



Slides: bit.ly/oshland



The current landscape of OS Hardware

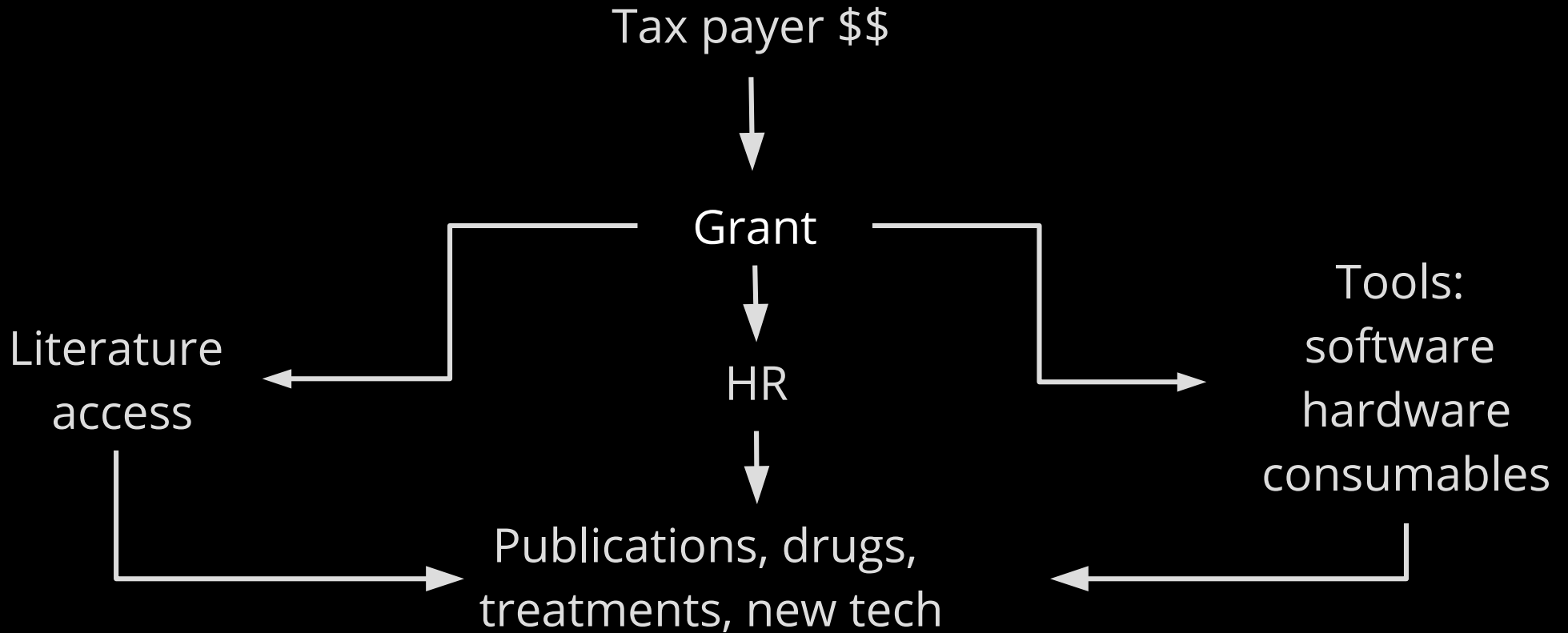
Andre M Chagas
17.04.2018



Outline

- Funds for Science and Education
- Projects
- Companies
- GOSH
- Repositories

Funds for Science and Education



Funds for Science and Education

Publications, drugs, treatments, new tech



Patent, copyright



Technology transfer

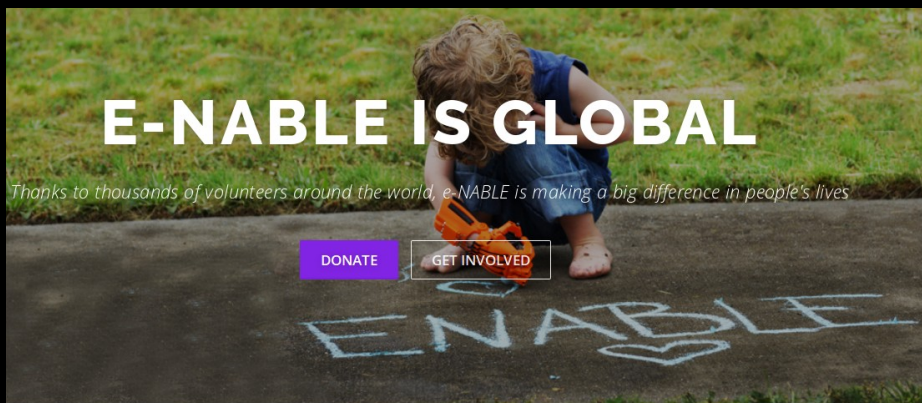


Distribution/production Oligopoly



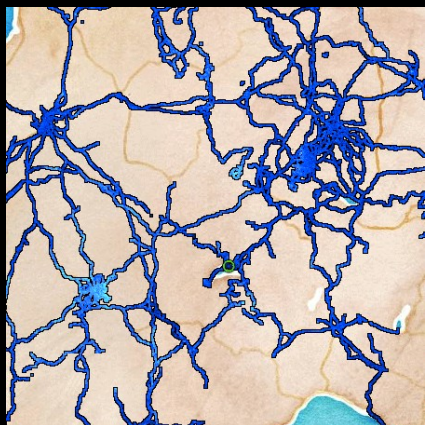
High Costs

Projects



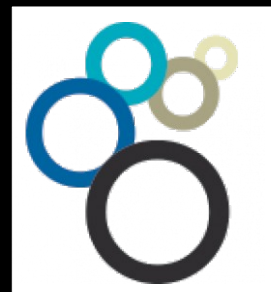
Open Source Toolkit

A global forum for open source hardware and software research and applications



\$5 DNA Replicator

The one of the most revolutionary inventions of the 20th Century, designed for DIY gene replication. (Now with a working prototype!)



Companies

BACKYARD  BRAINS

 WaterScope

quartz crystal microbalance
 OPEN

OPENBCI

 open ephys

OLIMEX

OPENROV

NEURO  TINKER

Sanworks

flyPAD
fruit flies going hi-tech

 IO Rodeo
Smart Lab Technology

 irnas

 opentrons

 openiolabs

 SAFECAST

 Prometheus Science


KitHub

Gathering for Open Science Hardware

[ABOUT GOSH](#) ▾[GOSH CODE OF CONDUCT](#)[GOSH MANIFESTO](#)[GOSH ROADMAP](#)[GATHERINGS](#) ▾[NEWS](#)

 [Read the GOSH Roadmap!](#)



 [GOSH 2018 – Shenzhen in Sep/Oct!](#)



 [Join the GOSH Forum](#)



GOSH Manifesto

- ▼ GOSH is accessible
- ▼ GOSH makes science better
- ▼ GOSH is ethical
- ▼ GOSH changes the culture of science
- ▼ GOSH democratizes science
- ▼ GOSH has no high priests
- ▼ GOSH empowers people
- ▼ GOSH has no black boxes
- ▼ GOSH is impactful tools
- ▼ GOSH allows multiple futures for science

GOSH 2017 lead to...



**AFRICA
OPEN SCIENCE
HARDWARE**

GOSH 2018



GOSH 2018 – Shenzhen in
Sep/Oct!

all categories ▾

Categories

Latest

Top

+ New Topic

Category

Topics

Latest

General

2 / week

This is the right place for general discussions about Open Science Hardware. Want to show or ask for something, this is the right place to start.

