

Frontiers in Vaccinology

What year was the CVD founded?



Frontiers in Vaccinology

Name five infectious diseases against which the CVD has created and tested vaccines.



Frontiers in Vaccinology

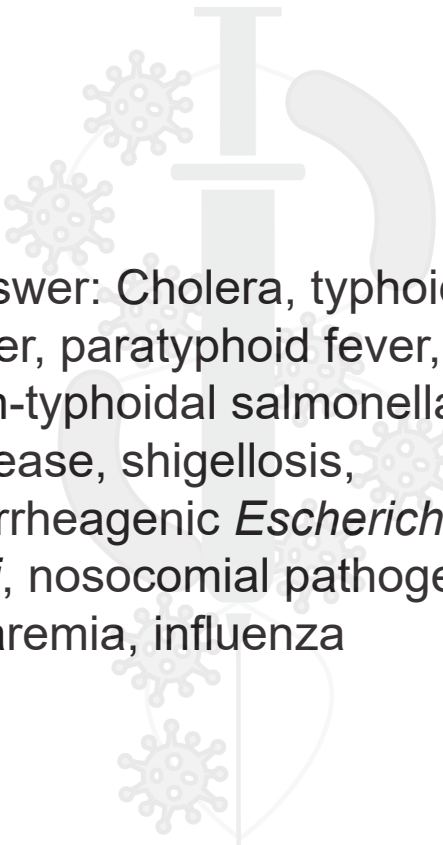
Who founded the CVD?



Frontiers in Vaccinology

Which CVD faculty and post-doc received the Maurice R. Hilleman Early-Stage Career Investigator Award? What year did each receive the award?





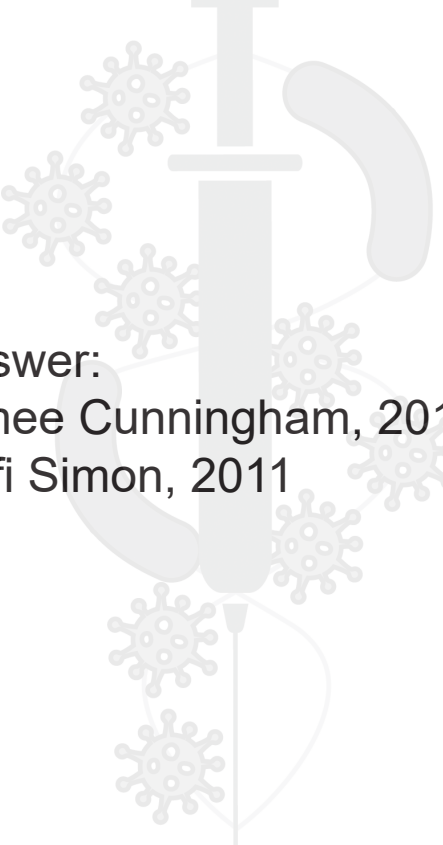
Answer: Cholera, typhoid fever, paratyphoid fever, non-typhoidal salmonella disease, shigellosis, diarrheagenic *Escherichia coli*, nosocomial pathogens, tularemia, influenza

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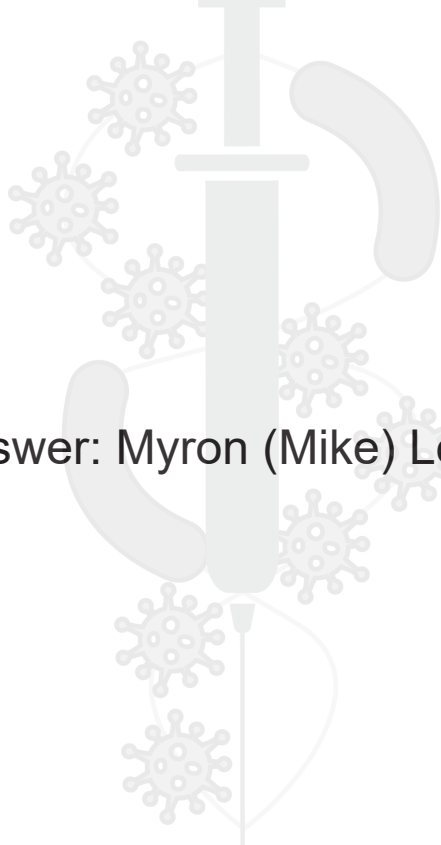
Answer: 1974

