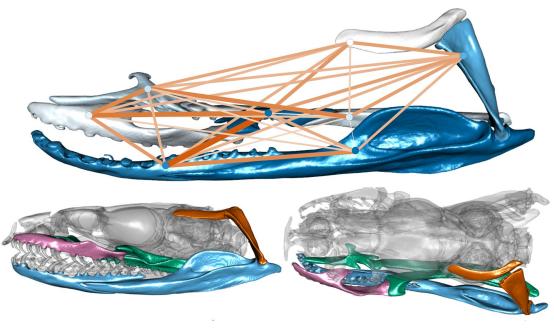
# Committee on Evolutionary Biology







Student Handbook 2022-2023

# THE UNIVERSITY OF CHICAGO Committee on Evolutionary Biology

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#### **CEB Administration**

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#### Department Offices and institutions affiliated with the Committee on Evolutionary Biology

Department of Anthropology Haskell Hall, room 119 5836-46 S. Greenwood Ave., Chicago, IL 60637 773-702-8551 http://anthropology.uchicago.edu/

Department of Comparative Human Development 5730 S. University Ave., Chicago, IL 60637 773-702-3971

http://humdev.uchicago.edu/

Department of Ecology & Evolution Zoology Building, room 114 1101 E. 57th St., Chicago, IL 60637 773-702-1988 http://pondside.uchicago.edu/ecol-evol/

Department of Geophysical Sciences Hinds Laboratory, room 161 5734 S. Ellis Ave., Chicago, IL 60637 773-702-8180

http://geosci.uchicago.edu/

Department of Organismal Biology & Anatomy Anatomy Building, room 107 1027 E. 57th St., Chicago, IL 60637 773-702-4822 http://pondside.uchicago.edu/oba/

Department of Philosophy Classics Building, room 17 1010 E. 57th St., Chicago, IL 60637 773-702-8513 http://philosophy.uchicago.edu/

Argonne National Laboratory 9700 S. Cass Ave., Argonne, IL 60439 708-972-2000 http://www.anl.gov/

Brookfield Zoo Chicago Zoological Park 8500 Golf Rd., Brookfield, IL 60513 773-242-2630 http://www.brookfieldzoo.org

Chicago Botanic Garden 1000 Lake Cook Rd., Glencoe, IL 60022 847-835-5440 http://www.chicagobotanic.org/

The Field Museum 1400 S. Lake Shore Dr., Chicago, IL 60605-2496 312-922-9410 http://fieldmuseum.org/

Lincoln Park Zoo 2001 N. Clark St., Chicago, IL 60614 312-742-2000 http://www.lpzoo.org/

The Morton Arboretum 4100 Illinois Route 53, Lisle, IL 60532 630-968-0074 http://www.mortonarb.org/

#### THE COMMITTEE ON EVOLUTIONARY BIOLOGY

#### Overview

The Committee on Evolutionary Biology (CEB) is a doctoral-degree-granting academic program within the Division of the Biological Sciences at the University of Chicago. Its mission is to provide the highest caliber of interdisciplinary graduate training in all aspects of evolutionary biology to produce the next generation of leaders in the field.

CEB consists of faculty members with primary appointments in departments from all four graduate divisions within the University (e.g., Anthropology, Comparative Human Development, Ecology and Evolution, Geophysical Sciences, Human Genetics, Linguistics, Organismal Biology and Anatomy, and Philosophy), and from several other institutions in the Chicago area: Argonne National Laboratory, Chicago Botanic Garden, Field Museum of Natural History, Lincoln Park Zoo, Brookfield Zoo, and The Morton Arboretum. The University also has a formal affiliation with the Marine Biological Laboratories at Woods Hole, MA. The diversity of research interests represented by the collective expertise of the CEB faculty contributes to its strong national and international reputation as a graduate training program.

Students in CEB have ready access to facilities at these institutions, including over 1,100 animals representing over 200 species at Lincoln Park Zoo, more than 30 million specimens in the Field Museum collections in anthropology, botany, geology, paleontology, and zoology, as well as the libraries at the Field Museum. Other resources for student research include relevant hardware and software and several labs and facilities for the study of molecular evolution.

In the greater Chicago area, CEB students have also used the rich resources available at the Shedd Aquarium, the Morton Arboretum, and the many parks and lands managed by the national parks, local county forest preserves, and park districts.

The University of Chicago is a member of the Organization for Tropical Studies. Doctoral students in CEB have taken courses in tropical biology and conducted research in Costa Rica through this affiliation.

Recent CEB students also have conducted domestic research at a variety of field sites, including the S.W. Research Station of the American Museum of Natural History, Kellogg Biological Station of Michigan State University, Friday Harbor Laboratories, Rocky Mountain Biological Station, and Highlands Biological Station. International research has been carried out in every continent.

#### Resources for Learning, Research and Wellness

The University of Chicago and the Biological Sciences Division have a number of campus offices and online resources to help you:

- develop and strengthen your learning skills (in person and remotely);
- stay up-to-date on information relating to COVID-19, research safety, and campus health;
- familiarize yourself with supports and resources to navigate the 2022-2023 academic year successfully

We encourage you to explore these resources. If you have any questions, please reach out to Audrey Aronowsky or Marcy Hochberg for assistance. Below are a few common resources to get you started:

The Academic Skills Assessment Program (ASAP) assists students with improving academic performance through assessment, short-term coaching, workshops, individual appointments, and referrals. Students can learn to improve study skills, time management, exam preparation, and reduce test anxiety, as well as getting help with other general skills. <a href="https://wellness.uchicago.edu/mental-health/academic-skills-assessment-program/">https://wellness.uchicago.edu/mental-health/academic-skills-assessment-program/</a>

<u>UChicago Forward</u> provides up-to-date information on university heath requirements related to COVID-19, including campus protocols and non-instruction meeting guidance, and resources for the full resumption of on-campus research activities. <a href="https://goforward.uchicago.edu/">https://goforward.uchicago.edu/</a>

