Purpose: Predoctoral Fellowships have been established through an NIH-supported Training Grant (T32-HD007505), entitled, “Training Program in Organogenesis”. The goal of this Fellowship Award is to provide up to two years of support to PhD or MD/PhD students who have achieved candidacy and who wish to undertake a research project in the field of organogenesis. Interdisciplinary projects (crossing departmental or school lines) are highly encouraged. Criteria used to evaluate applications include the strength of the mentors, strength of the student (as evaluated by letters and CVs), the interdisciplinary nature of the project, its feasibility and the likelihood of a successful outcome and the degree to which the project fits the goals of the Center for Organogenesis.

Organogenesis Mission Statement: The mission of the Center for Organogenesis is to provide an infrastructure for the study of organogenesis at the University of Michigan. The field of organogenesis unites research in the clinical, basic science, and applied arenas with a common, directed goal: To understand the basic mechanisms by which organs are formed and maintained and to use this knowledge to regenerate or replace damaged or diseased organs. The following research focus areas have been defined:

- Stem Cell Biology
- Organ Development
- Tissue Engineering and Organ Regeneration/Replacement
- Organ Injury and Disease

Student eligibility: The student must: a) be registered in a Ph.D. program at the University of Michigan, b) have attained full candidacy by the start date of the training year (usually September), c) outline a research project that fulfills the goals of this program, and d) be a U.S. citizen or permanent resident. Applicants who have not yet successfully passed preliminary examination of their graduate program to pass to candidacy are not eligible. Applicants who expect to have passed prelims before September 1st are eligible to apply. However, funding is contingent on passing prelims and achieving candidacy.

Mentor requirements: The primary mentor must be a member of the Center for Organogenesis and a Mentor on the Organogenesis Training Grant. Primary faculty mentors must have an active research program with sufficient funds to provide continuous support for a trainee. Potential faculty mentors who are not already listed as Organogenesis training grant mentors may apply for mentorship simultaneously with the NIH fellowship submission (please contact organogenesis@umich.edu for an application).
secondary mentor is optional. The secondary mentor must hold a faculty appointment at the University of Michigan and does not need to complete a membership application. The mentor and co-mentor must provide a recent NIH style Biosketch and Other Support pages.

The mentor(s) must provide a letter describing:

a) The trainee’s strengths and appropriateness for the award.
b) The involvement of the laboratory/laboratories in the training program; the mentor(s) must state what aspects of the training they will be involved in, describing specifically the elements of the laboratory setting or areas of expertise that are important to the success of the project. (If more than one mentor, why is each mentor involved? How will the trainee benefit from the interaction with the two mentors rather than one?)
c) The procedures that will be followed by the mentor(s) to monitor trainee progress and deal with unexpected findings.
d) Recommendations for composition of the mentoring committee for the candidate (suggest two faculty mentors and state why they are appropriate).

**Student requirements:** In addition to the letters from each mentor, the student must solicit two additional letters of recommendation. The letters should address the student’s academic qualifications, intellectual strengths and probability for success in carrying out a research project in Organogenesis. All recommendation letters must be received by the application deadline date. The student should submit an updated Curriculum vitae and graduate transcript along with this application.

**Project description:** A description of the project and its interdisciplinary components should be prepared by the trainee. The project must fall into one or more of the four core research areas designated under the umbrella of the Training Program in Organogenesis (see Mission Statement). The project description should be **no longer than 4 pages** (3 pages of text plus 1 additional page for figures and tables) using standard NIH formatting (0.5 inch margins, single spaced, 11 point Helvetica or Arial font) and should include the following sections:

- **a)** Specific Aims (1 page)
- **b)** Significance/Scientific Rationale and Innovation (approx. 0.5 page)
- **c)** Research plan, including experimental Approaches and Limitations (approx. 1.5 pages)
- **d)** Figures and figure captions and/or tables (1 page)
- **e)** Complete references should be attached, but should not be counted as part of the page limit. In preparing reference lists, article titles must be included.

Failure to adhere to these requirements will lead to exclusion of the application.