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Answer:
Aimee Cunningham, 2016
Rafi Simon, 2011

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Answer: Myron (Mike) Levine

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When did the FDA approve the oral cholera vaccine invented and developed by researchers at the CVD?



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What was the largest, most comprehensive study of childhood diarrheal diseases ever conducted in developing countries? Who led the study?



Frontiers in Vaccinology

In the 1970s/1980s, researchers at the CVD pioneered the development of what study design to understand vaccine responses in humans?



Frontiers in Vaccinology

What five pathogens did the Global Enterics Multicenter Study (GEMS) show were responsible for almost 50 percent of moderate-to-severe diarrhea?





Answer:

Global Enterics Multicenter Study (GEMS)

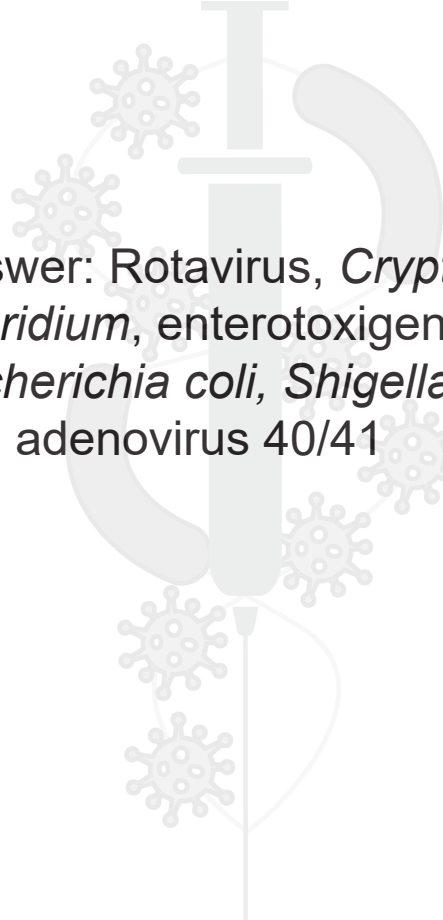
Myron (Mike) Levine and Karen Kotloff

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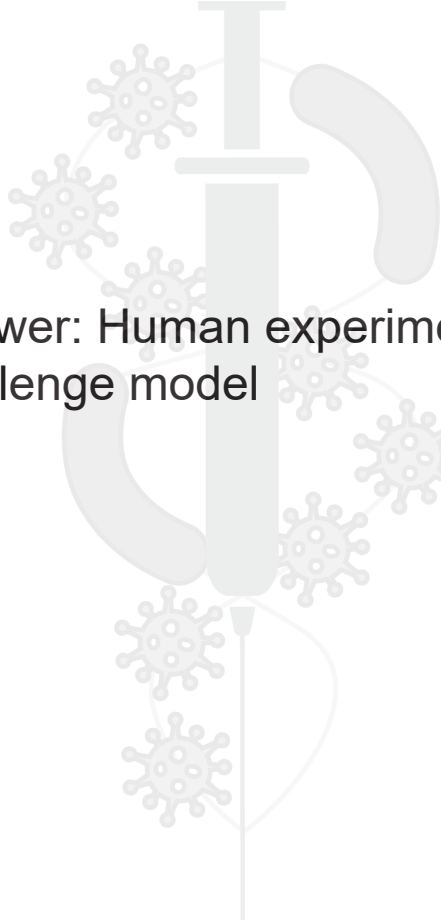
Answer: June 10, 2016

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Answer: Rotavirus, *Cryptosporidium*, enterotoxigenic *Escherichia coli*, *Shigella*, and adenovirus 40/41

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Answer: Human experimental challenge model

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Frontiers in Vaccinology

How long has CVD had the NIH-sponsored Training Program in Vaccinology (T32)?



