Stanford

Anne L. Friedlander

Adjunct Professor, Program in Human Biology

Bio

BIO

Anne L. Friedlander, Ph.D, is the Assistant Director of Stanford Lifestyle Medicine, an Adjunct Professor in the Program in Human Biology, and a member of the Wu Tsai Human Performance Alliance. She has served as the Director of the Exercise Physiology Lab, the Director of the Mobility Division within the Stanford Center on Longevity (SCL), and the Associate Director for Education within the Geriatric Research, Education and Clinical Center (GRECC) at the VA Palo Alto. Dr. Friedlander has broad research experience in the areas of enhancing human performance, environmental physiology, and using physical activity and mobility to promote healthy aging. She also consults regularly with companies interested in developing new products, programs and ideas in the fitness and wellness space. She is passionate about the benefits of movement on the aging process and specializes in giving talks translating scientific findings on physiology and exercise into practical applications for people.

ACADEMIC APPOINTMENTS

- Adjunct Professor, Program in Human Biology
- Member, Wu Tsai Human Performance Alliance

Teaching

COURSES

2026-27

- Human Performance: Foundations for Collegiate Athletes: BIOE 32, HUMBIO 32 (Aut)
- Your Body at Stanford: The Physiology of College: HUMBIO 35 (Spr)

2025-26

- Exercise Physiology: HUMBIO 135 (Aut)
- Your Body at Stanford: The Physiology of College: HUMBIO 35 (Spr)

2024-25

- Exercise Physiology: HUMBIO 135 (Aut)
- Your Body at Stanford: The Physiology of College: HUMBIO 35 (Spr)

2023-24

- Exercise Physiology: HUMBIO 135 (Aut)
- Your Body at Stanford: The Physiology of College: HUMBIO 35 (Spr)

STANFORD ADVISEES

Undergraduate Major Advisor

Sami Raskin

Publications

PUBLICATIONS

- **Cyclic Hypobaric Hypoxia Improves Markers of Glucose Metabolism in Middle-Aged Men** *HIGH ALTITUDE MEDICINE & BIOLOGY*
  Marquez, J. L., Rubinstein, S., Fattor, J. A., Shah, O., Hoffman, A. R., Friedlander, A. L.
  2013; 14 (3): 263-272

- **Sildenafil does not improve steady state cardiovascular hemodynamics, peak power, or 15-km time trial cycling performance at simulated moderate or high altitudes in men and women** *EUROPEAN JOURNAL OF APPLIED PHYSIOLOGY*
  Kressler, J., Stoutenberg, M., Roos, B. A., Friedlander, A. L., Perry, A. C., Signorile, J. F., Jacobs, K. A.
  2011; 111 (12): 3031-3040

- **Sildenafil Has Little Influence on Cardiovascular Hemodynamics or 6-km Time Trial Performance in Trained Men and Women at Simulated High Altitude** *HIGH ALTITUDE MEDICINE & BIOLOGY*
  Jacobs, K. A., Kressler, J., Stoutenberg, M., Roos, B. A., Friedlander, A. L.
  2011; 12 (3): 215-222

- **Evaluating Technology that Makes Physical Games for Children more Engaging**
  Peer, F., Mazalek, A., Mueller, F., Friedlander, A., ACM
  ASSOC COMPUTING MACHINERY.2011: 193–96

- **Sildenafil Does Not Improve Performance At Simulated High Or Moderate Altitudes In Men Or Women.**
  Stoutenberg, M., Kressler, J., Roos, B., Friedlander, A. L., Viskochil, R., Signorile, J. F., Jacobs, K. A.
  LIPPINCOTT WILLIAMS & WILKINS.2010: 470

- **Sildenafil Does Not Improve Peak Exercise Capacity During Acute Hypoxia In Trained Men Or Women.**
  Kressler, J., Stoutenberg, M., Roos, B., Friedlander, A. L., Perry, A. C., Signorile, J., Viskochil, R., Jacobs, K. A.
  LIPPINCOTT WILLIAMS & WILKINS.2010: 141

- **Men And Women Exhibit Similar Declines In Peak Exercise Capacity And Performance At Simulated Altitudes.**
  Viskochil, R., Kressler, J., Stoutenberg, M., Roos, B., Friedlander, A. L., Perry, A. C., Signorile, J., Jacobs, K.
  LIPPINCOTT WILLIAMS & WILKINS.2010: 470

- **MAKING MOLEHILLS OUT OF MOUNTAINS: Maintaining High Performance at Altitude** *ACSMS HEALTH & FITNESS JOURNAL*
  Friedlander, A. L., Braun, B., Marquez, J.
  2008; 12 (6): 15-21

- **Systematic review: The effects of growth hormone on athletic performance** *ANNALS OF INTERNAL MEDICINE*
  Liu, H., Bravata, D. M., Olkin, I., Friedlander, A., Liu, V., Roberts, B., Bendavid, E., Saynina, O., Salpeter, S. R., Garber, A. M., Hoffman, A. R.
  2008; 148 (10): 747-U59

- **Effects of growth hormone and pioglitazone in viscerally obese adults with impaired glucose tolerance: A factorial clinical trial** *PLOS CLINICAL TRIALS*
  Attallah, H., Friedlander, A. L., Nino-Murcia, M., Hoffman, A. R.
  2007; 2 (5)

- **Effects of oligofructose-enriched inulin on intestinal absorption of calcium and magnesium and bone turnover markers in postmenopausal women** *BRITISH JOURNAL OF NUTRITION*
  Holloway, L., Moynihan, S., Abrams, S. A., Kent, K., Hsu, A. R., Friedlander, A. L.
  2007; 97 (2): 365-372

- **Visceral obesity, impaired glucose tolerance, metabolic syndrome, and growth hormone therapy** *19th Annual National Cooperative Growth Study/1st Annual National Cooperative Metabolic Study Investigator Meeting*
  Attallah, H., Friedlander, A. L., Hoffman, A. R.