■ **Funding opportunities****GOSH 2017**

93

This is the right place for discussions about the 2017 Gathering that takes place in Santiago, Chile. Welcome to GOSH 2017!

- **Sessions** ■ **I. Support GOSH Community**
- **II. Grow GOSH Community** ■ **III. GOSH for traditional developers**
- **IV. Research to support GOSH** ■ **V. Institutional support for GOSH**
- **VI. Funding** ■ **VII. Education, training, learning**
- **VIII. Impacts and Seeing Success**
- **IX. Supporting GOSH in all its parts**

Communities

1 / week

Space for supporting community communication and engagement. If you would like to use this space for your community, please contact GOSH organizers for creating a dedicated category.

- **Lantino Americanas** ■ **Education** ■ **Single Pixel Camera dev group**
- **Digital Biology** ■ **AfricaOSH**



OSch - Environmental Sensing and Community Science

■ **General**

gosh_resources, collaboration

12
4m

Generic data logger

■ **General**1
36m

Alternativas a 'Global South'?

■ **Lantino Americanas**9
5h

GOSH talk at Tech4Dev 2018? (UNESCO Chair in Technologies for Development: Voices of the Global South 27-29 June 2018 | EPFL, Lausanne, Switzerland)

■ **General**16
14h

Oportunidades de Financiación

■ **Lantino Americanas**7
1d

Repositories and online communities

- GOSH (<http://openhardware.science/>)
- CERN (<https://www.ohwr.org/>)
- PLOS Channel (<https://channels.plos.org/open-source-toolkit>)
- Open Neuroscience (openeuroscience.com)
- Open Plant Science (<http://openplant.science/>)
- Hackaday.io (hackaday.io)
- CTA – UFGRS (<http://cta.if.ufrgs.br/capa/>)
- Instructables (instructables.com)
- Journal of open Hardware (<https://openhardware.metajnl.com/>)
- HardwareX (<https://www.journals.elsevier.com/hardwarex/>)
- Appropedia (http://www.appropedia.org/Welcome_to_Appropedia)
- Hackteria (hackteria.org)

Thank you!

- Questions?
- Slides on GoogleDrive folder, as well as: bit.ly/oshland