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"Why am I muted?"

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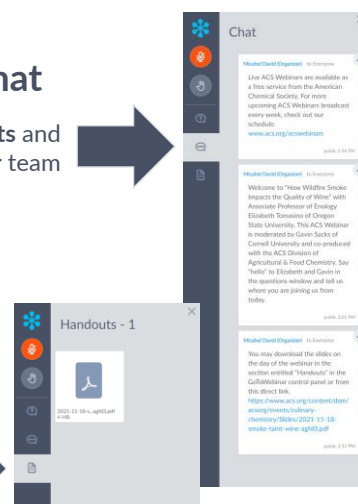


Chat

Announcements and hyperlinks from our team

Handouts

Download the PDF of today's slide deck



2

2

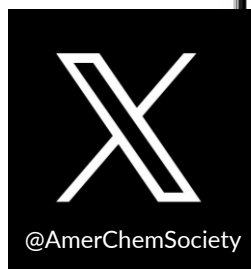


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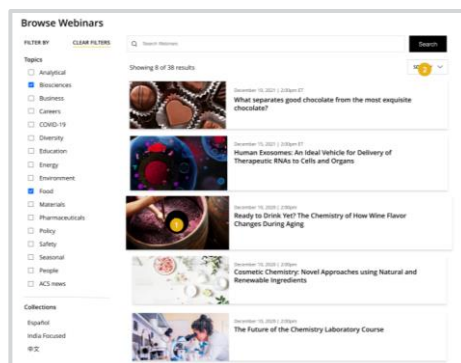
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A Career Planning Tool For Chemical Scientists

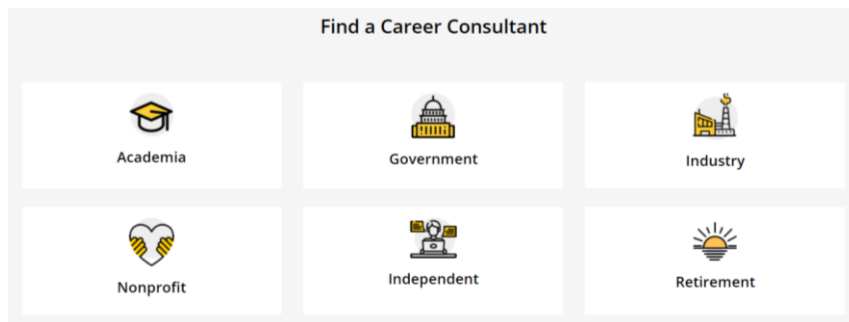


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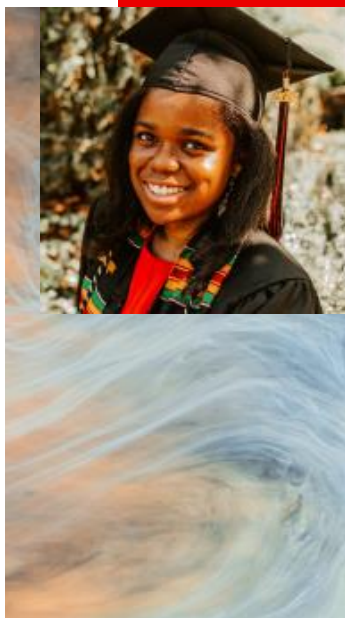
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ACS Scholar Adunoluwa Obisesan

BS, Massachusetts Institute of Technology, June 2021
(Chemical-biological Engineering, Computer Science & Molecular Biology)



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<https://www.youtube.com/c/ACSReactions/videos>

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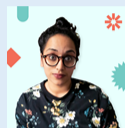
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c&en's
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CHEMISTRY



Bonus Episode
Carolyn Bertozzi and K. Barry Sharpless chat about sharing the 2022 Nobel Prize in Chemistry
December 6, 2022



Bonus Episode
Bioorthogonal, click chemistry clinch the Nobel Prize
October 5, 2022



Episode #46
Lithium mining's water use sparks bitter conflicts and novel chemistry
September 13, 2022



Bonus Episode
Happy 100th birthday, John Goodenough!
For John Goodenough's 100th birthday, Stereo Chemistry revisits a fan-favorite interview with the renowned scientist
July 25, 2022



Bonus Episode
Jess Wade on Wikipedia and work-life balance
June 21, 2022



Bonus Episode
The sticky science of why we eat so much sugar
May 31, 2022



Bonus Episode
There's more to James Harris's story
April 27, 2022



Bonus Episode
The helium shortage that wasn't supposed to be
March 24, 2022

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Preview Content: acs.org/indnl

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ACS Career Resources



Virtual Office Hours



<https://www.acs.org/careerconsulting.html>

Personal Career Consultations

Jim Tung

Chairman
Lacamas Laboratories

B.S., Biochemistry, University of Oregon
Ph.D., Organic Chemistry, University of Notre Dame

Jim Tung works at Lacamas Laboratories in Portland, OR, currently as a business development manager. He has been with Lacamas for 10 years, working on developing new chemical manufacturing projects. Before that, he was a senior research chemist at Glaber Research in Champaign, IL, performing kilo-scale organic chemistry.