Copies of relevant publications by the trainee may be submitted as an appendix.

**Trainee selection:** After initial review of all candidates, the Operating Committee will select several promising candidates for oral interview. Trainees should be prepared to present 3-5 slides that can succinctly explain the rationale and project overview. A short question and answer period will follow. Final selections will follow the interview process.

Successful applicants will be required to:

- Attend lectures in “Organogenesis: Stem Cells to Regenerative Biology” (CDB 582/583).
- Attend monthly trainee meetings.
- Attend and participate in the Organogenesis seminar series.
- Execute a yearly Individual Development Plan.
- Present a poster at the International Symposium on Organogenesis (Date: TBA).
- Complete all predoctoral requirements for Responsible Conduct of Research.
- Complete a Progress Report at the end of the first year of training (documented progress is required for appointment in the second year of training).
• (Optional) Select a clinical co-mentor who will guide translational experiences. (Selection will be done after appointment to the Training Program, but specific requests made in the context of the application are welcome.)

Please contact the Center for Organogenesis at organogenesis@umich.edu if additional information is needed.
Organogenesis Predoctoral Application Form

Applicant Name______________________________________________________________

Student or Employee ID Number_______________________________________________

Department or Graduate Program______________________________________________

Title of Proposal____________________________________________________________

Campus Address/Box_________________________________________________________

Phone_________________________ Email Address: ____________________________

Applicant’s Citizenship Status: ______________________________________________

If funded on this training grant, name & contact info of administrative individual in your department:

________________________________________________________

Primary Mentor_________________________ Department__________________________

Title________________________________________________________

Campus Address/Box__________________________

Campus Phone_________________________ Email address__________________________

Secondary Mentor_________________________ Department________________________

Title________________________________________________________

Campus Address/Box__________________________

Campus Phone_________________________ Email address__________________________
1. Research area:

State which of the following research areas best describes your project:

1. Stem Cell Biology
2. Organ Development
3. Tissue Engineering and Organ Regeneration/Replacement
4. Organ Injury and Disease

2. Project description:

Attach a description of your project as defined on page two of the guidelines.

3.  □ Check here if this project involves Human Subjects. Provide IRB numbers and approval dates ____________________________
    □ Check here if this project involves Animal Use. Provide UCUCA numbers and approval dates ____________________________

4. Relationship to the goals of the Training Program in Organogenesis:
Describe briefly how your project meets the Training Program in Organogenesis guidelines as an interdisciplinary research project in Organogenesis.

5. Please attach a CV and graduate transcript.

6. Current status:
    □ I am currently supported by another training grant or fellowship. This will expire on ____________________.
    □ I am not currently or will be supported within the next two months on any training grant or fellowship.

I have received prior NIH T32/NRSA support:
No. of Years_____; Give dates ____________________________

□ I am also applying to other training grants/fellowships (please list)

7. ___ Minority code:
1  American Indian or Alaskan Native
2  Asian
3  Black or African American
4  Hispanic or Latino
5  White
6  Native Hawaiian or other Pacific Islander
0  Use this code if you would prefer not to provide this information

8. Primary Mentors only:
    □ My lab currently has a trainee who is supported by the Center for Organogenesis
    □ My lab does not have a current trainee being supported by the Center for Organogenesis
9. Signatures:

Applicant__________________________________________________________

*Primary Mentor____________________________________________________

Secondary Mentor___________________________________________________

Application Checklist

*Application Form (completed & signed by all)
*Project Description
*Trainee CV
*Graduate Transcripts
*Publications (if applicable)
Two additional letters of support
*Participating Mentor(s): *NIH Biosketch, *Other Support,

*Participating Mentor(s) Letters of Support plus Two additional letters of support

Send one complete PDF of your application, Mentor Biosketches and Mentor Other Support to organogenesis@umich.edu.

Mentor letters of Support and two (2) reference letters can be mailed or emailed separately to:
Center for Organogenesis
University of Michigan Medical School
109 Zina Pitcher Place, 2058 BSRB
Phone (734) 936-2499
organogenesis@umich.edu