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Senior Thesis Guide
Human Evolutionary Biology
2014-2015

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HEB Senior Thesis FAQs

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Q: What is a Senior Thesis?

A: A "thesis" is a proposition or assertion that is supported by logical arguments and factual evidence, or data. A Senior Thesis should represent an analysis of some phenomena, typically supported by original data. What makes your essay a "thesis" is that you go beyond narrative and description to include original data, analysis, and argument. What makes it a Human Evolutionary Biology thesis is the centrality of problems and phenomena related to the concerns of our discipline, adaptation and natural selection.

The thesis involves, briefly:

1) working with your advisor to choose a research question, design and execute a research project that addresses that question through hypothesis testing;
2) registering for and taking two courses, HEB 99a and HEB 99b;
3) analyzing and thinking about your research results;
4) writing and submitting your work.

Your Senior Thesis is *not* expected to make a staggeringly original contribution to science or to report amazing "statistically significant" results that support your hypotheses (or to require that you lose sleep or find yourself without any social life because you are constantly in the lab).

The Senior Thesis is an exciting opportunity for you to work with a faculty member to carry out and write up original research that addresses a question in which you are very interested. As far as possible it should be enjoyable and not (too) all-consuming.

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Q: Why should I write a Senior Thesis?

A: While writing a thesis is *one* way to become eligible for honors, and the *only* way to become eligible for the Summa Cum Laude level of honors, the best motivations are a love of research and/or

a burning question. You should not consider a Senior Thesis if your primary motivations are not intellectually based, but are instead more practical—i.e., increasing your chances of getting into medical school or "beefing up" your resume. There are other ways to achieve those goals that might be more suitable for you, and you should discuss your options with an Office of Career Services or concentration advisor.

Students who write Senior Theses typically are motivated by a genuine intellectual curiosity for a particular area, and have a positive experience with research in the past. The process of the thesis is guaranteed to be *at times* arduous, stressful and challenging; but students describe the process as one of the most rewarding of their college careers. They report that that they get out of the thesis process what they put in, and in addition to learning valuable skills and becoming an expert in some area, they have an enormous sense of accomplishment and a new confidence in their own abilities.

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Q: Who is eligible to pursue a Senior Thesis?

A: Any HEB student is eligible—but you should seriously consider whether you want to devote the time and energy to the work (invariably more than an average course load), and whether you have a demonstrated interest in either research or a particular area of inquiry. Ideally, you'd have taken relevant courses, and/or had relevant work experience. There is no minimum GPA. Even if you know you won't get honors, you might want to research and write a thesis just for the experience.

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Q: What is the rough schedule for thesis work?

A: The schedule varies from student to student, but here are some guidelines that might help you plan. Be sure to schedule your thesis goals with your advisor, and make a calendar of deadlines. Aim to have your first chapter to your advisor by Thanksgiving, and data collected and analyzed, with a Materials and Methods draft completed by the end of the Fall semester of your Senior year. You should focus your Spring semester efforts on writing the body of the thesis, and make sure you can have it completed the Friday before Spring Break (in 2015, that will be Friday, March 13). Be sure to leave plenty of time for editing! Sloppy writing, typos and grammatical errors will shed an unwelcome light on your thesis.

What follows is the schedule that the majority of our students follow, but there is plenty of flexibility, depending on what you and your advisor work out. For instance, it's possible to spend the summer after Junior year doing something other than thesis-related work, if you're sufficiently prepared to begin research in your Senior Fall, and agree with your advisor that you can meet the deadlines above.

Junior fall—You will want to start thinking about thesis ideas your Junior year. Talk to friends, think about what you liked in your classes (or books you read), take time to look at the websites of faculty in HEB, look at research articles of some labs and professors that look interesting. (See http://www.heb.fas.harvard.edu/labs.html for a list of HEB labs.)

Junior Spring—Prepare for thesis research over the summer. One excellent way to do that is to take the HEB 91r independent research course with an HEB faculty member. If preparing for thesis research, this course could allow you to, for instance, design and carry out a pilot study, or even to read relevant papers and books, discuss them with your potential advisor, then carry out and write up an extensive literature review in the area in which you're interested. That paper could then serve as a basis for the introduction to your thesis.

Summer after Junior year—conduct thesis research, learn relevant statistical skills, become familiar with software packages (statistical and reference), write detailed outline for thesis, begin writing portions of thesis.

