



**TETRADYN, LLC**  
*(Applied Science in Threat Protection, Monitoring,  
 and Emergency Response Systems)*

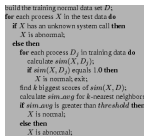
**What is TETRADYN?**

TETRADYN is a consortium of dedicated people, leaders in their prospective fields, who have combined their efforts, knowledge, and resources to approach the many problems presented by bio-threats. Dr. Martin Joseph Dudziak, world-renowned quantum physicist, began exploring bio-threat research in 1990, escalating his scope throughout his career. In 2004, he turned his focus toward practical identification, monitoring, and response methods to any bio-threat. TETRADYN was formed as a vehicle to make these systems available to all health sectors, food sources, large work areas, or wherever a threat may originate.

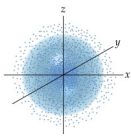
**What PRODUCTS do we offer?**



TETRADYN has developed **CUBIT™** (CUBIT Suite) a unified set of products, deliverable Today, that addresses in a unified, comprehensive and economical manner the early warning, detection, identification, diagnosis and intervention for a variety of infectious diseases affecting people and our food supply chain. This includes influenza such as the H1N1 pandemic, and food pathogens such as salmonella and e.coli, and other infectious diseases such as MRSA, dengue, cholera, plague, listeria.



**Nomad Eyes™** is an architecture and system for open-ended, free-form, easily distributed, fault-tolerant networks of sensors, cameras, and text information traffic that includes consumer cell phones and PDAs. It is something that is now being made available to consumers for other applications that do not even use sensors or data collection and it is now becoming a consumer intelligence product that we believe will go into things far more interesting and useful to ordinary people everywhere than many of the web community and portal products like Facebook and YouTube because Nomad Eyes™ is about delivering to people what is timely, important, and high-priority Now, when they want it and need it, without a lot of distractions.



**ABORINT™** is a body of mathematics and algorithms that derive from quantum thermodynamics, nonlinear systems, and inverse models. Mostly this pertains to energy and fuel performance, optimization, hybridization, and ways to make some things work more practically in both automobiles and spacecraft. Dr. D has some papers and monographs on this. That the maths apply very nicely to problems in software for other applications is not so strange if you consider how this universe works, and seeing some application areas as being more easily marketable today, we have expanded our thinking.



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## **CRAIDO – Community Rapid Response to Infectious Disease Outbreaks and other Emergent Critical Processes (ECP)**

The CRAIDO network is an open-ended installation of highly reconfigurable labstations for both stationary and mobile use in the mission of NBIC and related initiatives, programs and responses to national, regional and local public health threats. CRAIDO comprises a developed and tested suite of instrumentation, software and protocols meeting the requirements for BCON and BCOP and provides a functional Integrated Surveillance Program (ISP) that serves government agencies, health provider management, emergency response agencies, and most of all, the communities that comprise our nation.

CRAIDO provides today several core components with respect to bio-threat detection, diagnostics and response, spanning from very early warning to public notification and active threat mitigation. It has been designed with a focus upon bio-threats and specifically infectious diseases but it is inherently adaptable, in its mobilized version particularly, to a very broad range of CBRNE threats and events including social unrest and conflicts linked with panic and disinformation. CRAIDO thereby addresses the goals that NBIC aspires to accomplish and must implement within the immediacy of the H1N1 pandemic and related national risks, but it provides a logical, extensible, and extremely economical toolset for future threats.

A CRAIDO equipped pod-lab also has the ability to analyze the threat on-site, returning pertinent information in hours, instead of depending on outside labs and their time schedules. These abilities allow for a quicker reaction, minimizing the potential scope of the threat.



**Safety Net** is a not-for-profit community service for family and community safety providing self-control and prevention of violence, abuse, and gang crime activity. The concept of SAFETY NET is extraordinarily simple. Cell phones, especially camera-enabled and a civilian awareness and watchfulness program coupled with elementary data collection and analysis resulting in faster alerts and triggered responses to emerging, imminent crisis and catastrophe situations **before** they turn into violence, abuse, and terror at a cost for implementation of nearly zero \$with tangible commercial benefits to both the community users and service providers.

