Oscar Swineford Jr MD

Recruited from Vienna where he was studying Pathology

Appointed in 1935 to help with the "Allergy Epidemic". Established the allergy clinic on Wed to give immunotherapy to Hay fever patients, the Chairman played golf on Wed.

President of the American Academy of Allergy 1944-45. First Swineford Conference 1961, and in 1982 the first Swineford Professor of Medicine promised to continue the annual meeting.

In 1983 I had a referral from an allergist in this area whose note paper said ; "Open for the practice of Rhinitis only."

### UNIVERSITY OF VIRGINIA MEDICAL ALUMNEWS

Fall / Winter 1983

An Honor for Dr. Swineford



### SWINEFORD CONFERENCE 1967

### MY FIRST SWINEFORD CONFERENCE 1983 \*\*

Visitors: Phil Askenase, Hugh Sampson, and Mike Kaliner

**Supervisors:** Alexander McCausland # John Catlett\*, Paul Wornom, John Guerrant, Ken Berger, Donald MacLean

The real Question is what has happened to Medicine, Education, Training programs, in the last 40 years: Is it more like "Brave New World" or "1984".. The progressive change to a medical world where there is an assumed "Correct Answer", has been harmful to both education and research.

First: the most important findings are those that are not expected and I would like to give some examples of established truth...

- i) Mite fecal particles are too large to enter the lungs...
- ii) The presence of a cat increases the risk of sensitization.
  - \*\* "My first Summer in the Sierras" John Muir
    - # "I rode with the man who rode with Stonewall"
  - \*John Catlett's aunt wrote a book about "Defending the Valley"
  - John Guerrant (1910-2010) had Influenza in 1918.

# "Activation of the alternate pathway of human complement by rabbit cells"

When rabbit spleen cells are incubated with human complement (fresh serum) the surface of lymphocytes gets coated with C3 and the red cells are lysed.\* This lysis which does not require antibodies and can occur in EGTA<sup>+</sup> (is not classical pathway), became a technique for investigating the alternate pathway.<sup>#</sup> **Problem:** Prof Manfred Mayer at Hopkins published a short guide to complement

in 1973, that denied the existence of the alternate pathway.

\*Platts-Mills and Ishizaka K. J. Immunol 1974 113; 348-358

#Fearon D and Austin KF. Activation of the alternate complement pathway with rabbit erythrocytes.... J Exp Med 1977; 146:22-33.

*†EGTA= Ethylene glycol tetra-acetic acid binds calcium but not magnesium.* 

#### **Established Rules of Food Allergy in 2008**

- I. Patients who eat meat for 30 or 40 years do not become allergic.
- II. Intradermal skin tests for food are neither necessary or reliable.
- III. Severe reactions to food ,dependent on sIgE occur rapidly.
- IV. Ticks only cause allergic sensitization to tick proteins.
- V. Natural exposure to pollens in patients with sIgE ab to cross reactive carbohydrate determinants (CCD) does not induce symptoms.

Conclusion: The syndrome of delayed anaphylaxis to red meat in subjects who have sIgE ab to galactose alpha-1,3galactose induced by tick bites was in no sense "correct".

### Tick Bite Anaphylaxis induced by *Ixodes pacificus in Northern California; May 2023*

A 50-year-old farmer in the Nappa Valley developed anaphylaxis including shock, and had to be airlifted to hospital in May 2023. We were contacted by his wife, and he subsequently went to see Dr. Hannah Walford at Stanford who sent us serum. Anaphylaxis started within minutes after removing the tick.

**Preliminary Assays** 

Total serum IgE: 180 IU/ml IgE to alpha-gal: <0.1 IU/ml

Van Wye, Hsu Y-P, Lane R.S., Terr A. and Moss R.B. IgE Antibodies in tick bite anaphylaxis. JACI .88, p 968. 1991. Van Wye, Hsu Y-P, Terr A., Moss R and Robert Lane. Anaphylaxis from a Tick Bite. New Eng J Med. March 4, 1991.

