

Royal Raymond Rife And His Discoveries



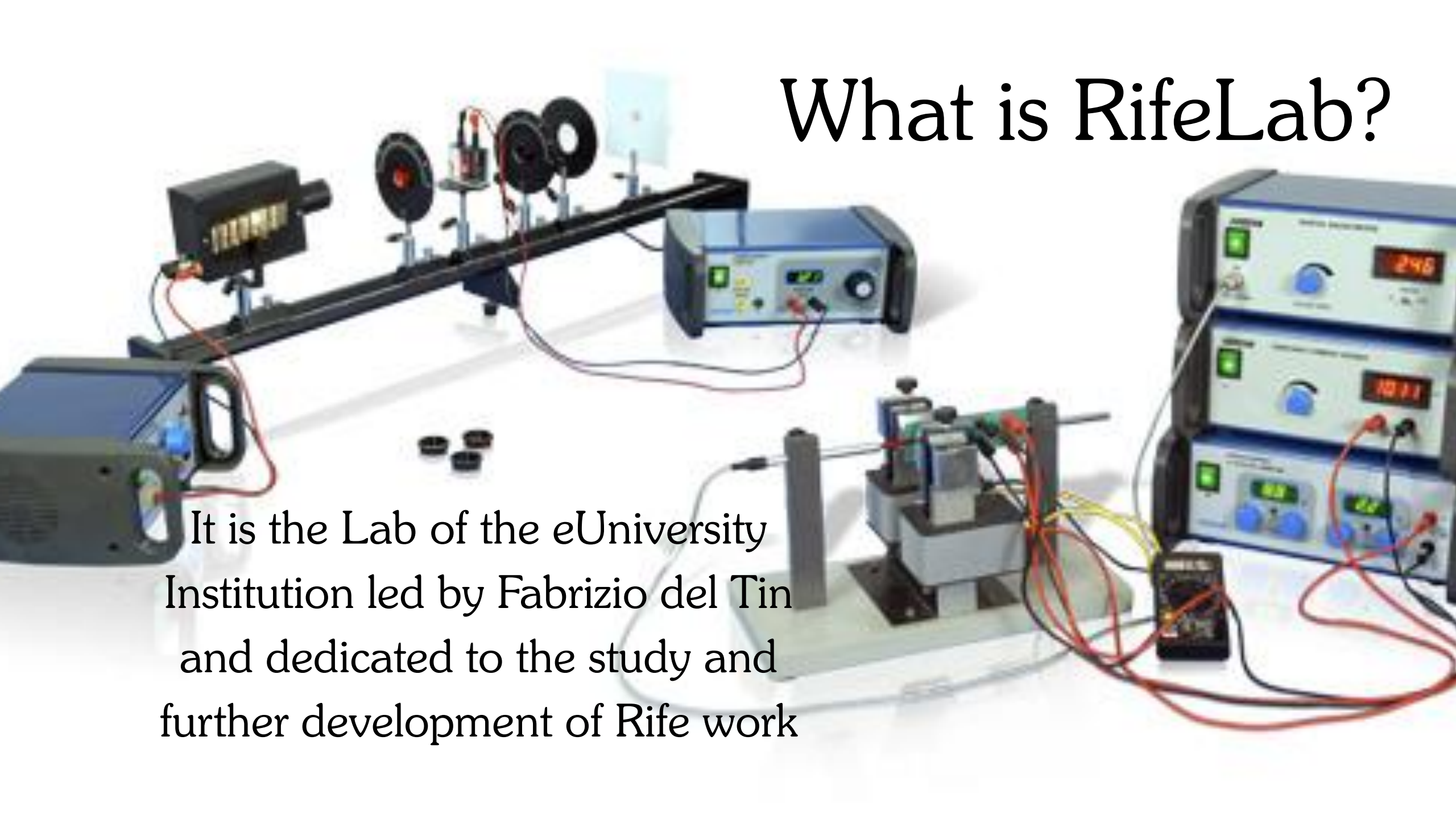
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By Fabrizio del Tin
at RifeLab

<https://rifelab.euniversity.pub>

What is RifeLab?

It is the Lab of the eUniversity
Institution led by Fabrizio del Tin
and dedicated to the study and
further development of Rife work



Who was Raymond Royal Rife?



He was a contested American researcher who developed a high magnification optical microscope and a machine that could devitalize microorganisms.

His work never went from the lab to the masses, despite some preliminary tests on human beings were conducted.

As a result of a modern revival, many have followed into his footsteps, but his secrets remain buried in his grave, as nobody could replicate his track of records ... till recently.

Can a Rife machine cure

- my broken nail
- my insomnia
- my allergy
- my asthma
- my fibrosis
- my flatulence
- my lumbago
- multiple sclerosis
- my toothache
- HIV
- my alopecia
- alcoholism
- my flue
- my rheumatism
- anything else that may come to my mind...?

The answer is a big **NO!**

Rife only dealt with a very limited number of severe pathogens

An endoscopic view of the colon, showing the mucosal lining and a large, reddish, polypoid lesion protruding from the wall. The text is overlaid on the image.

Can a Rife machine cure cancer?

Rife identified a virus associated with breast cancer and targeted it with his machine.

However, he stopped short of claiming that he could cure cancer, but did argue that he could “devitalize disease organisms” in living tissue, “with certain exceptions”

Electrotherapy, radionics, frequency resonance
... what were Rife machines really about?
In one word, **NONE** of the above!

Rife devices are currently classified as a subset of radionics devices, which are generally viewed as pseudomedicine by mainstream experts.

This is due to the fact that only post Rife devices were examined. Examples are Phil Hoyland machines, John Crane pad devices, Verne Thomson machines, John Bare systems, etc.

Nobody has ever examined early Rife machines, the only ones that passed successfully clinical trials and worked according to Rife's original tenets.

Disclaimer

However, to abide to Rife principles, a machine needs to clear off a pathogen:

- In a single flash or within max 3 minutes
- Using a particular mix of concurrent effects

No current modern Rife machine can claim that and:

- It normally takes hours to achieve any minimal effect
- May bring some temporary relief, but cannot achieve its goal in the long term

We are not against modern «Rife» machines, which were inspired by Rife but went through other paths of research. An outstanding example is Anthony Holland, who is investigating cancer cell shattering through an improved Bare device.



So, did Rife have a secret?

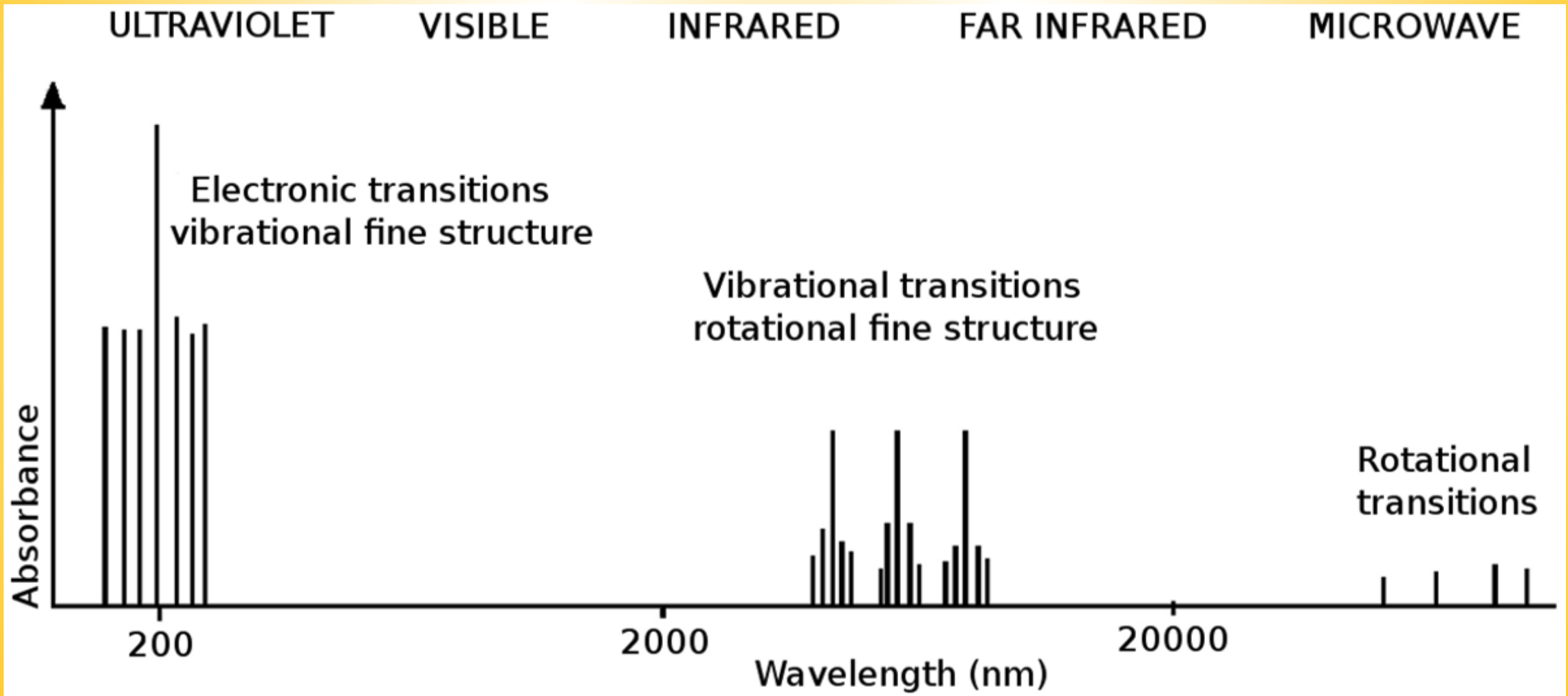
Why could nobody replicate – even Rife's later assistant, John Crane – the effects of the original earlier Rife machines?