Frontiers in Vaccinology

How many children will be enrolled in the CVD's clinical trial to test the impact of typhoid conjugate vaccines as part of the Typhoid Vaccine Acceleration Consortium (TyVAC) project in Malawi?



Frontiers in Vaccinology

What is the Vaccine and Treatment Evaluation Unit (VTEU) network?



Frontiers in Vaccinology

How long has CVD had the NIH-sponsored Training Program in Vaccinology (T32)?





Answer: 24,000

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Answer: 25 years

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Answer: 20 years

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Answer: Nine centers established by the National Institutes of Health to conduct clinical trials of vaccines and treatments for infectious diseases. The CVD has been a VTEU for 25 years.

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Frontiers in Vaccinology

How many years has the CVD hosted Frontiers in Vaccinology?



Frontiers in Vaccinology

Which CVD faculty member recently became a Fellow of ASTMH?



Frontiers in Vaccinology

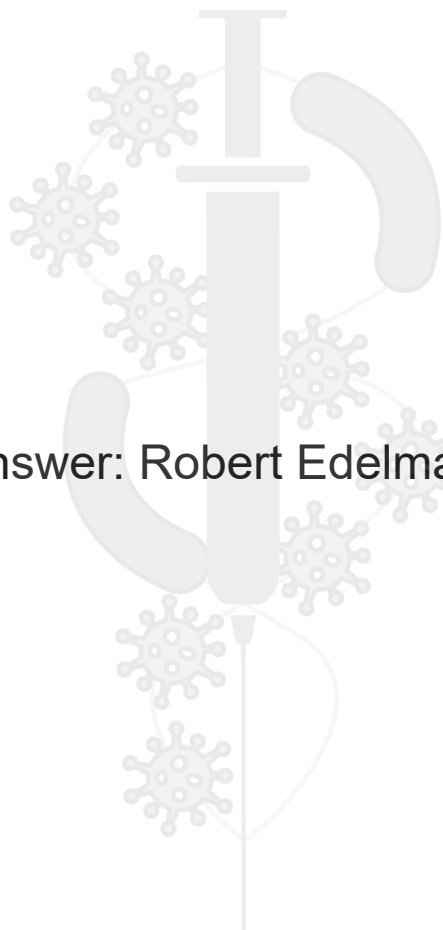
Who is the Minister of Health in Mali and what is his/her role with the CVD?



Frontiers in Vaccinology

Which CVD faculty member recently became a Fellow of the Infectious Disease Society of America?





