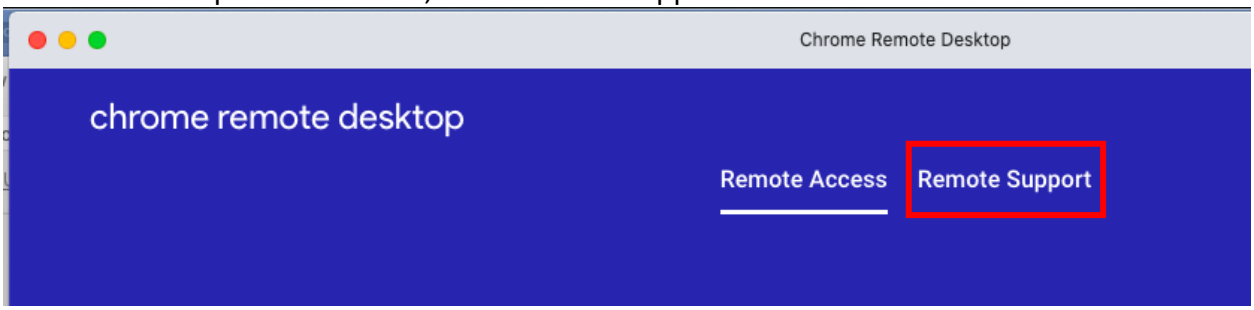
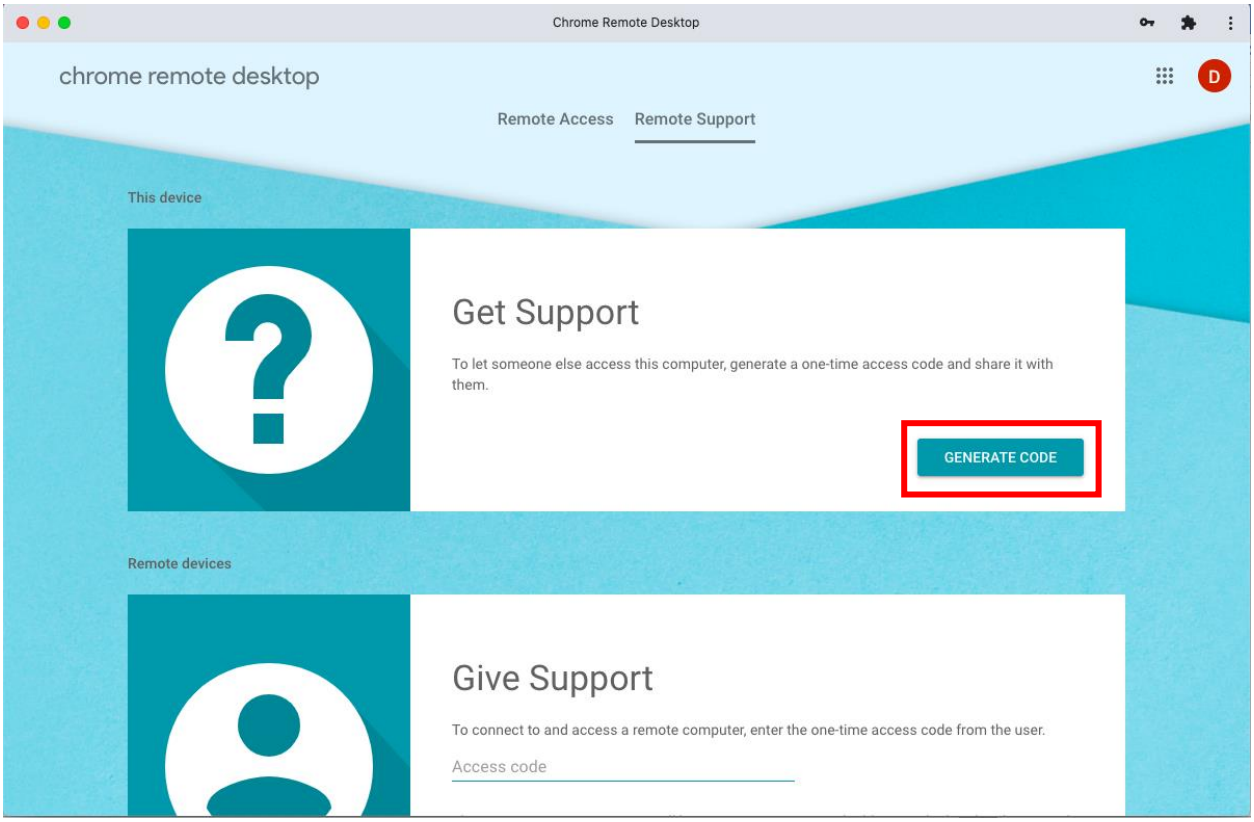
Remote Control of Fluorostat