#### **UChicago Wellness**

- <u>Medical services</u> provide students with no-cost primary health care, including care for acute and chronic issues and a wide range of health complaints and concerns. (If you have a chronic condition that requires routine care, we recommend that you establish a primary-care relationship with one of their physicians or nurse practitioners.) <a href="https://wellness.uchicago.edu/medical-services/">https://wellness.uchicago.edu/medical-services/</a>
- Mental Health services provide accessible, high-quality, culturally sensitive outreach and consultation to actively enrolled students, at no cost. (Referrals to outside providers for ongoing therapy have a \$10 co-pay/session.) Students also have access to <u>TimelyCare</u>, which offers scheduled virtual counseling sessions with a licensed mental health provider. <a href="https://wellness.uchicago.edu/mental-health/timelycare/">https://wellness.uchicago.edu/mental-health/timelycare/</a>
- <u>Wellness resources</u> offers programs and resources to promote lifelong healthy behaviors so students are empowered to reach their highest potential while maintaining work-life balance. https://wellness.uchicago.edu/healthy-living/
- <u>University Student Health Insurance Plan (U-SHIP)</u> provides insurance coverage for hospitalization and outpatient diagnostic, testing and surgical procedures, among other costs. (Please note: the annual premium is covered as part of your student stipend; however, students are responsible for deductibles and other out-of-pocket costs.) <a href="https://wellness.uchicago.edu/student-insurance/u-ship/">https://wellness.uchicago.edu/student-insurance/u-ship/</a>

Student Disability Services (SDS) provides resources, support, and accommodations to ensure that all aspects of student life are accessible and inclusive of persons with disabilities. https://disabilities.uchicago.edu/

<u>Dean-On-Call</u> is the University official responsible for providing referrals, information, and support to students 24/7 during an emergency. They can be reached by calling UChicago Police (UCPD) at 773-702-8181. If you prefer to text the Dean-on-Call directly, you can use the <u>UChicago Safe App</u>.

**BSD Office of Diversity & Inclusion** advocates for a culture across BSD in which inclusion is appreciated and nurtured as a central priority. Their work focuses not just on race and ethnicity, but also the ways sexuality, gender, class, and religious identity impact our community. https://voices.uchicago.edu/bsddiversity/

Bias Education & Support Team (B.E.S.T.) advises and supports UC students impacted by bias, by ensuring that bias incidents are properly documented so the University can assess, and take steps to improve, campus climate on an ongoing basis, and that students who report their experiences are heard throughout the process, and understand available options. B.E.S.T. also facilitates workshops on topics including: Bystander Intervention for Bias, How to Have Difficult Conversations, Implicit Bias and Microaggressions, as well as structured listening sessions for groups.

Student Ombuds Office is a resource for all UC students, to assist in the resolution of conflicts, concerns, and other problems that they may encounter through the course of University life. As a neutral party, the Ombuds provides informal and confidential assistance in resolving concerns involving another student, a staff member, an administrator, or faculty member. The Ombuds is independent of administrative structures, which allows for impartial and objective consideration of all sides of an issue.

#### **Writing Skills and Support**

- <u>UChicagoGRAD Writing Program</u> offers writing supports tailored to the distinct needs of graduate students, including one-on-one consultations, and writing workshops addressing topics such as maximizing writing effectiveness, and writing for scientific vs lay audiences.
- <u>The University of Chicago Writing Program</u> offers credit and non-credit courses, seminars and workshops focused on writing for readers in academic and professional contexts. Their flagship course, <u>ENGL 33000/</u>
- <u>Academic and Professional Writing</u> (nicknamed "Little Red Schoolhouse") is an intensive, advanced writing course that helps writers learn to communicate complex material clearly to a wide variety of readers.

#### **Funding and Fellowships Support**

- <u>UChicagoGRAD Fellowships</u> office provides assistance for students navigating the complex process of applying for competitive fellowships.
  - O Search the <u>Fellowships Database</u> to identify timely and relevant funding opportunities, or <u>make</u> an <u>appointment</u> with a Fellowships advisor for help searching for appropriate opportunities.
- You are also encouraged to subscribe to UChicagoGRAD's STEM Fellowships listsery.

Need help finding your way around? Campus maps!

#### **CEB STUDENT GUIDELINES**

# **General Information**

All CEB students have assigned office space – shared with other graduate students – in University buildings affiliated with CEB faculty members. Entering students are assigned desks in the CEB space in Culver 402. Every effort is made to house more advanced students in close proximity to faculty and other graduate students sharing their research interests.

CEB students are allocated an annual \$500 research expense account administered by the CEB Chair and the Darwin cluster's Director of Graduate Education; for the 2022-2023 academic year, these funds – intended for educational and research expenses – are available starting July 1, 2022 through June 15, 2023. *Please note: unused funds are not carried over into the next academic year*, and students are expected to pay any account overdrafts promptly. (Students' annual account amounts are not automatically assured; funds may be reduced if students plan to spend significant time away from Chicago, or to delay graduation beyond a fifth year in the program.)

Computers, wireless base stations and other useful office and research equipment are located in Culver 402; most common software is available and ethernet connections are available if needed. Students have access to Apple and Windows computers, laser printers, paper and slide scanners, wireless internet, a 3D printer, 3D surface scanner, and other equipment and technology, including a smart screen in the conference room (Culver 403). Additionally, CEB has a library of field equipment, laptops, and electronics that students may rent at no cost. A list of the equipment available is located <a href="here">here</a>; if you need equipment or have questions, please contact the current equipment czar/czarina at <a href="here">cebequipmentuchicago@gmail.com</a> or their personal email. CEB also has a 24-core computing server that students may use; please contact the computer czar/czarina to be trained in its use.

Information on University-wide computing facilities and services is available on the <u>IT Services website</u> (https://its.uchicago.edu/students/). Access to Hull Court buildings is by UChicago ID card only. The default access for students is M-F, 9-5. To change access privileges on your card, contact the Graduate Education Administrator to request 24/7 access to Hull Court; please include in your request the ID# printed on the back of your UChicago ID card.

*Keys* for Culver 402 are available from the Graduate Education Administrator<sup>2</sup>. If you need keys for faculty lab space, please request them through that faculty member.

