

Summer Institute for Teachers

July 12-23, 2010

- ✓ Stipends and housing provided, travel and food allowances
- ✓ 12 days at Texas A&M University
- ✓ Learn latest science and tools, meet scientists, visit lab, museum
- ✓ Discover fun of collaborative cases
- ✓ Use cyber-technologies to interact and share case materials and ideas



Space for 16 high and middle school teachers.

To apply online:
www.myPlantIT.org

<http://www.myPlantIT.org/institute-application.html>

Application due:
April 9, 2010



NSF Project Award 07-37669

This Innovative Technology Experiences for Students and Teachers (ITEST) Project is a collaborative effort among the Botanical Society of America, BioQUEST Curriculum Consortium, and Texas A&M University.



myPlantIT

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Plant IT

Careers, Cases, and Collaborations



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Plant IT Careers, Cases, and Collaborations

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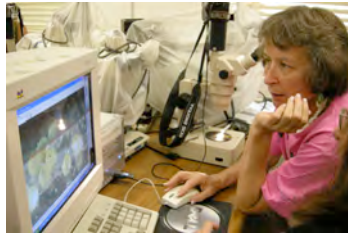
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This summer we will explore **bioinformatics** and **natural fiber textiles** with a focus on cotton.

We will look at the global use of Bt cotton and explore genetic engineering. Using DNA sequence data, we will search cotton database for genes of interest such as fiber color and drought tolerance. Textile forensics involves both microscopic and chemical testing of unknown samples.

Field trips to cotton research station, commercial textile outlet, museum. Career connections such as museum curator, textile product design and testing specialist, crime technician.

- **Learn** to incorporate IT (data, images, models, analysis tools) in student investigations.
- **Develop** case materials tailored for your classroom.
- **Enhance** biology content and discover career connections by meeting scientists and professionals in plant-related careers.
- **Explore** and share strategies for supporting and assessing student investigations.
- **Practice** new skills and examine student learning by leading summer students in investigations developed in week one.
- **Share** experience and receive support for classroom implementation through Quarterly Online Reflective Meetings on project Blog.
- **Contribute** a portfolio and/or work with education researcher on class case study.



Workplace applications ✧ Real-world problems Data, tools, resources ✧ Student investigative cases

Consider a new opportunity for you and your students to solve plant-related biology cases and explore career connections featuring the technology and skills that support modern plant science!

Learn new ways to teach science with collaborative investigative cases.

myPlant IT is an NSF-funded project for secondary school teachers and students working to root biology content in real world contexts and prepare students for diverse careers.



myPlant IT Cases offers teachers and students access to cases, data, and data analysis and visualization tools for structured, yet open-ended exploration of standards-aligned plant biology concepts.

Visit www.myPlantIT.org for free resources:

- ❖ Pollen identification and dissemination
- ❖ Chlorophyll Remote Sensing
- ❖ Seed Technology and forensics
- ❖ Ethnobotany, nutrition, food production
- ❖ Image databases, concept mapping tools, plant databases, simulations, interactive maps
- ❖ Case writing and assessment templates
- ❖ Cases prepared by summer workshop teachers
- ❖ Podcast interviews with scientists
- ❖ Blog reflections by summer camp students on learning cases with workshop teachers, research facilities, meeting scientists...

Teachers may build on their summer workshop and implementation experience through capstone **myPlant IT Collaborations**. Teachers and scientists collaboratively develop cases. Classes share data together online and communicate with scientists.