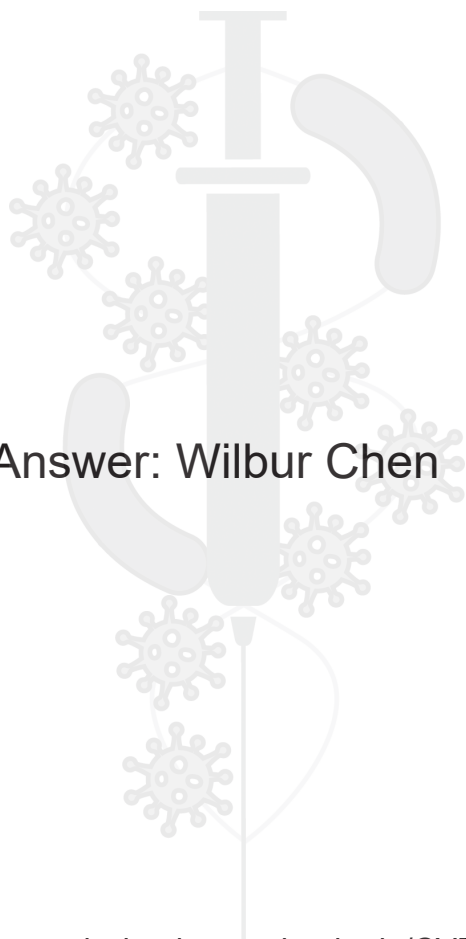
Answer: Robert Edelman

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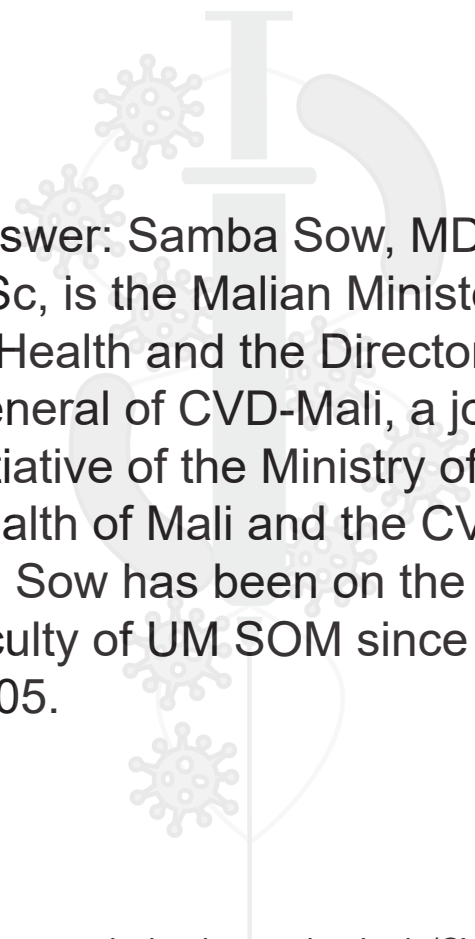
Answer: 24 years

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Answer: Wilbur Chen

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Answer: Samba Sow, MD, MSc, is the Malian Minister of Health and the Director General of CVD-Mali, a joint initiative of the Ministry of Health of Mali and the CVD. Dr. Sow has been on the faculty of UM SOM since 2005.

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Frontiers in Vaccinology

Which CVD faculty member was recently awarded a grant to study antibiotic resistant wound infections?



Frontiers in Vaccinology

Who was the first Frontiers keynote speaker? What was the title of the talk?



Frontiers in Vaccinology

Which CVD faculty member had the most-cited CDC paper in 2013? What was the topic?



Frontiers in Vaccinology

Which CVD project is focused on understanding and preventing child mortality in developing countries?





Answer:

John B. Robbins, MD,
National Institute of
Child Health and Human
Development, National
Institutes of Health

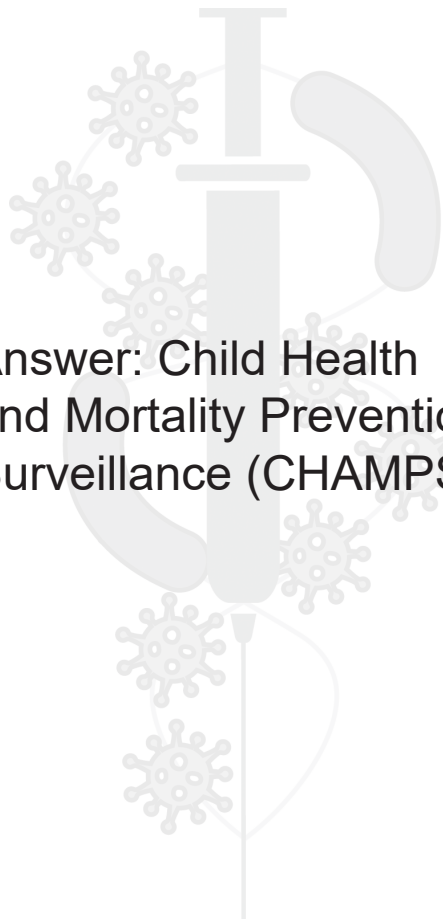
A Hypothesis on How
Licensed Vaccines Exert
Their Protective Activity