1. Log in, password: fluorostat
2. From the app launcher  find and select chrome remote desktop

3. At the top of the window, select remote support



4. Select Generate code



5. Send code to support giver, they can now log in to the fluorostat computer

Starting an LD run

The only difference between the LD runs and other runs is the Arduino code.

File: Arduino code TwoColors_Air_LD_chem_v2 (the same one that should already be open)

At the top of the script make sure the following variables are set:
Target_OD = 600
Delaytime = ((*Hr*L * 60L + *Min*L) * 1000L +60L)

Where *Hr* is the number of hours till the first night transition and
Min is the number of minutes until the first night
Since the Arduino doesn't have a clock you have to give it this time as a reference point. Night should fall at 9 pm, so for example if you were starting the run at 2:15 pm, 9 pm is 6 hrs and 45 mins away so the variable would be ((*6*L * 60L + *45*L) * 1000L +60L)

Transtime = (12 * 1000 * 3600L) 12 hours for both night and day

```
//-------------------------------------------------------
// Manually set variables
//-------------------------------------------------------
float temperature_SetTo = 30;//37; Temperature Thresh
int target_OD = 700; //OD voltage set point for turbidostat
int Fluorostat_target_channel = 0;
int Fluorostat_target_gain = 36; //26,31,36,41,46,51
//int Fluorostat_target=200;
int Target_fluoro

//LD Variables-----------
long delaytime = (14L * 60L + 45L) * 1000L * 60L); //num mils to night
//(hr to night x conversion from hr to min + min to night)x conversion from mils to secs * conversion from secs to mins
long transtime = (12 * 1000 * 3600L);
//num hours for day and night x conversion froms mils to secs x conversion secs to hours
int num_skips = 4; //If you don't want to take fluoroscence measurements every time define this
int current_skip = 0;
```

OD setpoint: 600

Hours till night

Mins till night

Length of day/night

In the loop, comment out other lines and uncomment turbidostat_cyano_air_LD(…) and upload

```
void loop() {
  //-------------------------------------------
  //Choose one function to set turbidostat mode:
  //-------------------------------------------
  //turbidostat(target_OD);
  //turbidostat_cyano(target_OD);
  //fluorostat(Fluorostat_target_channel,Target_fluoro[Fluorostat_target_channel]);//(channel (0 or 1), gain, target reading)
  //Pump_for_Exp_Start();
  //rolling_measure();
  //ODbatch();
  //Thorlab();
  //batch();
  //OD_calib();

  //pump_out(5);
  //pump_in(5);
  //wait(10);
  //ODbatch_light();
  //ODbatch_light_LD(starttime, transtime, delaytime);
  //ODbatch_light_air();
  //OD_signal_read();
  //ODbatch_light_air_PMT();
  //AirPin_ON();
  //digitalWrite(AirPin, HIGH);
  //turbidostat_cyano_air_LD(target_OD,starttime,delaytime,counter);
  turbidostat_cyano_air(target_OD,counter);

  //chemostat_cyano_air(chem_pump_interval,chem_starttime);
```