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Brief Overview

- Importance of the lens—men as a proxy for women
- Little background on how I started
 - Men and women have different body composition and shape
 - Growth hormone axis (GH, IGF-1, ghrelin) are known to influence body composition and metabolism
 - Interested in how exercise/physical activity influences GH responses in women vs men
 - Found that despite the fact that men have lower GH outputs, they have higher lean body mass and have lower overall outputs of GH in response to exercise
 - But, men have a more organized pattern of GH release & different levels of sex-steroids
 - Better synchrony between hormonal axes?
 - Sex differences have always been of interest to me but not the primary focus in all my work
- Current work; the role of physical activity for reducing cardiometabolic risk across the lifespan
 - Largely focused on biological outcomes such as metabolic (insulin resistance, hormones—leptin, adiponectin, PYY); inflammation; hypertension; body composition/obesity; hypothalamic-pituitary hormones (both HPA and HPG related hormones); ANS function

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Overview

- With regard to this more current work;
 - Know that adolescent girls have extreme drops in their rate of both sport participation and physical activity in general (both MVPA and low/moderate PA)—this is a well documented fact
 - We have confirmed this in our RIGHT Track cohort
 - However, little is known about why girls stop being active or why they drop out of sport
 - When we started RT Health, we wanted to look at this but could not find good questionnaires related to how adolescents felt about the importance of sport participation in their lives or why they dropped out of organized sport participation
 - We developed 2 new questionnaires on sport importance for adolescents and a questionnaire on their history of sport participation, reasons for dropping out, general barriers/facilitators for sport participation
 - Focused on both team and individual sports
 - Working on validating and publishing these questionnaires—hope this will help shed light on why girls are changing their participation during this developmental period

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Overview

- Work has come full circle; many of the projects I am working on now come back to the idea that sex-steroid hormones are differentially influencing important CMR outcomes in women vs men
 - Current work;
 - Potential influence of biological sex on CMR in emerging adulthood (several projects)
 - Influence of the menstrual cycle of hydration and wellness
 - How physical activity participation influences the menstrual cycle and reproductive health in women across the lifespan
 - Physical activity and diet influences on prenatal health outcomes in moms and how it impacts early life obesity outcomes (IRWG) in their children
 - Interaction of menstrual cycle and physical activity on heart rate variability (ANS) and inflammation

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Questions;

- 1. When we think about physical activity as a preventative measure for improving women's health outcomes, what do you think as been the biggest oversight in current research?
- 2. If we want to increase physical activity participation in girls/women across the lifespan, what do we need to do better?
- 3. Do you think that women believe that physical activity matters? Do they understand the difference between physical activity and exercise?


Attentional Focus in Motor Behavior

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 Department of Kinesiology

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Definitions & Examples

- Attentional Focus: attentional focus can be broken down into two different conditions (internal and external).
- An Internal Focus directs attention to an individual's body (Wulf et al. 2001).
- An External Focus directs attention to the effect's movement has on the environment (Wulf et al.2001).


Instructional Cue Examples:

External Focus: Keep the board parallel to the floor

Internal Focus: Keep your feet parallel to the floor

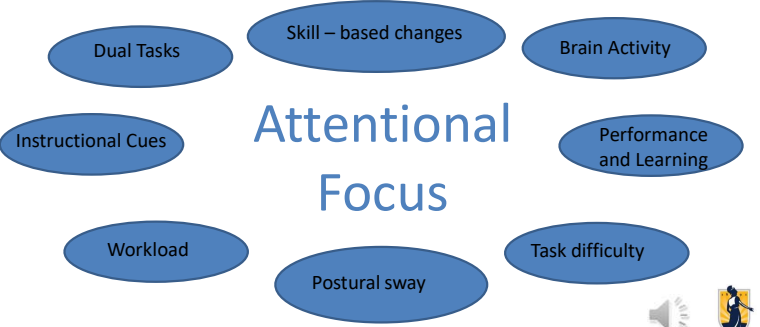
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Introduction



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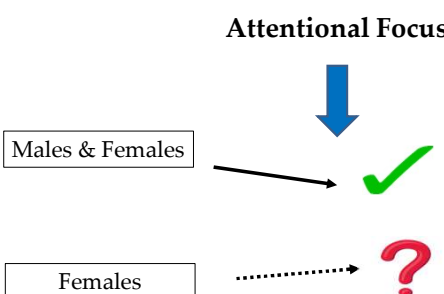




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Attentional Focus

Attentional Focus



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Future Directions

- Gender Differences
- Differences in women for different attentional focus conditions across a multitude of motor behavior and cognitive tasks
- How does physical activity level affect the potential differences between conditions (we have this data but we just recently started to explore it)

