Compassionate Science, Sustainable Planet

Luis Falcón, MD, MSc
About me

Luis Falcón
Founder, GNU Solidario
Author of GNU Health
falcon@gnuhealth.org

Education

- Computer Scientist
- Physician
- Genomics & Medical Genetics

Activism

- Social Medicine
- Animal Rights
- GNU Solidario is a non-for-profit organization
- Works globally
- Focused on Social Medicine
- Fights for the rights of human and nonhuman animals
- NPO behind GNU Health and Global Exposome Project
GNU Solidario around the world
Projects from GNU Solidario

GNU Health
The Libre Digital Health Ecosystem

GNU Solidario
Advancing Social Medicine

ROMPIENDO CADENAS

Global Exposome
GNUHealth: The Libre Digital Health Ecosystem
GNUHealth HMIS component
GNUHealth: A Digital Public Good, helping millions around the world
Rompiendo Cadenas

ROMPIENDO CADENAS
Free beagles from experiments at University of Barcelona, and replace them by ethical, human-relevant methods.

A call to accelerate human-focused medical research.
The Global Exposome Project - GEP

GlobalExposome
Compassionate Science, Sustainable Planet
**Exposome**

“Exposome/ (ˈɛkspəʊˌsəm) /

“The cumulative measure of environmental influences and associated biological responses throughout the lifespan, including exposures from the environment, diet, behavior, and endogenous processes.”

Miller and Jones (2014)
Humanity has become a victim of its own greed and cruelty.

Human is both the cause and the victim of a global, chronic inflammatory process.

- Anthropocentrism
- Capitalism
- Speciesm
- Abuse of natural resources
- Social gradient & inequity
The Failure of Animal experimentation: A cruel business lost in translation

- Over 96% trials result in failure
- ≈100% failure in neurodegenerative conditions
- Lost in translation from preclinical animal trials to human.
- 3Rs (Replace, Reduce, Refine) has failed
- Use of public institutions by pharma corporations for obscure experiments.
- Time to fund open science, cruelty-free, modern human relevant research.

They kidnap, stress, torture, hurt and kill sentient beings.

Argument solid enough to stop here
Alternatives to Animal Experimentation

NAMs

- New Approach Methodologies
- Human relevant
- Ethical
- Affordable
- Dynamic
- Specific to individual / context

From Petri Dishes to Organ on Chip Platform: The Increasing Importance of Machine Learning and Image Analysis
The Stiletto Project:
A Computational Model of the Cerebral Perforating Arteries in Health and Disease

- Multi-disciplinary project
- Part of the Global Exposome Project
- Cruelty-free research (no animal models)
- Tiny cerebral arteries (µm) critical in cerebral homeostasis
- Study of Small Vessel Disease (SVD) and cognitive impairment / dementia
- Brain microcirculation and the neurovascular unit (NVU)
- Role of exposome
- Open Science for education and research

A computational model of the cerebral perforating arteries in health and disease
Medical Imaging with Orthanc
Participating institutions will send the information to the GH Federation
Individuals can also participate.
GNU Health Federation: Collaborative, Open Science

**Information**
gathered from participating institutions across the globe.
*Statistics, validation,...*

**Open Science**: Researchers and Scientists from around the world will be able to participate

**Improve quality of care**
From Medical imaging, laboratory and genomics to *Socioeconomic and lifestyle* information

The **person** can be an active player in the system of health

**Using GPL license** saves millions of euros and boosts collaboration for the betterment of our health systems.
Become part of the Global Exposome Project!

Send your ideas / project to:

info@globalexposome.org
exposome@gnusolidario.org
GNU Solidario: A social project with a bit of technology behind

First GNU Solidario project. Santiago del Estero, Argentina 2006
Thank you for supporting us!

https://www.gnusolidario.org/support