HUMAN EVOLUTIONARY BIOLOGY
SENIOR UNDERGRADUATE THESES

Theses going back to 2009 are available from the HEB concentration advisors.
Most theses from 2008 and earlier are searchable in HOLLIS.

YEAR	STUDENT	THESIS TITLE	RESEARCH DIRECTOR
2016	Pamela Chen	*Beyond Twenty-Eight Days: Modeling energetic regulation of menstrual cycle length using urinary C- peptide and urinary free cortisol*	Susan Lipson
	Connie Hsu	*The impact of athletic identity on pain-related distress and functioning in young athletes: an evolutionary perspective*	Susan Lipson
	CJ Jaramillo	*The Relationship Between Footwear, Arch Stiffness, and Intrinsic Pedal Musculature in Dancers*	Daniel Lieberman
	Bernadette Lim	*Beyond the Maternal-Infant Bond: Exploring Partner Influence on Breastfeeding and Co-sleeping*	Peter Ellison
	Claire Lo	*Born to Run Slowly: The Influence of Exercise Intensity on Serum C-reactive Protein as a Measure of Cardiovascular Disease Risk*	Daniel Lieberman
	Kim Reimold	*(MBB) Fat and Fecund: How Energy Status and Fat Distribution Shape Reproduction in a Modern Population of Females*	D Lieberman/C Hooven
	Lauren Stone	*(MBB) Central Ghrelin Resistance: A Newly Discovered Consequence of Chronic Stress, with Implications for Stress-associated Mental Illness*	Peter Ellison
	Olivia Turner	*A Non-Fig Fruit a Day Keeps the Illness Away: A Study of Illness and Injury in Wild Chimpanzees*	Zarin Machanda
	Hursuong Vongsachang	*Changes in Hair Cortisol and Isotopic Values in College Freshmen: A Study of the Freshman 15*	Peter Ellison
	Taylor Weary	*Sources of Variation in Fecal Particle Size for Free-Ranging Eastern Chimpanzees* (Pan troglodytes schweinfurthii*) in Kibale National Park, Uganda: Influence of Age and Food Type*	Richard Wrangham
	Wilder Wohns	*Exploring the Genomic Regulatory Architecture of Limb Bud Development and the Evolution of Limb Proportions in Mice and Primates*	Terry Capellini
2015	Sarah Abrams	*(MBB) Go for a run and let off some steam: cortisol is a biomarker of the long-term stress-relieving effects of exercise*	Susan Lipson
	Claire Edelson	*Sexual Coercion in a Western Human Population: Examining Patterns of Male Aggression Towards Female Partners*	Zarin Machanda
	Adrian Fanucci-Kiss	*Mother Knows Best: Ecological Factors Shaping Maternal Sociality in Dusky Dolphins (*Lagenorhynchus obscurus*)*	Zarin Machanda
	Ann Finkel	*(MBB) "It's Not Fair that James Gets All of Them": A Cross-Cultural Comparison on the Development of Third-Party Intervention*	Felix Warneken (Psychology)
	Rob Gunzenhauser	*Gdf5 cis-Regulation of the Shoulder Joint and Evolution of the Primate Scapula*	Terry Capellini
	Julia Hyman	*Social Relations in Red Colobus Monkeys*	Richard Wrangham
	Taylor Reiter	*A Starch Contrast: Evolution of Amylase Copy Number in Dogs and Humans*	Terry Capellini
	Patrick Schiller	*The Five Second Rule: A Novel Method for Collecting Wild Chimpanzee Saliva Samples; A Renewed Method for Understanding the Human Oral Microbiome*	Rachel Carmody
	Jenny Wong	*An Investigation of the Infant Safety Hypothesis in Kibale Red Colobus Monkeys (*Procolobus tephrosceles*)*	Richard Wrangham
2014	Emily Groopman	*The Fats of Life: The Energetic Significance of Processing Peanuts, A Lipid-Rich Plant Food*	Richard Wrangham
	Elizabeth Harvey	*Isotopic Change with Cooking: Implications for the Understanding of Neanderthal Diets*	Noreen Tuross
	Timothy Hopper	*(MBB) Saving What Counts: An Investigation of Selective Memory Consolidation*	Robert Stickgold (HMS)
	Riana Jumamil	*Fat and Its Relatives: The Effect of Family Relationships and Malnutrition on Adult Metabolic Risk Factors*	Janina Galler (Judge Baker Children's Center)
	Omar Mesina	*In Search of Our Natural Running Form: A Randomized Control Study of the Role of Running Form on Impact Peaks and Repetitive Stress Injuries*	Daniel Lieberman
	Diana Miao	*Detecting Signals of Natural Selection in Whole-Genome-Sequenced Plasmodium falciparum Malaria Parasites from Thiès, Senegal: 2006-2012*	Dyann Wirth (HSPH)
	Allie Pace	*(MBB) Your Brain on Games: Neural Activity Differences in Emotion Recognition after Plasticity-based Social Cognitive Training*	Christine Hooker (Psychology)
