

CMREC - Clarksville

Photo: E. Remsburg

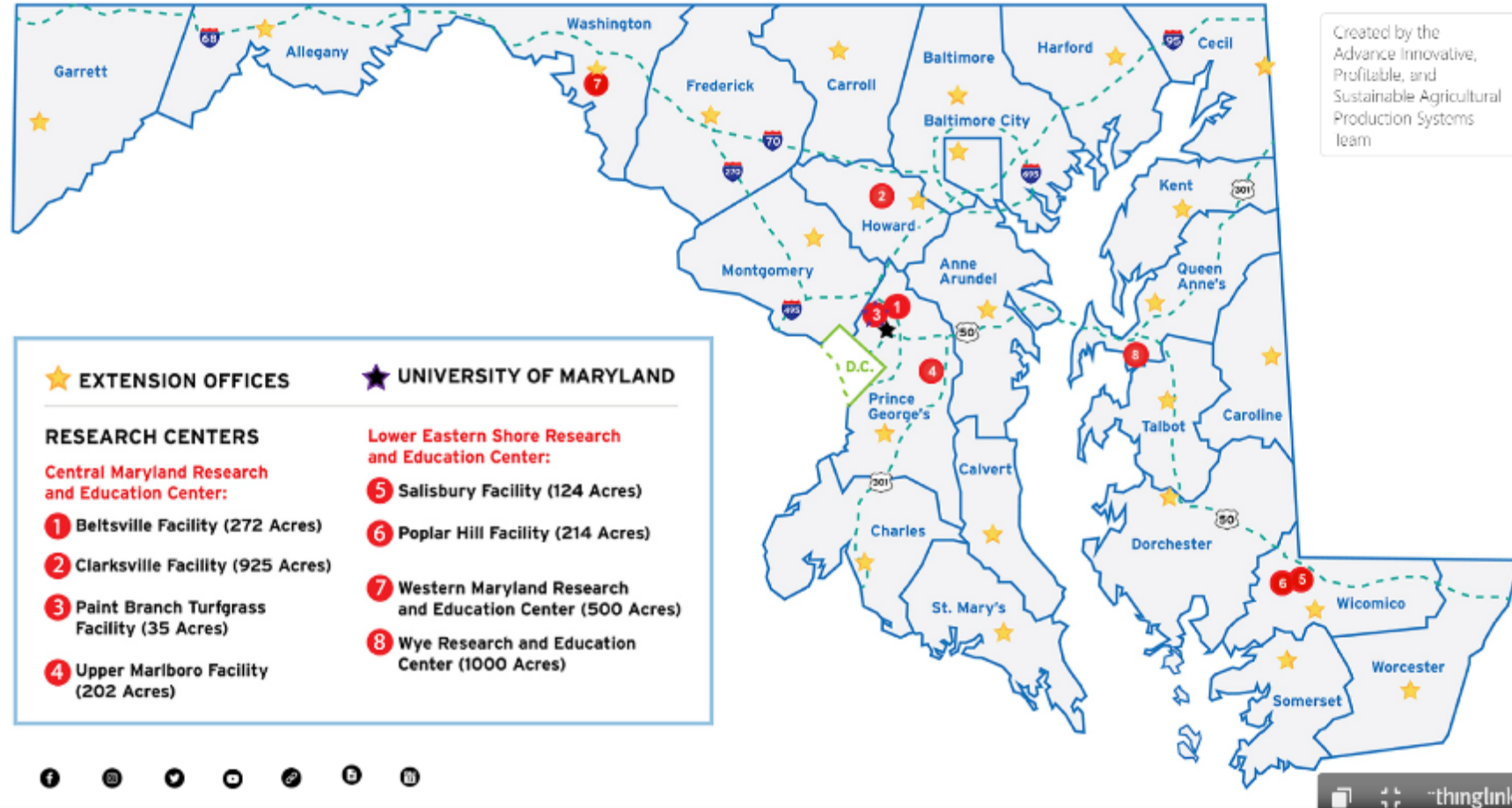


COLLEGE OF
AGRICULTURE &
NATURAL RESOURCES

MAES | MARYLAND AGRICULTURAL
EXPERIMENT STATION

8 REC Facilities

- WMREC
- CMREC
 - Clarksville
 - Beltsville
 - Paint Branch
 - Upper Marlboro
- Wye
- LESREC
 - Poplar Hill
 - Salisbury