An Oregon native, Jim got his B.S. in biochemistry from the University of Oregon, his Ph.D. in organic chemistry from the University of Notre Dame, with postdoctoral experience at Pfizer's laboratories in La Jolla, CA. He is past chair of the Portland Section of the American Chemical Society and was 2019 general co-chair of NORM 2019. He has interests in process chemistry, labor economics, social media outreach and encouraging career exploration and development for younger chemists.

Ask me about:

- Working in industry
- Applying for academic jobs
- Getting your first job

Contact With Jim

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LinkedIn Learning



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2439+

Members participated
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Get Involved

1739+

ACS Advocacy
Workshops participants
or enrollees

Enroll in a workshop

49

Years of Public
Policy Fellows

Become a Fellow

2000

Letters sent to
Congress

Take Action

American Chemical Society

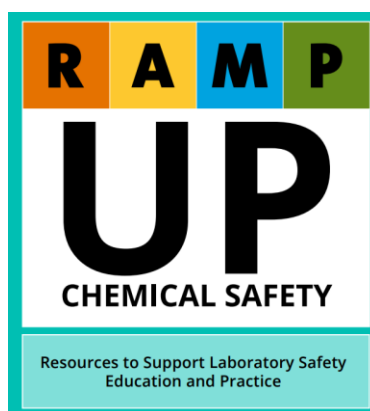
<https://www.acs.org/policy>

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A complete listing of ACS Safety Programs and Resources



Download it for free in the "Projects & Announcements" Section! www.acs.org/ccs



American Chemical Society

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ACS OFFICE OF DEIR

Advancing ACS' Core Value of Diversity, Equity, Inclusion and Respect



Resources

Inclusivity Style Guide Designed to help staff and members use language and images that respect diversity in all its forms. →	ACS Webinars on Diversity Covering diversity and inclusion at the workplace →
ACS Publications DEIR Hub See what ACS Publications is doing for fostering inclusivity in scholarly publishing →	ACS Volunteer and ACS Meetings Code of Conduct Fostering a positive and welcoming environment for attendees, volunteers and staff. →
C&EN Trailblazers C&EN highlights scientists from different backgrounds who are making an impact in chemistry. →	NEW! Download DEIR Educational Resources Download this educational guide for additional recommendations on videos, articles, books, podcasts, and more on diversity, inclusion, and related topics. →
Quick Guide: Inclusion Moments Learn more about what Inclusion Moments are and see ideas to host them during your meetings. →	Quick Guide: How to host inclusive in-person events Recommendations and best practices to ensure that your events can accommodate everyone. →

Diversity, Equity, Inclusion, and Respect

**Adapted from definitions from the Ford Foundation Center for Social Justice:

Equity**

Seeks to ensure fair treatment, equality of opportunity, and fairness in access to information and resources for all. We believe this is only possible in an environment built on respect and dignity. Equity requires the identification and elimination of barriers that have prevented the full participation of some groups.

Diversity**

The representation of varied identities and differences (race, ethnicity, gender, disability, sexual orientation, gender identity, national origin, tribe, caste, socioeconomic status, thinking and communication styles, etc.) collectively and as individuals. ACS seeks to proactively engage, understand, and draw on a variety of perspectives.

Inclusion**

Builds a culture of belonging by actively inviting the contribution and participation of all people. Every person's voice adds value, and ACS strives to create balance in the face of power differences. In addition, no one person can or should be called upon to represent an entire community.

Respect

Ensures that each person is treated with professionalism, integrity, and ethics underpinning all interpersonal interactions.

<https://www.acs.org/diversity>

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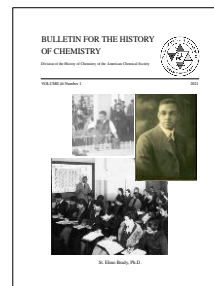


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Year	Group I B7	Group II B8	Group III B9*	Group IV B10*	Group V B11*	Group VI B12*	Group VII B13*	Group VIII B14*
1	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11
2	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11
3	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11
4	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11
5	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11
6	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11
7	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11
8	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11
9	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11
10	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11
11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11
12	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11

- Presents awards recognizing outstanding scholarship in history of chemistry (**Joseph B. Lambert HIST award** and **Paul R. Jones outstanding paper award**) and breakthrough publications in chemistry (**Citation for Chemical Breakthrough awards**)



WHY BECOME A HIST MEMBER!

