

An Inner Shield Against the Harmful Effects of Electromagnetic Fields

**Superluminal Particles, Biological Quantum
Entanglement and Microbiome Medicine**



Marco Ruggiero

November 1st, 2021

Acknowledgements

- I wish to thank the Mr. Pineault for this great opportunity.
- I wish to thank all those who will have the patience to listen to this presentation.

Advisory

- No information in this talk is presented by the author as medical advice.
- Standard of care for any disease must be followed as well as rules and regulations established by Health Authorities of each Country.

Disclosure of conflict of interest



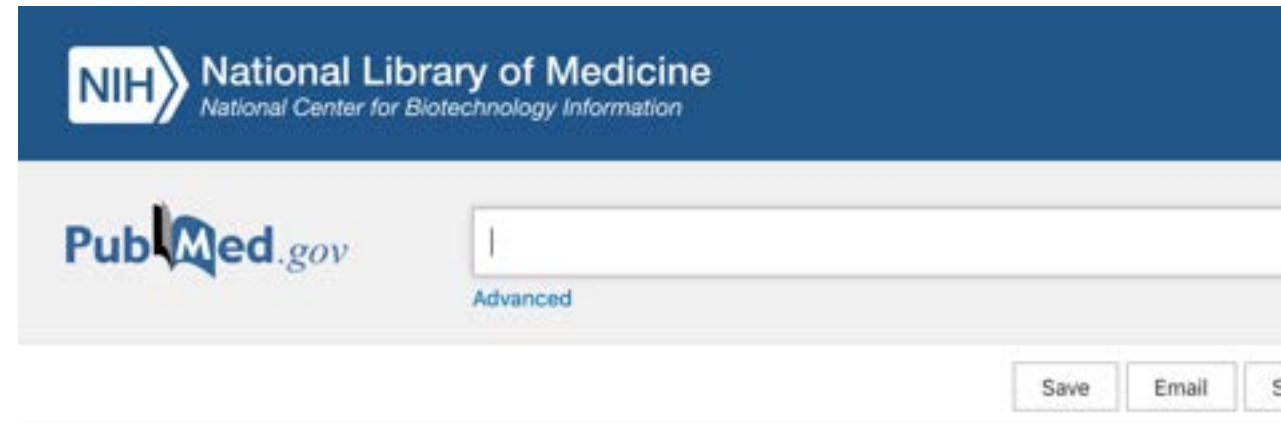
- I am the inventor of a number of supplements and developed the approaches and the products described in this study.

Please allow me to introduce myself

- I obtained my MD in 1980, and then a PhD in Molecular biology.
- I served in the Italian Army (North Atlantic Alliance) as Lieutenant Medical Officer in 1982-83.
- I worked as post-doc at Burroughs Wellcome Co. (1984), and as visiting scientist at the National Cancer Institute of the NIH (1987).
- I was appointed Professor of Molecular Biology at the University of Firenze, Italy, in 1992 where I worked until 2014.
- I have a specialization in diagnostic radiology.
- I published more than [240 scientific articles](#) co-authored, among others, by scientist such as EG Lapetina, SA Aaronson, JH Pierce, PH Duesberg, HH Bauer, JJ Bradstreet, D Klinghardt.
- One of my articles in [PNAS](#) was sponsored by Nobel Laureate Sir John Vane.
- My current research interests are in immunotherapy, quantum biology and microbiome medicine.

- For about forty years, I studied the biological effects of different types of energy, ranging from static magnetic fields to ionizing and non-ionizing radiations and ultrasounds, on normal and transformed cells in culture, embryos and organisms, with particular reference to changes in signal transduction, gene expression, cell morphology, and clinical responses.

- *Casamassima et al., 1989;*
- *Orlandini et al., 1991;*
- *Ruggiero et al., 1992;*
- *Vincenzini et al., 1993;*
- *Pacini et al., 1994a; 1994b; 1995;*
- *Chiarugi et al., 1995;*
- *Mazzanti et al., 1996;*
- *Santucci et al., 1996;*
- *Pacini et al., 1999a; 1999b; 1999c;*
- *Casamassima et al., 1999;*
- *Pacini et al., 2002; 2003;*
- *Ruggiero et al., 2004; Pacini et al., 2006;*
- *Ruggiero, 2008;*
- *Ruggiero et al., 2013;*
- *Bradstreet et al., 2014;*
- *Ruggiero and Aterini, 2015;*
- *Klinghardt, 2017;*
- *Branca et al., 2018.*



My first article on this topic



> [Blood](#). 1989 May 1;73(6):1677-81.

Hematopoietic bone marrow recovery after radiation therapy: MRI evaluation

F Casamassima¹, C Ruggiero, D Caramella, E Tinacci, N Villari, M Ruggiero

Affiliations + expand

PMID: 2713500

Free article



Marco Ruggiero

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American Journal of Immunology 17 (1), 14-24

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[Effects on the immune system of a three-month consumption of an extremely diverse probiotic: decrease of serum alpha-N-acetylgalactosaminidase activity, detoxification and gut ...](#)

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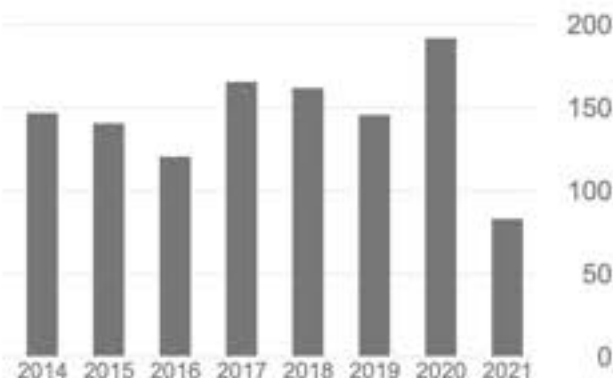
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I served in the Italian (NATO) Army as Lieutenant Medical Officer in 1982-83



- In 1970, a report from the Soviet Union described a "microwave syndrome" among military personnel working with radio and radar equipment. These subjects showed symptoms that included fatigue, dizziness, headaches, problems with concentration and memory, and sleep disturbances.
- Similar symptoms were found in the Eighties among Swedes working in front of the old cathode monitors of those days. They had symptoms such as flushing, burning, and tingling of the skin, especially on the face, but also headaches, dizziness, tiredness, and photosensitivity.
- The same symptoms were reported in Finns; in this case electromagnetic sensitivity was attributed to exposure to radiowaves.

Havana syndrome

From Wikipedia, the free encyclopedia

Havana syndrome is a set of medical signs and symptoms reported by United States and Canadian embassy staff in [Cuba](#) dating to late 2016 as well as subsequently in some other countries, including the [United States](#),^{[5][6][7]} [Austria](#),^{[8][9]} and [Germany](#).^[10] In 2021, the Biden administration started calling them "unexplained health incidents" or UHIs.^[11]

In 2018, U.S. diplomats in [China](#) reported problems similar to those reported in Cuba, as did undercover [CIA](#) agents working in other countries with partner agencies to counter [Russian](#) covert operations.^{[12][13]}

> [Oncol Res.](#) 2002;13(1):19-24. doi: 10.3727/096504002108747926.

Exposure to global system for mobile communication (GSM) cellular phone radiofrequency alters gene expression, proliferation, and morphology of human skin fibroblasts

Stefania Pacini ¹, Marco Ruggiero, Iacopo Sardi, Stefano Aterini, Franca Gulisano, Massimo Gulisano

Affiliations + expand

PMID: 12201670 DOI: [10.3727/096504002108747926](#)



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> [Environ Res.](#) 2018 May;163:208-216. doi: 10.1016/j.envres.2018.01.032. Epub 2018 Feb 22.

The human skin as a sub-THz receiver – Does 5G pose a danger to it or not?

Noa Betzalel ¹, Paul Ben Ishai ², Yuri Feldman ³

Affiliations — collapse

Affiliations

- ¹ Department of Applied Physics, The Rachel and Selim Benin School of Engineering and Computer Science, The Hebrew University of Jerusalem, Edmond J. Safra Campus, Jerusalem 91904, Israel.
- ² Department of Applied Physics, The Rachel and Selim Benin School of Engineering and Computer Science, The Hebrew University of Jerusalem, Edmond J. Safra Campus, Jerusalem 91904, Israel; Department of Physics, Ariel University, Ariel 40700, Israel.
- ³ Department of Applied Physics, The Rachel and Selim Benin School of Engineering and Computer Science, The Hebrew University of Jerusalem, Edmond J. Safra Campus, Jerusalem 91904, Israel. Electronic address: yurif@mail.huji.ac.il.

