United States
Environmental
Protection Agency

Office of Research and
Development
Washington, DC 20460

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www.epa.gov/ncerqa

EPA

Fall 2002 Science To Achieve Results (STAR) Fellowships For Graduate Environmental Study

ORD NCER

Building a scientific foundation for sound environmental descision-making

2002 RFA

Fall 2002 EPA STAR Fellowships for Graduate Environmental Study

Science To Achieve Results (STAR) Program
U.S. Environmental Protection Agency
Office of Research and Development
National Center for Environmental Research

Opening Date: August 15, 2001
Closing Date: November 19, 2001

SUMMARY OF PROGRAM REQUIREMENTS: GENERAL INFORMATION

Program Title: Fall 2002 EPA STAR Fellowship Program for Graduate Environmental Study

Synopsis of Program

The U.S. Environmental Protection Agency (EPA), as part of its Science to Achieve Results (STAR) program, is offering Graduate Fellowships for master's and doctoral level students in environmentally related fields of study. The deadline for receipt of pre-applications is **November 19, 2001**. Subject to availability of funding, the Agency plans to award approximately 100 new fellowships by July 22, 2002. Master's level students may receive support for a maximum of two years. Doctoral students may be supported for a maximum of three years. The fellowship program provides up to $34,000 per year of support. This amount covers a $17,000 annual stipend, $5,000 for authorized expenses, and up to $12,000 for tuition and fees. Actual annual support may vary based on length of fellowship award and tuition and fees.

Sorting Code: See Sorting Code list

Contact Person(s): Virginia Broadway
Phone: 202.564.6923 email: broadway.virginia@epa.gov

Applicable Catalog of Federal Domestic Assistance (CFDA) Number(s): 66.607

Eligibility Information

See full proposal for eligibility information

Award Information

Anticipated Type of Award: Fellowship
Estimated Number of Awards: 100
Anticipated Funding Amount: $3 million dollars
Potential Funding per Fellow per Year: $34,000

Deadline/Target Dates

Letter of Intent Due Date(s): None
Pre-Application Proposal Due Date(s): November 19, 2001

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DESCRIPTION OF THE STAR FELLOWSHIP PROGRAM: Introduction

The EPA invites pre-applications for graduate fellowships in academic disciplines relating to environmental research including physical, biological, and social sciences, and engineering. A pre-application provides the information needed for the review of its merit. Top ranked applicants following the merit review will be required to submit a brief formal application.

These fellowships are intended to help defray costs associated with advanced environmentally-oriented study leading to the master's or doctoral degree. Instructions for completing and submitting pre-applications are found in the sections that follow. Instructions must be followed exactly or the submission will not be reviewed.

Purpose of the Program

The purpose of the fellowship program is to encourage promising students to obtain advanced degrees and pursue careers in environmentally related fields. This goal is consistent with the mission of EPA, which is to provide leadership in the nation's environmental science, research, education, assessment, restoration, and preservation efforts. This program will benefit both the public and private sectors which will need a steady stream of well-trained environmental specialists if our society is to meet the environmental challenges of the future.

Eligibility

Applicants must be citizens of the United States or its territories or possessions, or be lawfully admitted to the United States for permanent residence. Resident aliens must include their green card number in their pre-application. EPA may choose to verify this number with the Immigration and Naturalization Service.

Students do not need to be enrolled in or formally accepted in a full-time graduate program at the time they apply for a fellowship, but proof of enrollment or acceptance must be produced prior to the award of the fellowship. Students must attend a fully accredited U.S. college or university. Students must be pursuing a master's or doctoral degree in an environmentally related field of specialization (see fields of specialization below).

Students who have completed more than one year in the master's program or four years in the doctoral program are not eligible. Students enrolled in a master's program, however, may apply for a doctoral fellowship.

Employees of the U.S. government must be able to prove separation from Federal service before accepting this fellowship.

Acceptance of this fellowship does not necessarily preclude acceptance of other scholarship, fellowship, traineeship, or grant aid. However, this fellowship may not be awarded to anyone who will simultaneously be receiving other federal assistance.
Eligible women, minorities, and disabled students are strongly encouraged to apply.