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Exercise & Cancer Recovery


Traci L. Parry, PhD



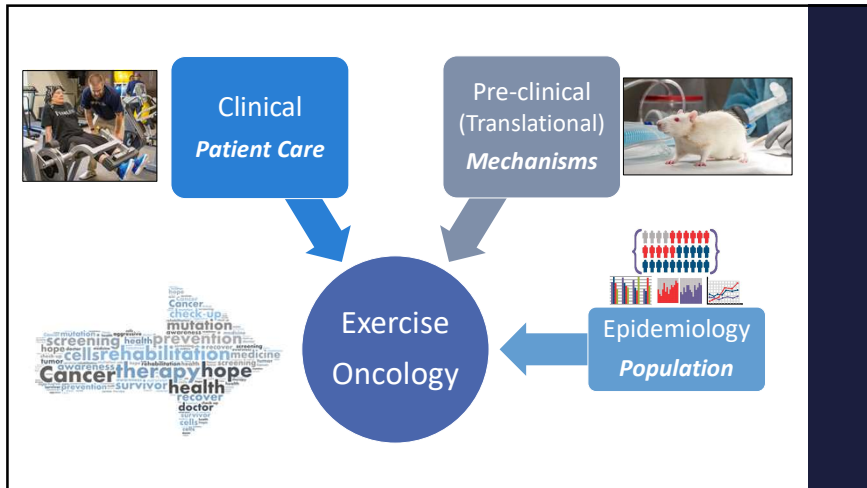
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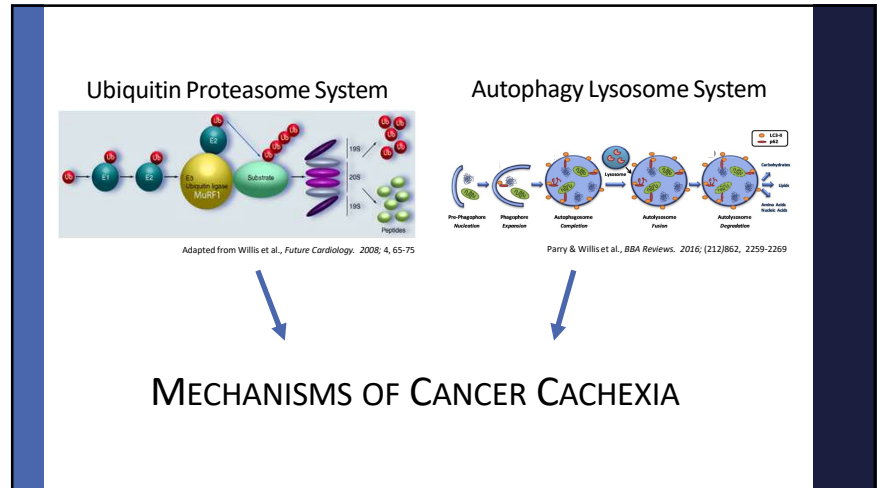
EXERCISE ONCOLOGY GOAL: IMPROVE THE QUALITY OF LIFE OF CANCER SURVIVORS



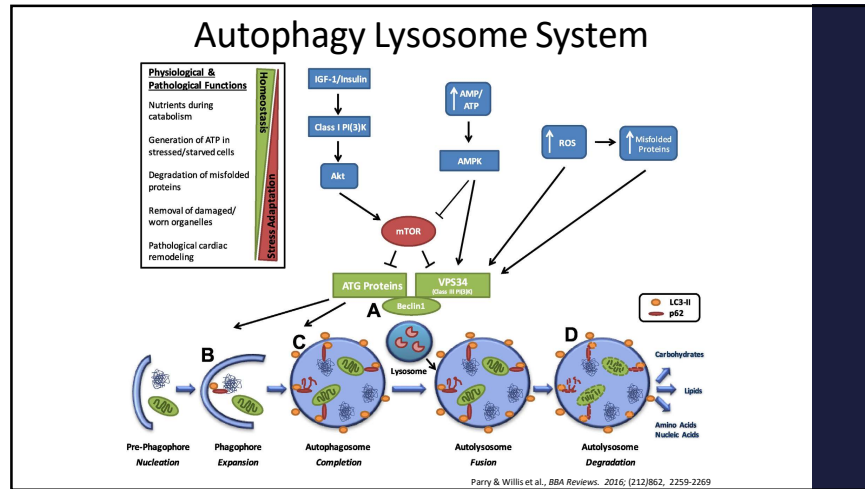
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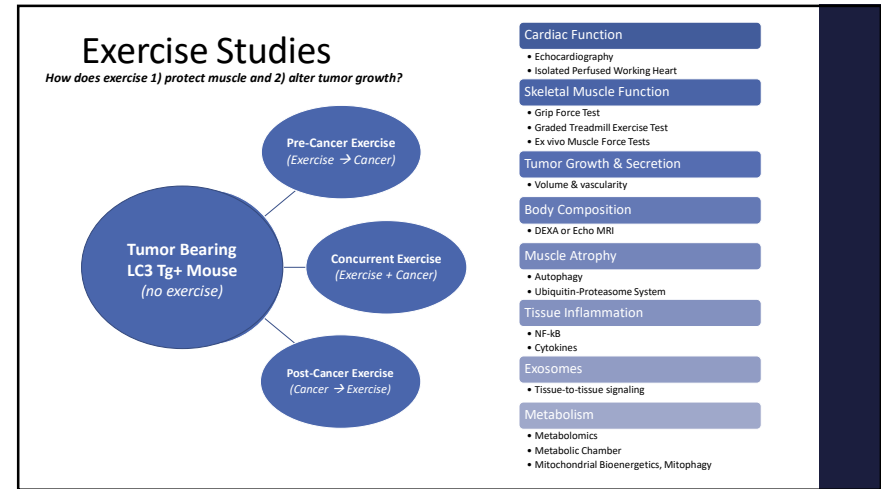
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