Did earlier Rife machine really produce the claimed wonders, or was it all hype?

The Resonance Of The BX With Its M.O.R

- The dimensions of the BX vary from 40 nm (the size of its head starts from 24 nm) to 10 μm
- Rife was targeting chemical constituents, not the entire microorganism; thus, molecules are even smaller
- If we convert, for example, the wavelengths of 10 nm to 2 μm to frequencies, we have from 29.9792458 petahertz to 149.896229 terahertz
- There is no way to use even the highest M.O.R. (Mortal Oscillatory Rate) of earlier Rife machines, 1,604,000 Hz to hit petahertz. Simply, they are too distant
- Even using harmonics, it is impossible to have such a power to go from a megahertz to petahertz (1 MHz is 0.000000001 PHz). Thus, we can exclude any form of resonance

Resonant Effects At Various Wavelengths



The Beam Ray Machine

- Rife called his machine «Beam Ray» – not «Frequency Instrument»
- «Beam» and «Ray» all refer to wavelengths – not frequencies, which fall much lower in the electromagnetic spectrum
- A Beam Ray uses very high power levels (unlike modern replicas), as it can be witnessed by the electrode sputtering in the image at the right where the beam exits the glass





Rife did not use the term «wavelengths»

Instead, he used the term «frequencies» or «frequencies of light».

This led to confusion, because all thought that the working principle was in frequencies (LF to RF) – M.O.R.s – instead of wavelengths

What were M.O.R.s for, then?

- «*You need to understand that you must mimic the microscope in what it does to light up the virus so you can see them. The machine must work on the same principal as the microscope*» (John Crane to John Bedini)
- «*An electronic gun and a reflector target*» (Rife/Thompson patent application 1956, page 15)

Actinomyces (Streptothrix)	181,003 Hz
Anthrax	139,200 Hz
B. Coll (Rod form)	416,610 Hz
B. Coll (Filterable virus)	709,035 Hz
Bacillus X or BX (Cancer Carcinoma)	1,007,430 Hz
Bacillus Y or BY (Cancer Sarcoma)	1,529,520 Hz
Gonorrhea	233,000 Hz
Spinal Meningitis	426,002 Hz
Staphylococcus Pyogenes Aureus	477,900 Hz
Staphylococcus Pyogenes Albus	549,070 Hz
Streptococcus Pyogenes	719,150 Hz
Syphilis	706,000 Hz
Tubercula	234,000 Hz
Tuberculosis (Rod)	380,435 Hz
Tuberculosis (Virus)	780,000 Hz
Typhoid Fever (Rod)	759,450 Hz
Typhoid Fever (Virus)	1,445,100 Hz

Basically, M.O.R.s are the frequencies used to pump a plasma tube like an electron gun, so that it can emit a certain band of wavelengths.

A real Beam Ray mimics what nowadays we call «tunable lasers». However, at the time lasers were not available yet. Therefore, flashlamp technology was used – flashlamps are the precursors of lasers

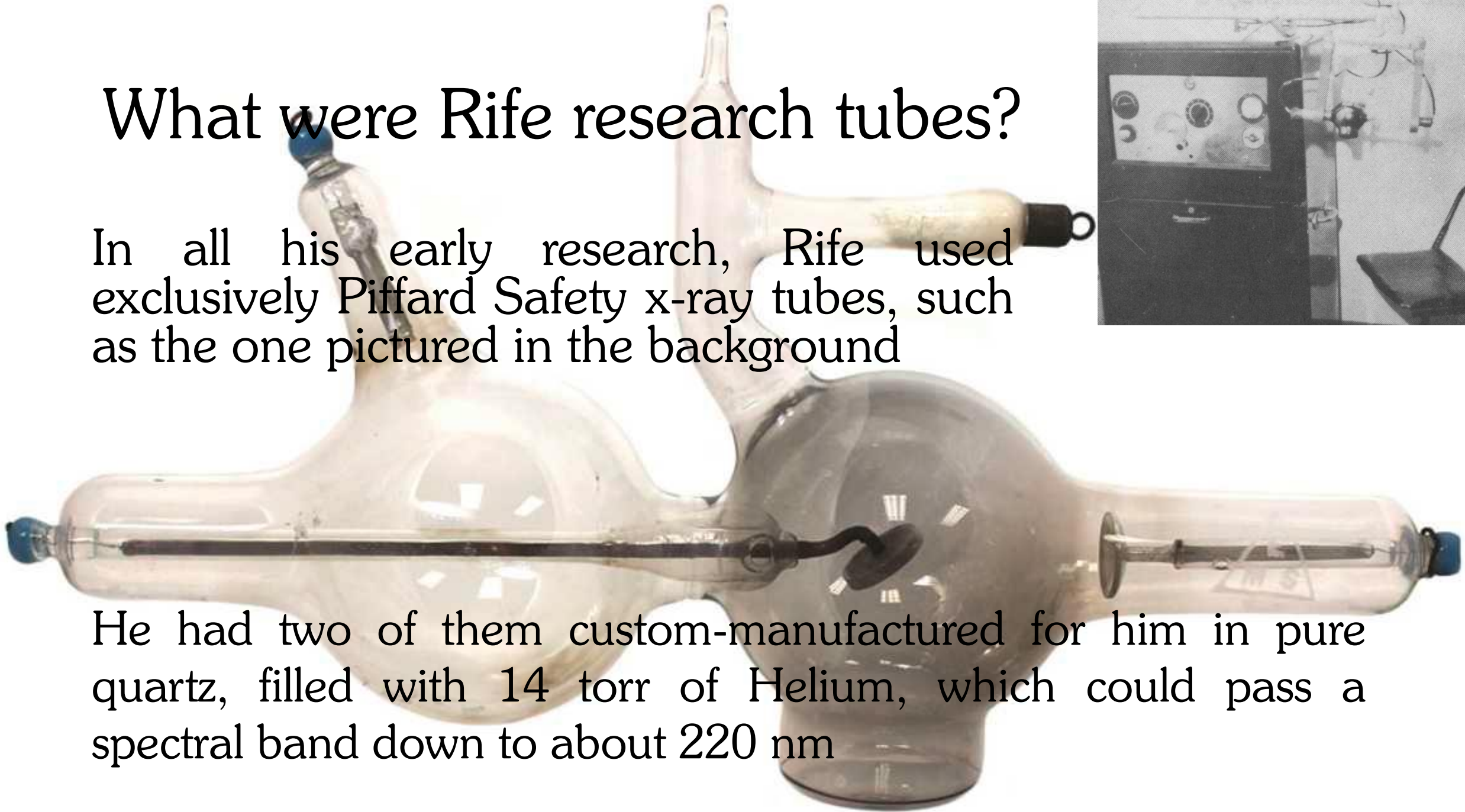
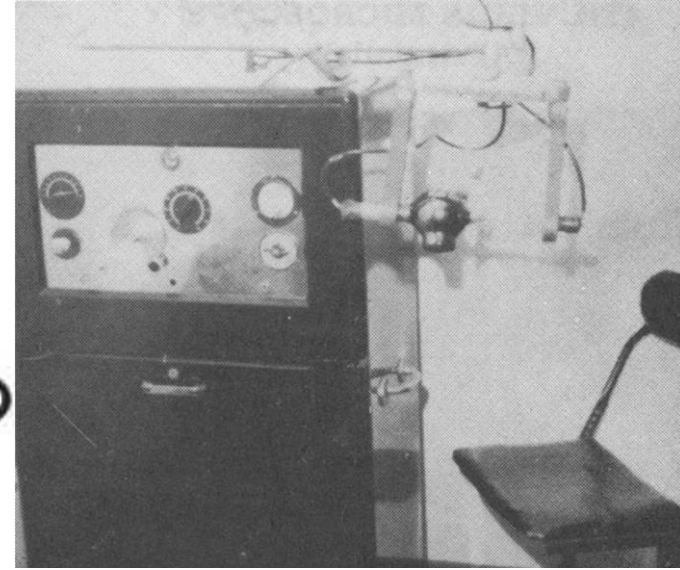
What is a Phanotron?

