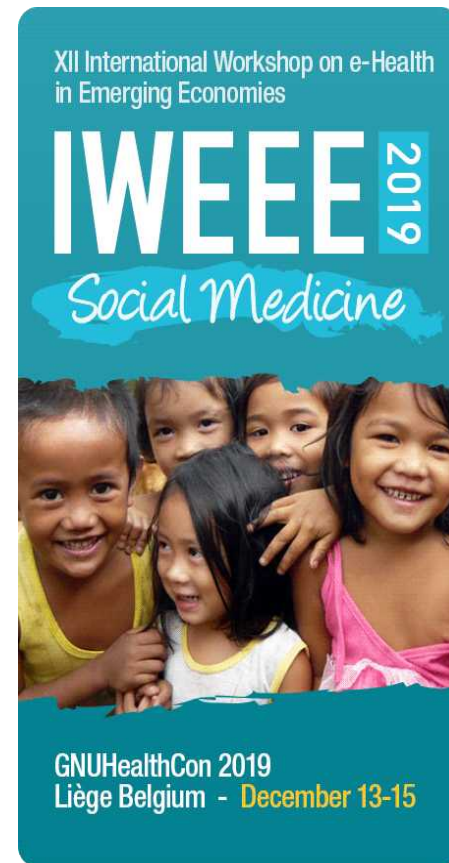# The Fight for our Rights in Public Health

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Freedom and Equity in Healthcare

GNU Health is, first and foremost, a Social Project

...with really cool technology

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From GNU Solidario

Group pic from **GNUHealthCon 2018** in Canary Islands

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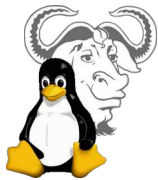Dr. Luis Falcon, M.D.

Official GNU Package

Official GNU Package, from the Free Software Foundation

Open Documentation

Relies on free technology

Friendly community

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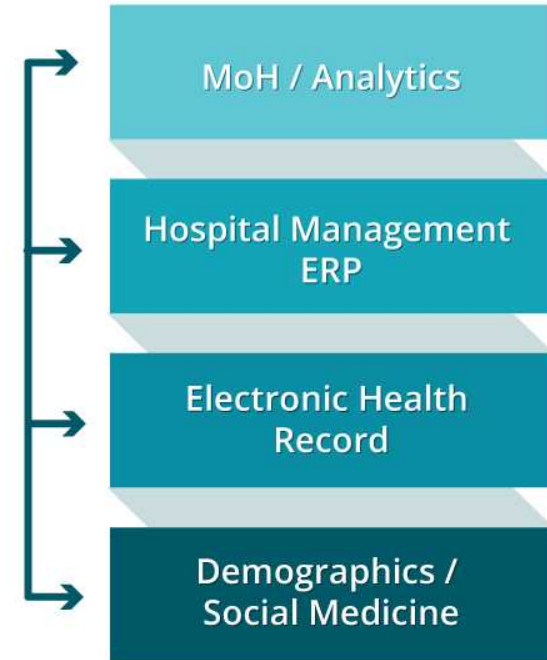
GNU Health Ecosystem

GUADEC 2019: The GNOME Conference
Thessaloniki, August 23rd

The fight for our rights in Piublic Health
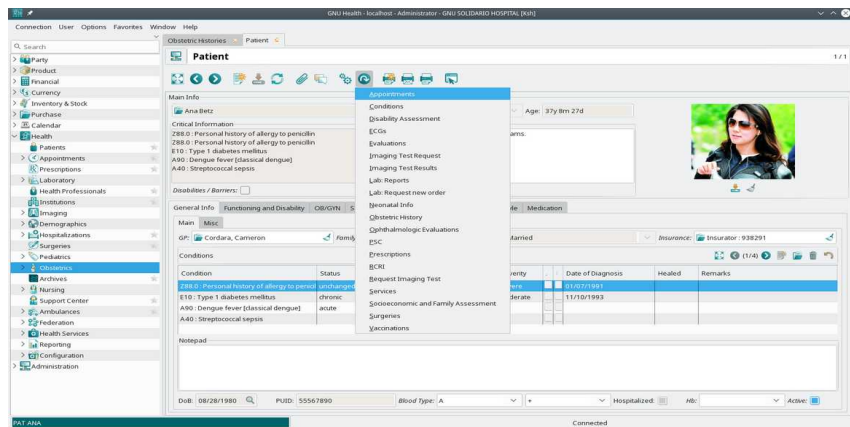Dr. Luis Falcon, M.D.