EDITORIAL

5G Technology and induction of coronavirus in skin cells

M. Fioranelli¹, A. Sepehri¹, M.G. Roccia¹, M. Jafferany², O. Yu. Olisova³,
K.M. Lomonosov³ and T. Lotti^{1,3}

¹*Department of Nuclear, Sub-nuclear and Radiation Physics, G. Marconi University, Rome, Italy;*

²*Central Michigan Saginaw, Michigan , USA;* ³*Department of Dermatology and Venereology, I.M. Sechenov First Moscow State Medical University, Moscow, Russia*

Received May 13, 2020 – Accepted June 9, 2020



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CORRELATION BETWEEN THE POTENTIAL ELECTROMAGNETIC POLLUTION LEVEL AND THE DANGER OF COVID-19. 4G/5G/6G CAN BE SAFE FOR PEOPLE

VLADIMIR I. MORDACHEV

Belarusian State University of Informatics and Radioelectronics (Minsk, Republic of Belarus)

Submitted 15 June 2020

Although a large number of other factors (the degree of general environmental pollution, food quality, climate features, epidemic phase, timeliness and effectiveness of restrictive measures taken, etc.) affects public health and susceptibility of the population to infections, and also data of different countries on morbidity and lethality have a different degree of reliability and reflect the different effectiveness of national health systems in struggle with COVID-19, today one cannot fail to see the area correlation between the use of recommendations [24] and the distribution of lethality from COVID-19.

In particular, an analysis of WHO reports [38–40] indicates that in a group of countries where, according to data [12], hygienic restrictions on radio frequency EM fields of $1\text{--}10\text{ }\mu\text{W}/\text{cm}^2$ are accepted, the relative level of lethality from COVID-19 is (1–5) % of the number of the infected, and in a group of countries where the hygienic regulation of EMB is carried out in accordance with corporate recommendations [24], this level is (5–20) %.

Encyclopedia of Cancer

2017 Edition | Editors: Manfred Schwab

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Electromagnetic Fields

Authors[Authors and affiliations](#)Marco Ruggiero , Stefano Aterini

Reference work entry

First Online: 20 June 2017

DOI: https://doi.org/10.1007/978-3-662-46875-3_1843

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Definition

Magnetic fields are generated by the movement of any electrical charge. A continuous electric current passing through a conductor creates a static magnetic field, while an electric current changing in time creates a variable magnetic field, which radiates electromagnetic waves spreading around the surrounding space at light speed. These electromagnetic fields enter the living tissue but are known as non-ionizing radiation since they are weak and unable to break molecular bonds. Metals such as iron, zinc, manganese, and cobalt are sensitive to electromagnetic fields that may exert their effects on proteins and cellular components containing these metallic elements.

From the skin to the
microbiome

For example, it was demonstrated that the myoelectrical activity of the gut induces the expression of heat-shock protection mechanisms in the cells of gut epithelium as well as in gastrointestinal microorganisms thus de facto altering the delicate balance of the gut microbiome (Laubitz et al. 2006). Considering that the human microbiome is involved in the development and function of all other organs and systems and most notably the immune system (Palm et al. 2015), we hypothesize that the alteration of the microbiome may be one of the mechanisms through which electromagnetic fields, both endogenous and exogenous, exert their biological effects. Thus, the effects of electromagnetic fields on the human microbiome open a new perspective in assessing the risks for health and in preventing them.



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> [Exp Physiol](#). 2006 Sep;91(5):867-75. doi: 10.1113/expphysiol.2006.033365. Epub 2006 May 25.

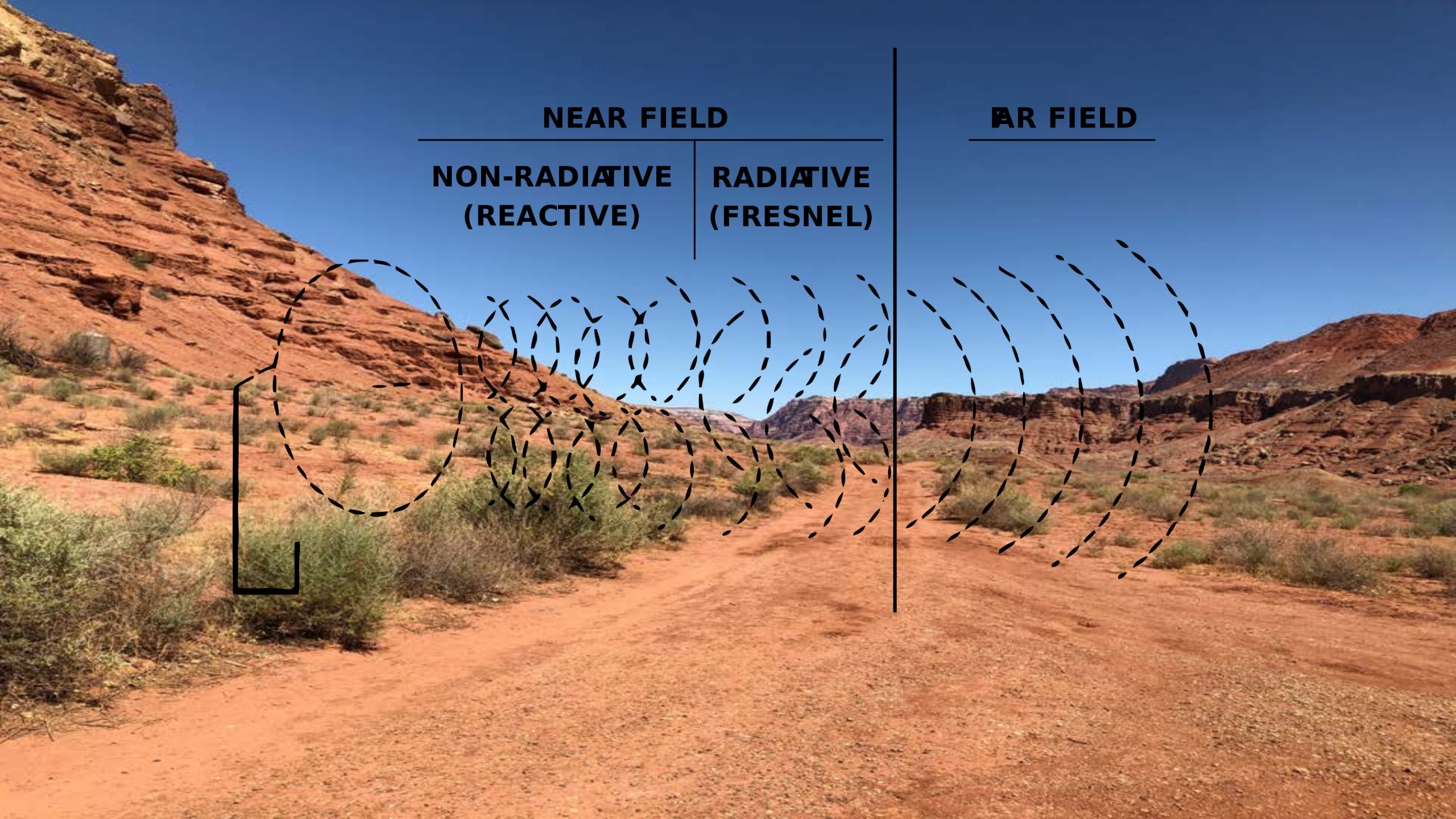
Gut myoelectrical activity induces heat shock response in *Escherichia coli* and Caco-2 cells

Daniel Laubitz ¹, Alicja Jankowska, Anna Sikora, Jarosław Woliński, Romuald Zabielski, Elzbieta Grzesiuk

Affiliations + expand

PMID: 16728456 DOI: [10.1113/expphysiol.2006.033365](#)

Free article



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DOI: 10.3844/ajisp.2021.14.24