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- Opportunity to serve on awards and leadership committees to shape the future of history of chemistry

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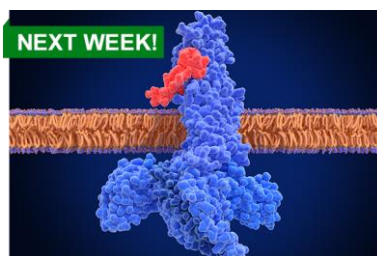


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WEDNESDAY, February 21, 2024 | 2-3:30pm ET
Immuno-oncology: Big Data Insights in the Quest to Cure Cancer

Co-produced with CAS, a division of the American Chemical Society



THURSDAY, February 22, 2024 | 2-3pm ET
The GLP-1 Revolution: From Diabetes and Obesity to Alzheimer's and PCOS

Co-produced with the Science History Institute



WEDNESDAY, February 28, 2024 | 2-3:30pm ET
Harnessing the Power of Natural Polymers

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Eating Dangerously: How a Chemist's "Poison Squad"
Won the Battle for Food Safety in the US



DEBORAH BLUM, MA

Director, Knight Science Journalism
Program, MIT & Publisher, *Undark* magazine



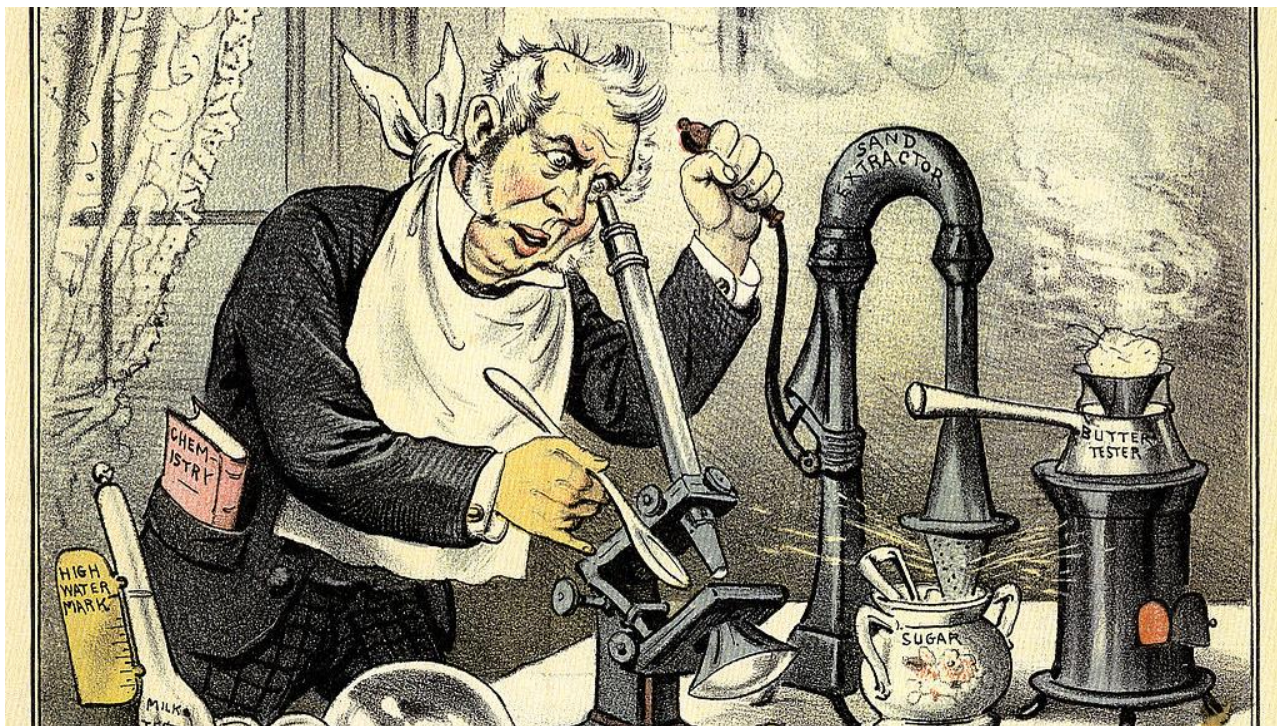
CARMEN J. GIUNTA, PhD

Professor Emeritus,
Le Moyne College

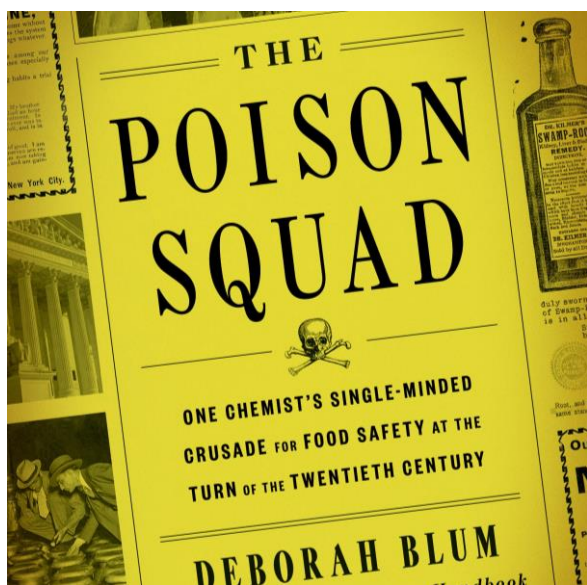
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EATING DANGEROUSLY

How A Chemist's "Poison Squad" Won the Battle for Food Safety in the US

American Chemical Society



February 15, 2024

Deborah Blum

KSJ@MIT

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Three Basic Questions

