

Call for Applications due by
TUESDAY, MARCH 11, 2008

The NSDL BiosciEdNet (BEN) Scholars Program

Introduction

The National Science Digital Library (NSDL) Biological Sciences Pathway invites undergraduate faculty in the biological sciences to apply to become BiosciEdNet (BEN) Scholars. The BEN Scholars Program is one of the grassroots outreach activities of the BEN Collaborative. The goal of the BEN Scholars Program is to promote the use of digital library resources and student-centered teaching and learning methods in higher education, specifically in biological sciences lecture and laboratory courses, and in research training programs.

The BEN Scholars program works both directly with faculty who are BEN Scholars and indirectly, through outreach activities led by BEN Scholars. Outreach activities are aimed at biological sciences faculty and are carried out on campus with departments, locally throughout the region, and nationally through professional societies.

The BEN Collaborative is seeking Scholars who are leaders in biological sciences teaching and learning and who have a passion for improving undergraduate education. Prospective BEN Scholars should have a demonstrated commitment to professional leadership and outreach and a good track record of implementing enhancements to teaching and learning in their own classrooms. Using digital libraries, the BEN Scholars will have an opportunity to learn how to transform lectures and laboratories to be more student-centered and to integrate career exploration and science across fields into existing curricula.

A successful candidate should aspire to be a BEN user, author, and advocate.

NSDL BEN Scholars Training Institute

BEN Scholars will receive (i) training in leadership and effective use of digital libraries, (ii) resources to use in their own classrooms and to share with colleagues through presentations, workshops, and one-on-one mentoring, (iii) integration into the BEN Scholars Network, (iv) recognition from the participating organizations, and (v) travel support and a small stipend. The next NSDL BEN National Leadership Training Institute is scheduled for **July 9-12, 2008** in Washington, D.C. The Institute will start at 100pm on July 9 and end by noon on July 12.

After acceptance into the program, Scholars will be expected to complete pre and post-institute assignments and readings and to participate in an ongoing dialogue amongst the BEN Scholar community.

The training program for BEN Scholars is developed by the BEN Collaborative in partnership with the University Corporation for Atmospheric Research (UCAR). The primary funder of the BEN Pathway and the NSDL (<http://nsdl.org>) is the National Science Foundation (NSF), which created the digital library to provide organized access to high quality resources and tools that support innovations in teaching and learning at all levels of science, technology, engineering, and mathematics education. The development, project management, and daily operations of the NSDL is facilitated through the collaborative efforts of UCAR, Cornell University, and Columbia University.

By the completion of the Institute, BEN Scholars will:

- Increase their facility in using the following digital libraries:
 - The BEN portal;
 - The digital libraries of BEN Collaborators; and
 - The NSDL and NSDL Pathways libraries.
- Deepen their knowledge of student-centered learning methods, including:
 - Inquiry-based teaching;
 - Interactive lectures;
 - Authentic assessment;
 - Problem-based learning;
 - Use of technology in teaching; and
 - Career information integration.
- Expand their skills and available strategies and tools to allow them to promote the use of the BEN portal, the digital libraries of BEN Collaborators and the NSDL and the submission of teaching resources to digital libraries of BEN Collaborators to their colleagues.

Also, BEN Scholars will successfully develop and submit a teaching resource for inclusion in a BEN –related digital library, including:

- Selecting an appropriate library for submission, including appropriate content area, resource type, and copyright requirements;
- Developing a resource that meets the required guidelines for inclusion in that library;
- Successfully utilizing the online tools to describe the resource (metadata); and
- Working with the library staff and reviewers to complete any revisions required following the review process.

Eligibility

Applications will be reviewed from individuals who meet the following criteria:

- An undergraduate biological sciences faculty member teaching currently at a U.S. accredited institution of higher education;
- A leader in enhancing teaching and learning; and
- A U.S. citizen or U.S. Permanent Resident.

Selection Criteria

Individuals will be selected based upon their commitment to:

- Improving biological sciences education in higher education institutions; and
- Leadership development and outreach in the biological sciences.

Efforts will be made to select a cohort that represents all fields of biological sciences; all educational institutions types; ethnic/racial diversity; and geographical diversity. Special consideration will be given to institutions serving significant numbers of students that are traditionally underrepresented in the biological sciences.

Applications for the BEN Scholars Program are due by March 11, 2008. Questions about applications can be sent to Shelia Clark (sclark@aaas.org).

Project Background

The BEN Collaborative was established in 1999 by the American Association for the Advancement of Science (AAAS) with 11 other professional societies and coalitions. Since its inception, the BEN Collaborative has grown from its original 11 to 26 collaborators. Educational e-resources from all BEN collaborators are aggregated into a one-stop, searchable catalog at the BEN portal (www.biosciencednet.org). BEN resources can help educators to engage student interest, shorten lesson preparation time, provide concept updates, and develop curricula that are in line with national standards for content, use of animals and humans, and student safety. The BEN Collaborative's overall mission is not only to provide seamless access to e-resources but also to serve as a catalyst for strengthening teaching and learning in the biological sciences.

