

CORONAVIRUS CRISIS (SARS-CoV2)
COVID19 (The disease that is caused by SARS-CoV2)

Data Analysis
Data Assessment
Review

June 9th, 2020.

Final Text

Why this report and who?

We are a group of diverse persons, with critical and positive thinking, sharing the need of accurate information and quality data. We are still believers in maths, science, chemistry, evidence-based medicine, public good and humanism, and we value and respect everyone.

The key motivation for us was to assess the situation while avoiding posturing positions.

We conceived this work as a multi-layered communication. One can read part or the whole of it, one can browse some general audience text or go deeper into technical notes and addenda. It is a bit like a hypertext where parts are related and cross-referenced. It is our intent to build this communication like an Open Source effort that may be used as a core repository for future information and contributions. It was written in English to facilitate communication. It does not want to teach anything, just equip the readers with some key information and references that they can control by themselves and generate some healthy questions.

Our goal is to use this work as a call to action.

We have a set of propositions in the 2 last chapters. We feel that a global problem requires a global response, but that some actions are both urgent and evident.

About the authors (* who can be reached upon request):

- Prof dr. Martin ZIZI * - MD-PhD, Molecular Biophysicist, former Medical Chief Scientific Officer and Chair of the Bioethical Committee of the Belgian Dept. of Defense. He was involved in the Military Applications of Telemedicine. He was also a former UN Bioweapon Inspector, served as advisor to the Belgian Government in Biological And Toxin Weapons Convention Treaty in Geneva, and was an active scientist involved in Operational Epidemiology, Germs and Bacteriophages, and in cancer metabolism. He studied *in-vitro* molecular evolution using molecular random chemistry, and used technologies he invented for peptide drug design or fight against germs. He was an advisor for various Ministries in Belgium, led the creation of the Belgian VA (Veteran Administration) and other Health-related structures. He was involved with many others in the resolution of various Public Health crises (9/11, Radars, Depleted Uranium, GSM radiation...), led expert panels for the Courts in various countries. Throughout his career, he wrote and obtained numerous patents across various fields. He currently leads a blue-sky startup in California merging physics, neurosciences and mobile technology.
- Dr. Giuseppe TRITTO * – a well-known surgeon and uro-andrologist, specialized in reconstructive surgery of genital organs, transgender reassignment surgery and microsurgery of male infertility. He was Chairman on Surgical Andrology in Saint-Louis Hospital in Paris until 2006 and Chief of Dept. of Urology in San Carlo Hospital in Rome-Italy for the IDI (Vatican) Project on Urology, Male Ageing and Rehabilitation during the Great Year of Jubilee declared by Pope John Paul II in 2000 in celebration of the new millennium. He is Visiting Professor in Microtechnologies for Microsurgery in Aston University, Birmingham,UK; a Visiting Professor in Nanotechnologies in Brunel University, London, UK, a Visiting Professor and a Chair of NanoMedicine in Amity University, New Delhi, India. He is Member of the Laboratory of Bio-Ethics, directed by prof. Christian Herve in Paris. Giuseppe Tritto is also Executive President of the World Academy of Biomedical Sciences and Technologies, founded under the aegis of UNESCO in 1997. He introduced the new concept of Human Health Medicine under UNESCO/UN umbrella, through the three congresses on Men's, Women's, Children Health Medicine (2004-2006), promoting Human Nutrition, Social Determinants of Human Reproduction, Medicine of Ageing, Gender Medicine and Personalized Medicine and introducing new fields in Innovation Technologies for Health as Bio-nanotechnologies, Pico-technologies and TeleMedicine through Space Technologies. In 2007 He founded with prof. Giulio Tarro, (virologist, fellow of Sabin, who isolated the syncytial virus (RSV) in the epidemics in Naples in 1979) the international Platform on the VirusSphere. In 2013 He founded with prof. Sujoy Guha in India the new Scientific Field of Pico Medicine in Amity University.
- Dr Kaarle Parikka * – PhD. Universite Bretagne (France, 2013). Microbiologist specialized in bacterial viruses. He obtained his PhD studying microbial communities of extreme environments and then worked on the use of viruses as natural born enemies of bacterial pathogens in a clinical setting. After his post-doc, he led the 'Lab de Recherches Microbiologiques' in the Belgian Defense Medical Center.