CHURCHILL LIVINGSTONE.2006: S62–S67

- **Endocrine responses to acute and chronic high-altitude exposure (4,300 meters): modulating effects of caloric restriction** *AMERICAN JOURNAL OF PHYSIOLOGY-ENDOCRINOLOGY AND METABOLISM*
  Barnholt, K. E., Hoffman, A. R., Rock, P. B., Muza, S. R., Fulco, C. S., Braun, B., Holloway, L., Mazzeo, R. S., Cymerman, A., Friedlander, A. L.
  2006; 290 (6): E1078-E1088

- **Sildenafil improves cardiac output and exercise performance during acute hypoxia, but not normoxia** *JOURNAL OF APPLIED PHYSIOLOGY*
  Hsu, A. R., Barnholt, K. E., Grundmann, N. K., Lin, J. H., McCallum, S. W., Friedlander, A. L.
  2006; 100 (6): 2031-2040

- **Sildenafil Improves Cardiac Output and Exercise Performance During Acute Hypoxia**
  Friedlander, A. L., Hsu, A. R., Lin, J. H., Branholt, K. E., Grundmann, N. K., McCallum, S. W.
  LIPPINCOTT WILLIAMS & WILKINS.2006: 72

- **Cytokine response at high altitude: Effects of exercise and antioxidants at 4300 m** *MEDICINE AND SCIENCE IN SPORTS AND EXERCISE*
  Hagobian, T. A., Jacobs, K. A., Subudhi, A. W., Fattor, J. A., Rock, P. B., Muza, S. R., Fulc, C. S., Braun, B., Grediagin, A., Mazzeo, R. S., Cymerman, A., Friedlander, A. L.
  2006; 38 (2): 276-285

- **Three weeks of caloric restriction alters protein metabolism in normal-weight, young men** *AMERICAN JOURNAL OF PHYSIOLOGY-ENDOCRINOLOGY AND METABOLISM*
  Friedlander, A. L., Braun, B., Pollack, M., Macdonald, J. R., Fulco, C. S., Muza, S. R., Rock, P. B., Henderson, G. C., Horning, M. A., Brooks, G. A., Hoffman, A. R., Cymerman, A.
  2005; 289 (3): E446-E455

- **Antioxidant supplementation does not attenuate oxidative stress at high altitude** *AVIATION SPACE AND ENVIRONMENTAL MEDICINE*
  Subudhi, A. W., Jacobs, K. A., Hagobian, T. A., Fattor, J. A., Fulco, C. S., Muza, S. R., Rock, P. B., Hoffman, A. R., Cymerman, A., Friedlander, A. L.
  2004; 75 (10): 881-888

- **Foot cooling reduces exercise-induced hyperthermia in men with spinal cord injury** *MEDICINE AND SCIENCE IN SPORTS AND EXERCISE*
  Hagobian, T. A., Jacobs, K. A., Kiratli, B. J., Friedlander, A. L.
  2004; 36 (3): 411-417

- **Five weeks of insulin-like growth factor-I treatment does not alter glucose kinetics or insulin sensitivity during a hyperglycemic clamp in older women** *METABOLISM-CLINICAL AND EXPERIMENTAL*
  Braun, B., Friedlander, A. L., Pollack, M., Butterfield, G. E., Marcus, R., Hoffman, A. R.
  2003; 52 (9): 1182-1190

- **Energy intake deficit and physical performance at altitude** *AVIATION SPACE AND ENVIRONMENTAL MEDICINE*
  Fulco, C. S., Friedlander, A. L., Muza, S. R., Rock, P. B., Robinson, S., Lammi, E., Baker-Fulco, C. J., Lewis, S. F., Cymerman, A.
  2002; 73 (8): 758-765

- **One year of insulin-like growth factor I treatment does not affect bone density, body composition, or psychological measures in postmenopausal women** *JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM*
  Friedlander, A. L., Butterfield, E., Moynihan, S., Grillo, J., Pollack, M., Holloway, L., Friedman, L., Yesavage, J., Matthias, D. F., Lee, S., Marcus, R., Hoffman, A. R.
  2001; 86 (4): 1496-1503

- **Endurance training increases fatty acid turnover, but not fat oxidation, in young men** *JOURNAL OF APPLIED PHYSIOLOGY*
  Friedlander, A. L., Casazza, G. A., Horning, M. A., Usaj, A., Brooks, G. A.
  1999; 86 (6): 2097–2105

- **Effects of exercise intensity and training on lipid metabolism in young women.** *American journal of physiology. Endocrinology and metabolism*
  Friedlander, A. L., Casazza, G. A., Horning, M. A., Buddinger, T. F., Brooks, G. A.
  1998; 275 (5): E853–E863

- **Training-induced alterations of carbohydrate metabolism in women: women respond differently from men** *JOURNAL OF APPLIED PHYSIOLOGY*
  Friedlander, A. L., Casazza, G. A., Horning, M. A., Huie, M. J., Piacentini, M. F., Trimmer, J. K., Brooks, G. A.

1998; 85 (3): 1175-1186