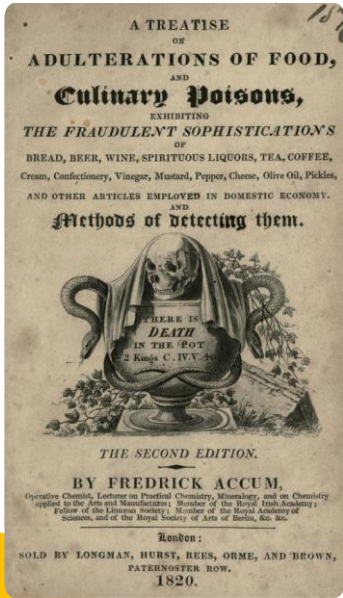
(I ask of science history)

- 1) Where did we start?
- 2) How far have we come?
- 3) Have we come far enough?

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28



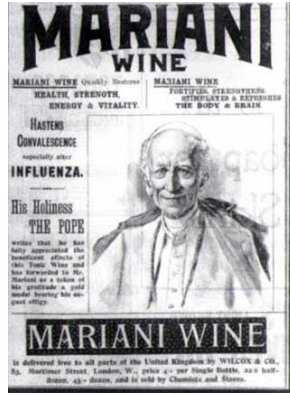
- But starting in the 1820s...

29

And in the U.S., starting in 1883



30

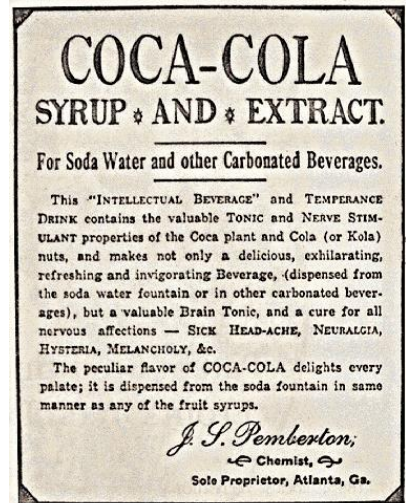


• Unregulated Narcotics

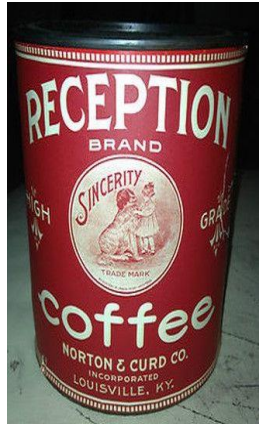
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Medicated soft-drinks



32



33



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STRAIGHT PURE RYE

The Standard of Rye Whiskey

Guaranteed Pure Rye Whiskey Under National Pure Food Law, Serial Number 2163

NOT BLENDED

NOT ADULTERATED

SOLD ONLY IN BOTTLES

NEVER SOLD IN BULK



35



Not just fake...

36



... but
dangerous

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EMBALMED MILK IN OMAHA.

OMAHA, Neb., May 29.—In view of the discovery of the use by dairymen of embalming fluid to prevent their milk from spoiling, the city Health Department has warned all families, as far as possible, to cease the use of milk and cream furnished by local dairies for the present. A patent embalming fluid known to the drug trade as preservaline is the chemical used. Its composition is a mystery, but physicians assert that it is poison, and quite fatal to children.