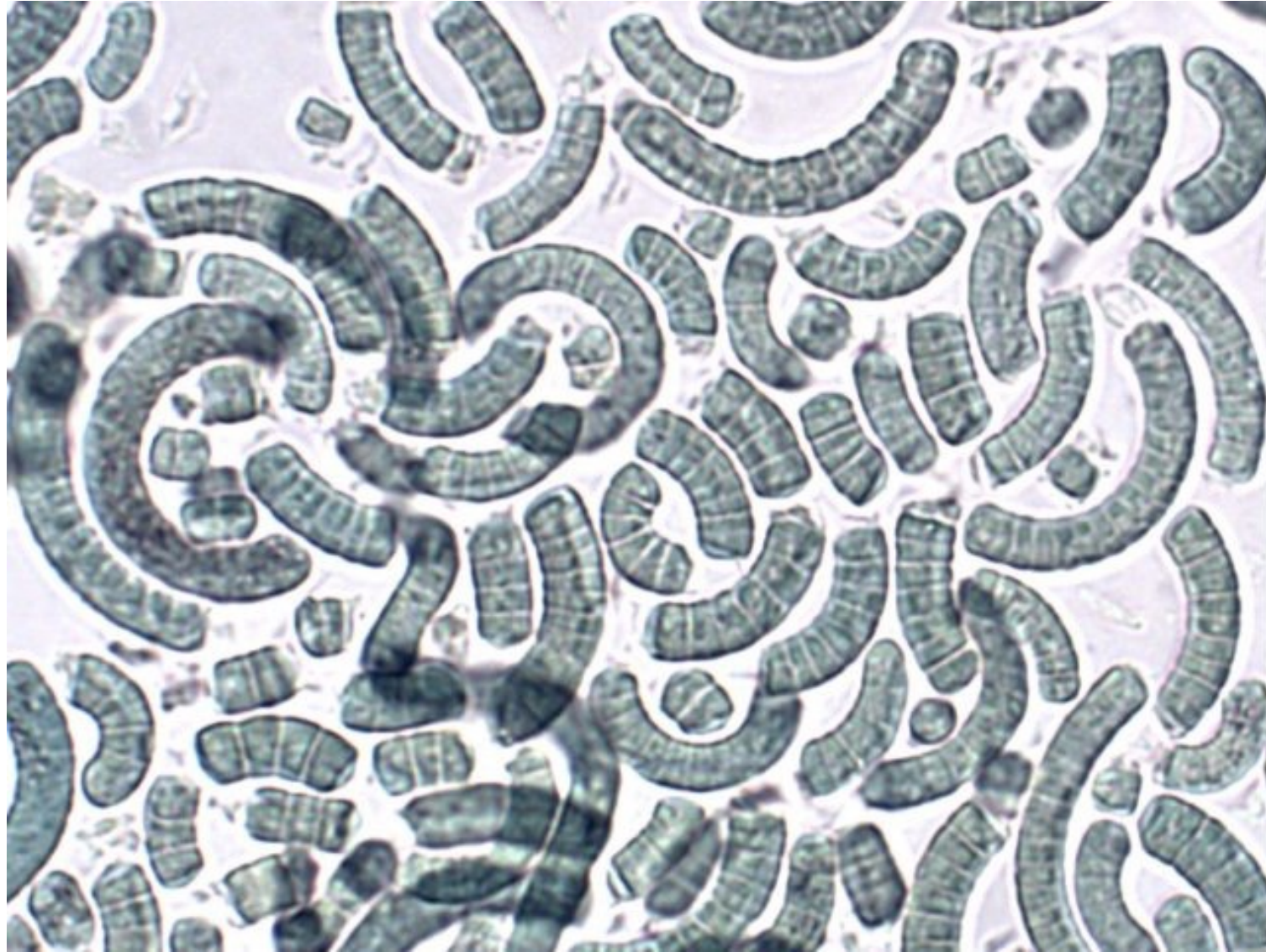
The results presented in this study lay the foundation for the development of a novel approach to protection against electromagnetic fields comprising ionizing and non-ionizing radiations. *In silico* observations and preliminary results on subjects exposed to common electromagnetic fields under real-life conditions, support the hypothesis that co-cultures of radiation-resistant cyanobacteria and probiotics may confer protection against the harmful effects of electromagnetic fields.

Marco Ruggiero / American Journal of Immunology 2021, Volume 17: 14.24

DOI: 10.3844/ajisp.2021.14.24



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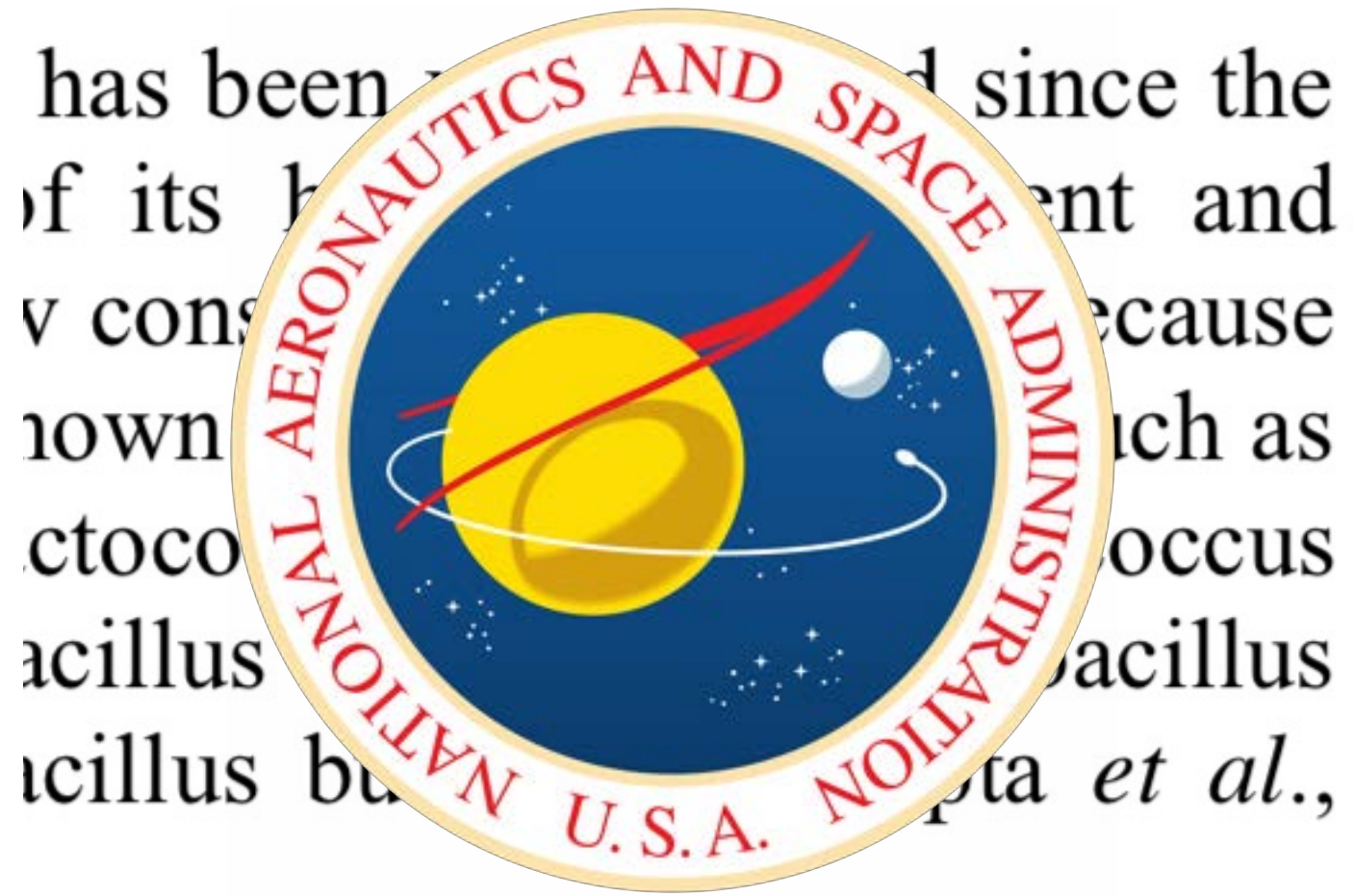
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Rationale for the use of Arthrospira Platensis

Most prokaryotic cells are sensitive to the killing effects of ionizing radiations and even to weak electromagnetic fields such as those generated by the physiologic electric activity of human cells *in vivo* (Ruggiero and Aterini, 2015). However, certain prokaryotes, such as cyanobacteria, exhibit extremely high resistance to the killing effects of ionizing radiations (Badri *et al.*, 2015). A notable example is represented by *Arthrospira platensis*, a bacterium that survives exposure to gamma-rays up to 6,400 Gray units (Gy) with a dose rate of 527 Gyh^{-1} (Badri *et al.*, 2015) [for comparison, the median human

Marco Ruggiero / American Journal of Immunology 2021, Volume 17: 14.24
DOI: 10.3844/ajisp.2021.14.24

lethal radiation dose computed from data on occupants of reinforced concrete structures in Nagasaki, Japan, is around 3 Gy (Levin *et al.*, 1992)].



> [Biotechnol J.](#) 2012 Nov;7(11):1412-7. doi: 10.1002/biot.201200177. Epub 2012 Oct 2.

Photosynthetic efficiency and rate of CO₂ assimilation by *Arthrospira* (*Spirulina*) *platensis* continuously cultivated in a tubular photobioreactor

Marcelo Chuei Matsudo ¹, Raquel Pedrosa Bezerra, Sunao Sato, Attilio Converti,
João Carlos Monteiro de Carvalho

Affiliations + expand

PMID: 22933335 DOI: [10.1002/biot.201200177](#)

➤ [Phys Rev Lett](#). 2019 Apr 26;122(16):161601. doi: 10.1103/PhysRevLett.122.161601.