The BEN portal includes a catalog of more than 8,200 peer reviewed e-resources including images, reviews and journal articles, lab exercises, lesson plans, teaching strategies and guidelines, and animations. Resources cover more than 77 biological topics including microbiology, botany and plant sciences, physiology, biochemistry and molecular biology, cell biology, human biology and anatomy, genetics and heredity, and ecology.

BEN Collaborators

- ***American Association for the Advancement of Science
- ***Association for Biology Laboratory Education
- ***American Institute for Biological Sciences
- ***American Physiological Society
- ***American Phytopathological Society
- ***American Society for Cell Biology
- ***American Society for Human Genetics
- ***American Society for Microbiology
- ***BioQUEST Curriculum Consortium
- ***Bio-Link (the NSF Advanced Technological Education Center for Biotechnology)
- ***Biotechnology Institute
- ***Botanical Society of America
- ***Dolan DNA Learning Center
- ***Entomology Digital Library
- ***Ecological Society of America
- ***Faculty for Undergraduate Neuroscience
- ***Human Anatomy and Physiology Society
- ***Microbial Life Education Resources
- ***National Health Museum-Access Excellence
- ***Society for Developmental Biology
- ***Society for Integrative and Comparative Biology
- ***Society of Toxicology
- ****Science* Collections
- ****Science's* Signal Transduction Knowledge Environment (now Science Signaling)
- ***Video and Image Data Access (VIDA) for Science Inquiry during Teacher Preparation

NSDL BEN Scholars Program – Application

All application materials must be submitted electronically to the BEN Administrator, Shelia Clark at sclark@aaas.org no later than **TUESDAY, MARCH 11, 2008**.

Applications must include:

- NSDL BEN Application form
- A *Curriculum Vitae*, limited to two-pages and containing relevant information to the NSDL BEN Scholars Program
- Letter proposal (no more than five pages double-spaced and numbered, with your name and institution in the header of each page) which includes:
 - A. Statement confirming you are available to participate in all aspects of the NSDL BEN Scholars Program including:
 - BEN National Leadership Institute, July 9-12, 2008 in Washington, DC;
 - Pre- and post-Institute assignments and follow-up monitoring of your professional development for a minimum of 2 years;
 - BEN Scholars Listserv Community;
 - Presentations on campus and at regional and/or national meetings in 2008 and 2009; and
 - Leading and mentoring faculty colleagues in student-focused learning using digital resources.
 - B. Description of your teaching responsibilities including course names, levels and frequency, number of students, types of students (biology majors, nursing and/or pre-health, biotechnology, or engineering majors, education majors, non-science majors, general education, etc.).
 - C. Description of your past or current outreach activities including education or outreach grants that you have received and types and numbers of people reached.
 - D. Description of education workshops or conferences that you have attended.
 - E. Description of your personal and/or professional goals for using digital resources in your teaching.
 - F. Description of a resource you have created which could be contributed to BEN.
 - G. Description of your potential outreach activities for the BEN Collaborative and the NSDL (targeted at members of the higher education community).
 - H. A list of any BEN partner societies of which you are a member.
- A letter of support from an institutional administrator or supervisor advocating your participation in the program. The letter should describe institutional support available to the applicant as you transform your sessions and reach out to faculty on campus as well as regionally and nationally. The

letter may be sent electronically, but must originate from the advocator's email account. Send recommendations to sclark@aaas.org.

Questions about the program should be directed either to Amy Chang, BEN Liaison to Faculty Development, at achang@asmusa.org for information about the program content; or to Shelia Clark, BEN Administrator, at sclark@aaas.org for information about the application, deadlines, and arrangements.

Criteria for Evaluating Applicants

Applicants are chosen through a competitive evaluation and selection process. Space is limited to 20 BEN Scholars.

The NSDL Biological Sciences Pathway is seeking Scholars whose work is likely to make a significant contribution to our understanding of integrative learning in the biological sciences. To that end, proposals will be evaluated with the following questions in mind:

- A. How feasible is the proposed BEN and NSDL outreach plan?
- B. Can the proposed goals be addressed given the candidate's experience and access to available resources including prior understanding and practice, institutional infrastructure, a suitable student population, and digital resources?
- C. Does the candidate demonstrate a commitment to complete professional development activities and disseminate information about curriculum resources, teaching practices, BEN, and the NSDL?
- D. Has the candidate presented a clear plan to contribute to and build upon existing resources, both digitally and in print?
- E. What leadership abilities has the candidate demonstrated previously in his/her area of expertise and outreach?
- F. How committed is the candidate's institution to sustaining the candidates' work, including digital resource tools and accessibility, students, and release time (to attend occasional conferences or run periodic workshops)?

NSDL BEN Application

All application materials must be submitted electronically as attached Word documents to sclark@aaas.org no later than Tuesday, **March 11, 2008**.

Name:

(First Name) (Middle Initial) (Last Name)

Job Title and/or Academic Rank:

Discipline and/or Professional Field:

Institution:

Department:

Campus Address:

Country:

Work Phone Number:

E-Mail Address:

(Optional) Academic or personal web site:
