



HIGH SCHOOL TEACHER APPLICATION FORM

Summer 2011

Teachers, join us to make a big difference. We are assembling the **GENE TEAM 2011**. The Department of Biological Sciences invites motivated and creative high school biology teachers and their students to apply for a program designed to bridge current research with the high school classroom. Composed of a research and education component, this program blends our strengths by generating novel, inquiry-driven science education from current health-related research.

Program Description

Selected high school biology teachers and students will participate in a 4-week summer laboratory experience (June 20 to July 15, 2011), during which they participate directly in cutting-edge lab research that uses genetics to study health-related problems. With the participation and guidance of University research labs, teacher-student teams will perform genetic research projects using three sets of model organisms: bacteria, yeast, and nematodes.

Weekly Curricular Roundtable meetings among participating teachers, a Teacher Advisory Board, and University Faculty will allow us to work together to develop inquiry-based curricula, for use in high school and middle school classrooms. Roundtables will focus on connecting concepts learned in the research laboratory with state mandated education standards. Attention will be focused on identifying required topics that can be demonstrated in bacteria, yeast and/or nematodes. During the academic year, the modules will be tested and refined in the classroom.

Interested teachers are asked to distribute student applications (enclosed) to their students. Selected teachers will be asked to help choose student participants.

Eligibility

To apply, you must be currently teaching high school biology. For additional forms see <http://www.pitt.edu/~biology/Dept/Frame/geneteam.htm>

Program Benefits

Teacher participants will receive a total of \$2,500 in stipends; \$1,500 during the 4-week summer research program and \$1,000 during the academic year implementation phase. All participating teachers will receive Pennsylvania Department of Education Act 48 Continuing Education hours. You will become eligible to implement our instructional programs in your classroom, with faculty assistance and all equipment and materials provided by Pitt.

Deadline

All teacher application materials are due in the Department of Biological Sciences, A234 Langley Hall, University of Pittsburgh, PA 15260 (FAX 412-624-4759) **by 5pm on March 4th, 2011.**

Application Materials

Please submit

- Completed Application
- Administrator support document

Come to our Teacher Information Session

February 9, 2011, 219B Langley Hall (Pitt) 4:30 PM

Questions or directions, contact:

Brian Dirienzo (412) 383-5921 bdd4@pitt.edu
Marcie Warner (412) 624-2230 mwarner1@pitt.edu

Frequently Asked Questions

XX What will I do in the program? You will carry out state-of-the-art biomedical research projects, teamed with other teachers and high-school students. You will attend weekly lectures by Pitt faculty and graduate students. You will also help develop and test novel inquiry-based curricular materials for high-school biology.

XX Do I need previous research experience? No, we will learn together and teach you everything that you will need to know. Pitt graduate students and advanced undergraduates will be in lab each day for additional support and assistance.

XX What are the working hours for the program? You will be in the lab on the Pitt campus June 20-July 15, Monday through Friday, 9 AM to (approximately) 5 PM.

XX How about transportation to campus? Free Port Authority bus passes are available. There is often free on-street parking in the summertime, if you arrive early in the day.

XX Do I need to have taken a previous workshop at Pitt? No.

XX Do I need any specific educational qualifications? No.

XX Do I have to be teaching an advanced or AP course? No.

XX What will I be doing during the academic year program? The goal of this program is to develop a model of the way in which a research university can help teachers to incorporate inquiry into the classroom. During the academic year, we will meet once a month to continue refining curricular modules, incorporate them into your classes and assess their effectiveness.

XX Why are students involved? Student involvement will help us to gauge ability and interest level. This layered learning approach also simulates most research labs, which are staffed by scientists of varying ages and experience levels.

XX How do students get involved? Students will not find out about this program unless their teacher informs them. We ask teachers to take a moment to introduce this program to their classes and point interested students to application materials. Student application materials are available at <http://www.pitt.edu/~geneteam> **Please give this link to as many students as possible.** We may select a student from your school even if you elect not to participate. Your own acceptance does not depend on whether students from your school also apply.

XX I have a summer vacation planned. Will I have to miss it? **Probably.** Because of the team structure, it is permissible for each participant to miss *no more than two days* of the summer session. **You are not permitted to miss the first day or the last day of the program.**

XX Do I get paid? Yes, teachers receive a total of \$2,500 in stipends (\$1,500 for the research program, paid during the summer, and \$1,000 for academic year implementation activities).

