

Before starting, make a copy of this doc and replace “master” with your first and last name. Save your file in the new students folder on the google drive.

Every new student in the lab must complete the basic skills checklist. You must also complete the checklist of the specific projects you work on. Some skills will require a check off by a lab leader or Norimatsu (see each project for who can check off your skills).

SCHOLARSHIP STUDENTS ONLY:

You are required to work 55 hours this Fall 2021 semester. Please log the hours on Truview→Student→ Student Timecard. This is 3.9 hours per week excluding Thanksgiving break and Finals Week.

Basic Skills

Skill	Source	Completed on	Lab Leader check off
Welcome to Norimatsu Lab	 Welcome to the Norimatsu Lab	8/16/2022	n/a
Tour of Lab	Tour from a Lab Leader	8/23/2022	AJH
Have Access to the Google Drive, Google Calendar, Slack, and Lab Wiki	Email from Audrey (ajh6675@truman.edu)	8/16/2022	n/a
Tutorial for new students	 Tutorial for New Students.pdf		n/a
Navigate the Lab Wiki	Google Site Tutorials Watch Lab Wiki Tutorial Number 1 and 2 (~10 minutes). The rest should be watched whenever necessary (so only when you are being asked to edit the wiki).		n/a
Make a Lab Wiki Page For Yourself	How to Make a Lab Wiki Page About Yourself	8/29/22	n/a
Take Principles You Personality Test and upload results to your lab page	Principles You You need to make an account on Principles You and then share your results with “ ynorimatsu@atsu.edu ”. You can share with the lab leaders if you would like!	8/29/22	n/a
Take LCI and upload	 LCI Survey.pdf		n/a

results to your lab page.	Write down your answers and then score them.  LCI for Student Advising.pdf This PDF explains each type of learning pattern.		
Hazardous Waste Training (wet lab only)	Hazardous Waste Training Video  Hazardous Waste Quiz-Mast... Make a copy of this quiz, complete the quiz on a google doc or word doc, and email to Audrey Heathcote at ajh6675@truman.edu . Once you pass the quiz, you will sign your name in the safety binder in the lab.		
Pipette Training (wet lab only)	Pipette Training Watch the video (if you have never pipetted before) then complete the training in person with a leader present.		

Molecular Biology Training

Skill	Source	Learned with a Trainer	Completed While Supervised	Lab Leader check off -good to perform protocol alone
PCR with Q5 Master Mix	PCR with Q5 Master Mix			
Site-Directed Mutagenesis with PCR	Site-Directed Mutagenesis with PCR			
HiFi Subcloning	HiFi Subcloning			
Blunt Ended PCR Subcloning	Blunt Ended PCR Subcloning			
Circularization of Linear DNA	Circularization of Linear DNA			
Transformation	Transformation			
Single Colony	Single Colony			

Inoculation	Inoculation			
TENS Prep and Ethanol Precipitation	TENS Prep and Ethanol Precipitation			
Streaking and Isolating Bacteria	Streaking and Isolating Bacteria			
Designing and Resuspending Primers	Designing and Resuspending Primers			
Nucleic Acid Quality Control	Nucleic Acid Quality Control			
Sequencing	Sequencing			
Making LB Agar Plates	Making LB Agar Plates			
Nanodrop	Nanodrop			
DNA Linearization	DNA Linearization			
RNA Synthesis	RNA Synthesis			
DNA Sequence Alignment/Mutant Verification	DNA Sequence Alignment/Mutant Verification			
Plasmid Maps	Plasmid Maps			

Electrophysiology Training

Skill	Source	Completed date	Lab Leader Check off
Electrophys Setup Tutorial	https://drive.google.com/file/d/14HWAzt8cRv1HkB_fVzau3wVdJZ9lvOJ7/view?usp=sharing		
Finding Materials for GlyH101 and Anion Sub expts	https://drive.google.com/file/d/1WavCm07vCs2x02QisUkUL9fW42iaA6fV/view?usp=sharing		n/a
Adjusting scale w/	https://drive.google.com/file/		

