



Body Composition Analysis

METABOLIC AND BIOMECHANICS TESTING

- **TRAINING PROGRAM DESIGN:** Development of season and year-long training plans including: periodization, training loads, recovery, peak phases, etc. Sound planning—the link between intelligent preparation and stable performance.
- **THERMAL IMAGING:** Thermal (infrared) imaging of body heat is used to discern inflammation from training and/or injury. This method allows you to see your body's response to training in a new light.
- **GAIT ANALYSIS:** A variety of measurements using instrumentation including high-speed video, Vicon motion analysis, force plates and electromyography (EMG) are used to characterize locomotion. Do you have pain while running or walking? Is your running smooth and without unnecessary motion?
- **SPORT SKILL ANALYSIS:** Measurements from high speed video, Vicon motion analysis, force plates, EMG and other instrumentation can help tune technique. Do you have technique deficiencies or idiosyncrasies? We can help improve sports technique.
- **AEROBIC TESTING:** Endurance and cardiovascular information. What is your VO_2 max? What is your lactate turn-point? What fuels do you use? How does your heart respond? What intensity is best for your training? Testing can include walking, running, biking or skating on an oversized treadmill.

- **BODY COMPOSITION:** Measurement to determine how much muscle and bone (lean body mass) vs. body fat a person has. Body composition data are important in any weight loss program for determining status and progress.
- **RECOVERY ANALYSIS:** Are you getting enough rest? What are your sources of stress?
- **HYDRATION:** Are you dehydrated? This is one of the easiest aspects of training to neglect—but also easy to fix. Know your status.
- **STRENGTH AND POWER ASSESSMENT:** Tests using accelerometers, force plates and jump power analysis. How high do you jump? What is your strength, power and rates of force development? What are your agility, reaction, anaerobic power, sprint speed and acceleration measurements?
- **BLOOD PROFILES:** Measurements of cholesterol, lactate and glucose levels.



I think we view the Monfort Family Human Performance Lab as a great opportunity to bring athletes and non-athletes alike together in a setting that helps them best understand the human body, and how it functions!

Charles Monfort

Laboratory Fees

Training Design	
Lab	\$65
Thermal Imaging	
Camera/Lab	\$45
Gait Analysis (Lab)	
High-speed Video Qualitative, Thermal and Report	\$75
Optical Quantitative and Report	\$110
Force Platform and Report	\$40
EMG and Report	\$90
Sport Skill Analysis (Lab)	
High-speed Video Qualitative, Thermal and Report	\$75
Optical Quantitative and Report	\$110
Force Platform and Report	\$40
EMG and Report	\$90
Sport Skill Analysis (Field)	
High-Speed Video Qualitative and Report	\$120
Motus Quantitative and Report	\$220
Motus Quantitative + EMG and Report	\$300
Aerobic Physiology (Lab) **	
Treadmill, Ventilatory Threshold, Max VO_2 , Report	\$75
Treadmill, Lactate Threshold, Max VO_2 , Report	\$100
Bike, Ventilatory Threshold, Max VO_2 , Report	\$75
Bike, Lactate Threshold, Max VO_2 , Report	\$100
Health Assessment	
Full Health Assessment w/ VO_2 , EKG, Report	\$100
Full Health Assessment w/out VO_2 , Report	\$50
At Risk Exercise Tolerance (Lab)	
Treadmill, Metab, EKG, Report, Physician*	\$190
Bike, Metab, EKG, Report, Physician*	\$200
Exercise Induced Asthma (Lab)	
Treadmill, Spirometry, Report, Physician*	\$210
Bike, Spirometry, Report, Physician*	\$210
Body Composition	
Skinfolds and Bod Pod Report	\$40
Resting Metabolic Rate (Lab)	
Metabolic Cart, Treatment Table	\$70
Hydration	
Refractometer	\$17
Vertical Jump	
Vertec (height only) and Report	\$20
Vertical Jump Profile	
Force Platform, power, impulse, Report	\$70
Blood Profiles	\$115
Special Tests	
Modify, build, design equipment for test	As Needed
Body Composition	
Skinfolds and Report	\$20
X 2 (group or individual series of measurements)	\$30
X 4 (group or individual series of measurements)	\$40
Bod Pod: (progress report with series of measures)	\$45
X 2 (group or individual series of measurements)	\$60
X 4 (group or individual series of measurements)	\$100

* With physician, if required

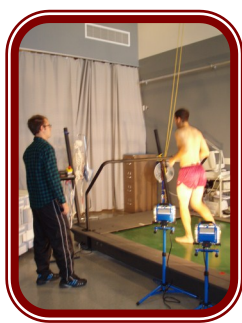
** Series of tests over a season can be arranged at reduced cost.

Monfort Family Human Performance Laboratory



The Monfort Family Human Performance Lab is one of the most technologically advanced facilities for applied physiological and bio-mechanical research in the inter-mountain west. The lab offers a myriad of services for the community, athletes, students, and faculty. It provides Colorado Mesa University the opportunity to positively impact the health and athletic performance of residents in the region. This integrative, multi-use human performance laboratory fills a need in the community by providing advanced physiological, biomechanical, performance, and wellness testing.

The Monfort Family Human Performance Laboratory is located in The Maverick Center, on the Colorado Mesa University Campus.



Laboratory Information

- Individuals over 45 years of age or those having cardiovascular risk factors must have a physician present during any max VO₂ test (maximal metabolic test).
- Your physician or therapist should be contacted prior to assessments that involve injury.
- Children under 18 years of age require the permission of a parent or guardian to participate in assessments.
- Group and team rates apply. Please contact the laboratory for more information.



1100 North Avenue • Grand Junction, CO 81501-3122

Department:
970.248-1935

Website:
coloradomesa.edu/hpl

Brent Alumbaugh, MS, CSCS

Acting Clinical Coordinator/Lab Assistant
970.248.1346 • balumbau@coloradomesa.edu

Kristin Heumann, Ph.D., HFS

Assistant Professor of Kinesiology
970.248.1763 • kheumann@coloradomesa.edu

Gig Leadbetter, Ph.D.

Professor of Kinesiology
970.248.1194 • gleadbet@coloradomesa.edu

Gerald A. Smith, Ph.D.

Director - Monfort Family Human Performance Lab
970.248.1918 • geasmith@coloradomesa.edu



*The Monfort Family
Human Performance Lab*



DEPARTMENT OF KINESIOLOGY
coloradomesa.edu/hpl