GNU Health ecosystem

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Projects from the GNU Health ecosystem

GNU Health snapshots
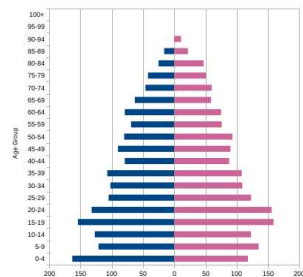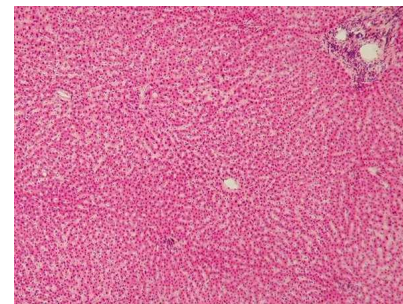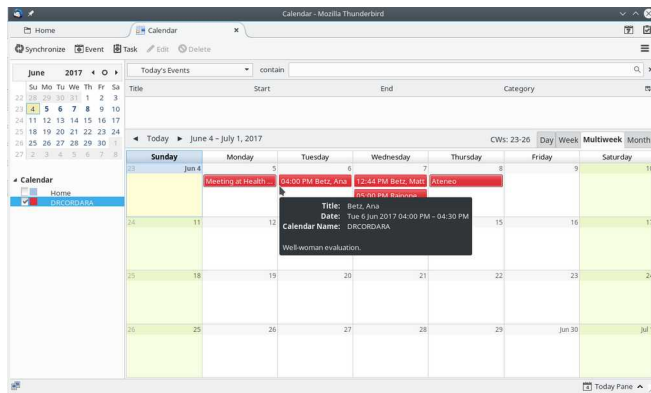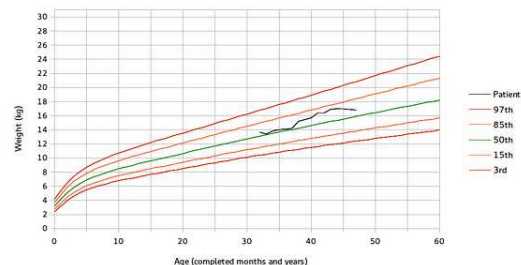
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GNU Health + Orthanc

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We live in a World of Injustice

Health is a Fundamental Human Right

"No one should get sick and die just because they are poor, or because they cannot access the health services they need."

World Health Organization

The right to health for all people means that everyone should have access to the health services they need, when and where they need them, without suffering financial hardship.

https://www.who.int/mediacentre/news/statements/fundamental-human-right/en/

UNIVERSAL = EVERYONE

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Over 20000 Children die _every day_ from Social Diseases

Human Trafficking
War
Contaminated Water
Malnutrition
Drug abuse
Chagas
Prostitution
Tuberculosis
Child Labour
Domestic Violence
Malaria
HIV /AIDS

Europe

United States

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Victims of War, indiference and hypocrisy

The macabre business of war

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Ditch Meat & Dairy: For the animals, for your health, for the Planet

Factory farming accounts for 37% of methane (CH4) emissions, 20 times the global warming potential of CO2.

* Extremely cruel

* Stress → immunocompromise → ATB → Resistance

* Milk / meat with ATB, Hormones, …

* Linked to cancer and cardiovascular disease in humans

* Global warming
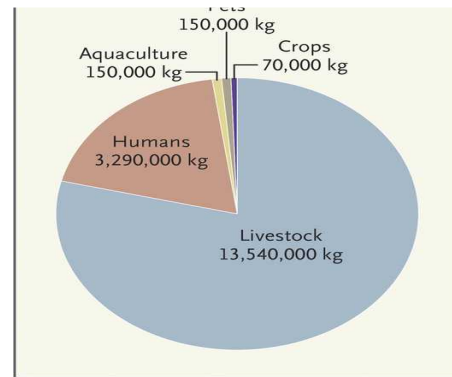
New England Journal of Medicine