# Registration

**Register online.** Each quarter, students will be notified of the dates for online registration. The portal for registration, courses, and class information is **my.uchicago.edu**, the self-service home for University students and staff in the Academic Information System. (Please check the University Registrar's website for frequently asked questions about graduate registration: <a href="http://registrar.uchicago.edu/page/students">http://registrar.uchicago.edu/page/students</a>)

#### Please also be aware that:

• All students in their first two years must obtain approval for their proposed registration from the CEB Student Advisory Committee (SAC). The SAC meets individually with each pre-proposal student before AU-WI-SP quarters. Students can register online before their meeting, then drop or add courses online in the first 3 weeks of the quarter at no charge, following approval from the CEB SAC.

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<sup>&</sup>lt;sup>1</sup> See page 2 for contact info.

<sup>&</sup>lt;sup>2</sup> Ibid.

- PhD candidates can directly enter their registration requests online (see note #1, below).
- All students *must* register for at least 300 units every quarter. Students register for reading, research and teaching courses with a specific faculty section number; registration with staff (or no one) is not allowed. Students should receive quality grades or a P/F for EVERY course they register for.

# Additional Notes on Registration

#### (1) Single PhD Registration Policy

Beginning in 2016-17, all PhD student registration utilizes a single doctoral registration status, referred to simply by the year of study (e.g., PhD1, PhD2, PhD3). (The terminology Scholastic Residence and Advanced Residence is no longer used.)

#### (2) Subject Codes – some common places to look for courses

BIOS – Biological Sciences Collegiate Division

BSDG – Biological Sciences Graduate Courses (Ethics, BSD TA Requirement, TA Training)

ECEV – Department of Ecology and Evolution

EVOL - Committee on Evolutionary Biology

GEOS – Geophysical Sciences

HGEN – Human Genetics

ORGB – Department of Organismal Biology and Anatomy

STAT – Statistics (most CEB students take College-level stats)

#### (3) Courses with variable units, and sections for each instructor

For the courses below, you *must* enter a section number for the particular instructor with whom you are working. *You may NOT use a section identified only as "staff."* 

49500 – teaching (not for BSD teaching requirement)

49600 – reading with Field Museum Curators

49700 – reading with UC faculty

49800 – research, off campus (use also with pro forma registration)

49900 – research, on campus

#### (4) Regular graduate courses – most graduate courses carry 100 units

**(5) Undergraduate courses** – Graduate students *supposedly* are not allowed to register for College courses for the first two weeks of the quarter, *however*, *this seems rarely to be enforced!* 

#### (6) Change of Registration

In autumn, winter, and spring quarters, you may add/drop courses, and make other enrollment changes, during the first three weeks. In summer quarter, the add/drop schedule varies, based on the length of the course. Courses dropped after the add/drop period has ended are noted on the student transcript with a grade of "W". A late change fee is assessed for any enrollment change processed after the add/drop period has ended. Contact the Director of Graduate Education or the Graduate Education Administrator for assistance with late add/drop requests.

#### (7) Expansion of Leaves of Absence Eligibility

Graduate students at any stage of their PhD program may take a personal leave of absence with the approval of their dean of students. Also, a new policy allows students to apply for leaves of absence of up to three years, to pursue another degree that is integral to their PhD.

#### (8) Expansion of Pro Forma Eligibility

Pro Forma status is a limited privilege intended to provide full-time status to doctoral students who must move a substantial distance from Chicago to conduct research or engage in language study. Eligibility for Pro Forma status has been expanded to include students in the lab sciences who follow a primary faculty advisor to another institution. Students need to apply for pro forma registration; please request the PDF form from the Director of Graduate Education or the Graduate Education Administrator<sup>3</sup>.

#### (9) Registration in the Quarter of Graduation

Doctoral candidates who hold their dissertation hearing after the dissertation submission deadline may be eligible to graduate in the following quarter, under the conditions noted below:

Autumn Winter Summer **Spring** To graduate with your PhD in 2022\*\* 2023\*\* 2023\*\* 2023 as a registered student (stipend + tuition) register to graduate by 1st Friday of Q 9/30/22 1/6/23 3/24/23 6/16/23 final dissertation deadline 7th Wednesday of Q (\*except Summer) – 4:30pm 11/9/22 2/15/23 5/3/23 7/19/23\* 6/3/23 6/3/23 6/3/23 6/3/23 convocation

Winter Autumn Spring To graduate with your PhD in 2022 2023 2023 without registration (no stipend or tuition) defend dissertation by 10th week of prior Q (\*except Autumn) 8/26/22\* 12/2/22 3/10/23 register to graduate by 1st Friday of Q 9/30/22 1/6/23 3/24/23 final dissertation deadline 9/7/22 12/9/22 3/17/23 6/3/23 convocation 6/3/23 6/3/23

#### (10) Time Limit for Registration

Students who entered a UChicago PhD program in, or after, the 2016-17 academic year are subject to a University-wide 9-year limit on registration. Students who entered a PhD program prior to summer 2016 continue to be allowed to register for up to 12 years from matriculation. The average time to degree for CEB students is 5.5 years.

#### (11) Degree application and graduating

Students must apply to graduate, via the student my.uchicago.edu portal, no later than the end of the first week of the quarter in which they wish to graduate. You have to APPLY for your degree, and University deadlines are very strict.

<sup>\*</sup>The final dissertation deadline for students graduating in Summer is the 6th Wednesday of Quarter

<sup>\*\*</sup>Summer, Autumn, and Winter degrees will be mailed. Graduates can return for Spring Convocation if they choose.

<sup>&</sup>lt;sup>3</sup> See page 2 for contact info.

#### Professionalization Requirement for BSD Students

To meet their degree requirements, BSD students must complete two terms of professional preparation (without additional compensation), at least one of which must involve serving as a Teaching Assistant (TA) to a UChicago course. Courses can be undergraduate, graduate, or medical, but must be in the Biological Sciences Division (BSD), and they must be approved to qualify for this requirement\*. The second requirement may be met with a second TA-ship, a Diversity, Equity & Inclusion (DEI) Assistantship, or by participating in the TA training course. **Please note:** *all TAships and DEIships require prior approval* from your dissertation committee or the SAC (as appropriate), to ensure they do not conflict with ongoing progress towards the PhD.