Cherenkov Radiation from the Quantum Vacuum

[Alexander J Macleod](#)¹, [Adam Noble](#)¹, [Dino A Jaroszynski](#)¹

Affiliations + expand

PMID: 31075012 DOI: [10.1103/PhysRevLett.122.161601](#)

Abstract

A charged particle moving through a medium emits Cherenkov radiation when its velocity exceeds the phase velocity of light in that medium.

[Review](#) > [Proc Math Phys Eng Sci.](#) 2017 May;473(2201):20160822.

doi: 10.1098/rspa.2016.0822. Epub 2017 May 31.

Quantum effects in biology: golden rule in enzymes, olfaction, photosynthesis and magnetodetection

[Jennifer C Brookes](#) ¹

Affiliations — collapse

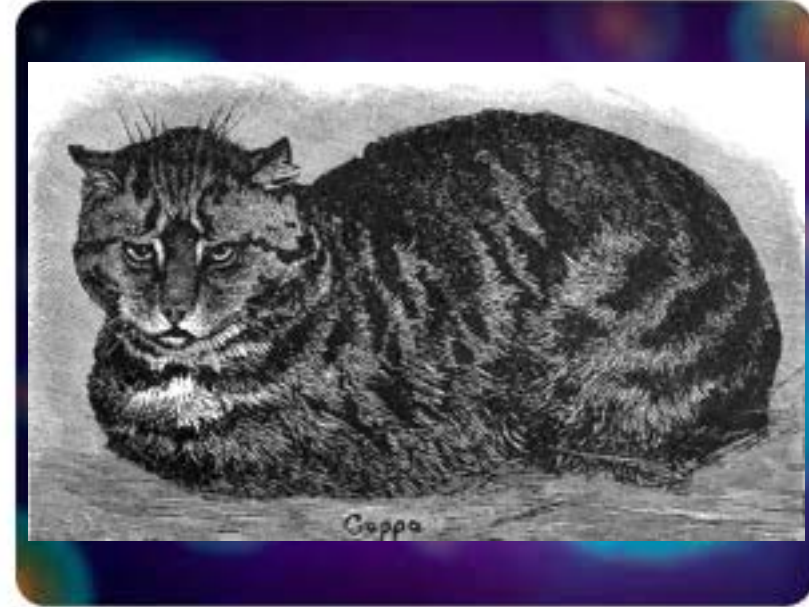
Affiliation

- ¹ London Centre for Nanotechnology, University College London, 17-19 Gordon Street, London WC1E 6BT, UK.

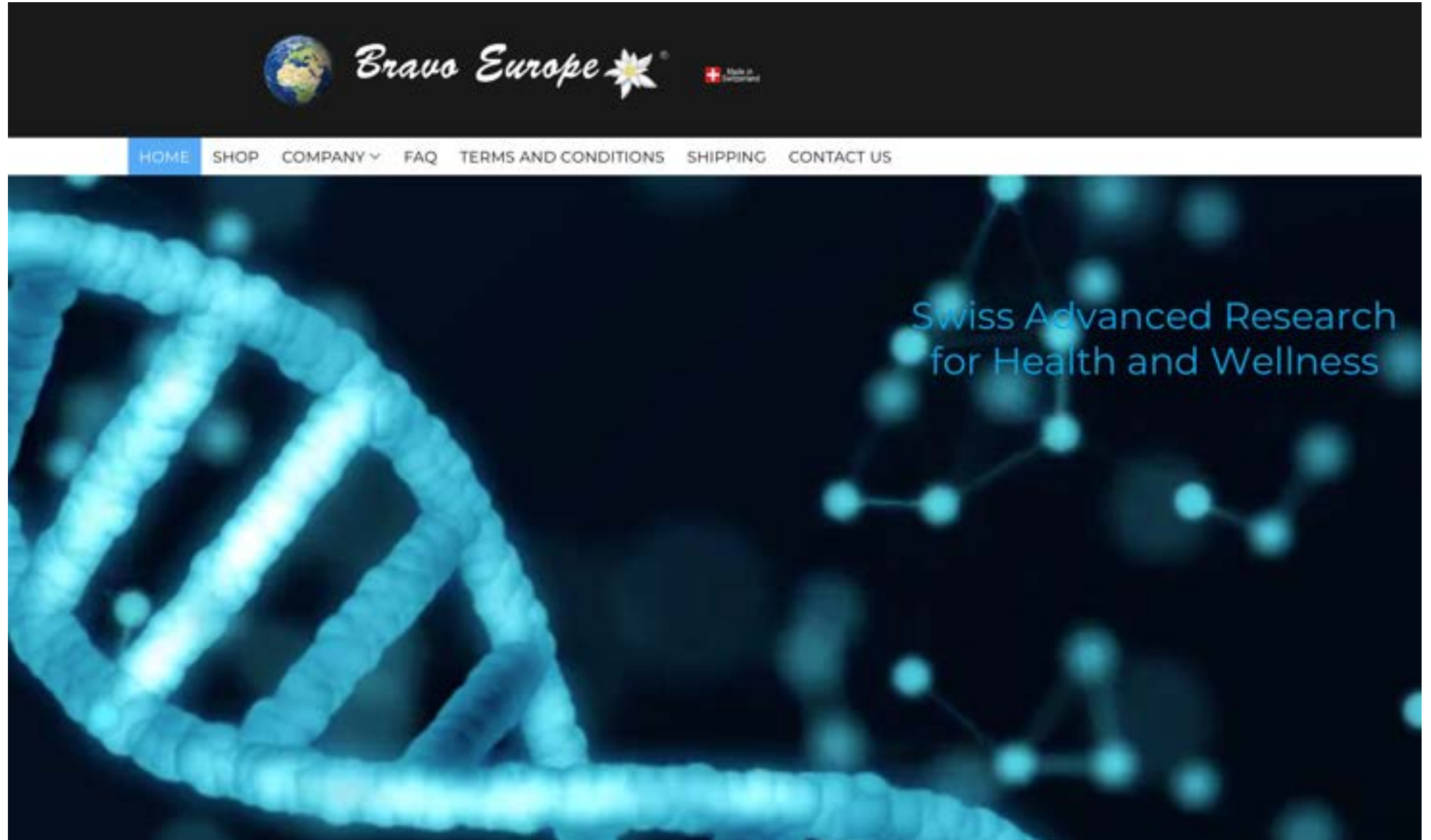
In essence, it appears **certain photons were simultaneously hitting and missing photosynthetic molecules within the bacteria**—a hallmark of entanglement. “Our models show that this phenomenon being recorded is a signature of entanglement between light and certain degrees of freedom inside the bacteria,” she says. Oct 29, 2018

[https://www.scientificamerican.com > article > schroeding...](https://www.scientificamerican.com/article/schroeding...) ⋮

"Schrödinger's Bacterium" Could Be a Quantum Biology ...



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Rationale for the Co-Culture of Arthrospira Platensis with Probiotics

The rationale for the use of Arthorspira platensis in co-culture with the probiotic blend described above consists in the following considerations. Ionizing

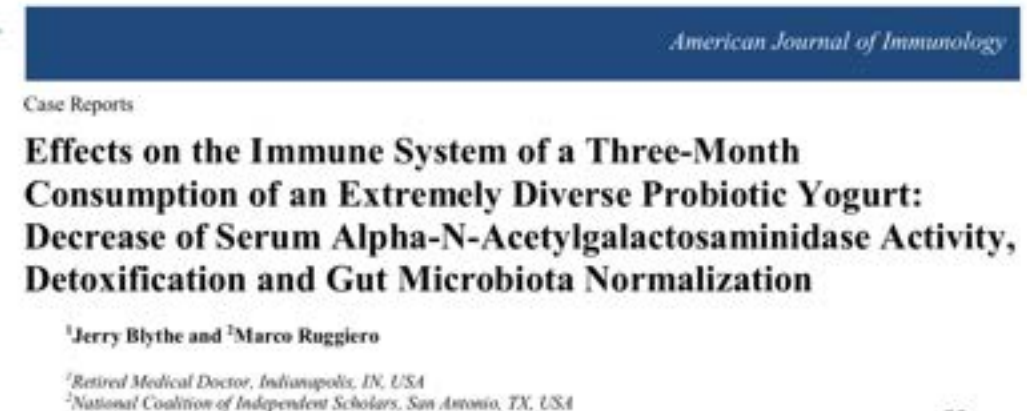
The probiotic blend is unique because scientific research published in peer-reviewed articles demonstrated that it has a powerful detoxifying effect.

regulates expression of *uvr* genes upon exposure to radiations (Badri *et al.*, 2015). Arthrospira platensis is known to protect against radiation sickness (Mazo *et al.*, 1999) as well as against the damage inflicted by electromagnetic radiations through DNA repair (*uvr* gene up-regulation) (Qishen *et al.*, 1989).

- Glyphosate
- 2-hydroxyisobutyric acid
- Perchlorate
- N-acetyl-S-(2-carbamoylethyl)cysteine
- N-acetyl(propyl)cysteine
- 2-hydroxyethyl mercapturic acid
- Diethylphosphate
- 3-Phenoxybenzoic acid
- Cadmium
- Lead
- Barium



These are the articles demonstrating that the probiotic blend removes all the toxicants listed above



Rationale for the Co-Culture of Arthrospira Platensis with Probiotics

The rationale for the use of Arthorspira platensis in co-culture with the probiotic blend described above

The probiotic blend is unique because scientific research published in peer-reviewed articles demonstrated that it has more than 300 different microbial DNA sequences that include probiotic microbes, phages and plasmids.

known to protect against radiation sickness (Mazo *et al.*, 1999) as well as against the damage inflicted by electromagnetic radiations through DNA repair (*uvr* gene up-regulation) (Qishen *et al.*, 1989).

Research Article



Phage composition of a fermented milk and colostrum product assessed by microbiome array; putative role of open reading frames in reference to cell signaling and neurological development

Abstract

Bacteriophages (phages), Earth's most numerous biological entities, are natural constituents of alimentary matrices; in this study we describe the characterization of phage populations in a product obtained by fermentation of bovine milk and colostrum. Such characterizations were achieved using a microarray consisting of a chip covered in short DNA sequences that are specific to certain target organisms for a total of approximately 12,000 species. The only viruses evidenced by the array belonged to Siphoviridae, the largest phage family that targets bacteria and archaea. The array yielded 27 iterations corresponding to a unique target. We discuss the putative role of some open reading frames of these phages in conferring health-supporting properties with particular reference to cells signaling and neurological development. We also describe the *in vitro* interaction of this fermented product with alpha-N-acetylgalactosaminidase, an enzyme whose activity in serum is elevated in neurodevelopmental disorders.

Keywords: phages, milk, colostrum, RAD52, DNA repair, genome stability, autism

Volume 10 Issue 2 - 2020

Stefania Pacini, Marco Ruggiero

Silver Spring Sagl, Arzo-Mendrisio, Switzerland

Correspondence: Stefania Pacini, MD, PhD; Silver Spring Sagl, Via Raimondo Rossi 24, Arzo-Mendrisio 6864, Switzerland.
Email: info@bravo-europe.com

Received: February 20, 2020 | **Published:** April 30, 2020

These are the articles
demonstrating such a great
biodiversity



Madridge
Journal of Immunology

ISSN: 2638-2024

Research Article

Open Access

Natural Plasmids in a Swiss Fermented Milk and Colostrum Product assessed by Microbiome Array

Stefania Pacini* and Marco Ruggiero

Silver Spring Sagl, Arzo-Mendrisio, Switzerland

Table 1 Phage composition of the product

<i>Species</i>	<i>Target Description</i>	<i>Conditional Score</i>	<i>Initial Score</i>	<i>Probes Expected</i>	<i>Probes Observed</i>	<i>%</i>
Lactococcus phage BM13	Lactococcus phage BM13	175.56	175.56	67	49	73.13
Lactococcus phage P335 sensu lato	Lactococcus phage Q33	158.28	158.28	69	46	66.66
Leuconostoc phage phiLN03	Leuconostoc phage phiLN03	187.97	187.97	93	57	61.29
Leuconostoc phage phiLN04	Leuconostoc phage phiLN04	180.09	180.09	91	55	60.43
Leuconostoc phage phiLN12	Leuconostoc phage phiLN12	194	194	100	60	60
Lactococcus phage ul36	Lactococcus phage ul36	115.08	115.08	60	36	60
Lactococcus phage ul36	Lactococcus phage ul36.k1	111.18	111.18	59	35	59.32
Lactococcus phage Tuc2009	Lactococcus phage Tuc2009	115.2	115.2	65	37	56.92
Streptococcus phage TP-778L	Streptococcus phage TP-778L complete genome	129.83	129.83	74	42	56.75
Lactococcus phage ul36	Lactococcus phage ul36.k1.t1	17.94	56.8	34	19	55.88
Lactococcus phage phiLC3	Lactococcus phage phiLC3	88.77	104.49	61	34	55.73
Leuconostoc phage phiLN6B	Leuconostoc phage phiLN6B	160.05	160.05	92	51	55.43

Citation: Pacini S, Ruggiero M. Phage composition of a fermented milk and colostrum product assessed by microbiome array; putative role of open reading frames in reference to cell signaling and neurological development. *J Neurol Stroke*. 2020;10(2):80–90. DOI: 10.15406/jnsk.2020.10.00416

Lactococcus phage ul36 encodes a protein, Sak, that is homologous to a human recombination protein, RAD52, that plays a crucial role in DNA repair, genome stability and prevention of carcinogenesis.^{26,27} Such an homology is present at the amino acid, phylogenic, functional, and structural levels and raises the possibility of a common origin with Sak being an ancestor of RAD52.

Mechanisms of entanglement and transfer of radiation resistance between *Arthrospira*, *Lactococcus*, phages, and human cells



bioRxiv posts many COVID19-related papers. A reminder: they have not been formally peer-reviewed and should not guide health-related behavior or be reported in the press as conclusive.

New Results

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Experimental evidence for the role of natural radioactivity in influencing viability of commensal microorganisms

Marco Ruggiero

doi: <https://doi.org/10.1101/2020.07.21.214676>

Now published in *American Journal of Immunology* doi: [10.3844/ajisp.2021.14.24](https://doi.org/10.3844/ajisp.2021.14.24)



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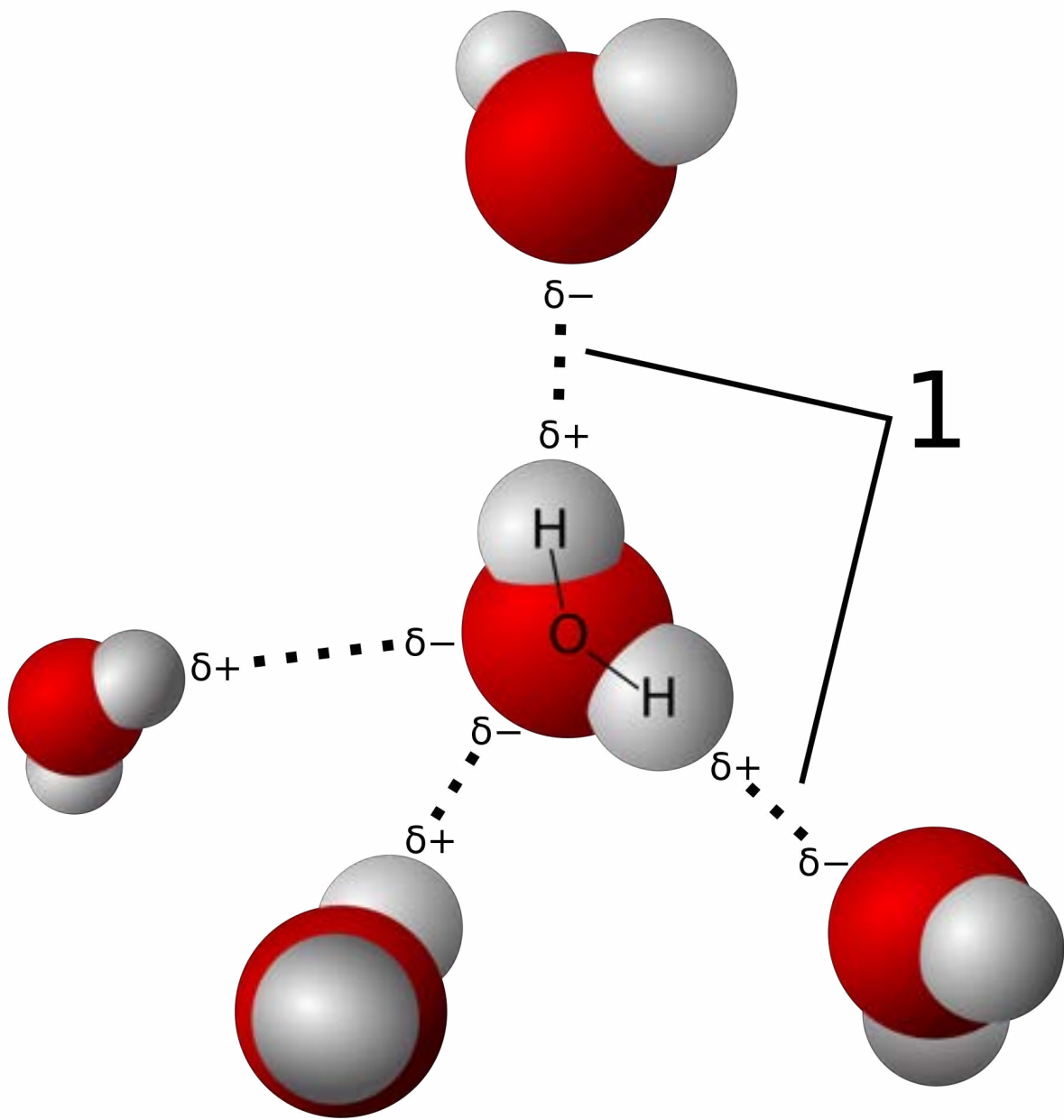
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COVID-19 SARS-CoV-2 preprints from medRxiv and bioRxiv

Subject Area

Microbiology

3



> [Dose Response](#). 2018 Feb 15;16(1):1559325817750067. doi: 10.1177/1559325817750067.
eCollection Jan-Mar 2018.

Biological Entanglement-Like Effect After Communication of Fish Prior to X-Ray Exposure

[Carmel Mothersill](#)¹, [Richard Smith](#)¹, [Jiaxi Wang](#)², [Andrej Rusin](#)¹, [Cris Fernandez-Palomo](#)¹,
[Jennifer Fazzari](#)¹, [Colin Seymour](#)¹

Affiliations — collapse

Affiliations

¹ McMaster University, Hamilton, Ontario, Canada.

² Department of Chemistry, Mass Spectrometry Facility, Queen's University, Kingston, Ontario, Canada.

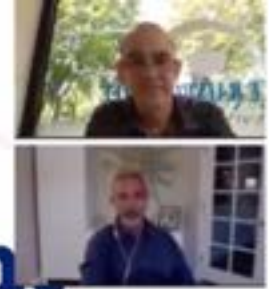
<https://www.youtube.com/watch?v=AFFulRh6cG0>

Relativistic Time Dilation and Biological Quantum Entanglement as they relate to Health and Disease

Marco Ruggiero, MD, PhD

*Silver Spring
Switzerland*

March 12, 2018



Leonardo da Vinci visited the source to sample the
town's “miraculous” water



WARNING: DO NOT TRY THIS AT HOME, IT WILL NOT WORK

4



Rationale for the use of Equisetum Arvense

Equisetum arvense (field horsetail) is a perennial plant from the family of Equisetaceae. Flavonoids, phenolic acids, alkaloids, phytosterols, tannins and triterpenoids are among the most widely known phytochemical compounds of Equisetum arvense. Several studies described different health promoting properties of Equisetum arvense such as anti-oxidant, anti-inflammatory, anti-bacterial, anti-fungal, blood vessel relaxant, neuro-and cardio-protective and anti-proliferative properties (Pallag *et al.*, 2018).

The

rationale for using *Equisetum arvense* in the co-culture described above is based on two properties of the plant. 1. Its anti-oxidant properties that counteract oxidative stress caused by radiations, thus synergizing with *Arthrospira platensis* and with phages of the probiotic blend resulting in inhibition of excessive reactive oxygen species formation 2. The high content of silica that is arranged in surface fractals in the stem and leaf of *Equisetum*. Silica from *Equisetum arvense* plays a fundamental role in the co-culture as it favors horizontal gene transfer between radio-resistant *Arthrospira platensis* and the microbes of the probiotic blend.

DOES IT
WORK?

In silico observations and preliminary results on subjects exposed to common electromagnetic fields under real-life conditions, support the hypothesis that co-cultures of radiation-resistant cyanobacteria and probiotics may confer protection against the harmful effects of electromagnetic fields.

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DOI: 10.3844/ajisp.2021.14.24



Marco Ruggiero MD, PhD

MD, PhD, Bravo Europe



USA

Speakers

Microbiome and Autism

Therapy

Treatments

Marco Ruggiero, MD, has a PhD in Molecular Biology and a specialization in Diagnostic Radiology. He served in the NATO Army as Medical Officer. In 1984-1986 he worked at the Laboratory of Cellular and Molecular Biology of Burroughs Wellcome Co, where he published a paper in PNAS sponsored by Nobel Laureate Sir John Vane. He worked at the National Cancer Institute of the NIH where he performed research on oncogenes and signal transduction. He was then Professor of Molecular Biology at the University of Firenze until his retirement in 2014. He collaborated with the late Dr. Bradstreet on the diagnostics and therapeutics for autism and they published two papers in major peer-reviewed journals. One of these proposes a breakthrough hypothesis for autism. The paper is in the open domain at <https://www.ncbi.nlm.nih.gov/pubmed/26733797>.



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> [Pathophysiology](#). 2013 Jun;20(3):191-209. doi: 10.1016/j.pathophys.2013.08.001. Epub 2013 Oct 4.

Autism and EMF? Plausibility of a pathophysiological link – Part I

[Martha R Herbert](#)¹, [Cindy Sage](#)

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Affiliation

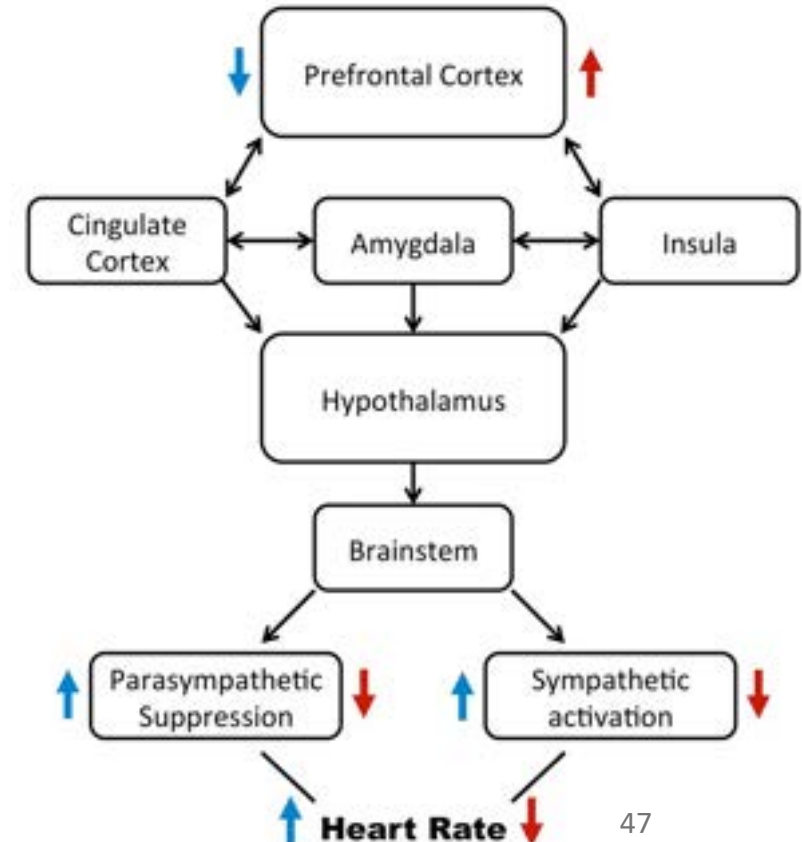
¹ TRANSCEND Research Program Neurology, Massachusetts General Hospital, Harvard Medical School, Boston, MA 02129, USA. Electronic address: drmarthahebert@gmail.com.

PMID: 24095003 DOI: [10.1016/j.pathophys.2013.08.001](https://doi.org/10.1016/j.pathophys.2013.08.001)

EMF affect Heart rate variability (HRV)

- **Heart rate variability** is the physiological phenomenon of variation in the time interval between heartbeats.
- Reduced HRV is a predictor of mortality.
- A range of conditions is associated with lower HRV, including congestive heart failure, diabetic neuropathy, post–cardiac-transplant depression, susceptibility to SIDS and poor survival in premature babies, fatigue severity in chronic fatigue syndrome.
- HRV decreases under conditions of acute time pressure, emotional strain and elevated anxiety state.
- High HRV reflects increased parasympathetic activity; low HRV reflects increased sympathetic activity.

By Stevan Nikolin, Tjeerd W. Boonstra, Colleen K. Loo, Donel Martin - Nikolin S, Boonstra TW, Loo CK, Martin D (2017) Combined effect of prefrontal transcranial direct current stimulation and a working memory task on heart rate variability. PLoS ONE 12(8): e0181833. <https://doi.org/10.1371/journal.pone.0181833>, CC BY 2.5, <https://commons.wikimedia.org/w/index.php?curid=61549870>



> [Cardiol Rev.](#) Mar-Apr 2004;12(2):85-96. doi: 10.1097/01.crd.0000094029.10223.2f.