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When Healthcare becomes a business, patients become clients

Privatization of the Public Health

The rise of private healthcare

Financial institutions as insurance companies

Health becomes a privilege of a few

Sophistication and de-humanization of medicine

The patient becomes a client

Focused on disease and not on health

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Health Information SILOS
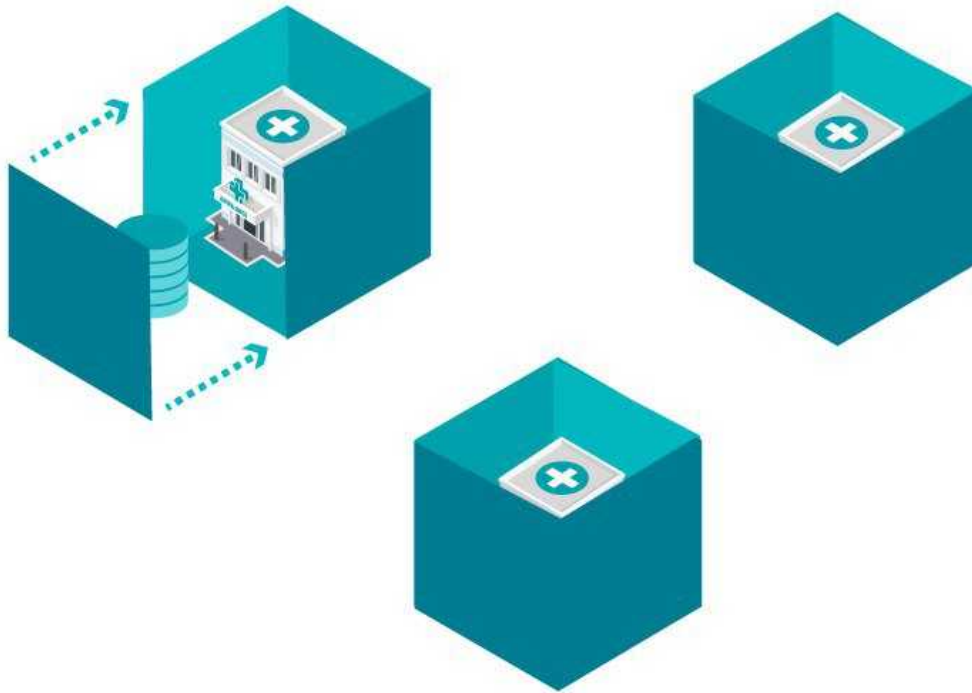
The information is locked

Different health histories at each institution, most of them obsolete / not updated

Health professionals and patients can not share medical information

Opposes team work among health professionals and patients

Takes away precious time from the health professional

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Our Mission:
Bring back Freedom & Equity in Healthcare

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Free/Libre Software requires social activism

Free Software as a Catalyst of a Free Society

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The GNU Health Federation Collective Freedom
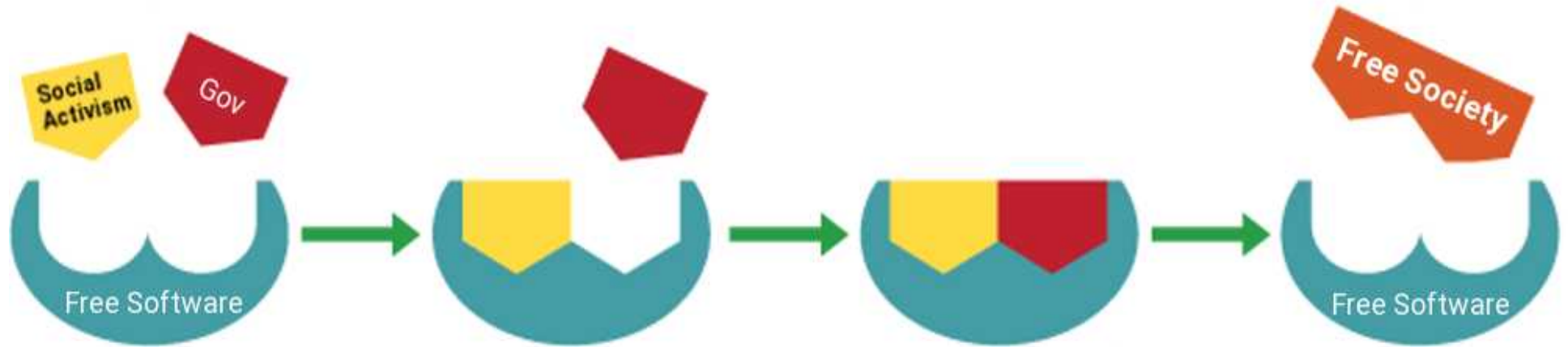
GUADEC 2019: The GNOME Conference
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GNU Health Federation

