

## MICROBIOLOGY

### LINKS FOR STUDY AIDS

Dr. SANKARANARAYANA CHANDRAMOHAN

#### MICROSCOPE:

How to use the microscope: <http://www.youtube.com/watch?v=1l7HKv2n3og&NR=1>

Microscopy with oil (100x high magnification)

<http://www.youtube.com/watch?v=P5AyMZPqWN0&feature=relmfu>

#### SLIDES for Microbiology Lab– study material:

Part 1 <http://www.palmbeachstate.edu/programs/Biology/documents/midterm.pdf>

Part 2 <http://www.palmbeachstate.edu/programs/Biology/documents/labstudy2.pdf>

#### CULTURE TECHNIQUES :

An Overview: Introduction to Microbiology Culture Techniques

<http://www.youtube.com/watch?v=Et1v8EQP10U>

Working in a sterile hood: [http://www.youtube.com/watch?v=yJ\\_acpKglto&feature=related](http://www.youtube.com/watch?v=yJ_acpKglto&feature=related)

Using Pipettes: <http://www.youtube.com/watch?v=LcRIulaiTNo&feature=related>

<http://www.youtube.com/watch?v=LFFyYN9bIKM&feature=related>

Calibrating Pipettes: <http://www.youtube.com/watch?v=ImFy3tBC-8o&feature=related>

Precautions for aseptic transfer: <http://www.youtube.com/watch?v=zd0iVJrQwyY&feature=related>

Streaking <http://www.youtube.com/watch?v=AaG3Pt3nwLQ&feature=related>

Aseptic transfer to Agar Tube: <http://www.youtube.com/watch?v=tBmNitxvgyC&feature=relmfu>

Cell Counts – Heamocytometer: <http://www.youtube.com/watch?v=89SB1tAa6kg&feature=related>

Enumerating Bacteria from samples <http://www.youtube.com/watch?v=lxFuTSenWpg&feature=related>

**STAINING TECHNIQUES:**

How to make a bacterial smear: <http://www.youtube.com/watch?v=5TmyxFvo9x4&feature=related>

Simple Stain [http://www.youtube.com/watch?v=tk1aP\\_xEtd0&feature=related](http://www.youtube.com/watch?v=tk1aP_xEtd0&feature=related)

Gram Stain <http://www.youtube.com/watch?v=8zd3HPRxx1U&feature=relmfu>

Spore Stain <http://www.youtube.com/watch?v=mfcFcFNkyAU&feature=relmfu>

Negative Stain <http://www.youtube.com/watch?v=avveXgPWVJ8&feature=relmfu>

Capsule Stain [http://www.youtube.com/watch?v=mZGEhql02\\_I](http://www.youtube.com/watch?v=mZGEhql02_I)

Acid Fast Stain [http://www.youtube.com/watch?v=faB\\_5STfZH8&feature=related](http://www.youtube.com/watch?v=faB_5STfZH8&feature=related)

(there are more related videos if you will look – when you watch this)

**Some microbes:****Yeast:**

Yeast – Growth by budding <http://www.youtube.com/watch?v=hJyFGYPyHbY&feature=related>

Model organism <http://www.youtube.com/watch?v=ijvFimSP-dg>

Life cycle <http://www.youtube.com/watch?v=XxDIzMARURE&feature=relmfu>

**Slime Molds:**

<http://www.youtube.com/watch?v=vmp1uopZKz8&feature=related>

**Fungi :**

Part 1 [http://www.youtube.com/watch?v=4NO299do\\_l4&feature=related](http://www.youtube.com/watch?v=4NO299do_l4&feature=related)

Part 2 <http://www.youtube.com/watch?v=Luxjo0AsbTY&feature=related>

Fungal Structures <http://www.youtube.com/watch?v=VJXLZRSEgz8&feature=related>

**MEDIA & TESTS:**

Selective / Differential Media to selectively grow microbes:

[http://www.youtube.com/watch?v=gKA\\_VLC4-jQ](http://www.youtube.com/watch?v=gKA_VLC4-jQ)

Biochemical Tests for Bacteria [http://www.youtube.com/watch?v=9N77Dvb2\\_AU&feature=related](http://www.youtube.com/watch?v=9N77Dvb2_AU&feature=related)

Microlab review part 1 <http://www.youtube.com/watch?v=BVkvLcjeUtk&feature=related>

Microlab review part 2 <http://www.youtube.com/watch?v=C5q71oE4NPM&feature=related>

Microlab review part 3 <http://www.youtube.com/watch?v=C5q71oE4NPM&feature=related>

Test for disinfectants [http://www.youtube.com/watch?v=4BPvab-MEZc&feature=results\\_video&playnext=1&list=PLE98D3AF665AFED55](http://www.youtube.com/watch?v=4BPvab-MEZc&feature=results_video&playnext=1&list=PLE98D3AF665AFED55)

Antibiotic Susceptibility (example: Bacitracin) <http://www.youtube.com/watch?v=XDeCg-IUQ9o&feature=related>

Antimicrobial Testing <http://www.youtube.com/watch?v=PkF2Ga4esJQ&feature=related>

[http://www.youtube.com/watch?v=\\_ujEXCXj4KE&feature=related](http://www.youtube.com/watch?v=_ujEXCXj4KE&feature=related)

Antibiotic Resistance <http://www.youtube.com/watch?v=XNiLtKzIVus>

ELISA concept <http://www.youtube.com/watch?v=RRbuz3VQ100&feature=related>

ELISA method <http://www.youtube.com/watch?v=QoK2xBn9fSc&feature=related>

ENTEROTUBE lecture

[http://www.youtube.com/watch?v=dPvNul6OnEo&feature=results\\_video&playnext=1&list=PLD85B5BF6031B0749](http://www.youtube.com/watch?v=dPvNul6OnEo&feature=results_video&playnext=1&list=PLD85B5BF6031B0749)

Alpha and Beta hemolysis on blood agar <http://www.youtube.com/watch?v=3hvKLK899R8>

Time lapse video of hemolysis on blood agar

<http://www.youtube.com/watch?v=nlXQRta1Dx0&feature=related>

MICROBIOLOGY TESTS (www.microrao.com)

[http://www.youtube.com/view\\_play\\_list?p=E98D3AF665AFED55&sort\\_field=added](http://www.youtube.com/view_play_list?p=E98D3AF665AFED55&sort_field=added)