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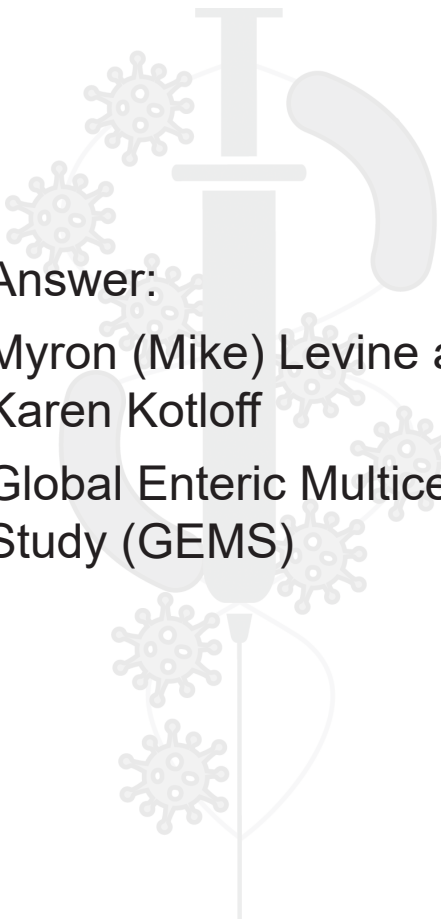
Answer: Alan Cross

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Answer: Child Health
and Mortality Prevention
Surveillance (CHAMPS)

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Answer:
Myron (Mike) Levine and
Karen Kotloff
Global Enteric Multicenter
Study (GEMS)

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Frontiers in Vaccinology

Which project involves a multidisciplinary team from fields of innate & adaptive immunity, molecular biology, mucosal biology & physiology, biochemistry, high-throughput technology, microbiology, genomics, protein chemistry, clinical gastroenterology, and vaccinology?



Frontiers in Vaccinology

Which CVD faculty members are developing vaccines to decrease the colonization of gram-negative bacteria in the gut biome?



Frontiers in Vaccinology

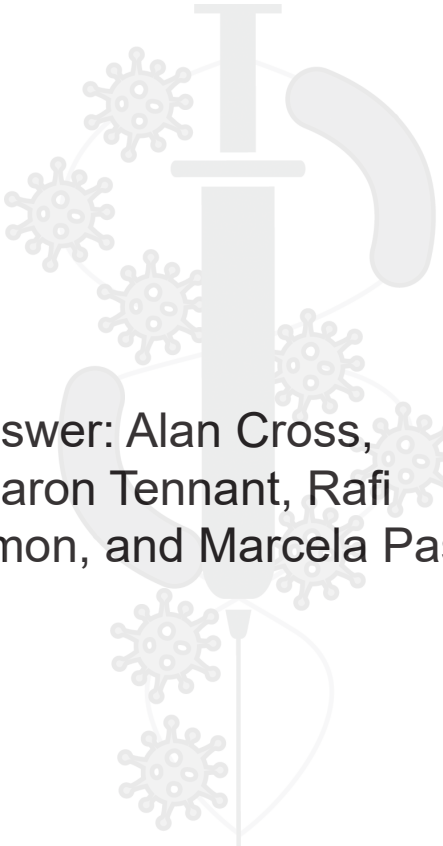
Which CVD faculty member is studying bovine colostrum as an antibiotic replacement in chickens?



Frontiers in Vaccinology

Which multi-project grant involves developing vaccines & therapeutics for multiple enteric pathogens of the highest importance worldwide, including *Shigella*, enterotoxigenic *E. coli* (ETEC), *Salmonella*, *C. difficile*, *Cryptosporidium*, and emerging pathogens? Which CVD investigators are involved?



A faint background graphic featuring a microscope and several virus-like particles (spheres with spikes) arranged in a circular pattern.