DESCRIPTION OF A STAR FELLOWSHIP

Tenure

The term of a graduate fellowship is negotiated with students and customarily covers a period of 9 to 12 months for each fellowship year. Students seeking a master's degree may be supported for a maximum of two years. Students seeking doctoral degrees may receive support for a maximum of three years.

Stipend and Allowances

The fellowship provides up to $34,000 per year of support. A maximum of $68,000 will be provided for master's fellows (two years) and up to $102,000 (three years) will be provided to doctoral students. The $34,000 annual support covers stipend, tuition, and expenses as follows:

Stipends: For the 2002-2003 academic year these will be $17,000 for 12-month tenures and prorated monthly at a maximum of $1,417 for shorter periods. Fundsfor unused months are

forfeited. Stipends are paid directly to the Fellow. At its discretion, each fellowship institution may supplement a Fellow's stipend from institutional funds in accordance with the supplementation policy of the institution.

Tuition and Academic Fees: Up to $12,000 per year will be paid directly to the institution. For the purposes of this fellowship, health insurance is not considered to be an academic fee. Health insurance costs may, however, be paid from the expense budget.

Expense Allowance: Up to $5,000 will be provided to pay for items and activities for the direct benefit of the student's education, such as for health insurance, books, supplies, equipment, travel to technical and scientific meetings, and domestic and international travel required to conduct the proposed research. Specific instructions regarding the disbursement and management of the expense allowance will be provided during the award process.

Annual Fellowships Conference
Fellows are expected to attend an annual EPA STAR Graduate Fellows Conference as long as they are in the program, unless the immediate needs of their research project make attendance impractical. Resources to support this travel are to be taken from the expense allowance.

International Activities
The fellow's proposed research may be conducted outside the United States. However, EPA allows only $5,000 for all expenses, including travel. See "Stipends and Allowances" for details. If at any time during the research project, it becomes necessary for you to work outside the United States and its territories, you must notify your Project Officer who will obtain the necessary EPA and State Department approval before you can use fellowship funds to conduct these activities. In addition, for travel to international meetings, approval must be obtained from the EPA project officer.

THE STAR FELLOWSHIP APPLICATION PACKAGE

The application package for a STAR Fellowship consists of three major parts: 1) the pre-application, 2) three letters of recommendation, and 3) a self-addressed, stamped postcard. The pre-application provides the reviewers with information about you and your proposed research, the letters provide support for your pre-application, and the postcard allows us to keep you informed about the status of your pre-application. This section provides information you will need to complete each part of the application package.

Educational Levels
When completing the application package for a STAR fellowship you will need to describe your educational level at the **time of submission**. Choose one of the following:

1. ***Entering Master's Student*** (**EM**) if you are applying for, or enrolled in, a master's program and have completed less than one year* toward this degree.
2. ***Entering Doctoral Student*** (**ED**) if you are applying for, or are enrolled in, a doctoral program, have completed less than one year toward this degree, and have **no** other graduate or professional degree (e.g., MS, DVM, JD).
3. ***Doctoral Student*** (**DS**) if you are applying for, or enrolled in, a doctoral program, have completed less than one year toward this degree, but have completed another graduate or professional degree (e.g., MS, DVM, JD).
4. **Continuing Doctoral Student(CD)** if you are enrolled in a doctoral program and have completed more than one year, but less than four years,* toward this degree.

Note*
Students who have completed more than one year of their masters or four years of their Ph.D. program are not eligible for the STAR fellowship.

Sorting Codes
You are also asked to select a single Sorting Code for your application. This sorting code will be used to

direct your application to the appropriate review panel. It is important that you select the **most appropriate** Sorting Code from the list shown below. If you select more than one Sorting Code it will be assigned to the first one you select, regardless of whether it is the most appropriate.