CMREC - Clarksville

- 1700s Charles Carroll
- 1951 – MD Mental Hygiene
- 1957 – UMD owners
- 1983 campus herd
- Late 80's Land O' Lakes
- 1988 MAES admin





CMREC – Clarksville Personnel



Brian Spielman
Assistant Director of
Operations



Brian Schnebly
Dairy Program
Manager



Ryan McDonald
Agronomy Program
Manager

Dairy

Jason Cline
David Bowman
Dolly Cline
Quincy Stephens
Anna Mezo

Agronomy

Mike Gray

Dairy Research

Improving feed efficiency and milk production of dairy cows

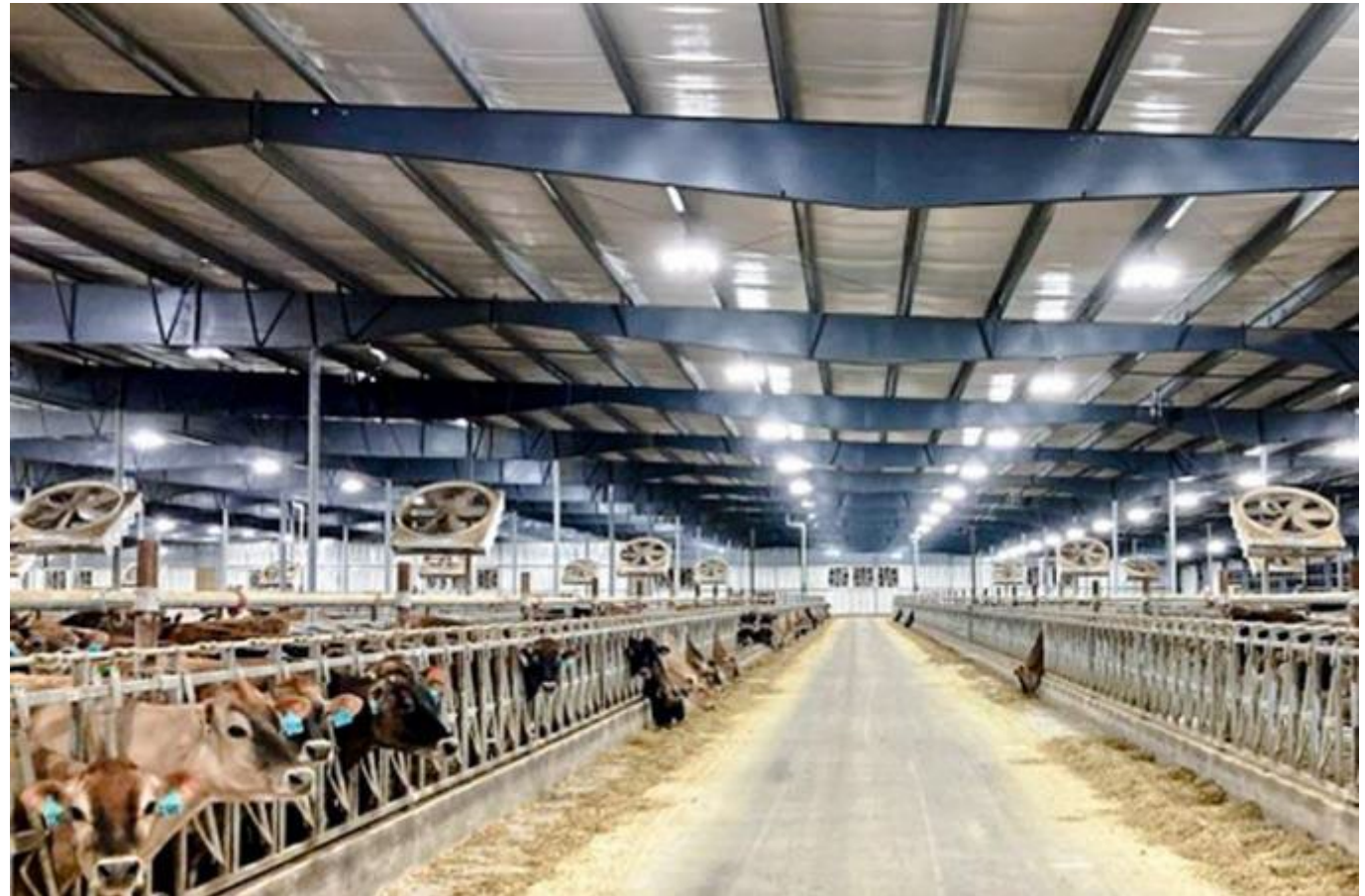


Dairy Research – 1970s

- Supplemental lighting and milk yield



Dr. Robert Peters
ANSC



Dairy Research – 1980s

- Sodium bicarbonate and dietary buffering
- Dietary choline and milk yield



Dr. Richard Erdman
ANSC



NATIONAL RESEARCH COUNCIL

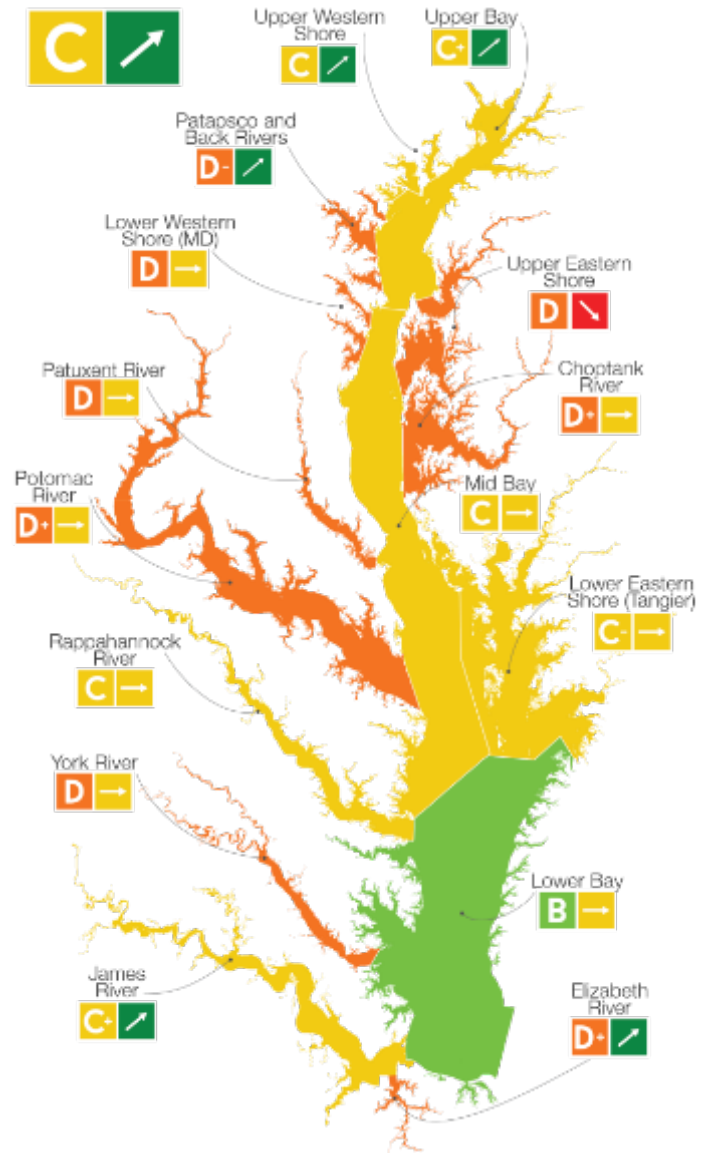
NUTRIENT REQUIREMENTS OF DOMESTIC ANIMALS