	Sara Providence	*Digging in Our Heels: The Effect of Heel Height and Stiffness on Impact Forces during Shod Walking and Heel-Strike Running*	Daniel Lieberman
	Alex Smith	*Cooking Beasts: The Role of Thermal Processing in Early Hominin Scavenging*	Richard Wrangham
	James Wood	*Gdf5 cis-Regulation and the Control of Variation in Primate Elbow Joint Morphology*	Terence Capellini
	Madeline Zhu	*Detecting stable nitrogen isotopes in human modern and archaeological tooth enamel*	Linda Reynard
2013	Aleah Bowie	*The Development of Inequality Aversion in Ugandan Children*	Richard Wrangham
	Nicholas Brazeau	*Growing Up Chimpanzee: A Study of Body Size and Growth Patterns in Pan troglodytes*	Richard Wrangham
	Martha Farlow	*(MBB) Regulating Fertility: Estrogen, Insulin, and the Unintended Effects of Hormonal Contraception*	Susan Lipson
	Charlotte Lane	*Why Play? Examining Costs and Benefits of Play in Rhesus Macaques*	Katie Hinde
	AJ Millet	*(MBB) Blinded by the Night: Short-Term Visual Deprivation and the Synaptic Homeostasis Hypothesis of Slow Wave Sleep Function*	Robert Stickgold (HMS)
	Neil Patel	*Testing the Self-Domestication Hypothesis in Humans and Bonobos with Molecular Evolution*	Maryellen Ruvolo
	Jorie Sullivan	*Evolutionary Perspectives of Obesity-Induced Lymphedema*	Arin Greene (HMS), Katie Hinde
	Robert Tamai	*Effects of Trunk Orientation on Human Running*	Anna Warrener, Dan Lieberman
	Hurnan Vongsachang	*Effects of Social Relationships on Inequity Aversion in Children*	Felix Warneken (Psych), Katie McAuliffe
	Justin Wang	*Tuning to the right frequency: The effects of stride rate on locomotor cost*	Anna Warrener, Dan Lieberman
	Vickie Wu	*The Effects of Body Composition on Acute Insulin Response in Young Adults*	Susan Lipson
	Owen Wurzbacher	*(MBB) How Robust is the Human Cooperative Impulse? An investigation of intuitive cooperation across social contexts*	David Rand (Psych)
	Pratyusha Yalamanchi	*An Evolutionary Perspective on Cardiovascular Aging: The Signaling Mechanism of Growth Differentiation Factor 11*	Richard Lee (HMS/Brigham)
2012	Ayse Baybars	*Step It Up! Energy Metabolism and Kinetics of Varying Step Frequency in Running*	Daniel Lieberman
	Graham Frankel	*Tread Softly and Carry a Big Stick: Using Flexible Bamboo Poles to Reduce the Metabolic Cost of Load-Bearing in Human Locomotion*	Daniel Lieberman
	Sylvia Ko	*The Effects of Early Exposure to Aggression on Subadult Rough-and-Tumble Play in Chimpanzees (Pan Troglodytes): Implications for the Development of Adult Aggression*	Zarin Machanda

	Robert Newell	*Sexual Age Preference and Pathology in Human Males*	Peter Ellison
	Mallory Owen	*(MBB) Social Strengthening: A Novel Hypothesis of How Religious Rituals Can Facilitate Cumulative Cultural Evolution in Humans*	Charles Nunn
	Ronnye Rutledge	*The Effects of Rapid Acculturation on Sexual Knowledge, Attitudes and Practices in Toba Youth of Namqom, Argentina*	Peter Ellison
	Brennan Vail	*I Ran, Fell, but Managed to be Third: Energy Allocation in Primary School Children in Rural Uganda*	Peter Ellison
	Caroline Vloka	*The Gastrocnemius Muscle as a Factor in Human Bipedalism*	Andrew Biewener (OEB)
	Bjorn Whitmore	*(MBB) The Evolutionary Motivations for Competitive Male Aggression in Humans*	Zarin Machanda
2011	Helen Bradshaw	*Physical and physiological bases of male running advantage*	Susan Lipson
	Shana Caro	*(MBB) The Play's the Thing: Benefits of Social Play in Pan troglodytes*	Zarin Machanda
	Daniel Driscoll	*(MBB) Evolutionary Switch-hitting: Theoretical Modeling of Parasite Generalism*	Charles Nunn
	Gulus Emre	*Cooperation and Equitable Relationships: a study of hand-clasp grooming in wild chimpanzees*	Zarin Machanda
	Rebecca Hofer	*(MBB) The effect of estradiol on emotion recognition in young women using and not using hormonal contraception*	Susan Lipson
	Katherine Kim	*(MBB) Unraveling HIV's Disproportionate Impact on Young Women: An Agent-Based Model of Age-Dependent Mate Choice on the Dynamics and Fitness Consequences of Sexually Transmitted Diseases*	Charles Nunn
	Amanda Klimczuk	*(MBB) Dancing into the Night: The Incorporation of a Learning Task Into Mentation During Sleep and Wake*	Robert Stickgold (HMS)