Safety Net serves multiple goals of prevention, circumvention, intervention and first response. It can address family, domestic, community, and state/national security interests such as spouse/child abuse, sexual abuse, gang-related crime, even organized terrorism. And it is a non-profit social program that actually puts money and benefits into the hands of the users and the supplier-sponsors.



**Sano y Salvo (Safe and Sound)** is an efficient cost-effective international program for prevention of child abuse, corruption and slavery. Using the power of the internet and modern database technology, coupled with marketing and advertising know-how, to increase not merely awareness but activity and responsible action among children, families, elders, and many in society, that will help build preventive strength against the problem and also help to identify and to circumvent in an educational and reconstructive manner, as opposed to traditional after-the-crime law enforcement.

Promoted by schools, social organizations, clubs, community-action groups, and responsible companies and organizations, with the Justice/Law organizations as participating coordinators but much less visible in the program, a variety of educational tools, lessons, games, ads, and positive psychology development is directed through avenues that are able to reach young children, youth, and adults on the Internet.

### Why TETRADYN?

TETRADYN finds itself in a unique position within the bio-threat community. Dr. Dudziak and his collaborators have spent literally decades combing the sciences for practical, efficient, yet economically feasible solutions to problems and situations presented by past, present, and future bio-threats. Combining this research and knowledge with the latest technologies, and establishing a communication network that includes links with health sectors on local, state, national, and international levels, with an adaptability to add/include any new source of information needed allows a concentrated effort to curtail the threat.

Throughout the process of organizing and designing competent ways to gather and share the necessary information, ideas were presented to hundreds of health officials, lawmakers, and business executives. Their feedback was instrumental in steering our programs toward addressing their perceived needs. Scientists and lab technicians searched for practical means to meet the challenges presented, with their solutions being fine-tuned to satisfy the TETRADYN model.

The TETRADYN model stands alone by taking the giant leap to action. Using CRAIDO, TETRADYN can take the information where it is needed most, the scene of the threat. CRAIDO can analyze the threat at the scene, without the need for an outside lab. Many times the analysis takes hours, instead of days, allowing for a much faster response and institution of arresting/prevention solutions. A faster response can help to minimize and contain the threat, slowing or preventing the spread to other factions of the community. Other solutions address the information gathering process, but only the TETRADYN system adds the ability to use that information in real time for real results.

TETRADYN has also realized that bio-threats come and go, and that to design and build portable (or stationary) laboratories with only the bio-threat mission in mind would mean that these facilities would lie dormant until needed. TETRADYN has incorporated into these labs abilities to confront other community/workplace health and wellness issues whether disease, social unrest, terrorism, gang violence, teen pregnancy, obesity, flu readiness, or any issue affecting the community. Therefore these labs can remain productive on a 24/7 basis, addressing community/workplace issues, and still remain in a state of readiness for

any bio-threat. Our labs can be coordinated with community efforts to govern/manipulate a given situation, and can be outfitted accordingly. Also, the introduction(s) of the **Safety Net** and/or **Sano y Salvo** programs provides new and attractive ways to improve the quality of life for those within the scope of each unit.

All of this knowledge and science are necessary when battling a pandemic, or when faced with local issues, but the sciences alone would be no more than a good basis for a website. It is the **PEOPLE** within the TETRADYN organization that really make the difference. People ready to act, ready to perform, and ready to respond. Professionals who work **with**, not against those they are serving play a major role in reducing the time between recognition of a threat and solution to the problems presented.

### **Who Shares the Benefits of the TETRADYN systems?**

As the TETRADYN systems offer new and fresh approaches to the problems addressed, let's look at just some of the many ways benefits can be determined. Please remember that the technologies derived from the combinations of science used have not yet been fully explored, with each day bringing us closer to the solutions of other situations not yet discovered.

Using the CRAIDO system offers benefits first to the site of the crisis, with the ability to monitor, analyze and respond to the immediate situation faster and more thoroughly than any system before it. Health and government agencies and officials receive the benefits associated with early detection, including curtailing the spread of the hazard to larger groups of people. In certain instances, the hazard can even be checked at its inception, preventing the problem before it spreads. With less infection, less treatment is needed, with benefits to the health institutions, doctors, insurance companies, and, of course, the public at large.