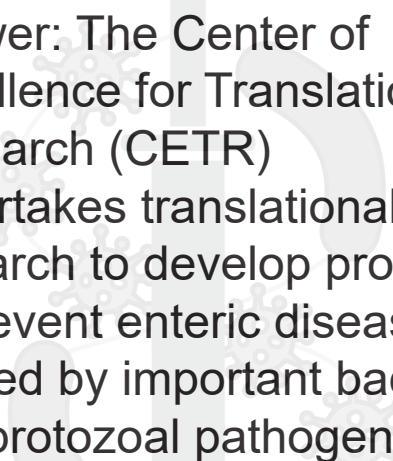
Answer: Alan Cross,
Sharon Tennant, Rafi
Simon, and Marcela Pasetti

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Answer: Cooperative Center
on Human Immunology
(CCHI)

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Answer: The Center of
Excellence for Translational
Research (CETR)
undertakes translational
research to develop products
to prevent enteric disease
caused by important bacterial
and protozoal pathogens.

Myron (Mike) Levine,
Sharon Tennant, Rafi Simon,
Marcelo Sztein, Eileen Barry,
Jim Galen, Marcela Pasetti,
Roseangela Mezghanni, and
Rezwan Wahid

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Frontiers in Vaccinology

What project is developing a multivalent vaccine with protective antigens from ETEC, STEC, and EAEC in attenuated *Shigella* live vectors for broad protection against enteric infections caused by these pathogens?



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Which CVD faculty members are translating the lead prototype for a multivalent combination vaccine from a research laboratory vaccine to a potential human vaccine? What is the candidate strain and diseases protected against?



Frontiers in Vaccinology

Which one of the highest priority biodefense pathogens is currently being targeted for vaccine development at the CVD?



Frontiers in Vaccinology

Which CVD faculty member evaluated the use of cow's milk as a prophylactic tool against gastrointestinal illness?





Answer:

Eileen Barry and Wilbur
Chen

CVD 1208S-122

Shigella and enterotoxigenic
Escherichia coli (ETEC)

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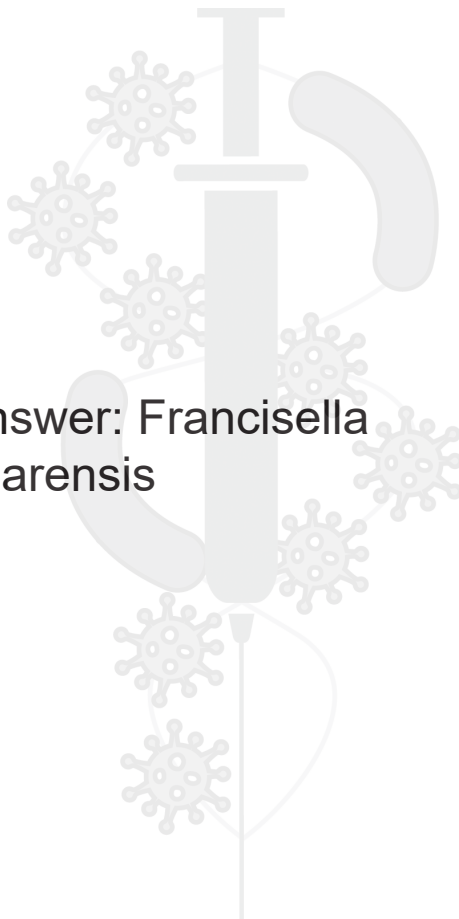
Answer: The Center of
Excellence for Translational
Research (CETR)

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Answer: Marcela Pasetti

www.medschool.umaryland.edu/CVD



Answer: Francisella
tularensis

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Which CVD lab had a project funded by the National Aeronautics and Space Administration (NASA)?
What was the project?