Senior Fall—submit a Thesis Intent form and a Thesis Title form to an HEB advisor no later than Study Card Day. (Both of these forms can be found at the HEB Forms and Guides section of the Life Sciences website.) Enroll in HEB 99a. Finish data collection, analyze data, submit first chapter draft by Thanksgiving, and submit a materials and methods chapter draft by the end of the semester.

Spring of Senior Year—Enroll in HEB 99b. Finish writing, and edit, edit, edit! We recommend leaving at least three weeks for revisions, printing, proofreading, copying, etc.

Due date: 1:00 p.m. on the day before Spring break -- Friday, March 13, 2015.

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Q: What are the basic requirements for a Senior Thesis in HEB?

A: Submit a Thesis Intent form and Thesis Title form by Study Card day of your Senior Fall semester.

Original work. As the author, you need to do original work that makes a contribution to the field. All of the writing must be your own (of course you may get comments from others to help you improve the writing). This does not mean that *parts* of the thesis research can't be based on the work of others—on the contrary, all good research builds upon the work of others. But a major component of the research must be your own original work. Theses vary in the extent to which various parts rely on the work of others (e.g., ideas, broad hypotheses, data sets, analytical methods, experimental designs), but at a minimum, the main portion of the thesis should be based on your original thinking and work. The theses that receive the highest grades tend to be based on the most original and independent work on the students' parts, because this enables students to demonstrate their own abilities.

Length. We strongly encourage you to limit your thesis to 50 pages. Longer is not better; on the contrary, skill is required to explain complicated ideas in a clear and concise manner, and readers appreciate brevity when possible and more detailed writing when necessary and helpful. The thesis should only be as long as is necessary to complete limited goals, based on your experience, funding, and time constraints.

Topic. Theses in HEB need to concern some aspect of human evolutionary biology. This means that the focus of the thesis should be on some topic relating to how and why we are the way we are, using a biological, evolutionary perspective to answer these questions. Your questions may be about human culture, anatomy, behavior, psychology, disease, diet, or physiology. Your species on which you focus does not necessarily need to be *Homo sapiens*—it may be a non-human primate species, or other taxa that shed light on a question ultimately about humans.

Scope. Keep your hypotheses and research design as straightforward and uncomplicated as possible. It's easy to get excited about lots of questions, and tempting to try to incorporate as much as possible into your research design. Remember: keep it simple. Talk with your advisor about how you can complete an excellent thesis without taking on too much.

Courses. You must enroll in both HEB 99a and 99b in your Senior year Fall and Spring, respectively. Students enrolled in HEB 99 are required to attend several thesis-writer group meetings throughout the Senior Year. These meetings serve mainly to provide support and guidance to thesis writers.

Submit your thesis by 1:00 on the Friday before Spring Break (Friday, March 13, 2015).

Oral exam. Participate in an oral exam with your advisor and two other thesis readers. The exam is usually scheduled during reading period.

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Q: What kinds of research projects are acceptable?

A: Most students collect and analyze original data as the basis for their thesis, but you may also choose to test a hypothesis using pre-existing data (published or unpublished). These options are described separately below.

Original data collection: Design and carry out a study to test a hypothesis, and collect and analyze the resulting data. The nature of your question will direct your study design, or, you may have certain methodological or time constraints that restrict the kinds of hypotheses you may test. You may want to conduct an experiment in one of the labs in Human Evolutionary Biology (http://www.heb.fas.harvard.edu/labs.html), conduct an observational study in the field or at Harvard, work in a psychology lab with human subjects, or you may work in a lab off-campus. Many students combine one or more of these options, for example collecting data from humans or non-human animals in the field then analyzing biological samples of various kinds in one of the HEB labs.

Using pre-existing data: Researchers frequently collect more data than they have the ability to analyze, and that doesn't mean that the data is not valuable or that it may provide insight into interesting questions! Many opportunities exist for students to work with such data sets in HEB or elsewhere, and this kind of thesis is an excellent opportunity to test a novel hypothesis with data in need of analysis. Our students have used pre-existing data sets to investigate areas such as the relationship between male aggression and female fertility in wild chimpanzees, or how diseases spread across primate groups. These types of theses offer both advantages and disadvantages that you should discuss with your advisor. Briefly, a benefit is that you need not take the time and effort to collect brand new data, and normally you will be able to take advantage of a rich data set collected by the lab of a senior member of the faculty. But a tradeoff is that you will be restricted in the questions you can answer, and you won't have the experience of designing and carrying out an experiment to collect your own, original data. This kind of thesis might be a great choice if: you are particularly interested in the work of a member of the faculty who happens to have such a data set; you don't have the time to collect your own data; or the kind of question you want to investigate is best suited to an existing data set. Regardless of your motivations, these kinds of theses tend to be valuable and rewarding experiences.

