**Job Position:** Summer Internship – 01

**Requirements:** A Greenville High School student in good standing.

**Purpose:** Identify optimal growth conditions for recombinant bacterial protein expression system.

**Salary:** $10.00 / hr

**Employment:** 20 hr / week

**Sponsor:** Greene Business Alliance & C2 Biotechnologies, LLC

**Location:** Greenville High School, Route 81, Greenville, NY 12309

**Start Date:**  July 5, 2010

**Termination Date:** August 16, 2010

**Description:** Under supervision of C2 Biotechnologies Chief Science Manager (CSM) summer interns will design and implement and analyze culture growth optimization experiments. This project will be developed using a mathematical model for discovering trends in culture growth called “design of experiment” (doe). Once the experiment has been designed the intern will prepare all media stocks and buffers according the doe. Recombinant bacteria containing our expression vector and target fusion gene will be used to inoculate the cultures under the various operating parameters defined in the doe. Growth of bacteria will be monitored at specified intervals using a spectrometer.

**Contact Information:** Greenville High School Administration Office

**Summer Intern job duties and tasks:**

1. Prepare bacterial culture media.
2. Understand and operate spectrometer.
3. Understand and perform SDS-PAGE.
4. Inventory and unpack reagents.
5. Prepare bacterial culture samples for analysis.
6. Observe and follow all safety operations and protocols.
7. Follow instructions.
8. Report to work when required.
9. Record experimental data in laboratory note book.
10. Communicate to staff problems and keep personal informed of experimental progress.
11. Understand how to use Microsoft Excel and word for data analysis and reporting.
12. Help maintain all aspects for laboratory.
13. At all times maintain professional and polite attitude.

**Performance and personal character skills:**

1. Must be a Greenville High School student in good standing.
2. Attention to detail.
3. Show ability to establish and maintain effective working relationship with CSM.
4. Ability to follow oral and written instructions.
5. Be punctual.
6. Act as a team member.
7. Good communication skills.
8. Eagerness to innovate.
9. Must have natural curiosity for biologics.
10. Tells truth, keeps promises and earns CSM’s trust.
11. Seeks opportunities to develop skills above and beyond norm.
12. Motivated to research and study new technologies.
13. Must have organizational skills and ability to complete tasks in a timely manner.

**Internship Goals:**

1. Must have and maintain dedication in face of failure.
2. Perseverance is a must.
3. Must maintain objectivity during experiment and while under critic.
4. Must maintain respect to fellow co-workers, male, female, young or old.
5. Must obey all safety procedures and protocols.
6. Become a competent molecular biologist.
7. Understand and use appropriate experimental controls for all protocols.
8. Communicate fluently using technical terms and to communicate using human terms.
9. To participate in a full time work setting with job expectations, a supervisor and co-worker.
10. Realize that performance will be monitored and scored during internship.
11. Respect co-worker’s laboratory experiments and operational space.