- A «Phanotron» is a modern term invented by post Rife developers. Rife never used one
- It was copied from Phanotron diodes (see one in the picture at the right), which are an entirely different thing
- The closest thing to a Phanotron that Rife really used is a Coolidge Universal x-ray tube, pictured in the background



What were Rife research tubes?

In all his early research, Rife used exclusively Piffard Safety x-ray tubes, such as the one pictured in the background



He had two of them custom-manufactured for him in pure quartz, filled with 14 torr of Helium, which could pass a spectral band down to about 220 nm

What tubes can be used nowadays?

- The closest thing to an early Rife tube that is commercially available nowadays is quartz DC arc tubes (background image)
- Instead of a flat mirror, they have a cone, which means they reflect the beam at 360°
- Appropriate reflectors can be used to focus the beam in one direction (image at the bottom-right)

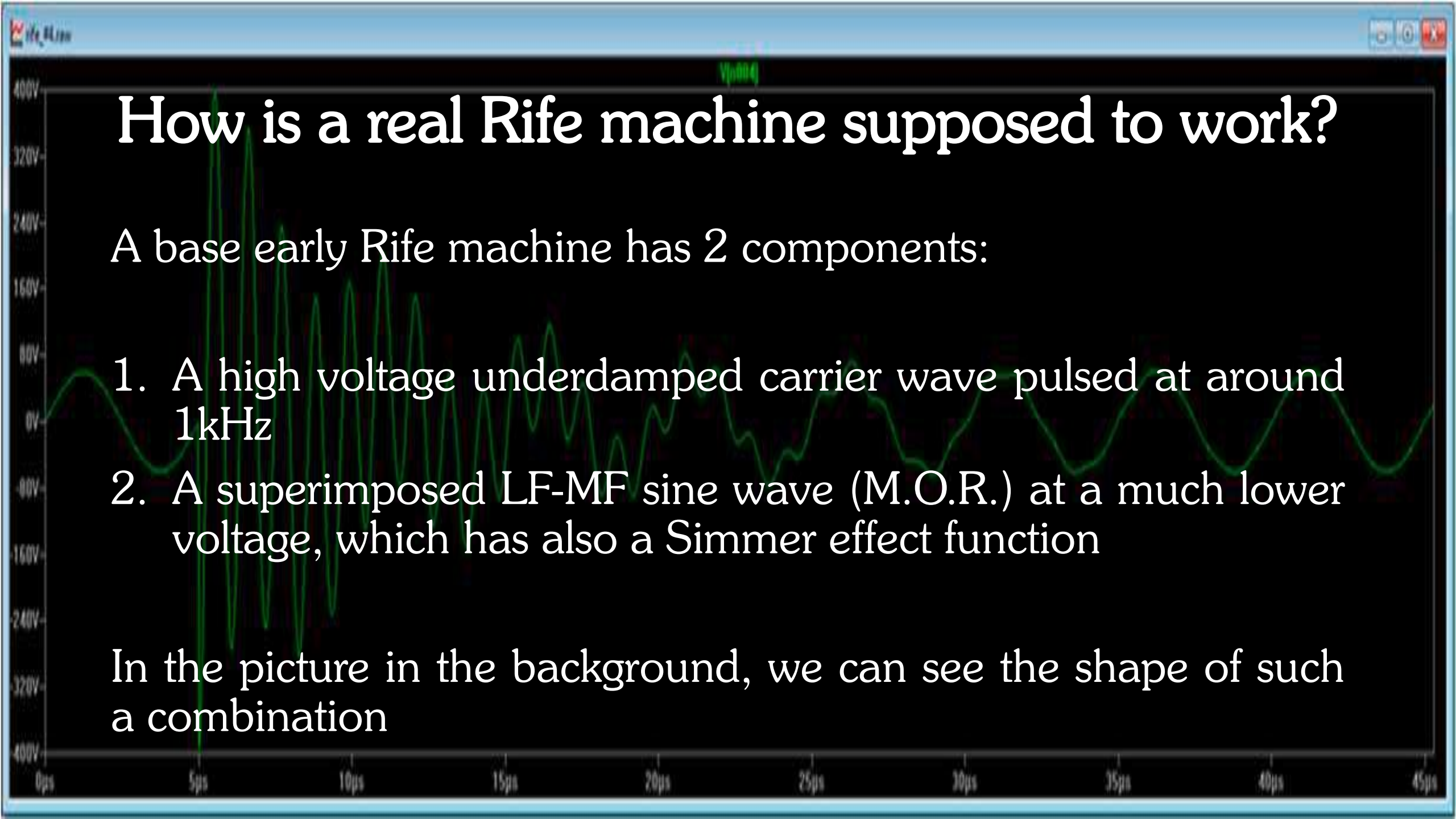


How is a real Rife machine supposed to work?

A base early Rife machine has 2 components:

1. A high voltage underdamped carrier wave pulsed at around 1kHz
2. A superimposed LF-MF sine wave (M.O.R.) at a much lower voltage, which has also a Simmer effect function

In the picture in the background, we can see the shape of such a combination



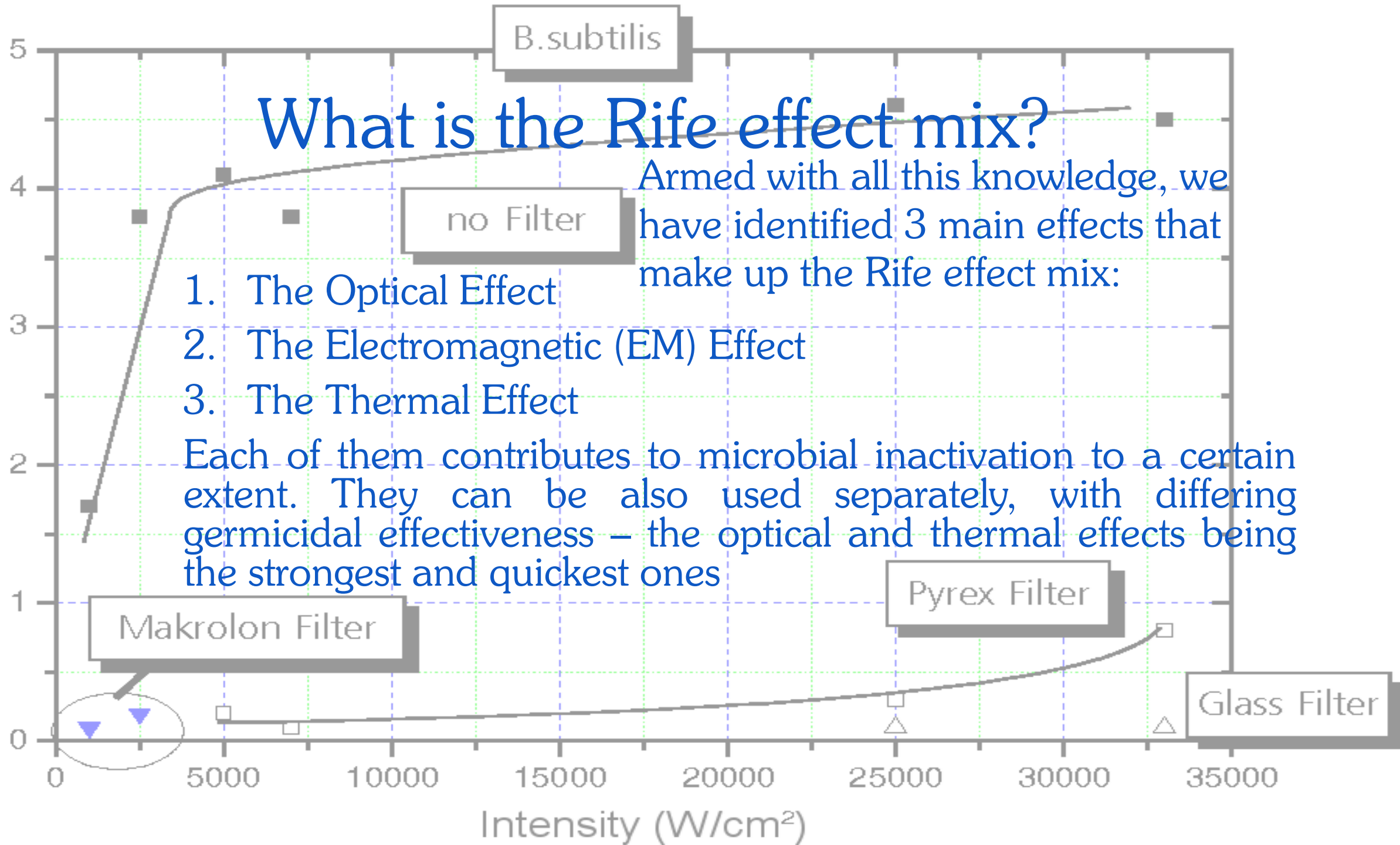
What is the Rife effect mix?

