

Appendix 3: Grading Guidelines for *C. elegans* Lab Report

Introduction

- Discuss method of delivery- fed bacteria containing expression vectors, and Timmons et al. 2001 paper
- PD4251: myo3:GFP (myo3 promoter driving gfp transgene)
- L4417 plasmid: 0.7 kb gfp and convergent promoters
- L4440 plasmid: empty, negative control
- HT115 lack dsRNA-specific endonuclease RNaseIII

Methods

- Class protocols
- OD readings
- Induce with IPTG, amount added
- Numbers calculated, e.g., amount Amp/IPTG/Tet at end
- Must indicate wet seeded done by students and the culture that they induced
- Handpicked to dry; chunked to wet

Results

- Chart: dry v wet - Silencing yes/no each plate
- Text discussing all 4
- Should define what “silenced” phenotype means
- OP50/nonsilencing: see bright green fluorescence e.g., body wall
- Lawn present/absent

Discussion

- BL21 vs HT115 samples: must compare and reference Timmons et al. 2001 paper
- L4440 vs L4417 samples
- Wet vs dry
- Effect if amount of food not sufficient
- Define their best silencing condition

References: Class protocols; Timmons et al. 2001 paper