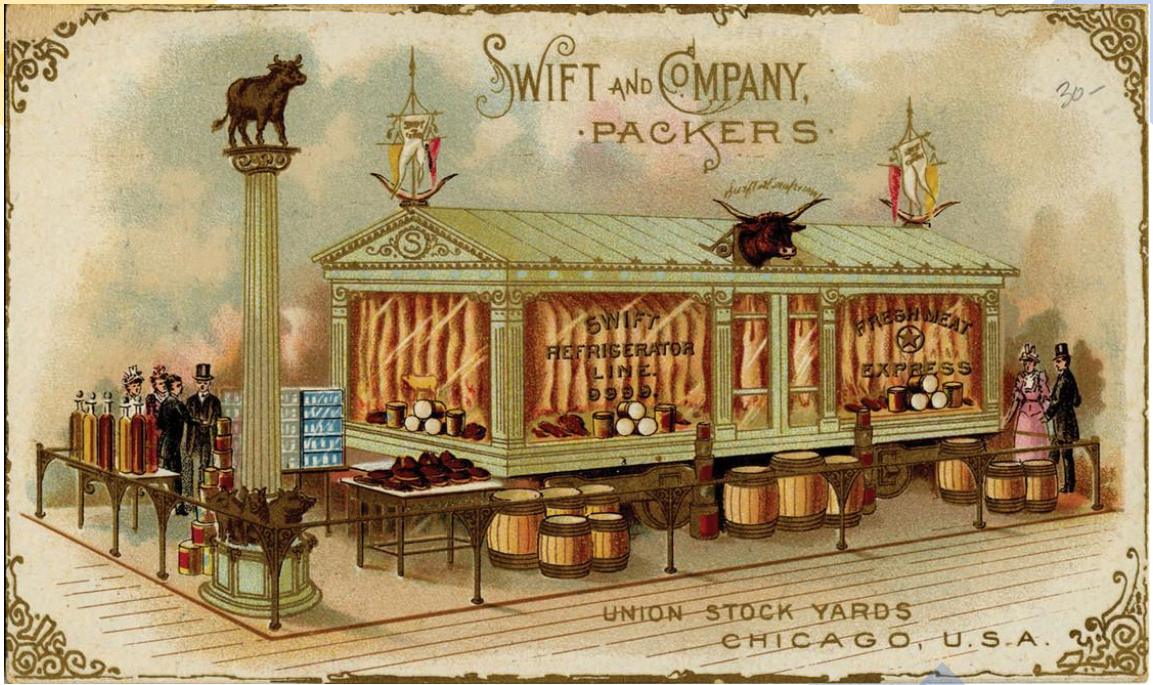
This fluid is sold at \$3 a gallon. It is estimated that ten gallons of the chemical is used daily in Omaha, a spoonful being all that is required to prevent ten gallons of milk from spoiling for several days. It is tasteless, though a blue sediment is left in the bottom of the cans used which is decidedly unpalatable in appearance.

The dairymen deny that they are using the drug, but the city Health Department has investigated the situation and alleges that every dairy of any size in the city is using preservaline. There is no law, other than the one prohibiting in a general way the adulteration of food, that can be invoked to prevent the dairymen from doing this, and the City Prosecutor says that this law is inapplicable to a case of this kind. A great many people have stopped using milk and cream, except when obtained from sources other than the regular dairies.

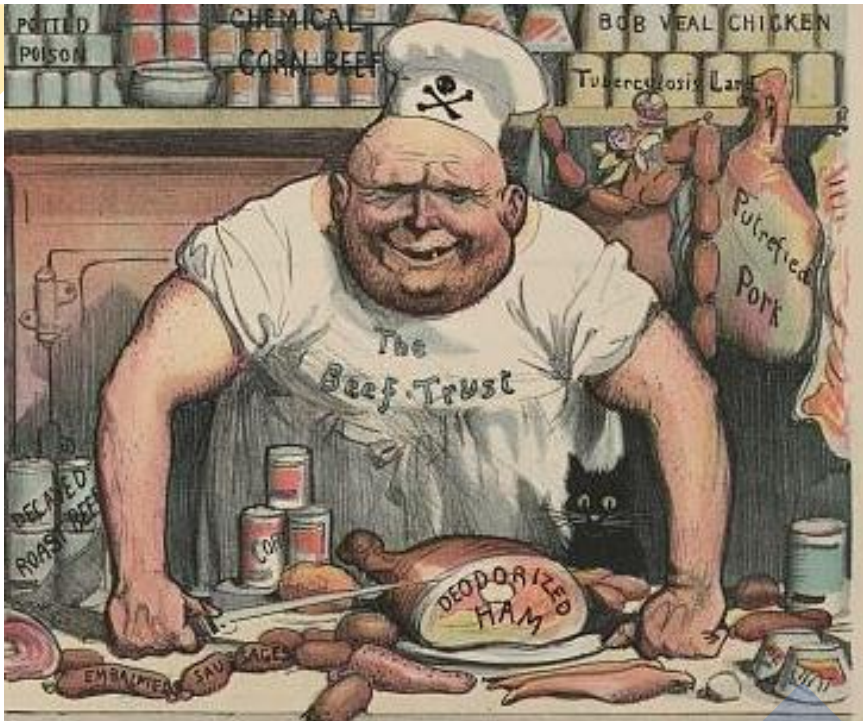
The New York Times

Published: May 30, 1899
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MURKIN AND DON'T LIKE IT.
PRESERVATIVES JARRED THEM

**Prof. Wiley Held the Microscope While
 the Voluntary Victims Wriggled—
 Little Mary Far from Strong.**

Special to The New York Times.

