

# What is CDC?

based on my personal experience

May 11, 2020

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I was a guest researcher in CDC during Oct 2002-Sep 2005.

# Creed of CDC

**Saving lives, Protecting people™**

# History of CDC

\*\*\*\*(Pre-history)\*\*\*\*\*

Office of National Defense **Malaria** Control Activities  
(1942)

Office of **Malaria** Control in War Areas (1942–1946)

\*\*\*\*(CDC history)\*\*\*\*\*

Communicable Disease Center (1946–1967)

National Communicable Disease Center (1967–1970)

Center for Disease Control (1970–1980)

Centers for Disease Control (1980–1992)

Centers for Disease Control and **Prevention** (1992-)



**Former  
entrance**

**Dec, 2002**

CDC's campus  
has been rented  
from Emory  
University.



## New entrance 2005

The government bought the land of old campus from Emory University and expanded the campus to the neighboring area.

# **CDC**

## **Centers for Disease Control and Prevention**

**8 Centers + 4 Offices/Institute**

**CDC field station/EID center**

**8500 persons(regular position)**

# **CDC** ( **12 organizations** ) as of 2005.

- **National Center on Birth Defects and Developmental Disabilities**
  - **National Center for Chronic Disease Prevention and Health Promotion**
  - **National Center for Environmental Health**
  - **National Center for Health Statistics**
  - **National Center for HIV,STD, and TB Prevention**
  - **National Center for Infectious Diseases**
  - **National Center for Injury Prevention and Control**
  - **National Center for Immunization and Respiratory Diseases**
  - **National Institute for Occupational Safety and Health**
  - **Epidemiology Program Office**
  - **Public Health Practice Program Office**
  - **Office of the Director**

# **Addition of 9 New Organizations** as of May 19, 2005

- **Coordinating Center for Health Promotion (CCHP)**
- **Coordinating Center for Environmental Health and Injury Prevention (CCEHIP)**
- **Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER)**
- **Coordinating Office for Global Health (COGH)**
- **National Center for Health Marketing (NCHM)**
- **Office of Enterprise Communication (OEC)**
- **Coordinating Center for Infectious Diseases (CCID)**
- **Office of Chief of Public Health Practice (OCPHP)**
- **Office of Workforce and Career Development (OWCD)**



# CDC's 3 excellent activities in 2003

## 1, Bacillus anthracis

(CDC)



## affairs

After the terrorism on World Trade Center in 2001, there happened anthrax mailing attacks. 5 killed 17 injured. The genetic typing in CDC revealed all bacillus specimen showed identical, that is, of one source.

## 2, Small pox vaccination

At the Iraq invasion US army received vaccination against small pox. Among 6000 thousand soldiers immunized, 4 died. CDC revealed this death was not related with vaccine.



(CDC)

## 3, SARS research

SARS virus was isolated in CDC from the specimen of Carlo Urbani and genetic character of it was analyzed in CDC in a very short time.

May 5, 2003  
(ARTHUR HOCHSTEIN)



**Science. 2003 May 30;300(5624):1394-9.**

Epub 2003 May 1.

## **Characterization of a novel coronavirus associated with severe acute respiratory syndrome.**

**Rota PA<sup>1</sup>, Oberste MS, Monroe SS, Nix WA, Campagnoli R, Icenogle JP, Peñaranda S, Bankamp B, Maher K, Chen MH, Tong S, Tamin A, Lowe L, Frace M, DeRisi JL, Chen Q, Wang D, Erdman DD, Peret TC, Burns C, Ksiazek TG, Rollin PE, Sanchez A, Liffick S, Holloway B, Limor J, McCaustland K, Olsen-Rasmussen M, Fouchier R, Günther S, Osterhaus AD, Drosten C, Pallansch MA, Anderson LJ, Bellini WJ.**

**(35 authors)**

An impromptu team was built to analyze the genetic character of the virus in CDC.