F2-STAR-A1 Environmental Engineering
F2-STAR-A2 Other Engineering (includes chemical, civil, mechanical, and bioengineering)
F2-STAR-B1 Atmospheric Sciences
F2-STAR-B2 Chemistry and Materials Science
F2-STAR-B3 Geology (includes geochemistry and geophysics)
F2-STAR-C1 Economics (includes market incentives, and health and ecosystem valuation)
F2-STAR-C2 Geography
F2-STAR-C3 Behavioral/Social Sciences (limited to environmental behavior and environmental decision making)
F2-STAR-C4 Urban/Regional Planning (limited to environmental applications)
F2-STAR-D1 Biochemistry, Molecular Biology, Cell Biology, Developmental Biology, and Genetics (including genomics, proteomics, bioinformatics)
F2-STAR-D2 Microbiology (including genomics, proteomics, bioinformatics)
F2-STAR-D3 Public Health Sciences (includes epidemiology, exposure assessment, biostatistics, and health risk assessment)
F2-STAR-D4 Toxicology (including toxicogenomics)
F2-STAR-E1 Aquatic Ecology and Ecosystems
F2-STAR-E2 Oceanography and Coastal Processes (includes physical, chemical, and biological systems)
F2-STAR-F1 Entomology
F2-STAR-F2 Forestry
F2-STAR-F3 Zoology
F2-STAR-F4 Terrestrial Ecology and Ecosystems (plants and soils only)
F2-STAR-F5 Terrestrial Ecology and Ecosystems (includes animals)
F2-STAR-G1 Ecological Risk Assessment*These categories are designed for applications pertaining to the inter-relationship of organisms and their environments, where there is not a more specific EPA code available, such as Oceanography, Entomology, etc.

Mandatory Format for Pre-applications

The pre-application part of your package consists of thirteen (13) items. The pre-application must be completed using a 12 point or equivalent typeface on 8-1/2 x 11-in paper with one-inch margins all around. Page limitations for individual components of the pre-application are specified below. Do not exceed these limits or the proposal will be ineligible. Do not submit materials permanently bound, or in ring binders. You must submit the original and six (6) copies of all required materials.

ITEMS 1-8 COMBINED MUST NOT EXCEED ONE PAGE

Item 1 PERSONAL DATA -- provide your full name (last name first), current address, permanent address, and home and work telephone numbers. If you can be reached by fax or e-mail, include that information as well. (Optional -- for statistical reporting purposes only, we ask you to include your gender and race, e.g., African-American, white, Hispanic, native American, Asian and Pacific Islander).

Item 2 CITIZENSHIP STATUS -- state whether you are a U.S. citizen or permanent resident. If you are a citizen, give the city of your birth. If you are a resident alien, provide your green card number. EPA may choose to verify this information.

Item 3 DEGREE SOUGHT -- state either master's or doctoral (e.g., M.S., M.A., Ph.D., M.P.H.). Include the month and year you expect the degree to be awarded.

Item 4 EDUCATIONAL LEVEL -- state either entering graduate student, doctoral student, or continuing doctoral student (as defined above).

Item 5 SORTING CODE -- from list provided above. You MUST select only one. Your pre-application will be reviewed by individuals from the field you select. This code must also appear in the address for delivery of your pre-application, as specified below.

Item 6 TITLE -- provide a descriptive title for your research project, or your research area of interest if the specific topic has not yet been selected. This title will be posted on the NCER web site in the event of an award.

Item 7 COLLEGE/UNIVERSITY, SCHOOL OR DEPARTMENT -- Name and location of the college/university, school or department from which your degree will be obtained.

Item 8 NAME AND ADDRESS OF GRADUATE ADVISOR -- If you have a graduate advisor, give his or her name, address, and telecommunications data, including phone, fax, and e-mail, if available. If you do not yet have an advisor, write "NA".

ITEM 9 MUST NOT EXCEED ONE PAGE

Item 9 STATEMENT OF OBJECTIVES -- Explain your academic and career goals and how your proposed course of study or research will help you to achieve these goals. Include any background information you believe is pertinent and provide insight into why you have chosen the goals you are pursuing. You will be evaluated on your dedication to your studies and to an environmentally- oriented career. This statement will also provide insight into your organizational, analytical, and written communication skills.

ITEMS 10 & 11 COMBINED, MUST NOT EXCEED ONE PAGE

Item 10 EDUCATION AND EXPERIENCE -- List the academic degrees you have received or expect to receive in the near future, including the date and the institution. Also list relevant experience, including paid employment, military service, internships, residencies, special studies, volunteer work, etc. Give dates and a short description of your duties in each position, listing most recent first. Give names and addresses of employers. List only relevant experience.