Magnetism and cardiac arrhythmias

[Benjamin J Scherlag](#)¹, [William S Yamanashi](#), [Yuemei Hou](#), [Jerry I Jacobson](#), [Warren M Jackman](#),
[Ralph Lazzara](#)

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Affiliation

¹ Cardiac Arrhythmia Research Institute at the University of Oklahoma Medical Center,
Oklahoma City, OK 73104, USA. benjamin-scherlag@ouhsc.edu

PMID: 14766023 DOI: [10.1097/01.crd.0000094029.10223.2f](https://doi.org/10.1097/01.crd.0000094029.10223.2f)

> [Rev Environ Health.](#) 2013;28(2-3):75-84. doi: 10.1515/reveh-2013-0004.

Radiation from wireless technology affects the blood, the heart, and the autonomic nervous system

[Magda Havas](#)

PMID: 24192494 DOI: [10.1515/reveh-2013-0004](https://doi.org/10.1515/reveh-2013-0004)



Journal of the Autonomic Nervous System

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Alicja Bortkiewicz , Elzbieta Gadzicka, Marek Zmyslony

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The effects of the duration of mobile phone use on heart rate variability parameters in healthy subjects

Berkay Ekici, Ashi Tanındı, Gamze Ekici¹, Erdem Diker²

Department of Cardiology, Faculty of Medicine, Ufuk University; Ankara-Turkey

¹Department of Occupational Therapy, Hacettepe University, Faculty of Health Sciences; Ankara- Turkey

²Department of Cardiology, Medicana International Ankara Hospital; Ankara-Turkey

in vivo 32: 1145-1153 (2018)

doi:10.21873/invivo.11357

Cellular Phone Irradiation of the Head Affects Heart Rate Variability Depending on Inspiration/Expiration Ratio

SZABOLCS BÉRES¹, ÁDÁM NÉMETH¹, ZÉNÓ AJTAY¹,
ISTVÁN KISS², BALÁZS NÉMETH² and LÁSZLÓ HEJJEL¹

¹*Heart Institute, University of Pécs, Pécs, Hungary;*

²*Department of Public Health Medicine, Medical School, University of Pécs, Pécs, Hungary*

RESEARCH ARTICLE

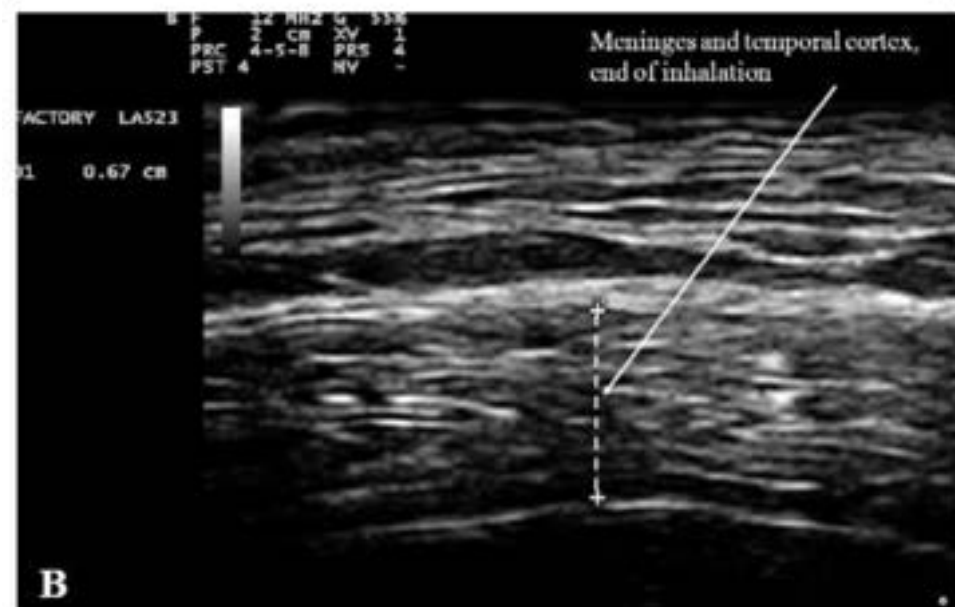
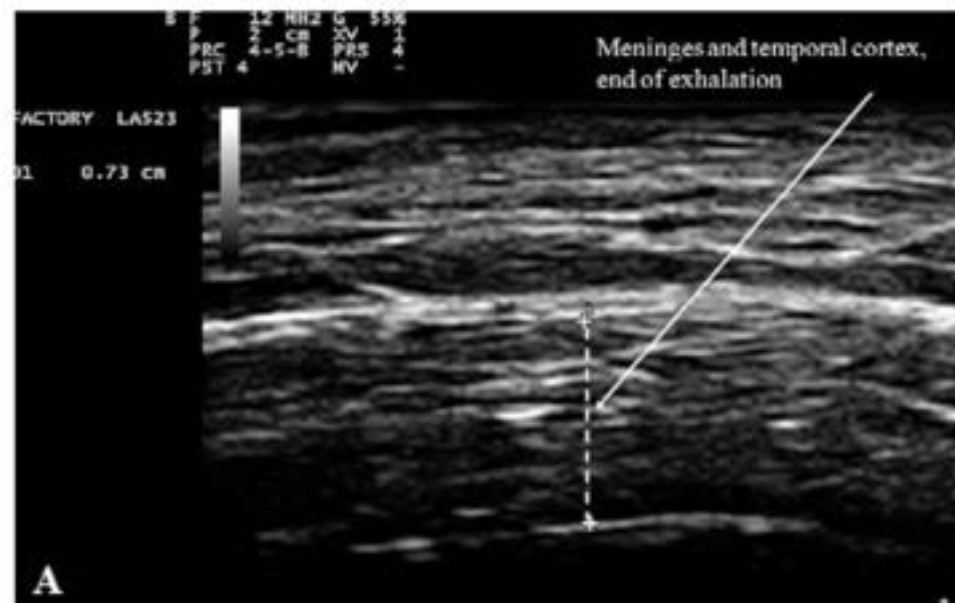
Application of Ultrasonography to Neuro-COVID-19