**Director, CDC  
(Jul 2002-Jan 2009)**

(Forbes Magazine)  
The World's 100  
Most Powerful  
Women in 2007

**Julie Louise Gerberding**

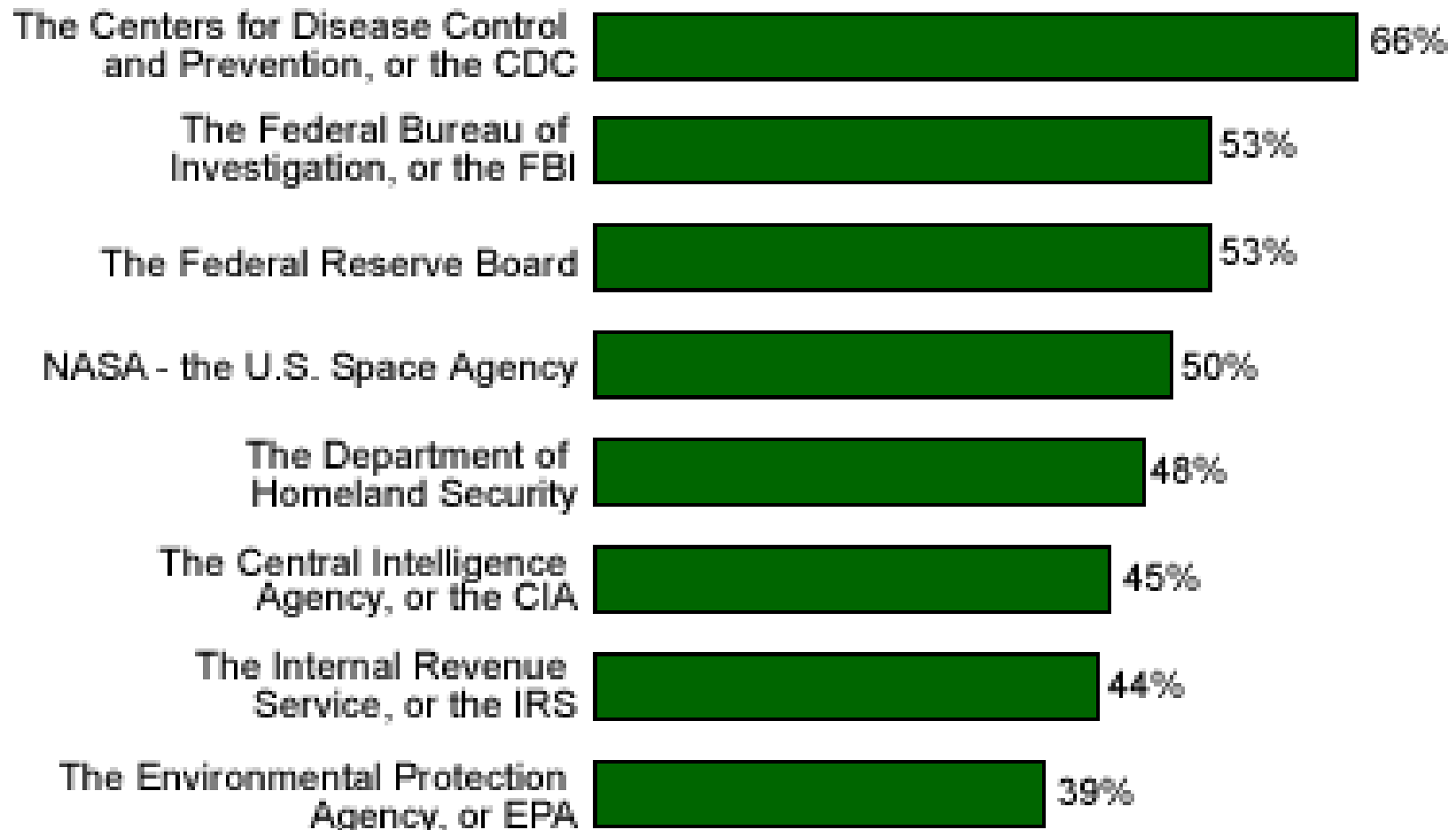
At all 3 big research subjects done in 2003 in CDC, she administrated them and announced the results of them to citizen through TV.

## Ratings of Government Agencies

(2004)

*How would you rate the job being done by . . . ? Would you say it is doing an excellent, good, only fair, or poor job?*

% saying "excellent" or "good"



# Excellence of CDC

- **Leader of Global Public Health alongside WHO**
- **Epidemic Intelligence Service (EIS)** CDC trained members 2 years and booked for detachment any place in the world at the emergency.
- **Mobility** Detach EIS next day after getting the information of emergency.
- **Publication (MMWR** Morbidity and Mortality Weekly Report, **EID** Emerging Infectious Diseases. Monthly)
- **Fund** Mainly Governmental. Efforts to get from other organizations.
- **Human resources** International
- **NCIRD (Support for ACIP** Advisory committee on Immunization Practices **on data collection)**