Item 11 PUBLICATIONS -- If you have published in the technical/scientific literature, provide a bibliography here. If you have not yet published, write "NA".

ITEM 12 MUST NOT EXCEED 5 PAGES

Item 12 NARRATIVE STATEMENT--The narrative statement should reflect the educational level of the applicant. All students must include a description of the scientific and, if appropriate, the societal importance of their field of study. A detailed research plan is required for continuing doctoral students, but is desirable for all applicants. At a minimum, answer the following questions for the appropriate educational level.

ENTERING MASTER'S STUDENT: What are the degree requirements for your program? What is your planned course of study during the period of the fellowship? Do you know if you will be undertaking a thesis/special project? If so, describe it. If you do not know, what project would you like to propose? Why would it be important? How is it relevant to the protection of human health and the environment?

ENTERING DOCTORAL STUDENT: What are the degree requirements for your program? What is your planned course of study during the period of the fellowship? If you could select your dissertation topic this year, what would it be? Why would it be important? How is it relevant to the protection of human health and the environment?.
DOCTORAL STUDENT: What are the degree requirements for your program? What is your planned course of study during the period of the fellowship? If you could select your dissertation topic this year, what would it be? Why would it be important? How is it relevant to the protection of human health and the environment?

CONTINUING DOCTORAL STUDENT: What is your dissertation topic? How is it relevant to the protection of human health and the environment? Describe your dissertation research project by addressing the following points:

A. Goal of research--What problem are you focusing on and what is your hypothesis?
B. Rationale--What is the technical or societal need for this research? What research has been published on this topic and how do the results relate to your project?
C. Approach--How will you test your hypothesis?

D. Expected results--What scientific or other benefits are expected to result from this work?
E. Cited literature--Provide a list of cited literature, which can be in addition to the 5- page limit.

ITEM 13 MAY USE AS MANY PAGES AS NECESSARY

Item 13 TRANSCRIPT INFORMATION -- Provide, in tabular form, the following information taken from your transcripts: identify the institutions at which the credits were earned, dates, names and catalog numbers of courses taken, credit hours, grades received, and cumulative GPA for all courses taken at each degree level. If possible, course titles should not exceed the space available. Abbreviations are allowed. If courses were audited or not completed, note this information. If any institution you attended had a grading system different from the traditional "A, B, C..." system, explain the system in a succinct footnote to Item 13. Do not leave anything out. Include data from your entire college career. DO NOT INCLUDE COPIES OF YOUR TRANSCRIPTS. Top-ranked applicants will be required to submit official copies of transcripts for validation prior to the award of the fellowship.

Letters of Recommendation
Each application package MUST include three reference letters from individuals who have knowledge of your academic record. If you have a sponsor or advisor in the program, one of these letters should come from that individual. EPA is bound by regulation to require three letters. If the pre-application does not include three letters, it will not be reviewed. The original and six (6) copies of each required letter must be contained in an individual envelope sealed by the writer and must be included in the pre-application package. We will not accept reference letters sent separately.

Self-addressed and Stamped Postcard
Include a postcard in your package so that we can notify you that your pre-application was received. If your postcard with the identifying application number is not returned within 30 days of the announcement deadline, you MUST call 1-800-490-9194 to verify that your package was received. If you do not include the postcard, you will not be notified that we received your package.

SUBMISSION REQUIREMENTS

All pre-applications must be submitted in the exact format described. All necessary information is provided in the instructions. To illustrate the instructions, a sample pre-application appears at the end of this announcement. Pre-applications must include the original and six copies of each letter of reference enclosed in three individually sealed envelopes, as described above.

EVALUATION AND SELECTION PROCESS

The pre-applications and letters of recommendation will be reviewed by non-EPA experts from the appropriate field of study. Students applying for fellowships must select a single Sorting Code from the list provided. Reviewers are recruited based on the specialty fields represented by the pre-applications. Each student will be evaluated based on his or her potential for success in a graduate study program. The reviewers will consider academic records, recommendations, and career goals and objectives. Students at each educational level will be evaluated based on the information provided in the pre-application as described above under "Mandatory Format for Pre-Applications".