An important component of traditional academic professionalization is to gain experience in teaching. The BSD has had a long-standing requirement that students gain mentored and evaluated teaching experience. Consequently, *all BSD graduate students are required to TA at least one course*, for academic credit, before their PhD degree is awarded. Students may complete their professionalization requirement either by serving as a TA to a second course, or through one of two alternatives: take the TA Training Course (BSDG 50000; which must be taken *before* the student serves as a TA); or complete a DEI Assistantship. DEI Assistantship opportunities continue to be developed and expanded, following a pilot program in the 2021-22 academic year.

An excellent option for those students who feel unprepared for teaching, is to take the TA Training Course, offered annually in Spring Quarter. For more information, students should contact either the Director of Graduate Education, or the Graduate Education Administrator<sup>4</sup>.

It is essential that you register for the BSD TA Course Number (BSDG 50XXX) in the quarters in which you TA. If you do not, you will not receive credit for the Assistantship. For more information, see: https://biosciences.uchicago.edu/programs/professionalization

\*To be eligible for credit, a course must offer the TA significant teaching experience, such as giving a full-length lecture, running a lab or field trip, or leading regularly scheduled, weekly discussion sessions.

Students may not TA the same course twice, and may not TA for pay before completing the BSD professionalization requirement.

# Stipend, Tuition, Fellowships, and Fees

All CEB incoming PhD students receive a contract indicating financial support from the Biological Sciences Division (BSD) for the upcoming academic year. Students who receive any tuition bills that contradict their understanding of the support agreement should notify the Director of Graduate Education or the Graduate Education Administrator immediately.

NSF Graduate Research Fellowships (GRFP). All eligible domestic students are expected to apply for NSF Graduate Research Fellowships early in the Autumn Quarter (you may only apply once as a PhD student). CEB faculty members and current/former NSF fellows will be available to assist students in preparing NSF fellowship applications. If offered, students are encouraged to register for EVOL 40100: Grants, Publications, Professional Issues in their first year, to help prepare their NSF GRFP; alternately, please coordinate with a faculty member for guidance and feedback when you are preparing your application. NSF GRFP website: https://www.fastlane.nsf.gov/grfp/.

<sup>&</sup>lt;sup>4</sup> See contact info on page 2.

*Field Museum Fellowships*. A limited number of competitive Field Museum fellowships are available for more advanced graduate students engaged in dissertation research associated with the museum. These fellowships provide stipend support (with tuition and some stipend generally provided by the University of Chicago) and are for one year. Applications are reviewed once per year by the Field Museum Science and Scholarship Funding Committee; the submission deadline is typically around January 30. CEB faculty and staff expect *all* advanced students conducting research at Field Museum to apply for these fellowships (<a href="http://fieldmuseum.org/about/graduate-student-fellowships">http://fieldmuseum.org/about/graduate-student-fellowships</a>).

**Stipends.** Each graduate student's fellowship is designed with the BSD Office of Graduate Affairs. All PhD students in BSD receive the same basic stipend and health fee/insurance support (2022-23: \$35,700 stipend, plus U-SHIP insurance premium, and the graduate student services fee).

Teaching Assistantship Requirement for CEB students with DU fellowships. Third, fourth, fifth, and sixth-year CEB students who receive their fellowships from Divisional Unendowed (DU) funds are expected to serve as a pre-approved Teaching Assistant, without remuneration, in one course during each academic year in which they receive the DU fellowship. Those advanced students receiving a DU fellowship who have not yet fulfilled their BSD educational teaching requirement may use a BSD TAship to fulfill their DU fellowship requirement at the same time. Students may receive payment for subsequent TAships once the fellowship requirement is fulfilled (with the permission of their advisor). Students serving as a pre-approved TA, who already have fulfilled their BSD TA requirement, are required to register for the TAship using EVOL 49500 + [relevant faculty section].

Student fellowships. Fellowships are initially discussed and planned in December/January each academic year, then finalized during the Spring and Summer Quarters. It is essential that students promptly return all questionnaires about their next year's research plans to the Darwin Director of Graduate Education, and submit FAFSA forms to UC Financial Aid to assess eligibility for relevant funding or training grants. These student plans are consulted in determining fellowship packages, including teaching and off-campus quarters. Reports from each student's Autumn and Spring Quarter committee meetings also are used in evaluation and fellowship planning. It is the student's responsibility to ensure that their advisor has filed a report to the CEB Chair after each of these meetings.

Except in extraordinary circumstances, CEB students are strongly discouraged from taking on any TAship or other employment responsibilities in addition to those required by the Divisional Teaching Requirement or individual fellowship packages.

Late fees, payment deadlines, and account holds. It is each student's responsibility to pay close attention to the published schedules of late fees and restrictions found in the Bursar's website:

<a href="https://bursar.uchicago.edu/">https://bursar.uchicago.edu/</a>. Any unpaid fee – library fines, activity fees, etc. – can cause the Bursar to put a hold on a student's account. (A hold also may be placed on a first-year student's account if they fail to submit immunization information required at the start of the academic year.) Once a student's account is on "hold," all student privileges are lost, and the account will start to accrue late fees. Late fees may only be removed by a formal petition from the BSD Office of Graduate Affairs.

# Funding for Research

CEB students are encouraged to actively investigate opportunities for securing outside funding for their dissertation research, and should review BSD/UChicago GRAD/cebstu listserv emails, and watch bulletin boards, for notice of funding opportunities. Students also can search the UChicagoGRAD Fellowship Database (<a href="https://grad.uchicago.edu/fellowships/">https://grad.uchicago.edu/fellowships/</a>), and/or schedule a formal appointment with a Fellowship Advisor to identify relevant grants and other funding sources.

It is often the case that applications may be made to a number of small funds that support initial stages of dissertation research (such as the Hinds Fund endowment, administered by CEB). These small grants can be of great use to students preparing dissertation proposals, as they are not necessarily restricted to advanced students already in candidacy for the PhD.

Later in the academic program, students are encouraged to apply to national programs such as Sigma Xi, NSF, NIH, NIMH, Fulbright, National Geographic, etc., for doctoral dissertation research funding. Information on some possible funding sources may be found at: <a href="http://evbio.uchicago.edu/resources/">http://evbio.uchicago.edu/resources/</a>. Please provide suggestions for additional funding sources to the Director of Graduate Education or the Graduate Education Administrator<sup>5</sup> so they can be included on this site.