- Dr. Andreas Hieke * - M.S. Physics, Ph.D. Physical Chemistry- has over 20 years experience both in US elite academic institutions an the high-tech industrial R&D sector. He is member of the scientific review committee of the NSTI World Innovation Conference. He used his wide expertise to build an advanced technology to enhance the analysis and sequencing of proteins and successfully demonstrated it at Stanford University, School of Medicine.
Dr. Hieke is a prolific inventor and author of 27 patents and/or applications covering numerical methods, data analysis, algorithms, scientific instruments, physical and biochemical analytical techniques and instruments, ionization of biological macromolecules, methods of obtaining medically usable biomarkers and advanced molecular diagnostics. Dr. Andreas Hieke is also founder and manager of a Silicon Valley based company Themis Scientific, LLC, providing expert advisory support related to R&D strategy and IP creation & evaluation to C-level executives of US- and European high-tech companies, as well as to inventors, investors, and lawyers. Dr Hieke independently controlled and reviewed an earlier draft of this report, before contributing as an author to it.
- Dr. P. Fransen * - MD, Neurosurgeon. - consultant neurosurgeon in IM2S Clinique Orthopédique de Monaco and CHIREC Delta hospital Brussels, former Head of the Department of Neurosurgery at the CHIREC - Parc Léopold Clinic. Dr Fransen is also Chairman of the Brussels Spine Center, past Board member for the Belgian Society for Neurosurgery, former President of the Belgian Neurosurgical Spine Society, International Fellow of the American Association of Neurological Surgeons, member of the Société de Neurochirurgie de Langue Française. He has published over 40 papers in indexed peer-reviewed journals, presented over 100 presentations and lectures in international meeting as well as surgeon's trainings. Dr. Fransen was both a reviewer and a contributor.
- Some contributors were journalists and professionals in Belgium and France. They provided general information, comments and reviewed the text for a general audience.
 - o Mr. F. Poncelet – Master in Journalism and in Political Sciences. Mr. Poncelet is a specialist with 30 years of experience in in-depth questions related to Security and Management of Information.
 - o Mr. A. Breithof – is a web developer and graphist, and an avid reader. He has an in-depth long experience about confined spaces and human response to it because of his work aboard cruise ships.
 - o Mr. L. M. (journalist, name withheld).
 - o Mr. O. Younes – PhD – Prof. at the Center for Entrepreneurship and Innovation at HEC (Paris – France). Dr. Younes is also a visting professor at UC. Berleley (USA) and at Dauphine (France), and a Mentor at Singularity University. He is the Founding CEO of EXPEN, a Tech Investment Bank. He was an early reader and gave valuable advice.
- Final Text Some contributors were MD's, nurses, and friends across 4 countries sharing their experiences, hopes, and facts on the ground. Some had fears and felt powerless, some even had fear to be cited in this work. Some MD's have read the text and, while agreeing with its core messages, have declined to be involved for personal reasons. We are much indebted to all of them. We are sad that they had to go through such experiences – while being constrained by guidelines they knew were at times not always adapted. Our deepest thanks and appreciation go to their work and courage.

This is NOT Ebola – Why are we treating it and acting like it is? Pleading for a reasonable and data-driven way out.

This pandemic crisis originated in China. It is intriguing that the Concept of “crisis” in the Chinese language and the Chinese word for “crisis” (simplified Chinese: 危机; traditional Chinese: 危機) are referred in Western culture with the symbolic of Yin and Yang and interpreted as the double face of “danger” and “opportunity” respectively. While the original meaning of wēijī is “danger at a point of junction” it is fundamentally the description of the point of bifurcation that can evolve towards chaos, which means an unpredictable chain of events.

In crisis situations, there is always an initial fog... with too many loops
- one has nearly no time to think amid an overflow of bad information and useless noise.
- oftentimes the first casualty is common sense.
- there is a need for candor to generate adhesion.

Some of us were involved in various such crises. Some of us regularly advised authorities in various countries... Some of us lived the period of the Cold War, the fall of the berlin wall, various wars...

What did we learn?

- We had to balance – to manage all those white powder envelopes – supposedly with Anthrax – and potential terror attacks with no risk to the public and minimal disturbances to society.
- Authorities are fragile and easily abused at such times. We had to resist all those phone calls and mails of business developers trying to make a quick sale (mostly out-of scope) and – when sales were declined – resist political pressure to buy the useless items anyway. For this we needed to build trust across government.
- No One has all the knowledge - We needed to go OUT of the classical public health expertise, and add psychologists, environmental biologists, military, toxicologists and physicists, anyone willing to contribute... While learning is local, knowledge is global.
- We needed trust from both the authorities and the public. This trust is essential to reach the balance between Governance and Public Well Being. As we will discuss further, Public health cannot be separated from Social needs.
- We needed clear and candid communication. No one will be blamed for not knowing something.

How to gain and consolidate trust? Be critical, Avoid noise, and Communicate.