Literature based-research: There are two types of literature-based research projects that you could consider: a "meta-analysis," and a critical review of the literature. Both types involve using published research articles to test a hypothesis or investigate a question. A meta-analysis is a systematic, statistical review of the literature with a specific question in mind. These kinds of studies help to make sense out of a large body of literature on a topic, particularly when no clear consensus has evolved (usually the case when interesting scientific questions are involved!). In this kind of thesis, all the published studies in a particular timeframe relevant to your question would be objectively analyzed, and the results compiled and sorted in an original data set. This allows the objective analysis and synthesis of results from numerous studies, and may also shed light on how various outcomes are related to aspects of study design.

A critical review is more subjective than a meta-analysis. In this type of thesis, you would rely on relevant, published studies to lend new perspective to an old idea, or to reevaluate an existing hypothesis in light of new work. Summarizing literature is not enough! The standards for originality in this type of thesis are high—these can be particularly challenging because you would need to compare/analyze divergent findings, discussing the strengths and weaknesses of various studies and conclusions, and arriving at some novel insight. This can be quite difficult for an undergraduate with relatively little research experience. This type of thesis would be rare.

You can learn more about your options by talking to one of the concentration advisors, a member of the HEB faculty whose work interests you, and by becoming familiar with different research methods used in published articles. There are likely other types of thesis research that would be acceptable—but what is described here are the major types available to you.

A list of recent thesis titles is available at the end of this document.

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Q: Do I need to be on campus to conduct thesis research?

A: No, but most students do conduct thesis research on or near campus. Some students do carry out research away from campus, either overseas in the field (e.g., in Uganda studying chimpanzees), or at another lab. If you want to do research away from campus, or want to do it during the school year only, you should talk with your advisor about the possibilities.

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Q: How can I fund my thesis research?

A: Lots of funding opportunities exist for thesis research. Some of these have early deadlines, so the earlier you get thinking about funding, the better. These opportunities are listed, along with deadlines and links, in the Research section of the Life Sciences website, under "Research Opportunities."

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Q: How do I go about contacting a professor about thesis advising?

A: You can always schedule a meeting with a professor to talk about possibilities for thesis work. You don't have to have a very specific idea for a project, but you should have done some legwork and have some idea of the kinds of research the particular professor or lab conducts. It never hurts to read some recent papers that have come out of a lab and share your comments or questions with the professor. Excellent advice on finding research opportunities can be found in the Research section of the Life Sciences website. Your HEB concentration advisor is also a great resource for advice on finding research opportunities.

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Q: What can I expect from my thesis advisor? What are my responsibilities?

A: Your thesis advisor is there to advise and support you during the thesis process. You are ultimately responsible for the thesis, but you can expect your advisor to be a significant source of advice on ideas, research, data analysis, and writing. They should provide you with feedback on your writing—but remember, they are not your personal editors! In general, thesis meetings take place at least every two weeks, but this depends on your needs and progress, and your advisor's availability. You should discuss expectations (in terms of meeting frequency, deadlines, statistics help, feedback on writing) with your advisor early in the process, so you both know what to expect.

You are responsible for scheduling and attending meetings and meeting deadlines, but some advisors may prefer to take a more proactive role and send you reminders when deadlines are approaching. Thesis writers should be independent, self-motivated, highly disciplined and proactive. You will need to take the initiative to find a faculty advisor and a topic that intrigues you, and have the resilience to persist through setbacks. While advisors are not responsible for your compliance and progress, they should provide support and encouragement when possible.

Thesis advisors should work more closely with you during the initial stages of planning the thesis research (ordinarily Junior spring), and should check in with you frequently as research is beginning. Advisors should provide frequent and detailed feedback to students about research and writing progress, inform students about the desired content and format of the thesis (e.g., chapters or headings, citation format, what should be included in methods or introduction), help students plan a calendar indicating when various chapters, analyses, etc. should be completed, and be available to read and comment on work as it progresses.

The Concentration Advisors will be available to provide you more general thesis advice, and to respond to any questions or concerns you have about thesis advising. They will work with both parties to ensure that the advisor/advisee relationship runs as smoothly as possible and that students receive the support they need.