#### A history of food allergy

**Thomas A.E. Platts-Mills<sup>a</sup>, Emily C. McGowan<sup>a</sup>, Samuel M. Ailsworth<sup>a</sup>, Jonathan Medernach<sup>a, b</sup>, and Jeffrey M. Wilson<sup>a</sup>** <sup>a</sup> Division of Allergy and Immunology, University of Virginia, Charlottesville, VA, United States; and <sup>b</sup> Division of Pediatric Gastroenterology, University of Virginia, Charlottesville, VA, United States

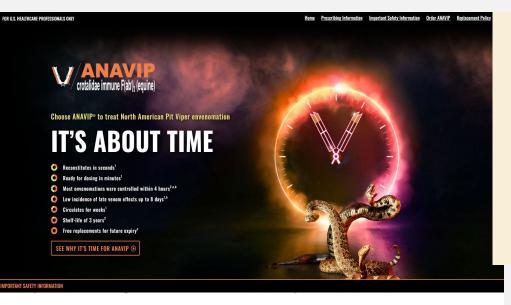
**INTRODUCTION**: three forms of food allergy:

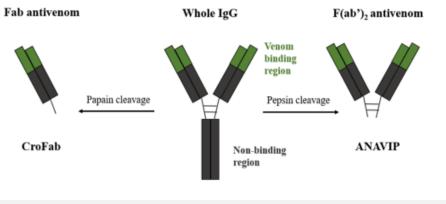
Immediate Reactions – including severe anaphylaxis
 1982 -- IgE +-++; IgG4 +-neg
 Peanut, Egg, Milk, sea food, tree nuts, etc.

1990-- IgE + -neg; IgG4 +++

- Eosinophilic Esophagitis (EoE).
  Delayed and chronic inflammation.
  Cows Milk and Wheat, others (Processed foods).
- Alpha-gal Syndrome (AGS).
  Reactions to red meat delayed 3-5 hours.
  Meat and organs from mammals, cows milk , gelatin..

Encyclopedia of Food Allergy: Edited by Scott Sicherer, Published 2024





Ovine Half life 12-23 hr Equine Half-life 5 days

#### Two Cases of Hypersensitivity Reactions Due to North American Pit Viper Antivenom Administration with Confirmed Elevation of Alpha-Gal IgE

L. Claire Epperson, DO, William Banner, MD, Ph.D., Eszter Moore, PharmD, Kristie Edelen, PharmD

Oklahoma Center for Poison and Drug Information College of Pharmacy, University of Oklahoma Health Sciences Center Oklahoma City, OK



NACCT 2023 Montreal, Quebec Canada

NORTH AMERICAN CONGRESS OF CLINICAL TOXICOLOGY

ANAVIP was introduced to Arizona and New Mexico early and had no obvious problems with side effects.

However use in Oklahoma resulted in a major increase in allergic reactions, compared to CroFab. Two cases were admitted to hospital after anaphylaxis had IgE of 13.7 and 38 IU/ml specific for alpha-gal.

# See Crofab data in :Straesser et al JACI in Practice 2021

# Our map of Sensitization to Alpha-gal among army recruits vs recent CDC map of positive blood test results from the lab in Kansas City Mo.

Aisworth S, Workman L, .....Nyland C, Wilson J M, JACI in Practice 2023. >87 Suspected cases 11-87 Suspected cases <11 Suspected cases 0 Suspected cases No testing performed 47% Geographic distribution of suspected alpha-gal α-Gal IgE syndrome per 1 million population per year-Sensitization 25% United States 2017-2022. Prevalence (% of Recruits) 0%

FIGURE. Geographic distribution of suspected alpha-gal syndrome cases\* per 1 million population per year — United States, 2017–2022

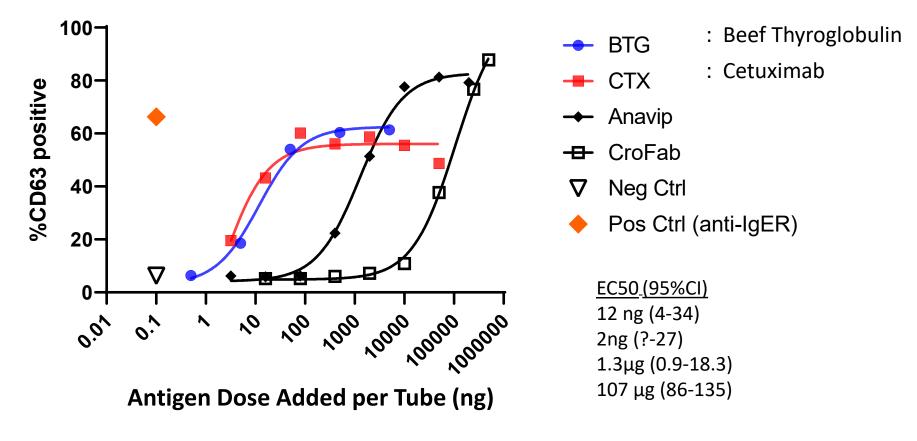
#### Alpha-gal sensitization prevalence at baseline:

2% 8% 9% 4% 5% 1% 2% 2% 8% 4% 5% 6% 4% 5% 1% 6% 7% 2% 14% 12% 10% 4% 39% 6% 6% 13% 10% 3% 3% 17% 5% 8% Created with Datawrapper 0 39

Percent of recruits with alpha-Gal IgE ≥0.1 IU/mL

### Basophil Activation in vitro monitored for CD63 expression using Flow Cytometry

TPM basophils, 3/29/2024



Pamela Schoppee Bortz, PhD; Jeffery M Wilson, MD PhD et. al.

### I WANT TO EMPHASIZE TWO FACTS

- I. A large portion of the disease that we now treat/investigate was not recognized and may not have existed forty years ago.
- II. All the interesting things that we have been involved with scientifically were not "correct" according to the guidelines and general knowledge at that time.

**CONCLUSION:** It is irrational to use identification of the "correct" answer, to test student's understanding about a group of syndromes that are changing as rapidly as allergic disease.

### **Colleagues > 40 Years**

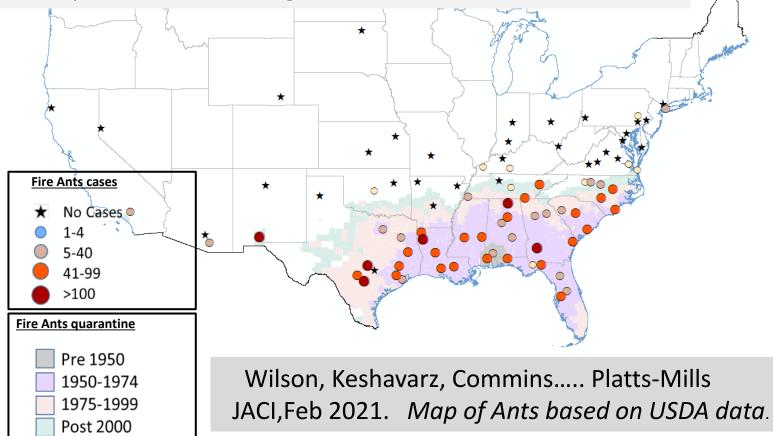
Kimi Ishizaka, MD, PhD Bill Frankland, MD Martin Chapman, PhD, Peter Heymann, Susan Pollart, MD Eva Ronmark, PhD Richard Sporik, MD Elizabeth Erwin, MD Christina Luczynska, Ph.D Rob Aalberse, PhD Judith Woodfolk, PhD, MD Frederic De Blay, MD, PhD Emily McGowan, MD, PhD Jeffery Wilson, MD, PhD

### Teachers, Friends & Workers

Betsy Hill Jaqui Snajdr Susan Wilkins Natalie Custis Jake Hosen Hayley James Lisa Workman

### Fellows & Students

Robert Call, MD Larry Gelber, MD Josh Kennedy, MD Tina Merrit, MD Sam Ailsworth Nathan Richards, MD Cases of Allergic reactions to fire ant stings & County based Quarantine designed to restrict spread of the Fire Ant *Solenopsis invicta* following introduction in Mobile AL, in 1931



## **ANAVIP and CroFab**

ANAVIP is a new form of anti-venom made in horses with the venom of pit vipers and digested with pepsin.

### **Compared to CroFab**

- Larger molecule-Longer half life
- ? Not so well purified
- No reactions in Colorado, New Mexico, or Arizona
- Oklahoma 2023: More reactions than Cro FAB: Two severe, both positive IgE to alpha-gal

**Feb 2024**: Josh Kennedy (UVA 2012-2015) from Little Rock Arkansas contacted Jeff and asked whether we could we could test ANAVIP using Basophil activation tests (BAT)