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<sup>&</sup>lt;sup>5</sup> See page 2 for contact info.

#### THE COMMITTEE ON EVOLUTIONARY BIOLOGY

# **Progress through the Doctoral Program**

# **Individual Development Plans (IDPs)**

In accordance with federal policy, the BSD requests that each student complete an Individual Development Plan (IDP) and certify that they have done so on their annual student report. To make the IDP more useful for you, and also for your mentor as they support your progress, the BSD is now providing more targeted, stage-specific IDPs, which you are expected to complete together with your thesis advisor, or the CEB SAC, and submit on-line as part of your annual report. You will receive the staged IDP documents annually via an email from BSD Office of Graduate Affairs (OGA) and a survey link.

Some of you will also find it useful to discuss your IDP with one or more additional mentors, such as your thesis committee chair, training grant director, or career advisor. We encourage you to use the IDP to guide those conversations and your long-term plans.

# **General Timetable for the PhD Program**

Most students in the Committee on Evolutionary Biology complete their PhD program in about 5.5 years. The first and second years consist of formal course work – including the fulfillment of CEB's breadth requirement – as well as individual reading and research courses, aimed toward successful completion of the Dissertation Proposal Hearing, and a defense of a dissertation research proposal by the Spring Quarter of the second year in the program. Work in subsequent years shifts to dissertation-centered research and, finally, preparation and defense of the PhD dissertation. Although there is no formal SM program in the Committee on Evolutionary Biology, students may apply to receive the SM degree eight months after the successful completion of their Dissertation Proposal Hearing.

# First Year – Incoming Students

Newly admitted students receive information from the BSD Office of Graduate Affairs Office during the summer. This includes information about Autumn Quarter orientation and registration dates, housing, stipend, etc. Incoming students should contact the Director of Graduate Education or the Graduate Education Administrator (email evbio(at)uchicago(dot)edu), as soon as possible after arrival in Chicago. Staff will provide information about the Committee on Evolutionary Biology and the University, registration for the upcoming quarter, and other information necessary for new students. Contact evbio(at)uchicago(dot)edu at any time with questions.

**CEB Student Advisory Committee.** First-year and second-year students meet with the *Student Advisory Committee* (SAC) during Orientation Week to review their prior academic training and research plans.

- The SAC will meet with each student to advise on applicable courses, arbitrate which courses meet the "outside distribution" requirement, and otherwise help students keep on track toward PhD candidacy.
- The SAC meets with each student for 15-20 minutes during the registration period. CEB SAC members are available for discussion and consultation throughout the first two years of a student's career.
- As the student begins to work more with a faculty member who will become their advisor, the student is encouraged to solicit advice both from this advisor and the SAC.

**Reading and Research Requirements.** CEB requires all first- and second-year students to register for (a minimum of) 300 units every quarter, involving regularly scheduled courses, directed reading, and/or research units. (Please note: 1 course = 100 units; directed reading and research are variable-unit courses, and units should be set when the student registers.)

Each CEB student must successfully complete a minimum of nine (9) graded classes before they can be recommended for PhD candidacy. The most important goal is that the student acquires breadth in evolutionary biology: this breadth and the interdisciplinary research it permits should be the distinguishing feature of a CEB student.

To ensure breadth of knowledge in evolutionary biology, CEB students must take at least one course in five out of seven defined topical areas:

- Behavior
- Development
- Ecology/Biogeography
- Genetics

- Morphology
- Paleontology
- Systematics / Evolutionary History

CEB students should be exposed to evolutionary phenomena and forces operating on different scales of time and space, to taxonomic groups outside of their research focus, and to the approaches of major disciplines or areas within evolutionary biology. This exposure will involve classes outside the student's specialty. Each year the Committee revises and posts a course distribution list that classifies all CEB courses according to these categories. The 2022-2023 course list is included at the end of this Handbook.

Students are responsible for having a comprehensive understanding of major questions in evolutionary biology. All CEB students are expected to have read Darwin's *On the Origin of Species* some time before their dissertation proposal hearing.

#### Second Year

Second-year students will continue to meet quarterly with the Student Advisory Committee until they identify their research area and successfully pass their Dissertation Proposal Hearing. The first part of students' second year may be taken up with coursework, supplemented more heavily by reading and research courses.

# Faculty Advisors and the Student Advisory Committee

**Student Advisory Committee (SAC).** The SAC meets three times a year with each student until they have passed their Dissertation Proposal Hearing, and move to candidacy. The faculty membership of the CEB SAC rotates in such a way as to provide continuity in advising from year to year. Once a CEB student becomes a PhD candidate, they are formally advised by their dissertation committee, and meet with their faculty advisor and committee twice yearly, typically in autumn and spring quarters.

*Faculty Advisors*. Students must identify a *Faculty Advisor* no later than the end of Autumn Quarter of their second year, and their Committee should be constituted no later than Winter Quarter of the second year. The Advisor must be a Committee on Evolutionary Biology member.

• Students are required to hold a pre-proposal meeting with potential committee members, and to establish a *Committee Chair*, by no later than Winter Quarter of their second year in the PhD program.

- The <u>student must write a formal memo</u> to the Chair of the Committee on Evolutionary Biology requesting approval for the list of names of faculty members who already have agreed to serve as Chair/members of the student's committee. This memo is necessary for the proper appointment of those faculty members to the student's dissertation committee. At least **two** of the committee members must have primary appointments at the University of Chicago.
- The student's Advisor will not chair their Committee; rather, the Committee Chair must be a UC faculty member with an appointment in the Committee on Evolutionary Biology. Students should think of the role of the Committee Chair as similar to an ombudsman, who ensures that the entire committee is supporting and advancing the student's research goals.
- The CEB Chair will approve the Advisor, Chair, and Committee members, or recommend changes.
- The student should meet with their entire Dissertation Committee at least once a year *both before and after the proposal hearing*.
- The Dissertation Proposal Hearing must take place during Spring Quarter of the second year; *any delays must be petitioned, in writing, to the CEB Chair well before Spring Quarter.*
- The Advisor and student must provide the CEB Chair with a written memo/email describing the student's progress, and any recommendations that arise from these committee meetings. Student, Advisor and Chair of the committee must agree on the memo content. One copy should go to the student and one copy will be retained in the student's file.