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Q: What are the expectations for the format and style of the written thesis?

A: Talk with your Thesis Advisor for specific advice on how your thesis should be structured. Ordinarily, HEB theses include an abstract, introduction, methods and results section, discussion, and conclusion. You might want to examine published research articles that bear some relationship to the kind of research you want to do, to learn more about what various sections contain and how they are formatted. You could ask your advisor for good examples. Below is a summary of sections you might want to include, but again, talk with your advisor about his or her expectations.

The abstract is a summary of your thesis: the hypothesis, the methods you used to answer it, your findings, and conclusions. **The introduction** should state the problem, the general question and specific hypotheses being tested or investigated, and the manner in which you will test, analyze, and discuss the questions. The introduction may include the literature review, in which you provide the reader with the context for your research question—Why is your question important? What justifies your hypothesis? What's been done previously to address it? What's the consensus? What are the problems with the current state of the literature, and shortcomings of the methods that have been used previously to answer your question? What are the outstanding questions, and how will your research contribute? You will want to include a **Methods and Results section**, including a description of the statistical procedures you are using and an explanation of why you chose the particular methods you used. You will want a **discussion section** in addition to conclusions. In the discussion section, you should discuss whether your results provide support for your hypotheses. How do your findings impact current theory? What were the limitations of your study, and how might these limitations bear on your results? **The conclusion** should summarize the question, approach, main findings and interpretations, and outstanding questions. Don't forget the **acknowledgments section**! Most research projects are collaborative efforts, and rely on funding from outside sources. Be sure to thank the people and agencies who provided you with support.

Style. General Comments: You should address yourself to a well-informed reader. Avoid repetition, unnecessary detail, and irrelevance in both data and analysis. This is a crucial point: do not include any data or analyses that do not bear on your hypotheses, and be sure to thoroughly explain the relevance of all analyses to your hypotheses.

Use your own style—and use the thesis as an opportunity to develop it—but, in any case, write *clearly*. In the process of composing and preparing the thesis, do not neglect the details of good expository writing. The pleasure and the understanding of the reader (and perhaps your grade) can be undercut by inattentiveness to style, form, grammar, punctuation, spelling, and citations.

Page Formatting: Leave 1-inch margins at the top and bottom of the page and on the right. Be sure to leave a 2-inch margin on the left to allow for binding! All pages need to be double-spaced on one side of the page only.

Font: Use 12-point fonts, preferably Times.

Title Page: A sample title page is at the end of this document. Please follow this format in centering and spacing the appropriate text for your thesis.

References, Notes and Tables: Ask your advisor about preferred citation format—sooner rather than later! We recommend using a reference and bibliography software package, such as EndNote. This will greatly streamline the management and entry of your references, and will save you the hassle of having to re-format your bibliography every time you add or delete a reference. It will also allow you to automatically download references from online services, and automatically change the formatting of all your references, if necessary.

Charts, tables and figures should be placed within the text, at the appropriate place. The pages on which they appear should also be numbered or given some other systematic identification, and a list specifying page numbers or locations should be provided with the table of contents.

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Q: Where can I get help with writing?

A: Excellent references on style are W. Strunk and E. B. White, Elements of Style (http://www.bartleby.com/141/) and K. L. Turabian, A Manual for Writers of Term Papers, Theses and Dissertations (Chicago, 1973). You can also consult The Chicago Manual of Style (http://www.chicagomanualofstyle.org/home.html).

You should also consult previous theses for examples of structure and format. Some previously submitted HEB theses can be found in the Tozzer Library, and most recent theses are on the shelf outside of Carole Hooven's office.

Finally, you are strongly encouraged to consult with counselors at the Writing Center (Room 019, Barker Center, 12 Quincy Street, 495-1655). The Writing Center (http://writingcenter.fas.harvard.edu/) offers individual conferences to go over drafts of your writing. They recommend that senior thesis writers contact them by telephone to arrange for an appropriate tutor instead of using the on-line scheduler. They also have a number of handouts on format, style, and other aspects of writing.

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Q: What's involved in submitting the thesis?

A: Theses must be bound, and submitted to Carole Hooven on time. Late theses will be penalized one grade step per day, counting weekends. These penalties will be waived only in cases of serious extenuating circumstances. Students should contact the Head Tutor or a concentration advisor **immediately** in that event. Crashed computers, malfunctioning printers, and scheduling problems at the Science Center are *not* considered valid excuses.

Statement of Research: Along with your thesis, you are also required to submit a statement of research. This statement should name your advisor and the names of any collaborators. Please outline the role that each person played in helping you with your thesis. If you obtained data that was collected by someone else, please indicate this in your statement of research as well as in the written thesis itself. Your statement of research should also indicate how long you spent working on this project, including how many summers of full-time work went into this project, and if you were enrolled in courses like 91r.

Copies/Binding: You must submit **4 copies** of the thesis, bound in clear clamp binders. These are available at Staples (http://www.staples.com/Staples-Clamp-Binder-Clear/product_806968). These copies will be distributed to three readers (one of whom will be your advisor) who will grade your thesis. One copy—destined to reside in the HEB Undergraduate Office—*must* be on high-quality acid-free paper; the other copies will be returned to you following the oral defense. *Please mark the archival copy clearly.*

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Q: Besides submitting the written document, what else do I have to do?

A: Once the written thesis is turned in, you will present your work to the department and sit for an oral exam.

Presentations: Thesis writers will share their research and findings to the HEB department, including some faculty, undergraduate and graduate students. The presentation may last no longer than 5 minutes, and most students supplement their talk with 5 or 6 Powerpoint or Keynote slides. The presentation meeting will take place at some point between Spring Break and Reading Period, and we will let you know of the date as the time approaches. This is simply a chance to share your work with a wider audience, and you are not evaluated on your presentation.

Oral Exam: Thesis writers will also sit for an hour-long oral exam. The exam normally takes place during Reading Period in early May, and we will notify you of the date for the exam around that time. The oral examination will involve a discussion of both the thesis and more general areas of HEB. Your performance on the oral exam will be evaluated as part of your final thesis grade.

Q: How is the thesis evaluated?

A: The grade for the Fall semester thesis course, HEB 99a, reflects the quality of your work, your progress, and the effort you have put into your thesis up to that point. Your grade for HEB 99a is determined by your thesis advisor. Once your thesis is submitted, copies will be sent to your readers. Readers include your thesis advisor and two other faculty readers (normally you are not permitted to know in advance the identity of these readers). Your thesis and the oral exam are evaluated by each reader separately. Evaluations will be made for the oral examination in the same manner. The average of the evaluations determines your HEB 99b grade for the Spring semester, with the written evaluations being weighted more heavily than the oral evaluations.

Notification of evaluations: About one week after your oral exam, you will be notified of your thesis grade, and will receive your written evaluations for the thesis and oral exam. We will also let you know the level of English departmental honors for which you were recommended. Details on this process can be found in the HEB Honors Info section of the Life Sciences website.

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Please contact an HEB Concentration Advisor with any questions about the thesis process.
Contact information is available here.

Most important: enjoy the process!

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HUMAN EVOLUTIONARY BIOLOGY
SENIOR UNDERGRADUATE THESES

These titles, and those going back to 2009, are available in Carole Hooven's office (Peabody Museum 52-F).
Theses from 2008 and earlier are searchable in HOLLIS.

YEAR	STUDENT	THESIS TITLE	RESEARCH DIRECTOR
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	*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	*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*	Zarin Machanda
	Martha Farlow	*Regulating Fertility: Estrogen, Insulin, and the Unintended Effects of Hormonal Contraception [MBB]*	Susan Lipson
	Charlotte Lane	*Why Play? Examining Costs and Benefits of Play in Rhesus Macaques*	Katie Hinde
	AJ Millet	*Blinded by the Night: Short-Term Visual Deprivation and the Synaptic Homeostasis Hypothesis of Slow Wave Sleep Function [MBB]*	Robert Stickgold
	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, 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, 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	*How Robust is the Human Cooperative Impulse? An investigation of intuitive cooperation across social contexts [MBB]*	David Rand
	Pratyusha Yalamanchi	*An Evolutionary Perspective on Cardiovascular Aging: The Signaling Mechanism of Growth Differentiation Factor 11*	Richard Lee
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
	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
	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
	Lauren White	*Every Moment Counts: The Effect of Footwear and Foot Strike Type on Ankle and Knee Movements*	Daniel Lieberman

Thesis title page example:

Unpacking Punitive Judgments:
Punishability, Severity, and Satisfaction

A thesis presented by
Your Name

to
the Department of Human Evolutionary Biology
in partial fulfillment of the requirements
for the degree with honors
of Bachelor of Arts

Harvard University
Cambridge, Massachusetts
March 2015

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