

[EnergyPreserver](#)

If our civilization ran out of energy, it would grind to a halt, so Lifeboat Foundation is looking for solutions.

[InfoPreserver](#)

To preserve the information created by our civilization, including technology as well as art and culture.

[LifePreserver](#)

The program explores new life-extension methods, such as the work of Aubrey de Grey and Robert A. Freitas, Jr.

[NeuroethicsShield](#)

To prevent abuse in the areas of neuropharmaceuticals, neurodevices, and neurodiagnostics. Worst cases include enslaving the world's population or causing everyone to commit suicide.

[NuclearShield](#)

To prevent nuclear holocaust including destruction of entire cities.

[ParticleAcceleratorShield](#)

To prevent, and also make plans on surviving when possible, particle accelerator mishaps including quantum vacuum collapse, mining the quantum vacuum, formation of a stable strangelet, and the creation of artificial mini-black holes.

[PersonalityPreserver](#)

Methods of preserving persons — or just their personalities — include cryopreservation and uploading.

[SeedPreserver](#)

To preserve plant life and diversity on the planet by storing seeds in a safe location and other methods.

[UFAI-Shield](#)

To protect against unfriendly AI (Artificial Intelligence).

LONG RANGE PROGRAMS

[AlienShield](#)

To prevent annihilation by an alien race (biological or otherwise).

[AntimatterShield](#)

To prevent antimatter-based annihilation.

[BlackHoleShield](#)

To protect against black holes that are not manmade. This would include an "eye to the sky" program that would scan for signs of them.

[GammaRayShield](#)

To protect against gamma ray bursts.

[SunShield](#)

To protect against and/or cope with our sun becoming a red giant and other harmful fluctuations in its output.

QUOTES

Michael Anissimov was recently advocacy director for the Singularity Institute for Artificial Intelligence. He is now our new Fundraising Director, North America, and a member of our Scientific Advisory Board.

"I cannot emphasize this enough. If an existential disaster occurs, not only will the possibilities of extreme life extension, sophisticated nanotechnology, intelligence enhancement, and space expansion never bear fruit, but everyone will be dead, never to come back. This would be awful. Because we have so much to lose, existential risk is worth worrying about even if our estimated probability of occurrence is extremely low.

It is not the funding of life extension research projects that immortalists should be focusing on. It should be projects that decrease the risk of existential risk. By default, once the probability of existential risk is minimized, life extension technologies will be developed and applied. There are powerful economic and social imperatives in that direction, but few towards risk management. Existential risk creates a 'loafer problem' — we always expect someone else to do it. I assert that this is a dangerous strategy and should be discarded in favor of making prevention of such risks a central focus."

Warren Buffett, our 2002 Guardian Award winner, is one of the world's wealthiest men, and is known as the 'Oracle of Omaha' for his astute investments.

"Predicting rain doesn't count, building arks does."

"Fear may recede with time, but the danger won't — the war against terrorism can never be won."

Stephen Hawking, the famous cosmologist who discovered that black holes are not completely black, but emit radiation and eventually evaporate and disappear.

"It is important for the human race to spread out into space for the survival of the species. Life on Earth is at the ever-increasing risk of being wiped out by a disaster, such as sudden global warming, nuclear war, a genetically engineered virus or other dangers we have not yet thought of."

Garry Kasparov is chairman of the United Civil Front, a democratic activist group based in Russia. He was the world chess champion for over 20 years.

"My matches against generations of chess computers made it painfully clear to me that the march of technology cannot be stopped. The lucky moment we have inhabited, in which weapons of mass destruction (WMD) are prohibitively expensive and difficult to manufacture, is rapidly coming to an end."

Ray Kurzweil was the principal developer of the first omni-font optical character recognition, the first print-to-speech reading machine for the blind, the first CCD flat-bed scanner, and the first commercially marketed large-vocabulary speech recognition. He is a member of the U.S. Army Science Advisory Group, our 2005 Guardian Award winner, and is on our Scientific Advisory Board.

"We can envision a more insidious possibility. In a two-phased attack, the nanobots take several weeks to spread throughout the biomass but use up an insignificant portion of the carbon atoms, say one out of every thousand trillion (10¹⁵). At this extremely low level of concentration, the nanobots would be as stealthy as possible. Then, at an 'optimal' point, the second phase would begin with the seed nanobots expanding rapidly in place to destroy the biomass. For each seed nanobot to multiply itself a thousand trillionfold would require only about 50 binary replications, or about 90 minutes."