# **Learned from CDC**

**(personal experience)**

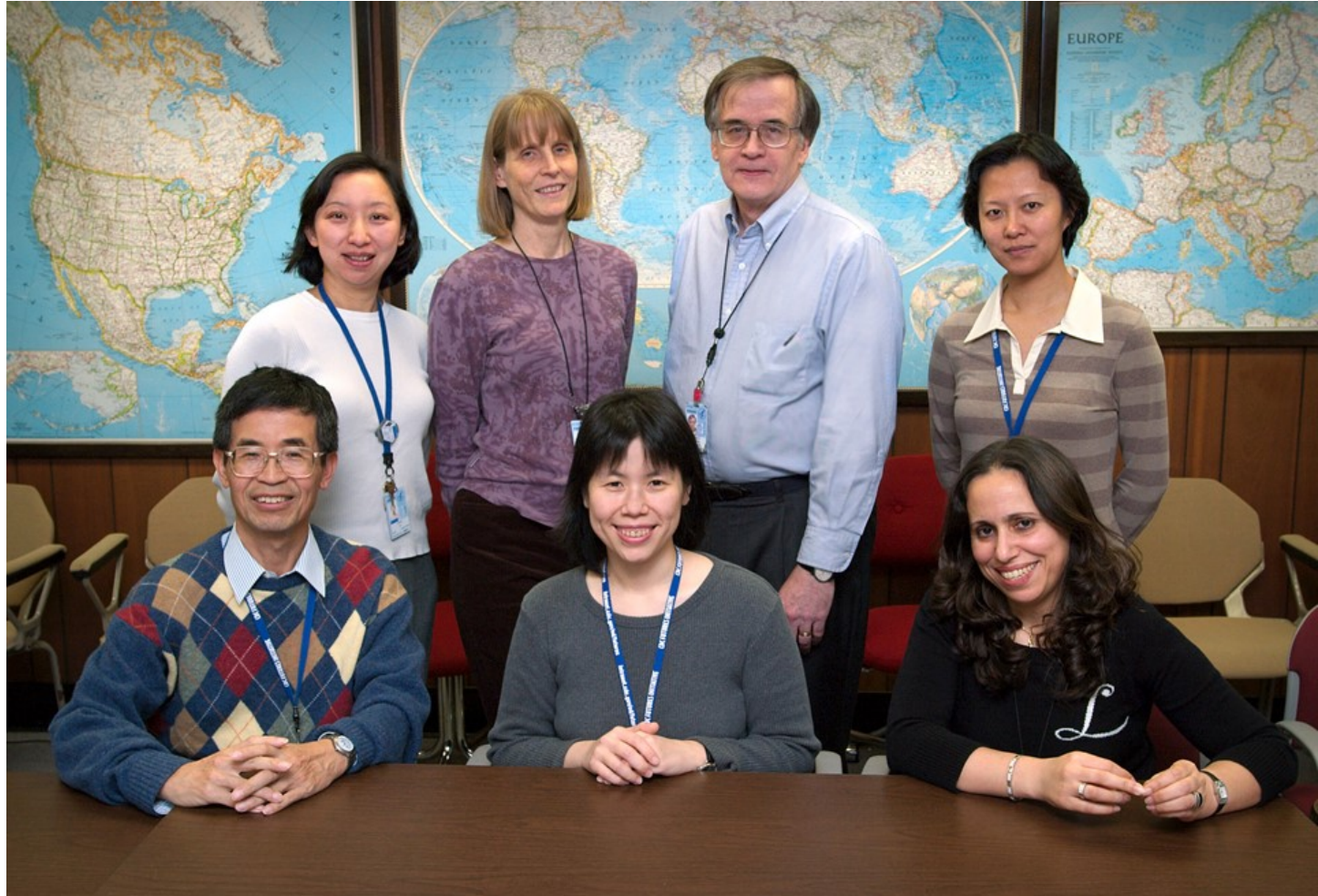
- 1. Global network: "International"**
- 2. Project team : Impromptu team made for genome analysis of SARS virus, in which members accepted CDC's mission**
- 3. Leader's leadership is excellent in the team**
- 4. Planning by professionals not by administrators**

**“International”**

**Field**

**&**

**Human Resources**



**Jan 7, 2005**

Example of "International" human resources. From many countries in Rubella Virus research team, which I was belonged.



# Limitation of CDC

**For the USA**

**(Sometimes selfish)**

In some country CDC used to collect research specimens with the power of their money.

# Problems in 2020 for COVID-19

- **Failure of PCR kit** which CDC made  $\Rightarrow$  **Failure of early action against COVID-19** due to loss of detection system of the patients  $\Rightarrow$  **FDA ceased CDC of its priority for delivery assay kits and reagents**
- **Cut down of the budget by the president** who has not focused on the Health  $\Rightarrow$  **Deterioration of activity of CDC**
- **Relation with the President of USA**  $\Rightarrow$  **Fluctuated by him** on the policy recommendation

# Essential functions requested for “CDC” in Japan

(Personal proposal)

Principal is **“The earlier the better”**

- 1, Unified announcement** with transparency from a professional person in reliable institution as soon as possible
- 2, Study and recommendation by permanent organization**  
(not temporal)
- 3, Leadership for grand design**

# Comparison between USA and Japan for Infectious Diseases administration

Function	USA	<u>Japan</u>	
			<u>to be improved in Japan</u>
<b>Epidemiology</b>	<b>CDC</b>	<b>NIID</b>	<p><b>Limited activity</b> in scale. However it has unique activity to detect herd sensitivity to several common infectious diseases like measles by measure the antibody level in age groups periodically.</p>
<b>National control of product</b>	<b>FDA</b>	<b>PMDA+ NIID</b>	<p><b>NIID has partial responsibility</b> NIID is authority for national testing of biological products such as vaccines.</p>
<b>Budget application</b>	<b>NIH</b>	<b>AMED</b>	<p><b>Almost pre-arranged</b> not completely open to all researchers.</p>