HUMAN PERFORMANCE AND CLINICAL RESEARCH LABORATORY (HPCRL)
Health and Exercise Science

Clinical labs

Clinical testing

Biochemistry/molecular biology

11,260 sq ft of administrative, clinical, and research space
Addition (2017)

4500 sq ft of new space and 900 sq ft of remodeled space
HPCRL OVERVIEW

• The HPCRL, a CSU Program of Research and Scholarly Excellence since 2008
  – Serves as a center for interdisciplinary research, teaching and outreach efforts that address the etiology, prevention, intervention and treatment of major chronic diseases including cardiovascular disease, diabetes, obesity, and degenerative conditions associated with aging.

• Leadership
  – Executive Director: Dr. Barry Braun
  – Director: Dr. Matt Hickey
  – Manager of Research Operations: Laurie Biela
  – Manager of Clinical Operations: Tiffany Lipsey
OUTREACH PROGRAMS

- **Adult Fitness Program**
  - With a healthy lifestyle, every child’s a winner.
  - Spread a less healthy summer with us!
  - Register online at www.hesc.colostate.edu/YSC/

- **Youth Sport Camps**
  - 2010

- **Noon Hour Fitness Program**
  - Faculty & Staff

- **Heart Disease Prevention Program**
  - 11:30 a.m.—1:30 p.m. Monday through Friday
CSU COLUMBINE HEALTH SYSTEMS
CENTER FOR HEALTHY AGING

60,000 sq ft opening 2017
CSU COLUMBINE HEALTH SYSTEMS CENTER FOR HEALTHY AGING

7000 sq ft
ALTERNATIVE CLINICAL MODELS

- NIA and other institutes have recognized that alternative models are needed to accelerate translation of basic science into clinical treatment.
- Numerous high profile clinical trial failures from promising treatments in mouse models.
TRANSLATIONAL RESEARCH ON AGING AND CHRONIC DISEASE LABORATORY (TRACD)

http://www.tracd.chhs.colostate.edu
WHY IS THE CANINE MODEL PROMISING FOR STUDIES OF HUMAN AGING?

- Diversity of size and lifespan within a species.
- Well-described genetics and genetic variability (breeds within the species).
- Short-to-moderate lifespan.
- Share many diseases with humans.
- Well-developed medical care.
- **Share the human environment.**
THE CANINE AS A PROMISING MODEL FOR STUDIES OF HUMAN AGING?

- Canine Longevity Consortium
  - http://www.uwaging.org/CLC
- Dog aging project
  - http://dogagingproject.com
WHY THE ALASKAN HUSKY?

- Strong selective pressure has given rise to a stress resistant phenotype.
- Preliminary data that the Alaskan Husky is long-lived compared to other canines of equal body mass.
HARTLEY GUINEA PIG AND OA

Hartley

Strain 13
FOR MORE INFORMATION

• TRACD Lab
  – http://www.tracd.chhs.colostate.edu

• Health and Exercise Science
  – http://www.hes.chhs.colostate.edu