Agencies that share the responsibilities of maintaining public health benefit enormously, with new tools with which their individual jobs can be performed with new levels of accuracy, which in turn leads to the development of new solutions that have less budget impact. The monies saved can be used for other projects these agencies might have for the betterment of their respective communities. Again, benefits can be traced to the individual citizen.

Any reduction of a particular hazard to any group of people will yield valid benefits directly to those individuals affected, whether exposed to the threat or not. In the case of those not exposed, the benefits are obvious. For those directly affected, specific treatments can be determined to shorten or perhaps even deter completely any adverse effects expected from the hazard.

Our ability to monitor any viral mutations in real time helps to confront any hazard early, again allowing officials more options for response, with less chance of causing public panic, shortages of specific remedies, and other relevant situations.

Lower rates of infection affect workplaces and schools, decreasing absenteeism and maintaining productivity, directly affecting the bottom line of each workplace, and exposing our children to fewer health risks.

Certainly the benefits gained are quite numerous, and widespread from government entity all the way to the individual, who may not even realize he/she has received any benefit.

From a business perspective, it only makes sense that early remedies reflect themselves in dollars saved. Individuals save in health care costs, insurance companies save in the number and severity of claims associated with the threat or hazard, workplaces gain productivity and the income generated, schools can better educate students who are in class. By monitoring and attacking problems earlier, less time and money are needed to address the problems, leaving more time and money to be spent on wellness programs, curtailing violence, and better health education. The number of dollars involved is extensive. The H1N1 pandemic that swept Mexico in 2008 affected their Gross National Product at a rate of 0.3 to 0.5 percent, according to Mexico's own Finance Minister.

To the scientific community, the new technologies introduced open the doors to even greater usage within the private sector. The monitoring of bio-hazards can be brought to a new level of competency, and extended to other industry. Food processing and shipment can reach new levels of efficiency, with less recalls needed, creating less exposure to catastrophic perception of a particular foodstuff or company. Healthier food supplies relates directly to a healthier populace. These new processes can also enable regulators to enact new standards of excellence that will become the norm.

The social programs **Safety Net** and **Sano y Salvo** can benefit entire communities or workplaces, with better health, safety, and general well-being.

From any angle, the systems TETRADYN offers to the marketplace saves money. These funds can be diverted to the good of those affected, be it a business, government agency or entity, neighborhood or community, school or university.

As these approaches are fresh to the market, it is entirely conceivable that some of the products and methods demonstrated by the TETRADYN systems will soon become mandates. As the benefits are realized and weighed on their own merits, they will represent a "raising of the bar" that could be adopted as sure-fire solutions to age-old problems.

**"AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE"**

## **TIMETABLE**

As the TETRADYN systems represent new technologies, it might be expected that the timetable for action be a drawn-out process, with obstacles that interfere with forward progress. This is not the case. The technologies discussed herein are available **TODAY**. The software involved has evolved and has been tested and proven accurate.

A CRAIDO unit is specifically equipped for each application. CRAIDO podlabs, whether mobile or stationary, can be constructed and delivered on-site within a 30-day period, and once on-site can be altered in the field to meet any need.

The social programs are assembled and ready for usage, on a timetable determined by the user, better utilizing available resources.

## **CONCLUSIONS**

TETRADYN's systems offer opportunities to confront today's bio-health hazards in ways heretofore unavailable. We open new doors of exploration that will reach into the future and address situations not yet encountered. These systems approach and surpass the requirements set forth by the US government's Pandemic Initiative, expanding the capabilities to detect, analyze, monitor and respond not only to the H1N1 pandemic we are currently facing, but any bio-threat hazard we may encounter.

Bio-threats within the food supply can also be monitored, identified and checked before tainted goods are sold to the public. Public threats not bio-related can also be monitored, analyzed and quickly countered, minimizing distress and damage .

The institution of TETRADYN's systems represents an opportunity to better the lives of our entire society. The impact reaches into every corner, with favorable return on investment. The benefits can be felt by all, and only grow with time as they compound themselves by their very being.

Only TETRADYN offers this unique blend of applied sciences, community action, corporate and government interaction. Together these characteristics represent the approach of the future, but are available today.

(757) 847-5511 (202) 415-7295 (804) 740-0342

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