WASHINGTON, May 21.—The young men who have been eating poisons under the direction of the Agricultural Department and the immediate administration of Prof. Wiley, since January last, have been graduated, so to speak, and to-day resumed the diet of the ordinary person.

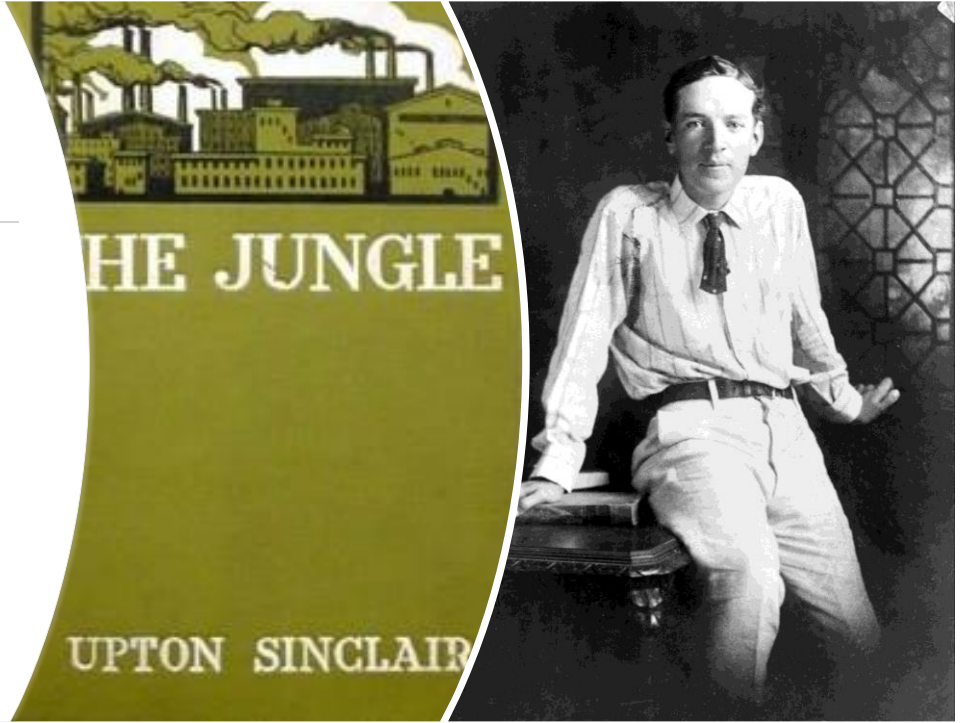
Some of the so-called "poison squad" of a dozen men have suffered in the course of the experiments on their digestive organs. The ill effects of eating drugs used in preserving articles of diet are said to be visible on all members of the squad, and one or two of them appear to be on the verge of breaking down. Two of the young men are from Georgetown University. One is

43



44

And then



45



46

The first consumer protection laws

- The Meat Inspection Act
- The Food and Drug Act
- 1906



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Audience Survey Question

ANSWER THE QUESTION ON THE INTERACTIVE SCREEN IN ONE MOMENT

What influential traveling exhibit in 1933 served to highlight about 100 dangerous, deceptive, or worthless products that the FDA lacked authority to remove from the market?

- American Horror Story
- American Chamber of Horrors
- The FDA Fright Show
- Wiley's Weird and Wonderful

<https://www.fda.gov/about-fda/fda-history-exhibits/80-years-federal-food-drug-and-cosmetic-act>

* If your answer differs greatly from the choices above **tell us in the chat!**

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Implications for Food Safety Today

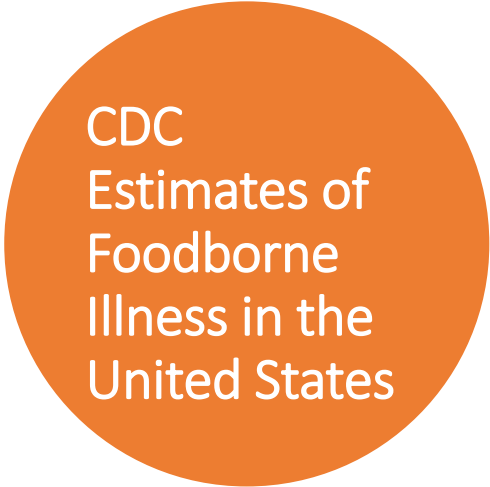
U.S. Department of Agriculture (USDA)