Armed with all this knowledge, we have identified 3 main effects that make up the Rife effect mix:

1. The Optical Effect
2. The Electromagnetic (EM) Effect
3. The Thermal Effect

Each of them contributes to microbial inactivation to a certain extent. They can be also used separately, with differing germicidal effectiveness – the optical and thermal effects being the strongest and quickest ones

Microbial Reduction Log



The Optical Effect

- Rife was targeting the main chemical constituents (molecules) of microorganisms
- Each molecule has its distinctive absorption spectrum and refracts light in a different way
- The refractive wavelength allowing to stain a microorganism through coordination with its molecular composition («optical resonance») and see it in its complementary color (higher visible wavelength) can be used to devitalize it, given the right power level
- The optical effect is the main one in the mix, which is found in no modern Rife machine replica. It works mostly instantly (single-hit operation) but has low penetration. It links Rife's microscopes to his machines and is the real working principle

The Electromagnetic (EM) Effect

The diagram illustrates an electromagnetic wave propagating to the right. It features two perpendicular planes: a red plane representing the electric field vibration and a blue plane representing the magnetic field vibration. The wave's direction of motion is indicated by a grey arrow pointing right. A dashed line indicates the wavelength of the wave.

- The EM field is a secondary effect contributing with a vibrational and rotational force
- Microorganisms are caught in the loop of the shaking effect and eventually become stressed, up to a point that their outer wall ruptures
- This effect is made of the carrier wave and the M.O.R. themselves. Depending on the carrier (skin impedance blocks certain frequencies), it may have either a better or worse penetration
- The EM effect works randomly. When it has some effect, it takes hours. In the long term, it fails to produce consistent results, as microorganisms develop resistance to it and adapt

Depth of penetration into the skin

The Thermal Effect

- Last but not least, pulsed bursts of EM waves induce heating
- Unlike the heat from a fire, which heats from the outside to the inside, this effect starts from the inside and goes to the outside. Therefore, it has a good penetration – the best one in the mix
- The sudden heating leads to cell wall rupture in microorganisms
- Cancer cells cannot dissipate heat well as normal cells do. Therefore, they die first. However, their thermal death point is very close to that of normal cells, requiring a perfect control of administered dose
- The photothermal effect (optical + thermal effect) is the workhorse of a Rife machine, but the thermal effect is a secondary effect of the EM one. The three do not come separate