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GNU Health Federation

Community based, **community managed**

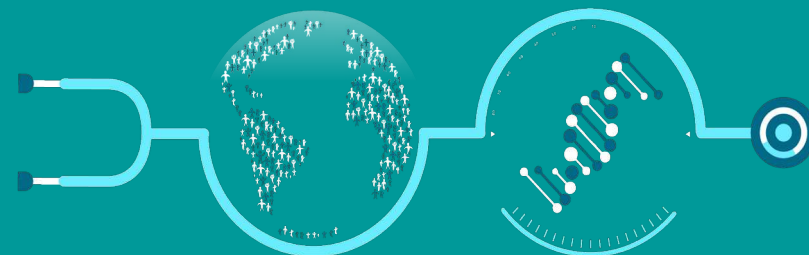Based on **collaboration** instead of competition

Independent. No Lock-ins

Integrates multiple sources and actors

Generates **ethical economic model**

Creates strong local community

Sustainable in time

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A proposal to our governments

Unique ID & history
Person demographics and **medical history up-to-date** no matter the health institution she goes across the country

Improve quality of care
Health professionals have better and timely patient information. Saving time and providing better healthcare

Empower the community
The person is now an active player in the system of health

Public Money, Public Code !

Libre Software: No hidden code, no blackboxes in healthcare.

The health software will be a **public good.**

Save millions of euros in licenses that can go to improve the public health system.

GNUHealth™

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GNU Health Federation in Cancer research

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Contextualized patient information

Federation Account : ESPGNU777ORG

Gene : BRCA1 (breast cancer 1, early onset)

Locus : 17q21

Protein code : P38398 . **URI** : https://www.uniprot.org/uniprot/P38398

Natural variant : VAR_007757 // **p.Cys61Gly**

Phenotypes: DI-02602: **Breast Cancer** . MIM Code : 114480

                               DI-01655: **Ovarian Cancer** . MIM Code: 167000

Onset age : -

Family history: **Mother** : C50.1 Malignant neoplasm central portion of the breast

                               Grandfather (maternal): Q87.4Marfan Syndrome

Medical History: Type 1 Diabetes (7y) / allergic to β-lactams // appendectomy (13y)

Lifestyle: Ex-smoker //...

Genetics
+
Family history
+
Lifestyle
+
Socioeconomics

The GNU Health Federation can help finding the answer to many **genetic natural variants of unknown clinical significance**

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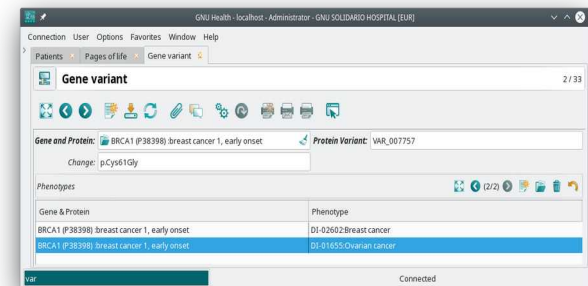
GNU Health Federation Community Hub

Community public server in Munich
Demo and test environment
Main Federation components:

* HMIS node and PgSQL
* Thalamus message server
* Person / Patient Master Index HIS
* openSUSE Leap OS

The GNU Health Federation Community Hub allows developers, health practioners and research institutions from all over the world to learn, test and develop their nodes & integrate them in the Federated network.

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Some projects around the World

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From clinics in the African rainforest

GNU Health

Social Medicine at the heart of Africa

http://health.gnu.org

To the largest hospitals in Asia

All India Institute of Medical Sciences chooses **GNU Health**.