	Kira Mengistu	*Food and Reproduction: Assessing the relationship between energy and macronutrient intake and human male fecundity*	Peter Ellison
	Daniel Perl	*Efficiency of barefoot running compared to shod running*	Daniel Lieberman
	Leah Seifu	*Blubbery Babies and Battered Brains: The Role of Micronutrients in the Link between Childhood Obesity and Cognition*	Nancy Conklin-Brittain
	Helal Syed	*Biological Mass Damping: A Biomechanical Model of Head Stabilization in the Human Body*	Daniel Lieberman
	Julia Tartaglia	*(MBB) The Effect of Reward on Declarative Memory*	Robert Stickgold (HMS)
	Lauren White	*Every Moment Counts: The Effect of Footwear and Foot Strike Type on Ankle and Knee Movements*	Daniel Lieberman
2010	Yuting Chiang	*Unpacking Punitive Judgements: Punishability, Severity, and Satisfaction*	Marc Hauser
	Laura DiCola	*How the Mind Computes Sexual Transgressions*	Marc Hauser
	Powell Graham	*The Angulation of the Cranial Base: A Study of Human Fetal Ontogeny*	Daniel Lieberman
	Randi Griffin	*Social network Connectivity and Parasite Risk in Nonhuman Primates: Integrating Theoretical and Empirical Approaches*	Charles Nunn
	Caitlin Lewarch	*Environment in Early Life and Metabolism in Adulthood: A Test of the Predictive-Adaptive Response in a Group of Gambian Women*	Peter Ellison
	Jonathan Mayer	*The Effect of Creative Writing on Health as Indicated by Changes in Secretory Immunoglobulin A Levels*	Susan Lipson
	Michael Peters	*The Relationship between Bite Force and Tooth Wear in the United Kingdom from the 18th - 19th Century*	Daniel Lieberman
	Megan Roberts	*Factors Associated with Menstrual Regularity in Female Runners*	Susan Lipson
	Julia Rudolf	*Cortisol and Psychological Responsiveness to the Stress of Directing at a Homeless Shelter*	Susan Lipson
	Rebecca Smith	*Is Fairness a Social Strategy? Testing the Influence of Social Relationships and Familiarity on 8-year-olds' Inequity Aversion*	Marc Hauser
	Robert Tennyson	*Hard-Hitting Results: The Role of Sex in Attraction to and Imitation of Forward Propulsion*	Richard Wrangham
	Gil Weintraub	*The Pounded and the Cooked: The Energetic Significance of Processing Starch-Rich Tubers in a Mammalian Model*	Richard Wrangham
2009	Catherine Buzney	*Bone Degeneration and Anorexia Nervosa: Evolutionary Implications for Human Osteology in Times of Famine*	Karen Kramer
	Jordan Comins	*Evolving an Understanding of Goals and Property*	Marc Hauser
	Jay Costa	*On The Role of Consequences in Punitive and Remunerative Judgments: Testing an Ultimate Explanation*	Joshua Greene (Psych)
	Steven Cupps	*Partner Choice in Human Cooperation: The Effects of Relative Position and Probability of Success on Coalition Formation*	Richard Wrangham
	Adam Daoud	*Determinants of rate of loading and magnitude of heel strike transient in endurance running*	Daniel Lieberman
	Shannon Flynn	*The Role of Maternal Folic Acid Intake in Mediating Genomic Imprinting of IGF2*	Karin Michels (HSPH/HMS)
	Nguyen Nguyen	*Population Genetics of Plasmodium falciparum, Selection at a Hypothetical Gene*	Dyann Wirth (HSPH/Broad)
	Madeline Shapiro	*Factoring Stress: The Interplay of Hormones and Emotions in Ultimate Frisbee Competitions*	Peter Ellison
	Malorie Snider	*A Case-Control Genetic Study of Temperamental Fear of Novelty: Insights from Animal Models and Evolutionary Theory*	Jordan Smoller (HMS)
	Megan Srinivas	*Evolution and Malaria: a Battle for Survival*	Charles Nunn
	Brandon Weissbourd	*Neural Systems Targeted by Imprinted Genes in the Mammalian CNS*	Catherine Dulac (MCB)
	John Paul Zermeno	*3D Structure of Enamel*	Tanya Smith
2008	Kara Furman	*Music in the Eye of the Beholder: Does Music Change the Way We See Others?*	Mark Tramo (HMS)
	Eliza Gardiner	*Factors Contributing to Ovarian Suppression Sensitivity in Women with High Levels of Activity*	Susan Lipson
	Phillip Roebuck	*A challenge-dependent testosterone response to repeated games of ultimate frisbee*	Peter Ellison
	Roberto Travieso	*The Temporal Pattern of Cortisol Levels during Lactational Amenorrhea*	Peter Ellison
	William Werbel	*Shoes: The Arch Enemy? Contrasting the Kinetics and Kinematics of Habitually Shod and Habitually Barefoot Distance Runners*	Daniel Lieberman