- FSIS inspects about 6,400 establishments (roughly 10-20% of U.S. food supply)
- Meat and poultry animals and products undergo continuous (i.e., 100%) inspection
- FY2019 Appropriations: **\$1,049.3 million**

Food and Drug Administration (FDA)

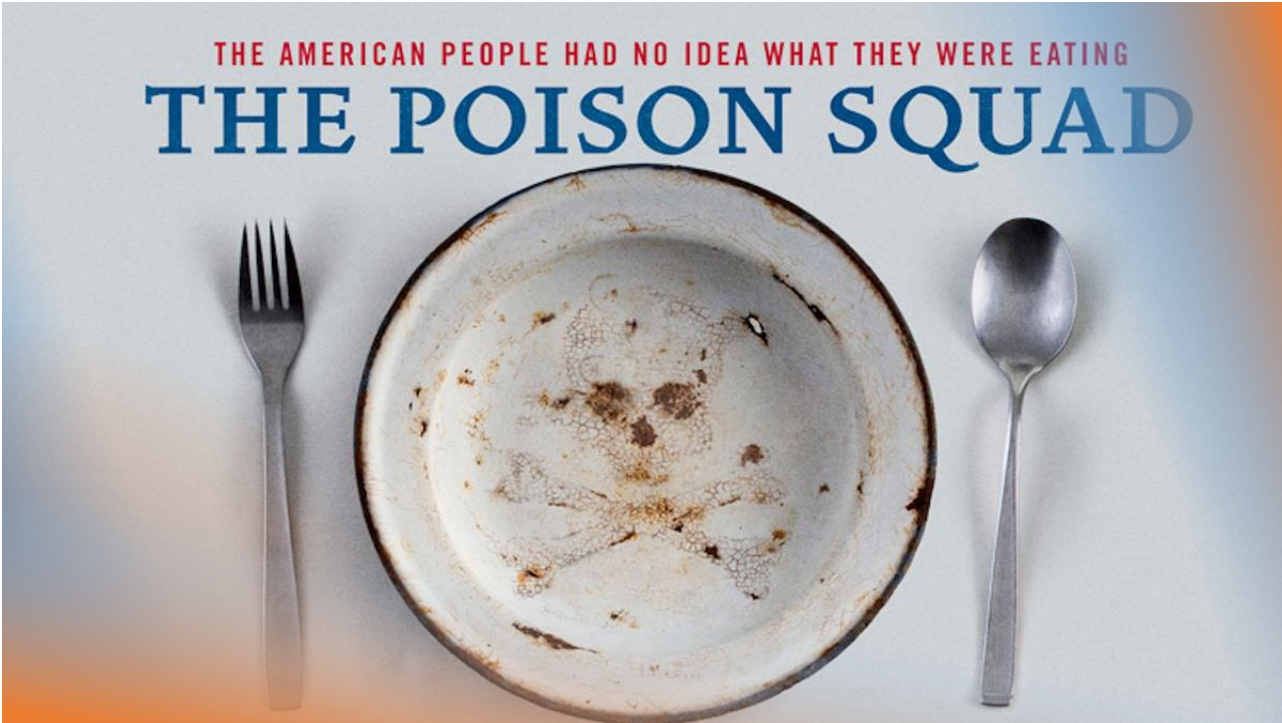
- FDA inspects more than 300,000 domestic and foreign food facilities (roughly 80-90% of the U.S. food supply)
- 2% of all food import lines being physically examined
- FY2019 Appropriations: **\$1,052.3 million**

50



CDC Estimates of Foodborne Illness in the United States

- An estimated (90 percent confidence) interval of 47.8 million illnesses a year.
- Of those, 9.4 million can be attributed to 31 known pathogens (i.e. listeria, salmonella).
- And the remaining 38.4 million are attributed to “unknown causes.”





Audience Survey Question

ANSWER THE QUESTION ON THE INTERACTIVE SCREEN IN ONE MOMENT

What scandal helped inspire the 2011 Food Safety Modernization Act?

