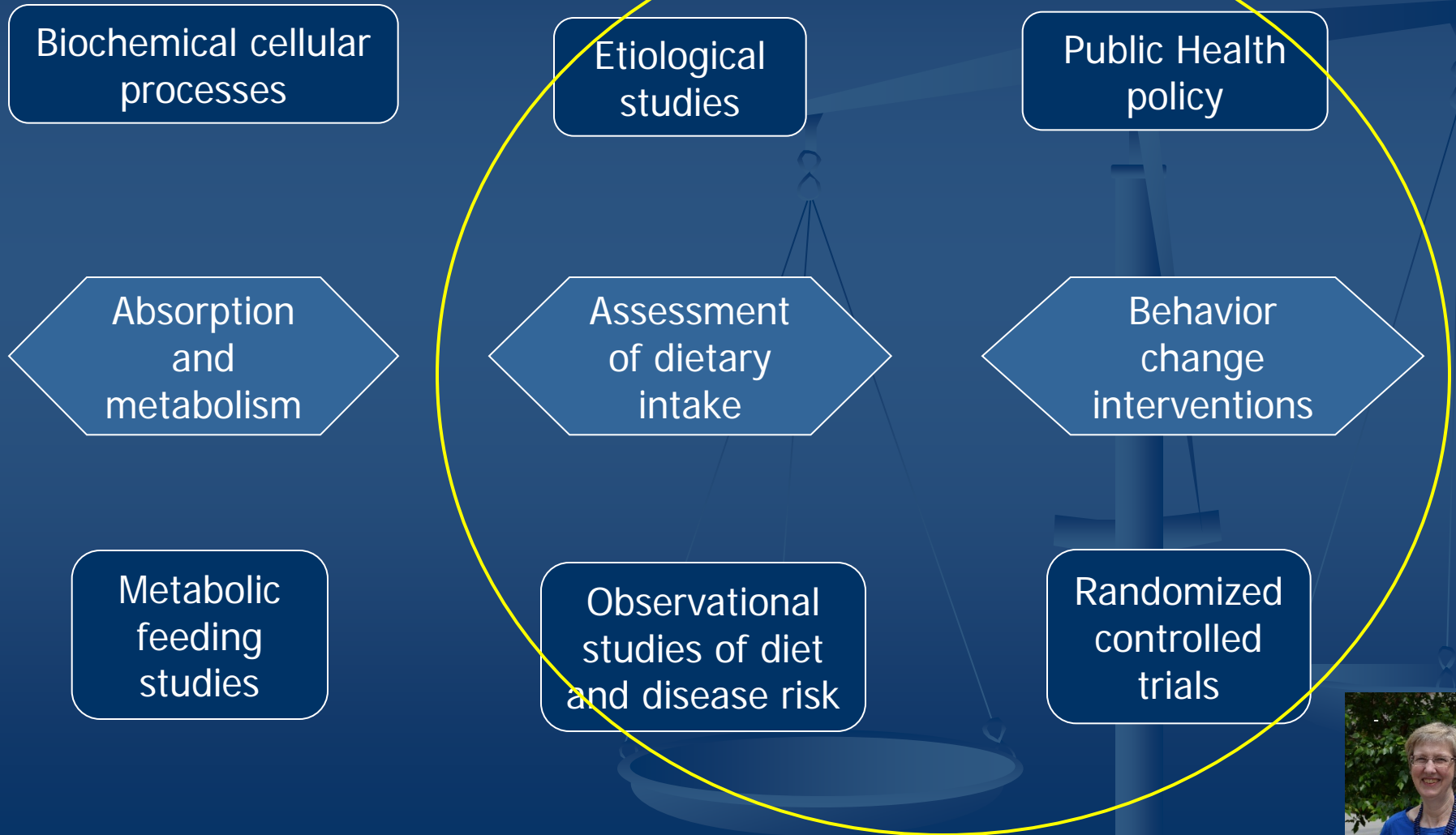


Human Nutrition

Nutritional Epidemiology



What motivates our research?

The questions we want to answer

▶ *Why is it that in the US women with lower education or lower income tend to be more obese?* (mechanisms- mediators)

▶ Socioeconomic Status and Obesity (SESO)

1017 women aged 30 to 50 years (514 Hispanic, 503 White)

Contextual factors

Stress

Dietary behaviors

Physical activity behaviors

Measured height and weight

Psychosocial factors

Socioeconomic factors

Longitudinal (two years)

What motivates our research?

The questions we want to answer

▶ *If women in later life change their diet in a dramatic way, will they reap health benefits?*

▶ **Women's Health Initiative –...**

161,808 postmenopausal women aged 50 to 79 initially

Dietary variables

Medications

Health History

RCT (for 9 years)

Cancer outcomes

CVD outcomes

Fracture outcomes

Cohort (further 10 years)



Epidemiology to Public Health Strengthening Etiological Inference

- Observational studies
 - Is dietary factor X related to disease outcome Y?
- Randomized trials
 - Does change in dietary factor X lead to change in disease outcome Y?
- Intervention studies (e.g. Group Randomized Trials)
 - Can an intervention strategy Z result in change to dietary factor X?
- Public Health Experiment
 - Does implementation of strategy Z **result in change in disease outcome** Y?

What motivates our research?

The questions we want to answer

▶ *Can we create supportive environments to help people adhere to dietary guidelines (through behavior change)*

▶ **Worksite randomized trials – five so far ...**

Several thousand employees in 154 worksites

Dietary variables

Behavioral processes

Plasma biomarkers

Socioeconomic status

Group RT (for 2 years)



Epidemiology to Public Health Strengthening Etiological Inference

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 - Does implementation of strategy Z **result in change in disease outcome** Y?

What motivates our research?

The questions we want to answer

- ▶ *What are the health consequences (if any) of change in fortification policy, on "fragile" population groups?*
- ▶ *Can we develop a new screening tool for pre-clinical pernicious anemia?*