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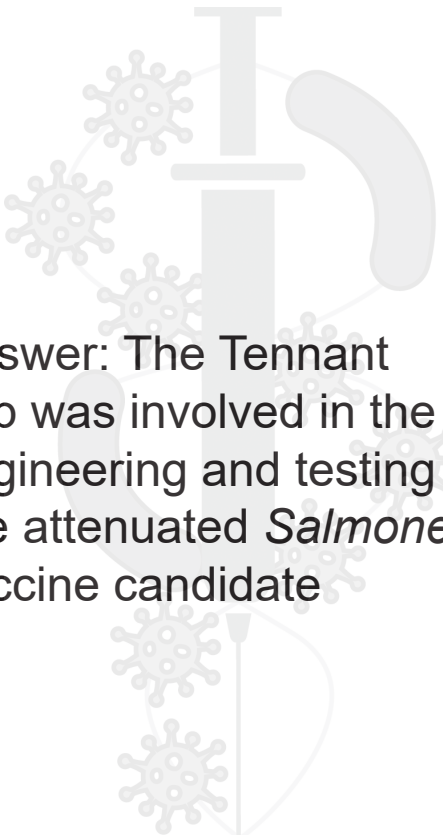
What country has been a CVD partner for over 40 years?



Frontiers in Vaccinology

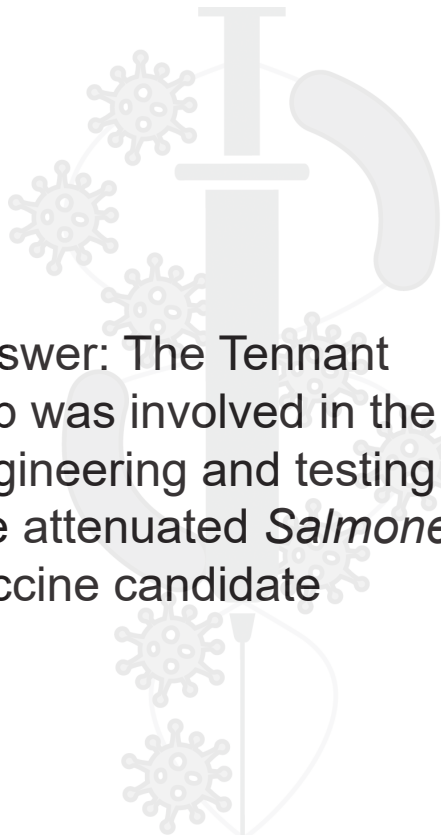
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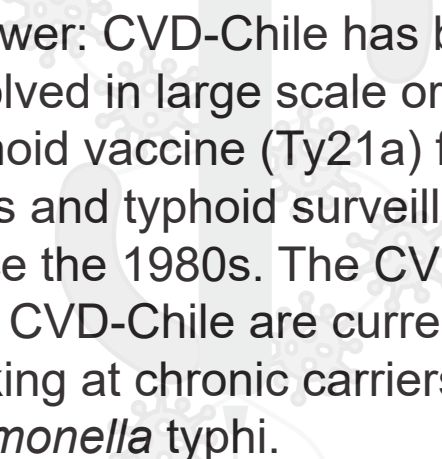
Answer: The Tennant Lab was involved in the engineering and testing of a live attenuated *Salmonella* vaccine candidate

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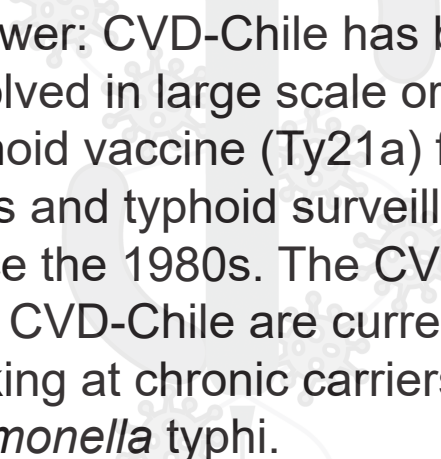
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Answer: CVD-Chile has been involved in large scale oral typhoid vaccine (Ty21a) field trials and typhoid surveillance since the 1980s. The CVD and CVD-Chile are currently looking at chronic carriers of *Salmonella typhi*.

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