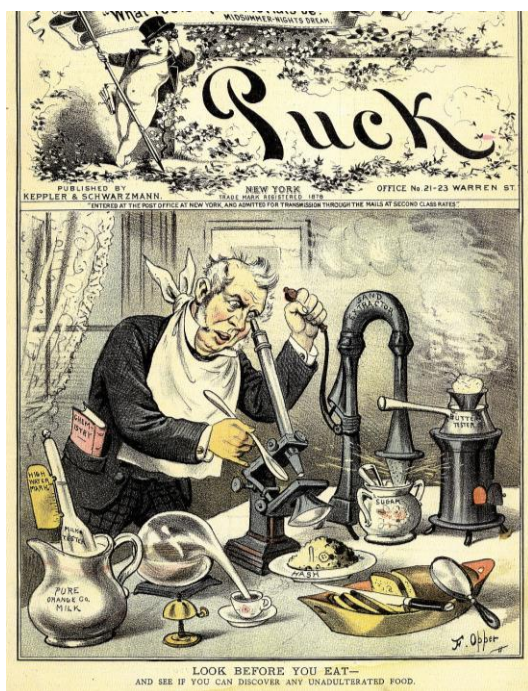
- Listeria outbreak of 64,000 lbs. of chicken/pork products packaged with broccoli in California
- 131,000 lbs. of pizza products recalled because wheat was not declared on the label in California
- 377,775 lbs. of ground beef products that were contaminated with E. coli in California
- The egg recall of 550 million eggs in 22 states that caused over 1,500 salmonella cases

<https://www.fda.gov/about-fda/fda-history-exhibits/80-years-federal-food-drug-and-cosmetic-act>

* If your answer differs greatly from the choices above **tell us in the chat!**

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Thank you!

Deborah Blum

<https://deborahblum.com>

<https://ksj.mit.edu>

<https://undark.org>

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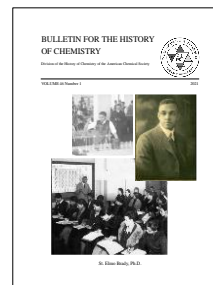
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<http://acshist.scs.illinois.edu>



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Year	Group I: 8/20-21	Group II: 8/22-23	Group III: 8/24-25	Group IV: 8/26-27	Group V: 8/28-29	Group VI: 8/30-31	Group VII: 9/1-2	Group VIII: 9/3-4
1	Nov 1							
2	Jan 5	Nov 5-6	Nov 11	Nov 17	Nov 14	Nov 16	Nov 19	
3	Nov 10	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20
4	Nov 20	Nov 21	Nov 22	Nov 23	Nov 24	Nov 25	Nov 26	Nov 27
5	Nov 28	Nov 29	Nov 30	Dec 1	Dec 2	Dec 3	Dec 4	Dec 5
6	Dec 6	Dec 7	Dec 8	Dec 9	Dec 10	Dec 11	Dec 12	Dec 13
7	Dec 14	Dec 15	Dec 16	Dec 17	Dec 18	Dec 19	Dec 20	Dec 21
8	Dec 22	Dec 23	Dec 24	Dec 25	Dec 26	Dec 27	Dec 28	Dec 29
9	Dec 30	Dec 31	Jan 1	Jan 2	Jan 3	Jan 4	Jan 5	Jan 6
10	Jan 7	Jan 8	Jan 9	Jan 10	Jan 11	Jan 12	Jan 13	Jan 14
11	Jan 15	Jan 16	Jan 17	Jan 18	Jan 19	Jan 20	Jan 21	Jan 22
12	Jan 23	Jan 24	Jan 25	Jan 26	Jan 27	Jan 28	Jan 29	Jan 30
13	Jan 31	Feb 1	Feb 2	Feb 3	Feb 4	Feb 5	Feb 6	Feb 7

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THE LIVE Q&A IS ABOUT TO BEGIN!

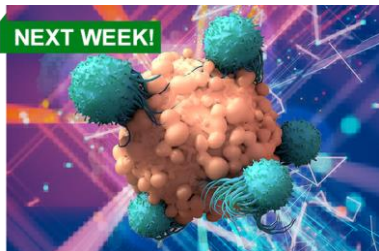
Keep submitting your questions in the questions window!



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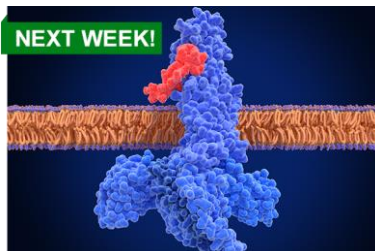


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Next Week!
Wednesday, February 21, 2024 | 2-3:30pm ET
Immuno-oncology: Big Data Insights in the Quest to Cure Cancer

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Next Week!
Thursday, February 22, 2024 | 2-3pm ET
The GLP-1 Revolution: From Diabetes and Obesity to Alzheimer's and PCOS

Co-produced with the Science History Institute



Wednesday, February 28, 2024 | 2-3:30pm ET
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