Horny layer

Epidermis

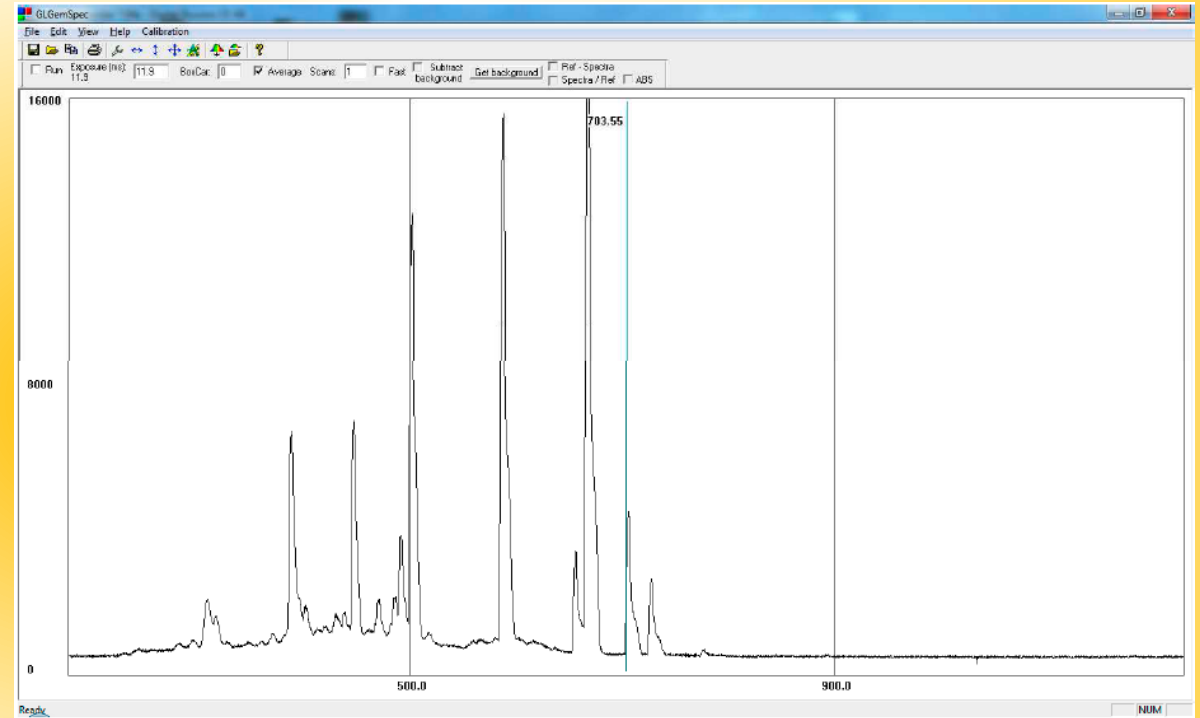
Dermis

Sub layer

Maximum penetration depth
- 5 mm

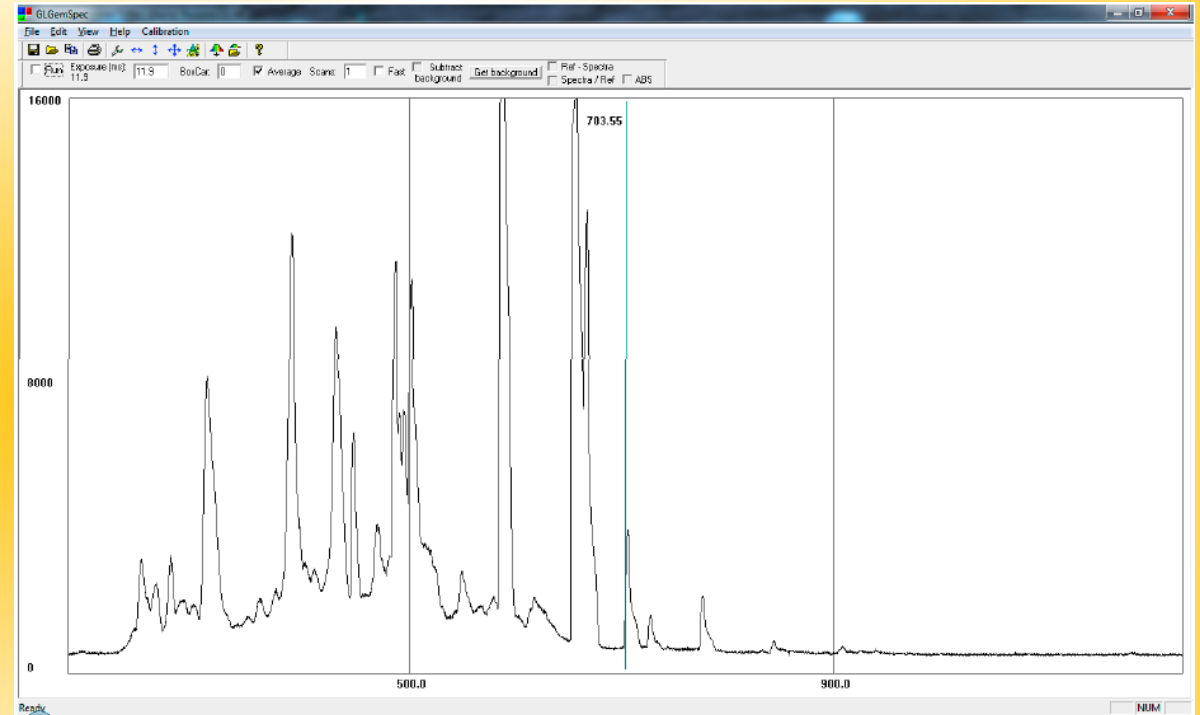
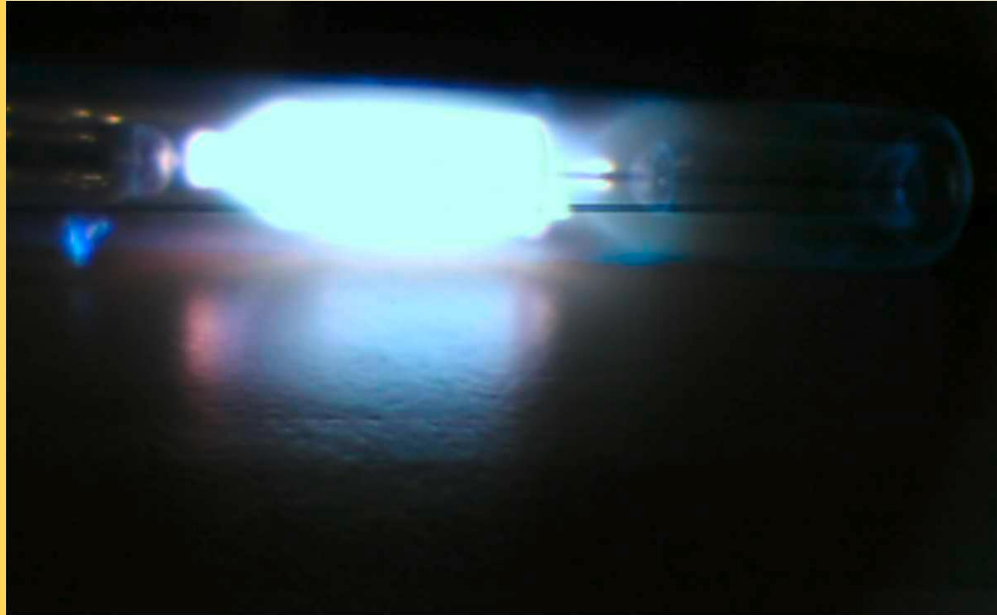
Penetration depth (mm) for 75% absorption

The beam of an early Rife machine analyzed #1



We replicated parts of an early Rife machine. With a lower M.O.R., it shows a centered spectral band more toward the visible (clear fused quartz tube filled with Helium)

The beam of an early Rife machine analyzed #2



With a higher M.O.R., it shows a centered spectral band more toward the UV. The change in color is noticeable, despite Rife tubes always emit a broad spectrum

A Rife machine is a Quantum Machine

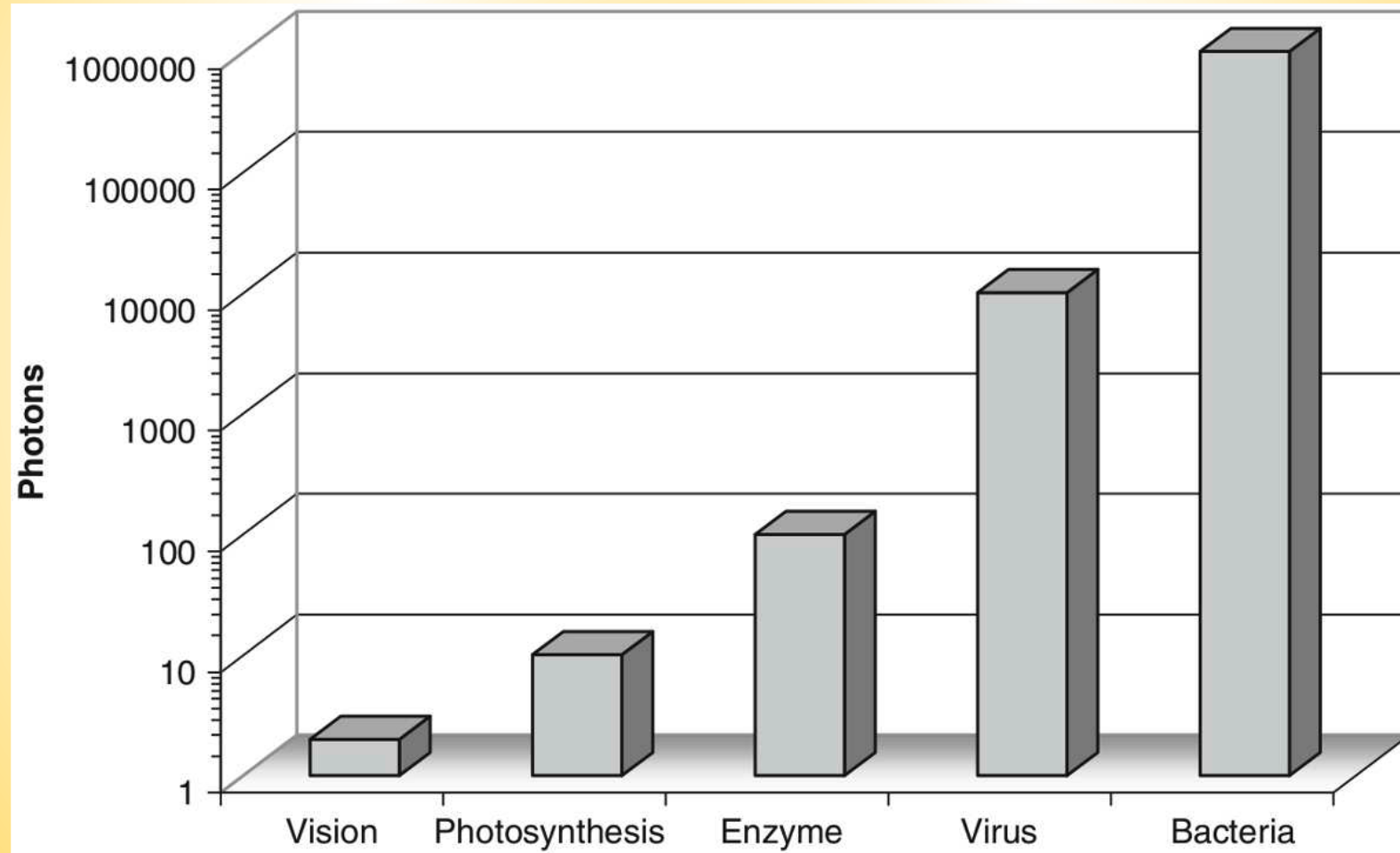
- The beam energy incident upon a microorganism can be considered in terms of the number of its photons – i.e. photon density per unit surface area
- The amount of energy a photon carries is called **quantum**
- Absorption efficiency is called **quantum yield**
- Molecular photoreaction requires a quantum yield in the order of 10^{-3} to 10^{-4}
- Electronic transitions take place only in discrete electronic jumps. Therefore, electrons can absorb only a specific quantum of energy
- When we know exactly how much energy we need to use and at which wavelength, we can easily achieve microbial inactivation



How does the Optical Effect work on targeted molecules?