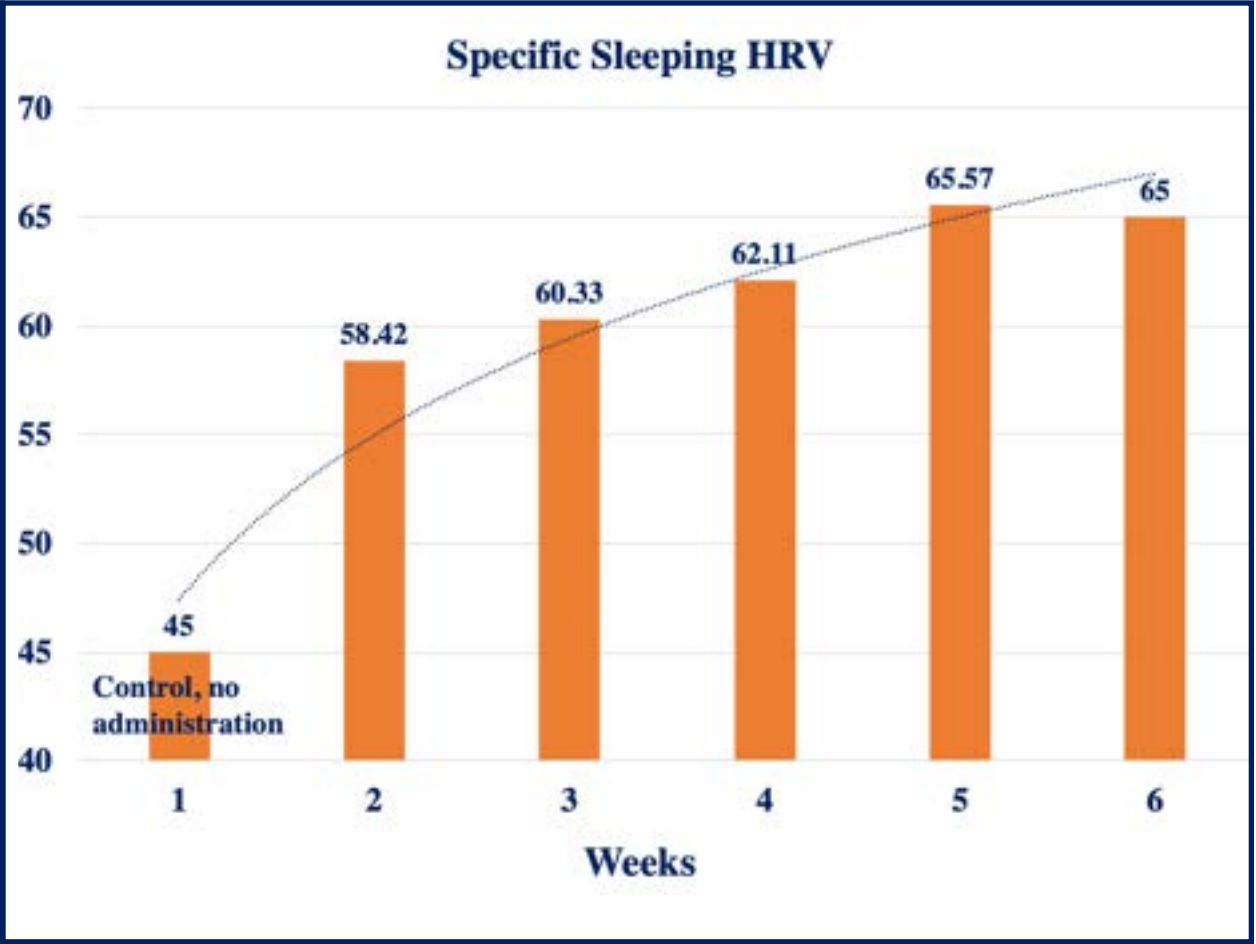
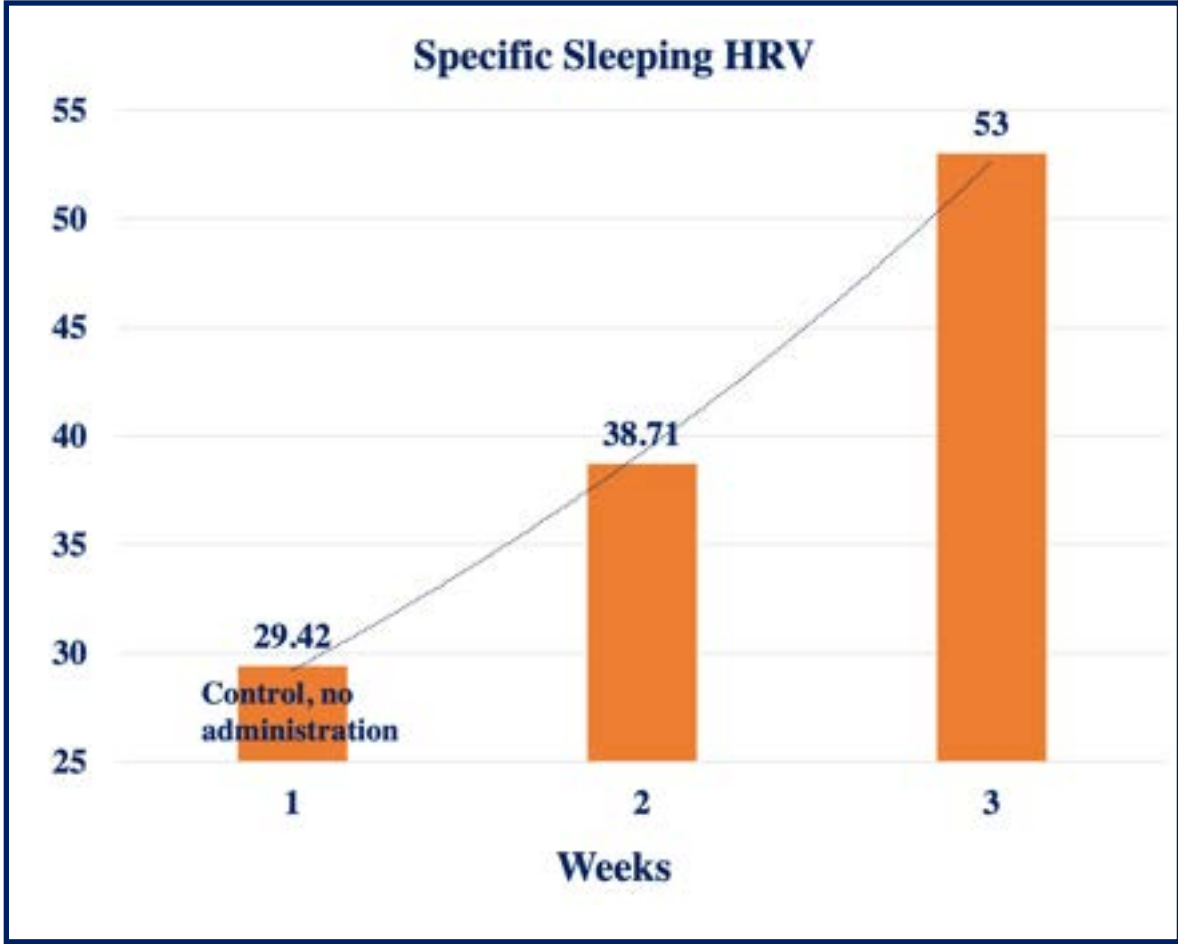
> Marco Ruggiero

DOI: 10.21203/rs.3.rs-776630/v1  Download PDFLICENSE:  This work is licensed under a CC BY 4.0 License. [Read Full License](#)DECLARATIONS:  [View author declarations.](#)

Abstract

Neurological and psychiatric symptoms are frequently observed in COVID-19, the disease caused by severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), and the term "Neuro-COVID-19" has been coined to indicate the plethora of short- and long-term neurologic and psychiatric manifestations. In a significant percentage of cases, neuro-psychiatric symptoms persist after recovery and long-term sequelae have been reported. SARS-CoV-2 can infect the brain through different routes and the damage can be direct, that is due to the virus itself, or indirect, that is associated with abnormal immune responses, inflammation, and hypoxia. Studies of brain specimens obtained from autopsy demonstrated the presence of the virus in a minority of cases and this leads to hypothesize that SARS-CoV-2 may hide in sanctuary sites in the central nervous system in analogy with what observed for HIV. The existence of sanctuary sites for SARS-CoV-2 has the potential to decrease the efficacy of antiviral therapies or vaccination and may even prevent complete eradication of SARS-CoV-2 from the infected organism. In 2017, a diagnostic and therapeutic procedure was proposed with the goal of identifying and treating pathogens hiding in sanctuaries that elude diagnosis and therapy. This procedure is based on clinical evaluation, diagnostic ultrasonography, therapeutic ultrasounds, and laboratory analyses. Here, it is demonstrated that application of ultrasonography to Neuro-COVID-19 requires a specific adaptation that takes into account brain movements synchronous with breathing as well as the sensitivity of SARS-CoV-2 to ultrasounds.





These subjects, who were exposed to common environmental electromagnetic fields (house appliances, wiring, wireless communication devices), observed significant increase of Heart Rate Variability (HRV) associated with regular consumption of the supplement.

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★★★★★ 09/09/2021 about Praesidium 3 months supply
Peter Sullivan

Interesting approach

It does seem to be making me less sensitive to EMF exposures.



★★★★★ 06/12/2021 about Praesidium 3 months supply
Peter S

Most interesting and credible approach

This is the most interesting and credible approach to help reduce the health effects of #wireless and #EMF that I have seen. Probiotics with high radiation resistance that help to improve heart rate variability (#HRV), #sleep, #detox and DNA repair and #cancer radiation therapy. My body has been feeling stronger after taking these for the last week. (via Facebook: <https://www.facebook.com/174193319595118/posts/1553058025041967>)



★★★★★ 06/10/2021 about Praesidium 3 months supply
Julie K

Nutritional Therapy Practitioner

Nutritional Therapy Practitioner based in Australia. I felt the benefits within a day of taking praesidium. Will be recommending to my patients.



★★★★★ 06/07/2021 about Praesidium 3 months supply
Sara P

Deep sleep

I have been taking the Praesidium, recommended by a friend, for a week now. I noticed my sleep has really improved. Normally when we go to our Beach House up North, I have this amazing deep sleep. I have noticed the same amazing quality sleep, since taking the Praesidium. So happy I found this.

The Invention of Praesidium

This page contains a speech given by the inventor of Praesidium, Dr Marco Ruggiero, outlining the reasons why he invented Praesidium, how it works, and the benefits of protecting our bodies from EMF fields.

The full speech can be downloaded [here](#).



Section headings:

1. Introducing Dr Ruggiero
2. The Invention of Praesidium
3. How Praesidium works
4. Biological Quantum Entanglement
5. Health Impacts of EMF
6. Biological effects of 5G
7. Praesidium supports health
8. Hypersensitivity to EMF
9. Praesidium; your inner shield

INTRO

INVENT

HOW

QUANT

EMF

5G

HEALTH

SENSE

SHIELD

Introducing Dr Ruggiero

Let me introduce myself and let me describe my research experience on the biological effects of electromagnetic fields. I was born in Firenze, Florence, Italy in 1956 and in this city I graduated in 1980 from the School of Medicine.



Thank you

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