth-oriented internet and healthy lifestyles. Driven by a passion for children and their ability to impact the world, she became the CEO for Homeboyz – a socially responsible firm working with disadvantaged youth. Lane started

Healthy Heroes, LLC, and launched the SHAKTI Warriors "STEAM" program, targeting children 8-12; the SHAKTI programs have been implemented in many school systems across the USA, serving over 9,000 children to date.

**Dr. Martin Dudziak PhD:** Physicist, mathematician and computer scientist with over 25 years of active research in the life sciences including biomedical engineering, and the principal founder and architect of several technologies developed under government and private sponsorship, now forming the core technology portfolio of The TETRAD Group of companies, of which SenSelpha stands as the forerunner in commercialization. Martin has worked in several defense and intelligence companies and agencies (Battelle, Lockheed-Martin, US gov't., and has been on the faculties of universities and medical schools (VCU, MCV, VT, MSU, UCR). His passion is in bringing accurate, consistent, reliable technology into the hands of people for self-improvement in their health and lifestyles.

**Mitchell Posada, MBA:** Digital media pioneer, active in business development, marketing and advertising for lifestyle media, social community, e-commerce and focused cultural internet serving Hispanic and multi-cultural user communities in USA, Latin America and Asia. Executive for interactive media product and audience development for Cafe Media, a leading firm serving bi-cultural Latino teens and adults. Co-founder of Grupo Estrada, formerly with Dieste Harmel, DHL, Ernst and Young, Hewlett-Packard.

**John Stelmach, CPA, MBA:** Controller within software development, enterprise services, and internet information systems industry, as well as in pharma and energy sectors, including companies such G. D. Searle, Peoples Energy, Computhink, Volvo and ADP.

**Rao Mandava, MSE:** International business developer with a career track record spanning from medical information and patient records to multi-national joint ventures and holdings. Active in establishing international outsource, customer service and support enterprises. Rao is a graduate of the Univ. of Memphis in engineering.

**Scientific, medical engineering, software, graphics, media, and content development staff:**

SenSelpha is fortunate and exceptional in having experienced, post-graduate-educated, and industry-proven teams, co-located in USA and Europe. Our technical staff have diverse backgrounds but each person has strong academic foundations, corporate R&D and product development experience, and all have worked closely for years with each other and with SenSelpha's founder, Dr. Dudziak, and in other member companies within The TETRAD Group, in some cases for more than a decade.

**Business and Financial Remarks**

**Market:** We serve a global market with prior achievements and deliverables in Europe, Asia, and the Americas, having focused through our parent company and partners upon the BRICS market nations and in particular upon programs linked with government agencies, NGOs and Fortune 100 companies. The market for SenSelpha's product line is truly global vertically and horizontally. We are principally serving the health and medical sectors with attention to nutrition, healthy lifestyles, and proactive care through foods, beverages and cosmetics in order that people worldwide can aspire to an easier and more intelligent way to achieve the universal goals of youthful and vital living. *Viva la Vida!*

**Competition:** Alternative AOA-type measurement products do not employ the advanced potentiometric methods and are significantly larger, slower, less accurate, costlier, and unable to be used in real-time, ad-hoc, on-demand ways as with SenSelpha-AOA. The same applies to all future non-AOA products (e.g. hydration, fertility, and specific chemical, biological, and electromagnetic-spectrum sensing and measurement devices).

Typically perceived "generic and behemoth" competitors do not bring in the comprehensive, holistic biomedical informatics (e.g., interface with personalized and public health knowledge bases such as GEMIS, and telemedicine resources for hospitals and public agencies), and their focus is directed in other market targets pertaining to their core businesses which are not medical, not healthcare, not personalized intelligence and self-managed care. Smaller companies do not offer the breadth of medical + computing features that are in the SenSelpha family because of the maturity and integration of such core technologies as IQs, Qoins, and LUX. These enable SenSelpha to provide a product that offers more features, more security, more user-friendliness, greater simplicity, and in the core sensing, measurement, and analytical functions, greater accuracy which is essential for any product related to healthcare to be worthwhile and long-term, brand-name acceptable.