amplifier knob	e/d/1ubYP1CrS4CGtRjiZjsN58KxgTdmQe1ON/view?usp=sharing		
Filling pipettes	In lab training		
Removing air bubbles from chamber	In lab training		
Switching solutions	In lab training		
Zeroing readings	In lab training		
Placing oocytes	https://drive.google.com/file/d/1oErRLMWssUiiXGm6eKQs_Y7pz5yBeRga/view?usp=sharing		
Imapling oocytes	https://drive.google.com/file/d/1PZCevTSeckiBkakBhE6ctZdvWC0N9ckd/view?usp=sharing		
Running Electrophys expt	https://drive.google.com/file/d/1b0A2nquS0_RPGzX_p047onpQ1oam-578/view?usp=sharing		
Running MTS expt	https://drive.google.com/file/d/1917c_P4EUocJRt0siftckbwSiwIMpfeW/view?usp=sharing		
Electrophys Cleanup	https://drive.google.com/file/d/1WavCm07vCs2x02QisUkUL9fW42iaA6fV/view?usp=sharing		
How to pull micropipettes	https://drive.google.com/file/d/17Lrby9CjVIFK3DjmAzvT8qOPLijYslXa/view?usp=sharing		
Analyzing expts w/ pClamp	https://drive.google.com/file/d/11FsdF2y6T8KSP49ipEifZy50x1PBltRz/view?usp=sharing		
Analyzing expts w/ sigma plot	https://drive.google.com/file/d/1ojGLr3blzYI05jkqUlaCwFHo36wZQHw/view?u		

	sp=sharing		
Anion sub expt explained	https://drive.google.com/file/d/1z4x34-JByd1s4oOk0OJFgYYGidlhX5Dp/view?usp=sharing		
Filtering IBMX w/ charcoal	https://drive.google.com/file/d/1gmfica2IElsrDGxgmW3Fvmm-XnB9RG5n/view?usp=sharing		
Analyzing Expts w/ sigma plot	https://drive.google.com/file/d/1Qa-h8oq18NZFFUqmxZ2mOW-v5SotRrk/view?usp=sharing or https://drive.google.com/file/d/14ZAlsxlQ8fnlqFxit_atkWmjPZLCLM7k/view?usp=sharing		
Oocyte sorting	In lab training		
Injecting oocytes	https://docs.google.com/document/d/1CXQPU9N3vm11UGClybl2rqpkLQqXJuM8t-cd5EKebj0/edit?usp=sharing		
Prepping Micropipettes for Oocyte Injection	https://drive.google.com/file/d/1SgrgNCAt10-pwag2XJotRuBYT2zYe1kA/view?usp=sharing		

Molecular Modelling Training

Skill	Source	Completed date	Lab Leader Check off
Overview	Molecular Modeling page Read the Molecular Modeling page.		N/A
Command-line tutorial	Ubuntu explainer Read steps 1-5 of this tutorial and practice on your own computer. Use a lab		Take the Command-line quiz .

	laptop running Linux if you have Windows.		
On-Demand tutorial	Bridges-2 On-Demand entry Read the Wiki page and explore the interface. Alec will need to grant you XSEDE credentials for this step.		N/A
Modeling team training	COVID-19 Project Training document Read and complete the tasks for the Modeling team.		
Simulation team training	COVID-19 Project Training document Read and complete the tasks for the Simulation team. Alec will need to grant you XSEDE credentials for this step.		
Data team training	COVID-19 Project Training document Read and complete the tasks for the Data team.		

Cell Culture

Skill	Source	Completed Date	Lab Leader Check Off
Sterile Technique	Cell Culture Protocol Page		
Passaging Cells	Cell Culture Protocol Page		
Pre-plating for Transfection	Cell Culture Protocol Page		
Counting Cells on a Hemocytometer	Cell Culture Protocol Page		

Transfection	Cell Culture Protocol Page		
Observing Cells Under Fluorescence	Cell Culture Protocol Page		
Imaging Cells	See Alec Higgins		
Deep Freezing Cells	Cell Culture Protocol Page		
Thawing Frozen Cells	Cell Culture Protocol Page		

Housekeeping

Skill	Source	Completed date	Lab Leader check off
Getting DI Water	Lab Leader		
Washing Dishes	Lab Leader		
Making Solutions (General)	Lab Leader		

Optional Skills

Skill	Source	Completed date	Lab Leader check off
Understanding Protein Structure - GPCR	GPCR Structure Video  GPCR Quiz		n/a
Understanding Protein Structure - CFTR	CFTR Protein Structure Video		n/a
Protein Locking Readings	Protein Locking Readings		n/a
How to Use Websites to Look up Drug Targets	How to Use Websites to Look up Drug Targets		n/a

This link below will tell you which leader is able to train you on each protocol!!

Skills Checklist- Lab Leaders

Yohei Norimatsu	Principal Investigator
Audrey Heathcote	Lab Leader Expertise: Molecular Biology
Meghan Novotny	Lab Leader Expertise: Molecular Biology
Brent Perry	Lab Leader Expertise: Molecular Modeling