

**Common Themes in Reproductive Diversity
A501, Techniques in Reproductive Diversity
Autumn, 2006
Class schedule**

Class will meet at CISAB, in people's labs, at Kent Farm, at the imaging facility, etc..
Meeting times: 1:30-4:30 on Tuesdays, 12:30-1:30 on Thursdays are the formal times,
students will be expected to participate at odd hours too
Enrollment is capped at 15

August 29

**Working with wild animals – measuring molt in songbirds, collecting blood samples
and feces, response to stressors – Ellen Ketterson**

August 31-Sept 5

**Extracting hormones and DNA from plasma, feces and yolk – Amy Poehlman and
Danielle Whittaker**

Sept 7-12

Measuring colorful phenotypes – Lynn Siefferman

Sept 14-19

Assessing relatedness - genotyping with microsatellites – Amy Poehlman

Sept 21-26

**Measuring plasma - hormone levels and EIA/RIA– Danielle Whittaker and Amy
Poehlman**

Sept 28-Oct 3

Modeling the evolution of sex – Curt Lively

Oct 5-10

Employing neuroanatomical techniques to study sex differences – Dale Sengelaub

Oct 12-17

Designing questionnaires to study human sexual behavior– Stephanie Sanders

Oct 19-24

Imaging brains using fMRI – Heather Rupp

Oct 26-31

Analyzing immune function in birds and mammals – Greg Demas

Nov 2-7

**Analyzing volatile metabolites in biological specimens using GC-MS techniques -
Milos Novotny and Helena Soini**

Nov 9-14

Understanding evolution using the comparative method – Emilia Martins

Nov 16-21

Employing comparative anatomy, immunostaining, in situ hybridization, and RNAi to study the evolution of development - Armin Moczek

Nov 28

Using Molecular techniques, particularly gene arrays to study reproduction – Christine Quirk

Nov 30-Dec 5

Recording electrical behavior in animals and cells to study sex differences – Troy Smith

Dec 7

Overview and retrospective – Ellen Ketterson

- On Thursdays we will introduce topics and the principles behind the methods. On Tuesdays we will do the lab or fieldwork.
- Students will need to be flexible and commit to coming in for more than the scheduled class time