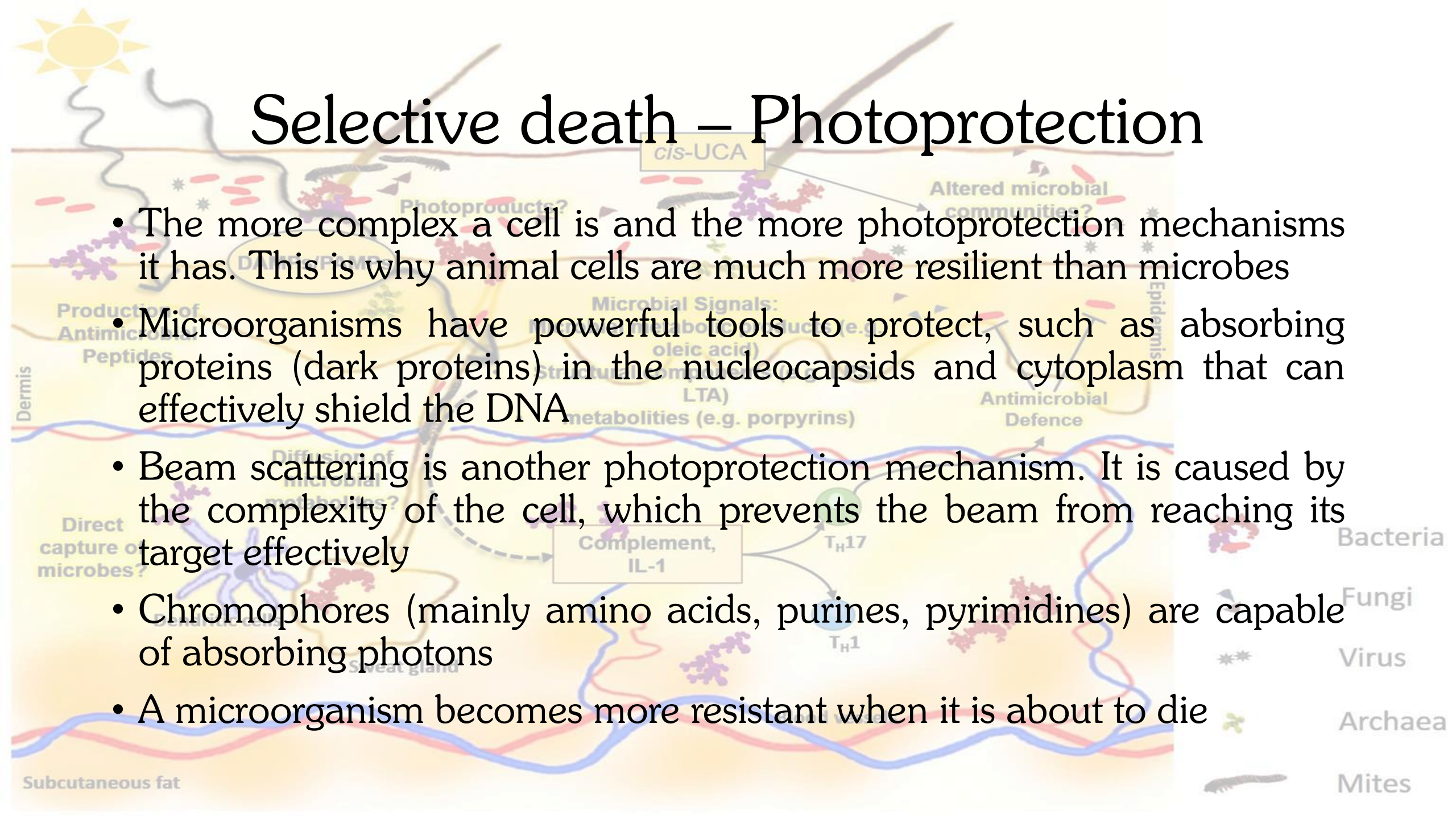
- The absorption of quanta of light by a sample is accompanied by a change in the electronic state of its molecules
- The energy supplied by the photons will push the electrons from their ground state orbitals to higher energy state orbitals
- When the supplied energy is absorbed, but not released back («optical resonance»), something must happen in the molecule
- Heat can be released, till it causes the thermal death of the microorganism
- The molecules change their chemical bonds, as they are unable to keep their previous structure (in this case, the radiation is called «ionizing»). This leads to instability, cell wall rupture, disintegration

Number of Photons required for Microbial Inactivation



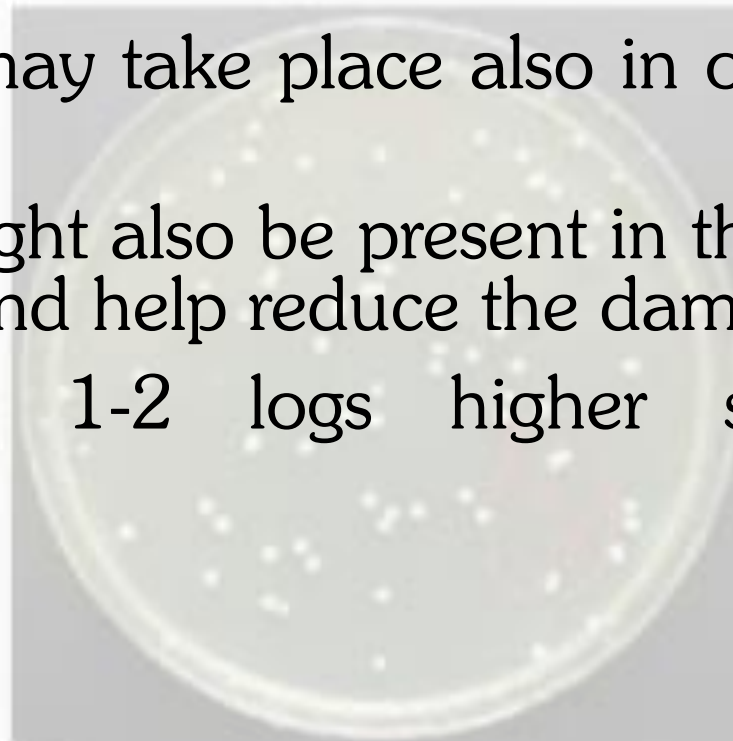
Selective death – Photoprotection

- The more complex a cell is and the more photoprotection mechanisms it has. This is why animal cells are much more resilient than microbes
- Microorganisms have powerful tools to protect, such as absorbing proteins (dark proteins) in the nucleocapsids and cytoplasm that can effectively shield the DNA
- Beam scattering is another photoprotection mechanism. It is caused by the complexity of the cell, which prevents the beam from reaching its target effectively
- Chromophores (mainly amino acids, purines, pyrimidines) are capable of absorbing photons
- A microorganism becomes more resistant when it is about to die



Microbial defence – Photoreactivation

- Photoreactivation is the natural process through which microorganisms can partially recover from beam damage
- VIS and UV light can reverse DNA damage, especially in more complex cells
- Photoreactivation may take place also in obscurity, which is called dark repair
- Enzymes, which might also be present in the host cell, can catalyze photoreactivation and help reduce the damage level
- *B. anthracis* has 1-2 logs higher survival rate due to photoreactivation



What are Absolute M.O.R.s?

- MOR lists are many because they are calibrated on a specific machine. This means they are computed from the Absolute MORs against the parameters of the machine
- The Absolute MOR is a MOR that does not change with the machine. It is the working principle behind the MOR. We could measure it for the first time, as at Rife's time the required instrumentation did not exist
- Absolute MORs are the same principle Rife used in order to tune the machine against the micro(polari)scope by eye
- They are the current per square centimeter (A/cm^2) that is needed to center a certain spectral line around a spectral band that is enhanced by means of the applied MOR or by other means
- They all fall in the UVB-UVC-DUV region

But Rife said he was not using UV. How come?

Rife's words were correct. He never used «UV», which at the time was obtained only by direct current means.

He was a pioneer in PUV – Pulsed UV – which has been described in some studies as having thrice the germicidal effectiveness of ordinary UV.

Nowadays, PUV systems have many names – UVGI, PWL, PWLD, PUVD, DUV, VUV, IPL, etc.

But Rife machines also emit visible light

This is also correct. Flashlamps are not lasers. They cannot emit only selected wavelengths. They always emit the entire spectrum of the employed gas.

However, through the action of M.O.R.s or other means, a particular band in the spectrum is enhanced, which is centered at the value of the Absolute M.O.R.

This is a common operation in PWL (Pulsed White Light) devices, which feature a wideband spectrum together with a strong UV content. There are extensive German studies on the subject, pointing out that the addition of visible light enhances microbial inactivation. But only visible light without UV works mainly through the thermal effect.

Red

Orange

Yellow

Green

Blue

Indigo

Violet

Does a Rife machine produce x-rays?

When a lot of energy is pumped in the plasma tube and the wavelength is centered around the Absolute MOR of the BX, BY, Salmonella Typhi or similar, it produces soft x-rays.