#### Dissertation Proposal Hearing

The Dissertation Proposal Hearing allows the CEB student to:

- Propose their plan for dissertation research and discuss the proposal with other interested faculty and students. The student should have written a dissertation research proposal well before the hearing and discussed drafts with their advisor and committee.
- Write a proposal equivalent in size and quality to a grant proposal (8 single-spaced pages). This short format provides training and practice in meeting external demands for project proposal preparation. Overlong proposals will be returned to the candidate with request to edit-down to expected length.
- Engage in closed, private discussion with their Committee on further issues regarding background preparation in evolutionary biology, dissertation research, further coursework, and whatever is necessary to aid in the successful completion of the PhD.

**Timing of the Proposal Hearing.** All CEB students are expected to schedule their Proposal Hearing before the end of Spring Quarter in their second year of the program. If a student believes that it is not possible to defend their dissertation proposal before the end of Spring Quarter in the second year, it is the responsibility of the student to petition the CEB Chair, in writing, for permission to delay the examination.

This petition must clearly state what has delayed the student's progress and must be accompanied by a supporting letter from the student's Advisor. The petition to delay the Proposal Hearing should be sent to the CEB Chair *well before* the beginning of Spring Quarter of the student's second year in the program.

**Setting up the Proposal Hearing.** Prior to the Proposal Hearing, each student must select an Advisor. CEB students should have successfully selected an Advisor by Autumn Quarter of their second year in the PhD program.

• The CEB Chair will approve a committee for the Hearing, formed in consultation with the student (see second bullet under "Faculty Advisors" above, p. 10). The committee should be formed *before* the student requests the CEB Chair's permission to schedule the Proposal Hearing. Normally, the student talks with individual CEB faculty, discusses possible committee members with their Advisor, then informs the CEB Chair in writing of their proposed faculty members for a committee.

- The CEB SAC recommends that second-year students convene an informal meeting of possible Proposal Committee members during Autumn or Winter Quarter, for an early discussion and review of the student's proposed research. Such a meeting informs faculty members about the student's research and helps the student decide which faculty members might serve most effectively on their Proposal Committee. During this time, the student should consult with these prospective members to ensure that their proposed research is on track for a spring quarter Proposal Hearing.
- The student must request permission in writing, from the CEB Chair, to hold their Proposal Hearing, and also must submit a digital copy of the Dissertation Proposal, at least 14 days before the proposed examination. A copy of this request and the digital Proposal also should be sent to the Graduate Education Administrator<sup>6</sup>.
- After the CEB Chair approves the student's request, notice of the Proposal Hearing will be distributed throughout the Darwinian Sciences cluster.
- The Graduate Education Administrator will officially notify CEB faculty of the hearing and invite them to examine the Proposal and attend the hearing.
- The Proposal Hearing usually lasts two to three hours, with the first hour dedicated to the student's explication of their dissertation proposal.
- The explication of the dissertation project in the form of a talk at the Proposal Hearing generally is expected to be open to the public. Under exceptional circumstances, students may request permission from the CEB Chair to hold a closed hearing. A closed hearing will be open to members of the student's committee and CEB faculty. Students who are given permission to hold a closed hearing must present a public seminar on their research by the end of their fourth year in CEB.

**Possible results of the Dissertation Proposal Hearing.** The Graduate Education Administrator will email the "Report on the Final Examination for the Degree of SM" form to the student's Committee Chair and have the Committee Chair sign the form electronically. The signed form must be returned promptly via email to Graduate Education Administrator.

The chair of the Proposal Committee will inform the CEB Chair, *in writing*, of the Committee's decision immediately after the examination. Possible outcomes are as follows:

- 1. The student may be passed as suitable to proceed to candidacy for the PhD. (The student may also apply for a Master's Degree eight months *after* candidacy, if they have satisfied relevant Divisional requirements, but this is not a condition for candidacy for the PhD.)
- 2. The student may be passed as suitable to proceed to candidacy for the PhD, subject to meeting certain specific requirements subsequent to the Proposal Hearing. The student and the CEB Chair are to be informed of these requirements in writing immediately after the Hearing, with deadlines for their completion. The chair of the Proposal Hearing Committee shall inform the CEB Chair in writing when they are satisfied that the requirements have been met.
- 3. The student may be instructed to organize a second Proposal Hearing within a clearly defined period of time. The student's proposal Committee Chair must notify the CEB Chair and the student of the exact requirements, in writing, immediately after the Proposal Hearing. No student shall undertake the Proposal Hearing more than twice. A student who is neither recommended for a Master's Degree, nor to proceed to candidacy for the PhD degree at their second Proposal Hearing, shall terminate studies in the Committee on Evolutionary Biology at the end of the quarter in which the final Hearing was held.
- 4. The student may be passed for a Master's Degree, subject to satisfaction of relevant Divisional requirements, but not as suitable to proceed to candidacy for the PhD degree.

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<sup>&</sup>lt;sup>6</sup> See contact info on page 2.

#### Candidacy for the SM and PhD degrees

Students who successfully pass their Proposal Hearing can apply to be admitted to candidacy for the SM and PhD. Students must have successfully completed nine (9) graded courses (which can include a reading course) to be eligible for SM and PhD candidacy. If a student wishes to leave the CEB program, they may apply to receive the SM degree if they have met all requirements set out by the Division of Biological Sciences, and requirements set out by the CEB Chair.

Results of the Dissertation Proposal Hearing are recorded on the "Report on the Final Examination for the Degree of SM" form. (An electronic copy of this form is available from the Director of Graduate Education or the Graduate Education Administrator<sup>7</sup>.)

In order to proceed to candidacy for the SM and PhD degrees, a CEB student must have passed their Proposal Hearing. Other requirements for advancement to candidacy (e.g., ethics training, TAships, etc.) are established by the University and the Division of the Biological Sciences, and are described in the *Announcements* of the University, the University *Student Information Manual*, and this handbook. Forms for candidacy for the SM and PhD degrees are completed and signed by the CEB Chair upon notification that a student has passed their Proposal Hearing and is recommended to be advanced to PhD candidacy.