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GNU Health and the World Health Organization - WHO

WHO Immunization schedules

Malaria, TB and HIV modules

Essential list of medicines

Neglected Tropical Diseases

ICD-10   ICPM

Pediatric growth charts

Training sessions with WHO Africa regional officers

GNU Health implementation at Bafia district Hospital, Cameroon with the World Health Organization

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Adopted by

UNITED
NATIONS
UNIVERSITY

Jamaica Public Health System

Started as a joint project between Government of Jamaica Ministry of Health and GNU Solidario

Local team

Sustainability and independence

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Red Cross / Cruz Roja

Cruz Roja Mexicana uses GNU Health, **Over 300,000 evaluations / year**

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GNU Health at Laos public health

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GNUHealth

ALLIANCE
OF ACADEMIC AND RESEARCH INSTITUTIONS

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GNU Health and the Academia

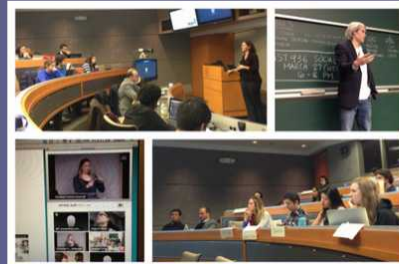United Nations University, Kuala Lumpur,Malasia

Univ. Palermo, Italy

University of Entre Rios, Argentina

HST.936: Global Health Informatics to Improve Quality of Care

The 2015 iteration of our course will focus on **Public Health Emergencies and Humanitarian Crises**.

Classes begin: February 6, 2015
Fridays 9am – 11am ET (GMT -5)
Room: **09-057**

Harvard / MIT, Boston, United States

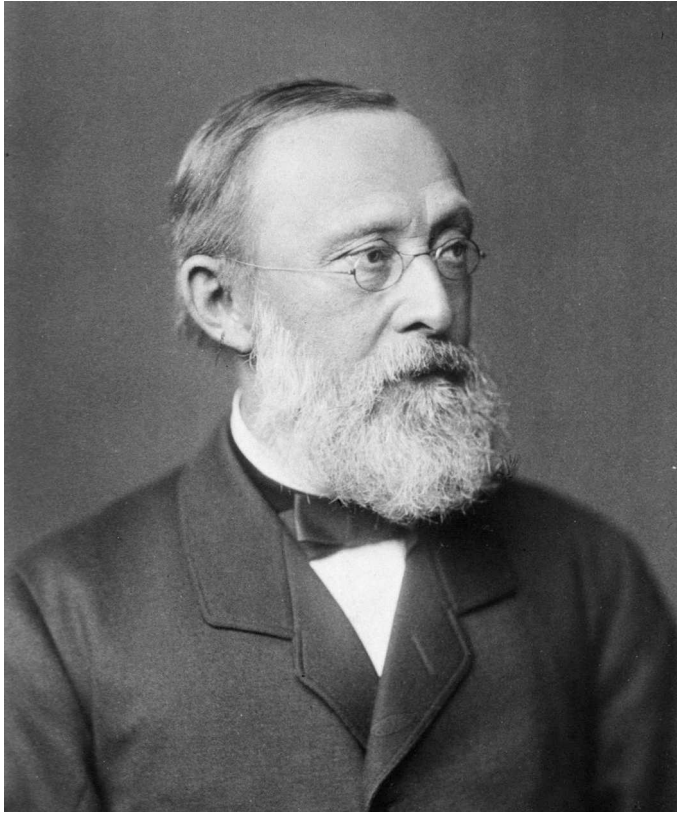UNIVERSIDAD DE CIENCIAS MÉDICAS
Matanzas

Univ. Matanzas, Cuba

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Social Medicine

"Medicine is a social science, and politics is nothing else but medicine on a large scale"

Rudolf Virchow

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Join us !

🌐 www.gnuhealth.org

🐦 @gnuhealth

✉️ health@gnusolidario.org

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Become a member and win a Raspberry Pi !

🌐 www.gnuhealth.org/join

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Health must remain a non-negotiable human right

GNU Solidario first project :Santiago del Estero, Argentina, 2006

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