XX How do I apply? Return your completed application and the administrator support document to Brian DiRienzo, A234 Langley Hall, Department of Biological Sciences University of Pittsburgh, PA. 15260 (fax 412-624-4759) no later than 5pm on March 4, 2011. Online applications forms are also available at <http://www.pitt.edu/~biology/Dept/Frame/geneteam.htm>

XX When will I find out if I'm accepted to the program? Our Advisory Board will meet on March 9, 2011 to make teacher selections. Applicants will be notified shortly thereafter.

XX Why do I need the endorsement letter from an administrator? The goal of this program is to get the new curriculum that you design into your classroom. We want administrators to be aware of this program and supportive of your efforts. Implementation will not cost you or your school district a thing. All materials, supplies, equipment will be provided by the University.

XX How do I get more information or answers to other questions? Contact Brian DiRienzo at 412-383-5921 bdd4@pitt.edu or Marcie Warner at 412-624-2230 mwarner1@pitt.edu We welcome all questions and would love to speak with you about the program.



Summer 2011 Teacher Application

Name: _____
Soc. Sec. number: _____
Home address: _____
School/District: _____
School address: _____
Classes currently teaching: _____
Telephone: (cell) _____ (home) _____
e-mail: _____
Number of years teaching in the high school classroom: _____
Have you ever taken one of our workshops before? ___ Yes ___ No
If yes, please list title(s) and date(s): _____

Please **attach a separate letter** telling us (a) Why you are interested in joining the Gene Team; (b) Something about your own educational background; (c) Any other information that you think might promote your selection for this program.

If selected, you agree to:

- Participate in the 4-week research program (June 20 to July 15, 2011)
- Attend one meeting each month Sept – April (held after school hours)
- Incorporate some new material into your curriculum with our assistance
- Participate in program assessment activities
- Allow class time for program assessment at least twice each year
- Obtain school/district administrator support (attached form)

Signature _____

Date _____

Send or FAX completed application to:

Brian DiRienzo
University of Pittsburgh
Dept. of Biological Sciences
A234 Langley Hall
Pittsburgh PA 15260
FAX 412-624-4759

Administrative Acknowledgment

(This document should be completed by a School Principal, Curriculum Coordinator or District supervisor.)

The teacher named below is applying for the Gene Team program at the University of Pittsburgh, an innovative, research-oriented project that will develop research skills and inquiry-based educational materials for use in high school Biology classes and laboratories.

Teacher Applicant Information

Name: _____
School: _____
District: _____

Telephone: _____
e-mail: _____

Administrator Information

Name: _____
Title: _____
School or District: _____

Telephone: _____
e-mail: _____

I understand the following aspects of the program:

1. Participation involves no financial commitment or cost to the teacher's home school or district.
2. The primary teacher participation will occur during the summer when school is not in session. Additional activities during the academic year will not occur during hours when school is in session, but may require attendance by the teacher during non-school hours. The teacher will be compensated for such activities by the University of Pittsburgh.
3. The teacher and the school will make a good-faith effort to incorporate into the teacher's Biology class(es) some or all of the inquiry-based curricular modules developed by teachers participating in the program. The choice of which module(s) to adopt will rest with the teacher-participant.
4. We may make curricular modules available to non-participating teachers on request and at our option. Modules will not be transmitted to other schools without permission from the Program Directors.
5. If the participating teacher so chooses, the school will host 1-3 University of Pittsburgh personnel to help implement the instructional module(s).
6. The teacher and the school will provide class time and access (at some later time) for University of Pittsburgh personnel to assess the instructional impact of any module(s) that are implemented. This may include lesson observation by our project evaluator, Dr. Kalyani Raghavan. During these observations, the evaluator will be non-obtrusive, taking notes without capturing individual student names. It is understood that this may mean the use of some Biology class time for the administration of one or more assessment instruments (surveys, mini-tests, etc.). The University personnel will make every effort to minimize the class time required, and will ensure that no student or teacher is identified by name with the results of the assessment.

I acknowledge and support the application of the teacher named above for the Gene Team program.

Signature

Date

This form should be returned to the teacher-applicant for inclusion with the application.

For further information or discussion, please contact:

Brian DiRienzo 412-383-5921 bdd4@pitt.edu	Dr. Marcie Warner 412-624-1134 mwarner1@pitt.edu	Dr. Alison Slinsky Legg 412-624-8286 alisonsl@pitt.edu	Dr. Lewis Jacobson 412-624-4647 LJAC@pitt.edu
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