**Please note: You must APPLY to receive a degree.** Students must apply to receive a degree via my.uchicago.edu no later than the end of the first week of the quarter in which they wish to graduate (see deadlines on p. 6).

# Progress towards the PhD - Third Year and beyond

- 1. The Dissertation Committee must meet with (second- and) third-year students at least once a year. The student and their dissertation Advisor are required to submit a written report after each Dissertation Committee Meeting to the CEB Chair. That written report should include: date, place, names of attending committee members, student's progress report, and a summary of the committee's recommendations to the student. This assessment is normally based on a written progress report from the student, and an oral discussion. It is the responsibility of the student to ensure that an annual meeting with their Dissertation Committee takes place well before the end of the Autumn Quarter, and that required reports are submitted to the CEB Chair soon after the committee meeting.
- 2. BSD's Basic Science Chairs have adopted the following policy for monitoring the progress of students in BSD PhD programs:
  - Beginning in the fourth year, each PhD student should meet with their Dissertation Committee once every other quarter. The Committee on Evolutionary Biology has determined that CEB students should hold their Dissertation Committee meetings in Autumn and Spring Quarters. *Please note:* The Autumn meeting should be scheduled with sufficient time to allow the student's Advisor to submit a written report to the CEB Chair well before the end of the Autumn Quarter.
  - The student's Dissertation Committee Chair is responsible for reporting a summary of the Doctoral Committee meeting's proceedings to the academic unit, i.e., the CEB Chair.
  - The student's registration for their fifth, and subsequent, years shall be permitted only if summaries of the Doctoral Committee meetings have been reported to the appropriate academic unit.
  - The student is required to prepare documents for their Committee's review at these meetings which should include a detailed dissertation plan as well as a completion schedule for each chapter.

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<sup>7</sup> Ibid.

- 3. Each CEB student is responsible for the fulfillment of all degree requirements of the University, as outlined in the CEB Student Handbook, the Division of Biological Sciences section of the *Catalog* (<a href="http://catalogs.uchicago.edu">http://catalogs.uchicago.edu</a>), and the *Student Manual* (<a href="http://studentmanual.uchicago.edu/">http://studentmanual.uchicago.edu/</a>) of the University of Chicago.
- 4. A second training in the ethical conduct of research is required for CEB students, in year four or five (EVOL 40200 will be next offered in Winter 2024). Senior ethics training content is more closely aligned with research areas and so this training is coordinated by the Darwinian Sciences cluster.

# Timetable for Planning the Dissertation Defense and Graduation

As students approach their planned date of graduation, it is critical to carefully build a timetable for the final year. Below is a schedule identifying the deadlines and requirements that CEB students must meet, in the 10 months preceding their anticipated graduation date.

CEB students must submit a detailed timeline for writing and review of their dissertation chapters, meetings with their Dissertation Committee, and proposed dates for a Dissertation Hearing and submission of the dissertation to the UC Dissertation office. The chapter-outlines and completion timeline must be approved by the Dissertation Committee before submission to the CEB Chair, *at least six months before a student's planned quarter of graduation*.

# Ten months before the Dissertation Hearing

The Division of the Biological Sciences requires a student to have been in candidacy for the PhD at least eight months, before the degree can be awarded. Well before planning a date for defense of their PhD dissertation, students should consult this timetable and discuss any questions with their advisor, the CEB Chair, and/or the Director of Graduate Education and the Graduate Education Administrator<sup>8</sup>.

Students should check their my.uchicago.edu portal to confirm that they are in candidacy for the PhD. (The "Report on the Final Examination for the Degree of SM" form should have been submitted by CEB to the BSD Office of Graduate Affairs after the Dissertation Proposal Hearing.)

Students also should examine their transcript for any missing grades. Students at all levels frequently discover that required grades are missing from their transcripts. It is students' responsibility to remind faculty to submit grades at the end of each quarter. Students should ask relevant faculty members to submit missing grades to the University Registrar. These grades are necessary for the student to graduate.

# Six months before the Dissertation Hearing

CEB students are strongly advised to meet with staff in the Dissertation Office *before* you start final writing! Bring samples and get their guidelines. Plan this meeting for the first week of the quarter *before* you plan to graduate (i.e., 20+ weeks before graduation). The Dissertation Office web site is: <a href="http://www.lib.uchicago.edu/e/phd/">http://www.lib.uchicago.edu/e/phd/</a>.

Students are responsible for ensuring that their written dissertation, after being approved by the student's Dissertation Committee, is prepared in a form suitable for acceptance by the Dissertation Office. Failure to meet the Dissertation Office's deadline will result in a delay of graduation.

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<sup>&</sup>lt;sup>8</sup> See page 2 for contact info.

# Three months before the Dissertation Hearing

Students must apply to graduate, via my.uchicago.edu, by no later than the end of the first week of the quarter in which they wish to graduate. The graduation application may be withdrawn without fee during the first five days of the quarter in which it was filed. Late applications will not be accepted.

Students must register for graduate research during the quarter in which they plan to graduate. Students who are no longer eligible for fellowship funds should make sure that they have a plan in place for payment of tuition and fees for their final quarter. For more information on graduation regulations and guidelines for more information on graduation, please see p. 5-6.

# (At least) Ten weeks before the Dissertation Hearing

A PhD student is required to distribute the final draft of their dissertation to their entire committee no later than the first week of the quarter in which they plan to graduate. Please note: the final draft should be substantially complete – including all text, figures, tables, captions, appendices, and bibliography – and should be delivered to all committee members at least four weeks before the scheduled date of the Dissertation Hearing. Please note: one or more dissertation chapters should be submitted, in press, or published by this time.

### Eight weeks before the Dissertation Hearing

CEB students must email the CEB Chair to request approval of the final Dissertation Committee and Advisor and inform them that you would like permission to set up the oral hearing for your dissertation defense for a specified date and time.