This is due to the broadband nature of flashlamps. The quartz envelope filters out UV content below a certain threshold, but it becomes transparent again in the x-ray range.

Rife stated: «*Verne Thompson used to go down there and take care of Yale's machines, when he began stepping them up and so, he used to slip a little dental film in his hip pocket, you know, with a key or something behind it and he would work around those things for a few hours and he found out that he had almost an x-ray out of it*».

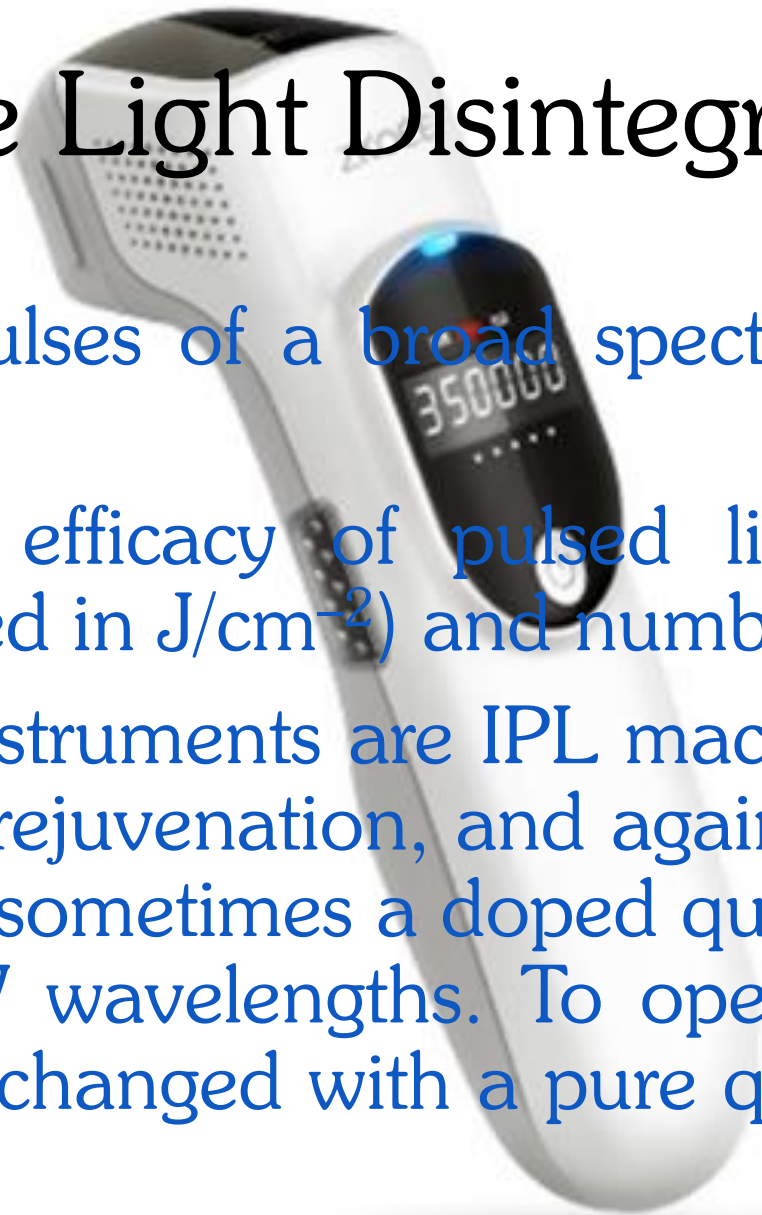
Is there a difference between a UVC and a Rife Machine?

Certainly. A UVC machine generally uses mercury, which has a strong peak at 253.7 nm. This peak causes DNA dimerization, leading to microbial inactivation. Microorganisms respond differently to the 253.7 nm peak. Thus, in some cases more energy is required, in some other cases less energy.

Conversely, a Rife machine does not target DNA specifically, but a wide array of molecules (microbial chemical constituents). Therefore, it can optimize the energy level required to inactivate a microorganism. This is Rife's real innovation, which requires further investigation.

Pulsed White Light Disintegration – PWLD

- Short duration pulses of a broad spectrum ensure microbial disintegration
- The inactivation efficacy of pulsed light depends on the intensity (measured in J/cm^{-2}) and number of pulses delivered
- A type of PWL instruments are IPL machines, which are used for hair removal, rejuvenation, and against acne. They feature a Pyrex tube and sometimes a doped quartz tube, which filters out the lower UV wavelengths. To operate in PWLD mode, the tube must be changed with a pure quartz one and screens removed



The fountain of youth

- As strange it might seem, a Rife machine can also be used for photorejuvenation
- In this mode, it removes red splotches, brown spots, scarring, reduces pore size, eliminates and reduces wrinkles, improves overall skin texture, smoothness and quality, closes capillaries
- Technically, in order to rejuvenate it operates by creating many small cracks in the tissue, forcing the triggering of the repair mechanism. The repaired tissue is structurally stronger and confers a younger aspect
- Rejuvenation mode needs UV light to be filtered out



Jarisch–Herxheimer reaction

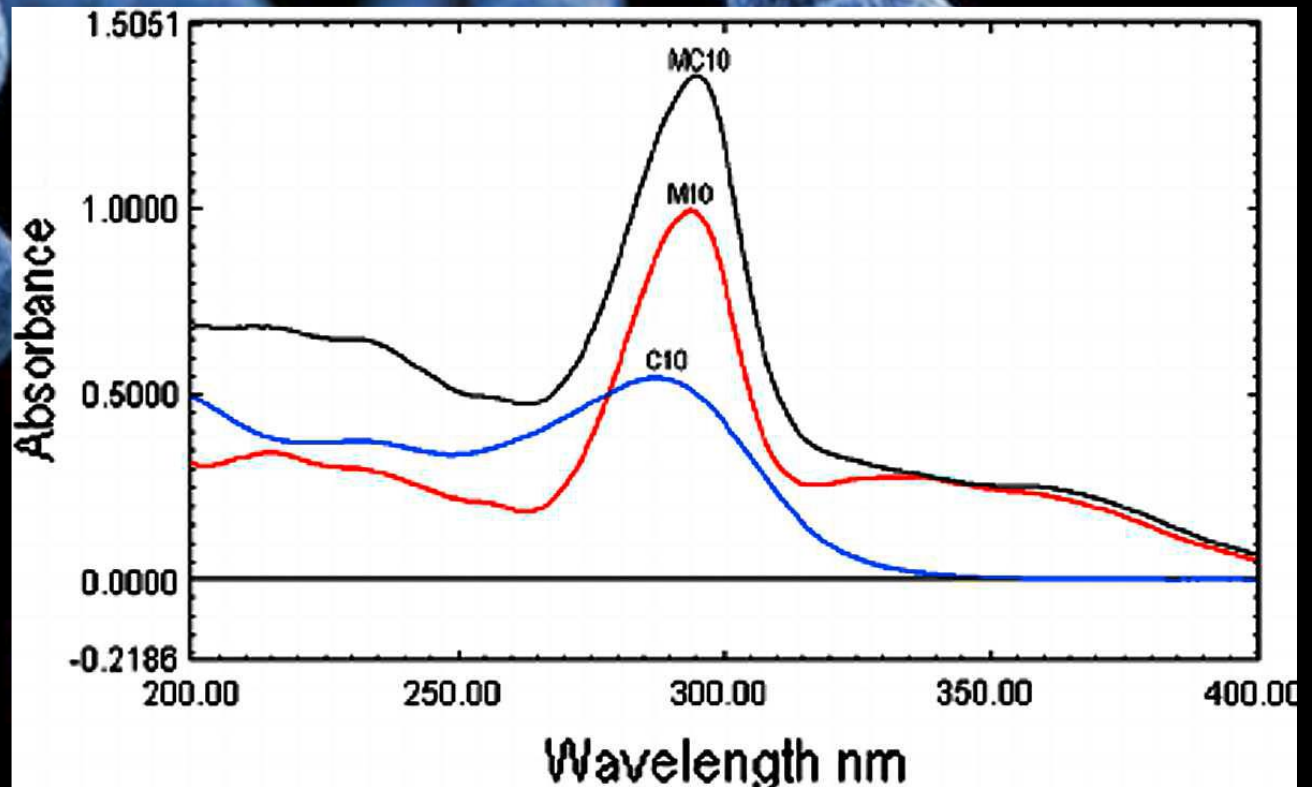
- A Jarisch–Herxheimer reaction is a reaction to endotoxin-like products released by the death of harmful microorganisms within the body during Rife sessions, which resembles bacterial sepsis
- When the bacterial cell membranes destruct, there is a consequent release into the bloodstream of bacterial toxins, resulting in a systemic inflammatory response (aspirin and ibuprofen may be used but give a limited benefit)
- Following a session, some precautions may be taken: Drink water often, avoid unprotected sun exposure for at least 30 days, do not take a hot bath (warm is fine), avoid strenuous activity or exercise for 48 hours, do not scratch or pick the skin on treated area during recovery, avoid any product or supplement high in Vitamin A (retinoic acid, glycolic acid, tretinoin/Retin-A, accutane, and alpha-hydroxy acids)

