

Langerhans Lab Protocols

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Protocol for Camera Equipment in the Langerhans Lab

- To use camera equipment make sure it's not in use and then sign it out on the Langerhans Lab Calendar through Gmail.
- For now the compact cameras, Canon Rebels XTi, XS, and general camera equipment/memory cards are in David Clark Labs room 382, while the Rebel T3i and a few others are in the labs at Yates Mill.

List of Equipment Available

Compact Cameras:

- Canon D10 (waterproof, shockproof blue camera, 12 megapixel, 3x optical zoom, 35-105mm f/2.8-4.9 lens, decent amount of control; 2009)
 - Decent easy-to-use all-weather field camera, decent underwater camera (careful to fully close the compartments now as it has shorted out before), ok video quality
- Canon G12 and waterproof case (10 megapixel, lots of control, RAW images, HD video, converter for adding lenses and filters, 28-140mm f/2.8-4.5 lens; 2011)
 - Good field camera with nice manual control features, can photo well for color and morphology in field; just short of SLR quality and control; pretty decent video quality

dSLR Cameras:

- Canon Rebel XTi (10 megapixel; 2008)
 - morphometrics station; pretty good, uses Compact Flash memory
- Canon Rebel XS (10 megapixel, live view; 2010)
 - morphometrics station; good all-around SLR
- Canon Rebel T3i (18 megapixel; 2011)
 - field use and morphometrics station as needed; nice all-around SLR, HD video

SLR Lenses:

- 2 Sigma 50mm macro f2.8 lenses
 - photographing small specimens
- 2 Kenko teleconverter 1.5x lenses
 - 50% greater magnification for photographing small specimens
- 1 Canon 50mm macro f2.5 lens
 - photographing small specimens (not as good as Sigma lenses), macro lens for HSV
- 1 Sigma 17-70mm f2.8-4 macro lens
 - field/everyday use, lab HSV use for versatile needs
- 1 Tamron 75-300mm f4-5.6 macro lens
 - field zoom lens
- 1 Canon 18-55mm f3.5-5.6
 - field/everyday use

Video Cameras:

- GoPro Hero HD video camera with lots of accessories (underwater case, tripod mount, battery bacpac, headgear, extra batteries)
 - field, underwater, action use

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- 2 Sony Handycam DCR-SR68 cameras (80GB internal memory, 60x optical zoom, SD memory card capability)
 - mate-choice trials, behavioral experiments (decent quality but not great)
- 2 EverFocus EQ550 low-light security cameras with 1/3" 6-60mm varifocal auto iris lenses with AVerDiGi NV3000 PCI card for viewing video on computer
 - behavioral experiments in G8, dark-room use for night-time monitoring and cave fish work

Memory Cards:

- 2GB Compact Flash: Canon Rebel XTi
- 2GB SD: extra available card
- 2GB SD: Leica EZ4D microscope
- 8GB SDHC: Canon Rebel XS
- 8GB SDHC: Canon D10
- 16GB SDHC (Class 10): Canon Rebel T3i
- 32GB SDHC: Canon G12
- 32GB SDHC (Class 10): GoPro

High-Speed Video Cameras:

- IDT N4-S1 camera w/ 1.25GB memory (1016 x 1016 resolution, 3.5 sec at 500Hz, up to 2000Hz, Ethernet connection, 6000 ISO)

Tripods:

- 2 standard Kodak black tripods: portable with carrying case, good for field use
- 1 standard silver Vivitar tripod: portable with carrying case, good for field use
- 1 good semi-portable tripod (Davis & Sanford Attaras Grounder Tripod): good for local field use (tough for long hikes or international travel)
- 1 really good tripod (Manfrotto 190XDB with 701HDV): HSV camera, etc.

Paraphernalia:

- Gray camera bag (old, falling apart now)
- Black camera bag for SLR and a couple of lenses
- Small black SLR camera bag
- Small black camera bag for GoPro
- UV filter (58mm) that fits on 50mm SLR lenses and the adapter tube for the G12
- Lens cleaning materials (sprays, cloth, Q-tips, blower brush)
- Memory card readers
- Screen protectors

Lighting:

- Lots of fiber lights
- Few flood lights
- Infrared ribbon lighting for dark room