Dairy Research – 1990s

- Nutrient management:
Milk urea nitrogen

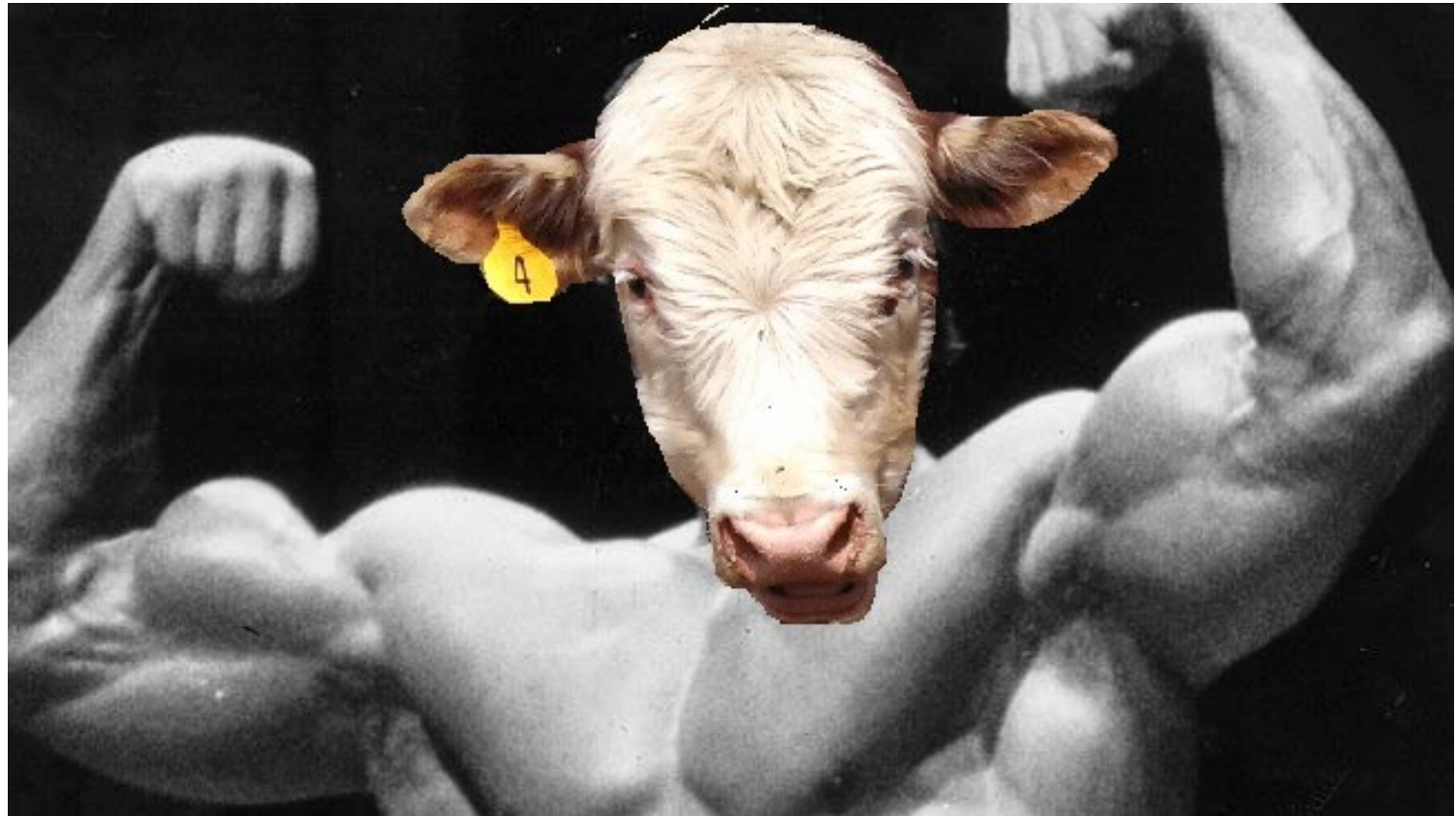


Dr. Richard Kohn
ANSC



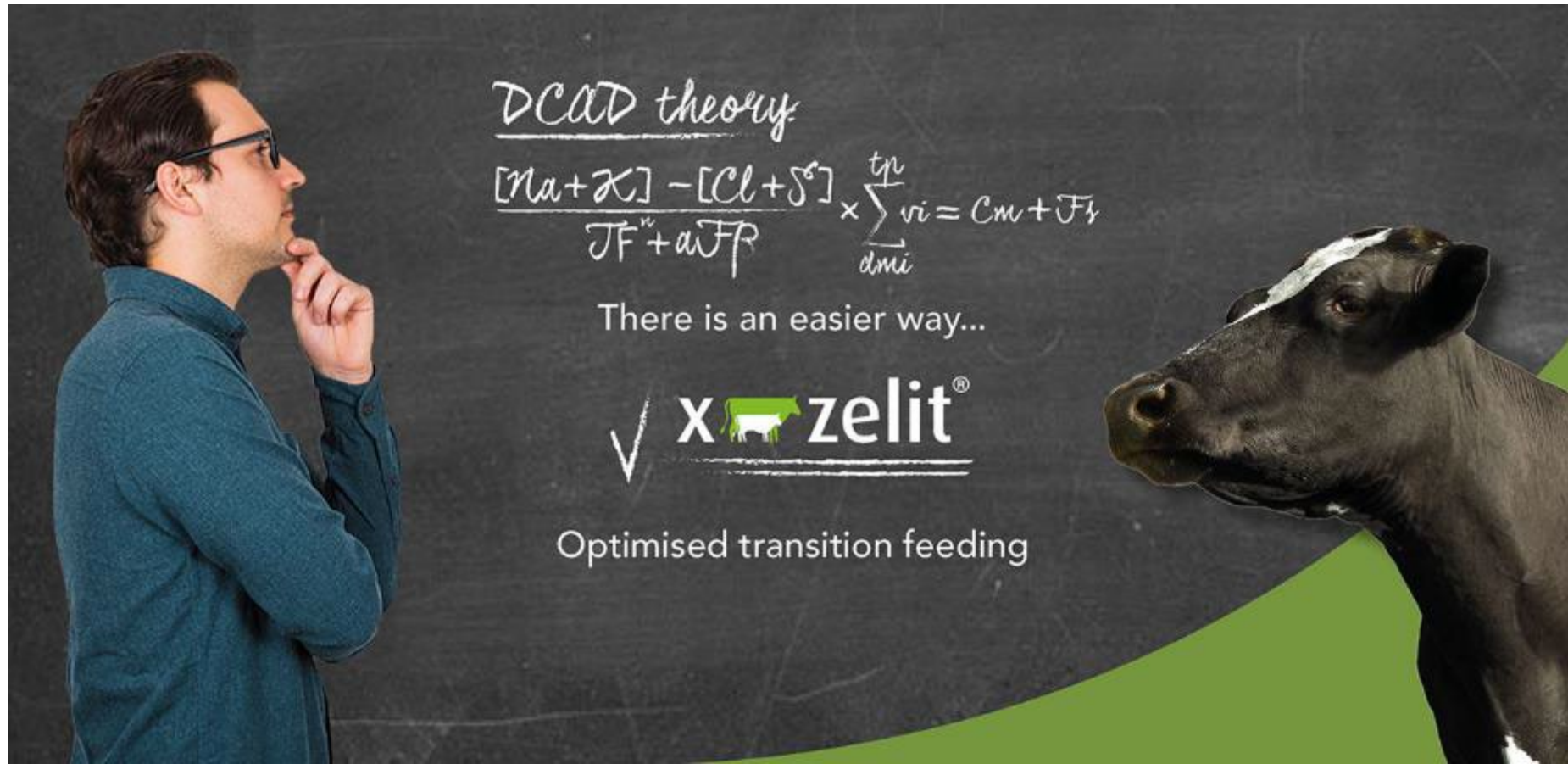
Dairy Research – 2000s

- Bovine somatotropin (rbST)



Dairy Research – 2010s


- Dietary Cation-Anion Difference (DCAD)



DCAD theory

$$\frac{[Na+K] - [Cl+S]}{JF^m + aJF} \times \sum_{dmi}^{tp} v_i = C_m + F_f$$

There is an easier way...

✓ **x**  **zelit**[®]

Optimised transition feeding

Dairy Research – Present

- Mastitis



Dr. Eduardo Rico
ANSC



- CH₄ emissions



Helen Craig
ENTM

Agronomy Research

- Transition zone forage
- Cover crops



Dr. Lester Vough
PSLA



Agronomy Research

- Pasture management



Dr. Amanda Grev
UME



Agronomy Research

- Small grains breeding



Dr. Vijay Tiwari
PSLA



Other Research

- Aquatic entomology



Dr. Bill Lamp
ENTM



Extension Programming

- Commercial horticulture
- Pest management
- Drones



Stanton Gill
UME



Dr. Dave Clement
UME

Extension Programming

- Equine unit
- Pasture management



Dr. Amy Burk
ANSC



Extension Programming

- Beef unit
- Nutrition/Reproduction classes



Racheal Slattery
ANSC



Extension Programming

- Home and Garden Information Center (HGIC)
- Master Gardeners
- Master Naturalists
- Native Plants
- Urban Agriculture



Questions?