# Three weeks before the Dissertation Hearing

Three weeks before a student wishes to hold their Dissertation Hearing, they must file a *final* defensible copy (PDF) of the dissertation with the CEB Chair and the Director of Graduate Education<sup>9</sup> (this should not be the first draft to be seen by your committee, but rather, a substantially complete document). Once approved by the CEB Chair, this formal notification will allow the Director of Graduate Education to notify CEB faculty that a Dissertation Hearing is scheduled to take place and enable distribution of notices for the public seminar which begins the Dissertation Hearing. All CEB faculty will have access to the file copy of the student's dissertation.

The PhD Dissertation Hearing should take place at least three weeks before the Dissertation Office's filing deadline (5th week of quarter at latest). During the period between the Dissertation Hearing and final University filing, the student must make all revisions to the defended version, based on the examining committee's decisions and recommendations.

Students must file the approved dissertation with the Dissertation Office by their published deadline (see quarterly deadlines on p. 6). *If you miss this deadline, you cannot graduate in the current quarter.* 

When the student's Dissertation Committee Chair notifies the CEB Chair that the dissertation meets their approval, the CEB Chair will approve the dissertation.

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<sup>&</sup>lt;sup>9</sup> See contact info on page 2.

# **Post-Graduation**

Please make every effort to keep the Committee on Evolutionary Biology informed about your post-doctoral plans and addresses. This information is important not only for forwarding mail and communicating with post-doctoral CEB students but is also invaluable in documenting the post-graduate careers of CEB students.

# **Comments and Suggestions**

Please send comments, questions, and suggestions for improvements to evbio(at)uchicago(dot)edu. We want this Handbook to be as useful as possible during all phases of your University of Chicago graduate career.

# Courses meeting CEB's Breadth Requirements, 2022-2023

The acquisition of breadth in evolutionary biology, and its application in the service of interdisciplinary research, is a defining feature of CEB training. To obtain and apply breadth of knowledge in evolutionary biology, CEB students must take at least one course in five out of seven defined topical areas:

- Behavior
- Development
- Ecology/Biogeography
- Genetics

- Morphology
- Paleontology
- Systematics / Evolutionary History

Following is a list of courses offered throughout the Biological Sciences Division, which fulfill the breadth requirement in each of the topical areas listed below:

Behavior	Development
BIOS 23249: Animal Behavior	BIOS 20189: Fund Dev Bio
CHDV 37860: Hist Evolutionary Behavioral Science	DVBI 36200: Stem Cells & Regeneration
CPNS 30107: Behavioral Neuro	DVBI 36400: Dev Mechanisms*
EVOL 36900: Biopsych of Sex Differences (ODD)	ECEV 32900: Plant Dev / Mol Genetics
EVOL 34800: Kinship & Social Systems (EVEN)	ORGB 33600: Vertebrate Development (EVEN)
ORGB 32500: Survey of Sys Neuro	ORGB 33850: Evolution & Development
ECEV 37500: Sexual Selection	
Ecology / Biogeography	Genetics
BIOS 23254: Mamm Ecology	BCMB 31400: GAMO*
BIOS 23289: Marine Ecology	BIOS 21306: HumGen & Evol
BIOS 23410: Complex Interactions	BIOS 22270: Bones & Genes
ECEV 37500: Sexual Selection	ECEV 31100: Evol Bio Molecules*
ECEV 42900: Theoretical Ecology	ECEV 32900: Plant Dev / Mol Gen
ECEV 44500: Networks in E&E	ECEV 33365: Evol & Genomic Med (last WI19)
EVOL 42600: Community Ecology	ECEV 35600: Population Genetics*
EVOL 42800: Population Ecology	ECEV 35800: Classics in Evol Genetics (last SP20)
EVOL 45500: Biogeography	HGEN 41700: Intro Probability for Geneticists*
GEOS 36650: Enviro Microbiology	HGEN 47200: Quant Genetics for 21st Century*
MICR 31200: Host-Pathogen Interactions	HGEN 47500: Genetic Mechanisms*
	HGEN 48600: Fund of Comp Bio*
	STAT 35420: Stoch Proc Gene Reg

Morphology	Paleontology
BIOS 23247: Bioarcheology	BIOS 23247: Bioarcheology
EVOL 31900: Topics in Paleo	EVOL 31700: Macroevolution
EVOL 32400: Invert Paleo & Evol	EVOL 31900: Topics in Paleo
EVOL 36700: Morphometrics (EVEN)	EVOL 32400: Invert Paleo & Evol
EVOL 38500: Color in Nature	EVOL 46200: Evol & Fossil Rec
GEOS 36905: Conservation Paleobiology (last WI20)	EVOL 36700: Morphometrics (EVEN)
ORGB 30250: Chordates (EVEN)	GEOS 34300: Paleoclimatology?
ORGB 31201: Mammal Evol Bio (EVEN)	GEOS 36905: Conservation Paleobio (last WI20)
ORGB 31300: Key Issues Vert Evol	ORGB 30250: Chordates (EVEN)
ORGB 32233: Comp Vertebrate Anatomy (ODD)	ORGB 31201: Mammal Evol Bio (EVEN)
ORGB 32245: Biomechanics (ODD)	ORGB 31300: Key Issues Vert Evol
ORGB 33265: Human Origins (EVEN)	ORGB 32233: Comp Vertebrate Anatomy (ODD)
	ORGB 32245: Biomechanics (ODD)
	ORGB 33265: Human Origins (EVEN)

#### **Systematics & Evolutionary History**

BIOS 23410: Complex Interactions ECEV 31100: Evol Bio Molecules\* ECEV 34500: Adv Topics EvBio

ECEV 36400: Mol Phylogenetics (EVEN; *last AU20*)

EVOL 31900: Topics in Paleo EVOL 32400: Invert Paleo & Evol

EVOL 35300: Phylogenetic Comp Methods (ODD)

EVOL 35401: Tree of Life (ODD) EVOL 38600: Apes & Human Evol EVOL 46200: Evol & Fossil Rec

GEOS 36100: Phylo & Fossil Record (EVEN) ORGB 31201: Mammal Evol Bio (EVEN) ORGB 31300: Key Issues Vert Evol

# typically offered:

- Autumn quarter
- Winter quarter
- Spring quarter

<sup>\*</sup>Meets GME training grant course requirements