An example: Streptococcus Pneumoniae #1

- Classification: Gram-positive, alpha-hemolytic (under aerobic conditions) or beta-hemolytic (under anaerobic conditions), nonmotile; usually found in pairs (diplococci)
- Disease: Pneumonia
- Size: 0.5-1.25 μm
- Chemical constituents: Polysaccharides, peptidoglycans, teichoic acid, lipoteichoic acid, phosphorylcholine, proteins
- Absolute M.O.R.: 294.5106 nm (nucleic acids, C-H bonds)

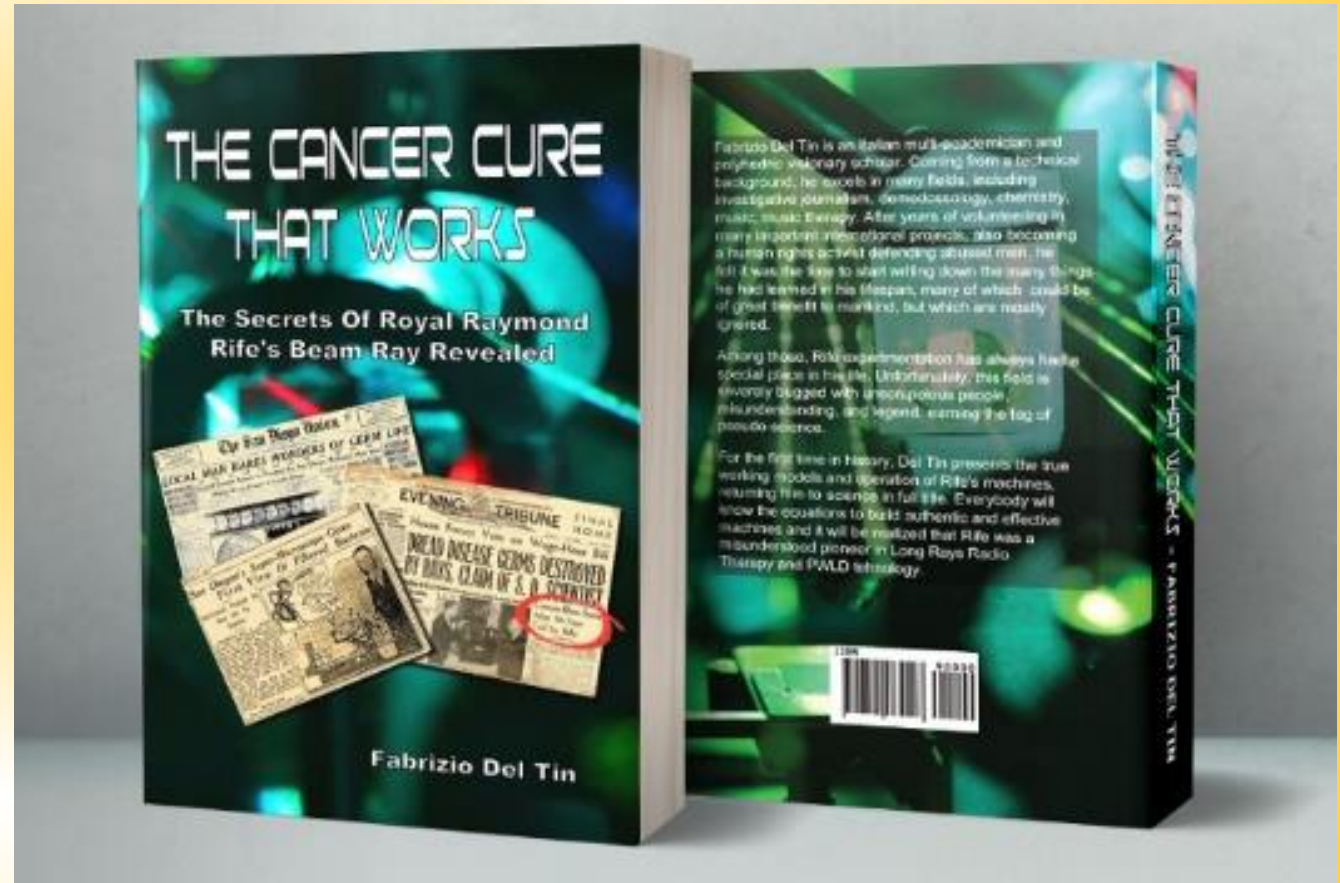
An example: Streptococcus Pneumoniae #2

The UV absorption spectra of 2 antibiotics against pneumonia – Moxifloxacin (10 μ g/mL, M10), Cefixime (10 μ g/mL, C10) and combination (10 μ g/mL each, MC10) in the diagram – show the same Absolute M.O.R. peak. Coincidence?



Our entire research in a book

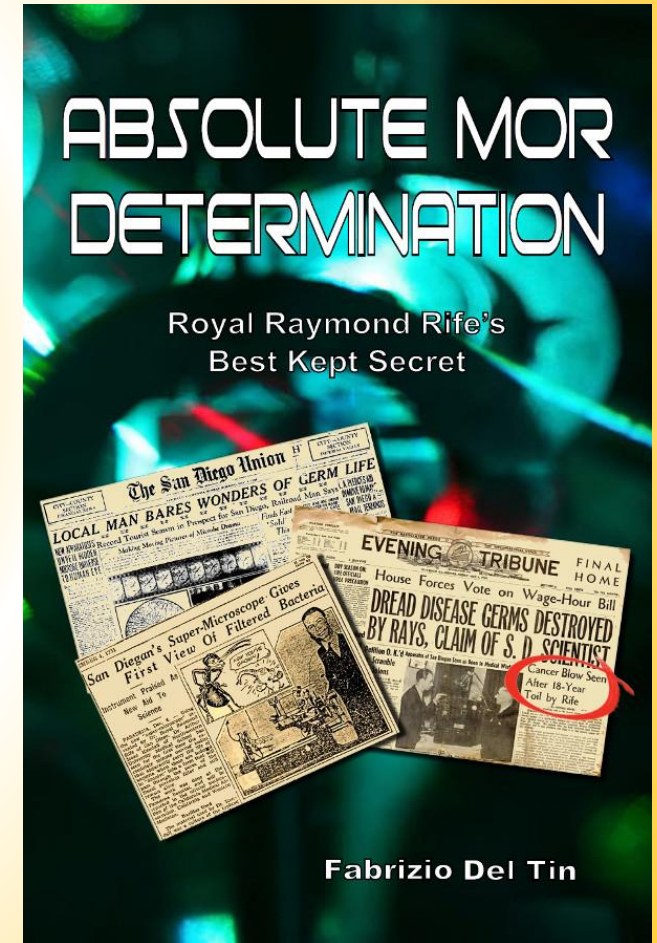
All our findings, lab tests, microbial inactivation data, circuits, clinical protocols, safety rules, even experimental quartz tube manufacturing details went into this book, which can be considered as the standard reference for Rife work. It has anything you could think of



Further developments

Our second book contains further developments:

- All Rife's microorganisms mapped, with their chemical constituents and Absolute MOR
- Equations to convert the Absolute MORs to a MOR list for a specific machine
- Method to calibrate a machine and make it fit to transpose on it the Absolute MORs
- BX and BY identified, filterable forms of bacteria identified, new microorganisms added
- Novel and less dangerous ways to destroy microorganisms (many patents quoted)
- Studies with emphasis on multi-band instruments that hit all Rife's Absolute MORs at once (no MOR/high voltage peak/etc. required)



A close-up photograph of a hand holding a fiber optic cable. The cable is glowing with a bright blue light, and a small, intense red light is visible at the end of the fiber. The background is dark, making the glowing cable stand out.

Thanks for watching!