Reviewers will recommend the best applicants from each of the three educational level categories. Finalists will be selected for award of a fellowship based on the availability of funds, reviewers' evaluations, and program goals, such as distribution of awards across disciplines, institutions and geography, degree level being sought, and other possible indicators of program balance. Only finalists will be required to submit the following:
1. EPA Form 5770-2, "Fellowship Application;
2. EPA Form 5700-49, "Certification Regarding Debarment, Suspension, and Other Responsibility Matters;" and
3. Sealed official transcripts from all institutions (if so instructed by EPA).

The necessary forms are available on the NCER homepage (www.epa.gov/ncerqa/fellow/).

WHERE AND WHEN TO SUBMIT

Pre-applications must be received at EPA no later than 4:00 p.m., EST, on **November 19, 2001.** Pre-applications may be submitted by regular mail, express mail, or uniformed courier services. If using regular mail, allow sufficient time for delivery since applications MUST be at EPA by 4:00 p.m. EST on **November 19, 2001**.

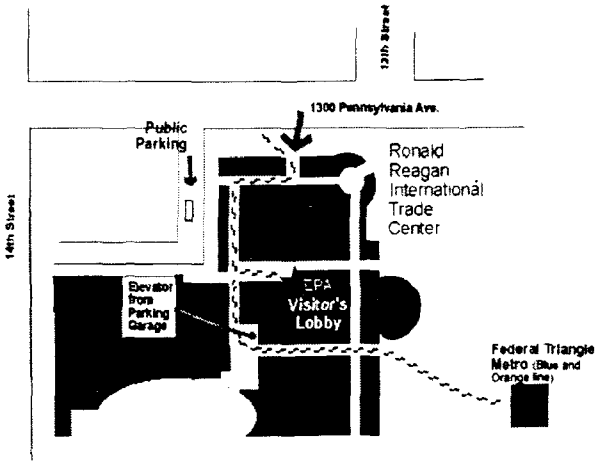
If sending by **regular or priority U.S. mail**, send the original AND SIX (6) COPIES of all required materials to:

U.S. Environmental Protection Agency
Peer Review Division (8703R)
Sorting Code: F02-STAR-XX(replace with the appropriate sorting code; see list provided)
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
NW Washington DC 20460

For **express mail**-delivered applications, the following address must be used:

U. S. Environmental Protection Agency
Peer Review Division (8703R)
Sorting Code: F02-STAR-XX (replace with the appropriate sorting code; see list provided)
Ronald Reagan Building
Room B-10105
1300 Pennsylvania Avenue, NW
Washington, DC 20004

Phone: (202) 564-6939 (for express mail applications)



Courier- or personally-delivered applications must be brought to the Ronald Reagan Building, 1300 Pennsylvania Avenue, NW, Washington, DC 20004. The courier must come to the EPA Visitors Lobby (see map), tell the security guard that he/she has a delivery for the EPA mail room. The courier will be required to sign a visitors' log, and will be directed to the EPA mail room. The mail room is open 8:00 a.m. until 4:00 p.m. weekdays, exclusive of Federal holidays. If the applicant requires a receipt for the delivery, you will need to provide a form which the mail room personnel will sign.

NOTIFICATION AND AWARD DATES

If you comply with the requirement to include a stamped, self-addressed postcard with your pre-application, you will be notified when we receive your package. Subject to the availability of funding, awards should be made by July 22, 2002, for the fall term.

FOR FURTHER INFORMATION

For additional information or assistance in preparing your pre-application, first consult the "Frequently Asked Questions (FAQs)" on the NCER Home Page (http://epa.gov/ncerqa). EPA also maintains a toll-free telephone number which allows individuals to leave a recorded message or question. These will be answered through a return telephone call. To access this service, dial 1-800-490-9194.

SAMPLE PRE-APPLICATION

The pages that follow constitute a sample pre-application for graduate fellowships. NOTE!!!! Smart as he is, this hypothetical student probably would NOT receive an EPA fellowship because his curriculum has no obvious relationship to environmental concerns or the disciplinary degree he is seeking. His only chance would be if his narrative statement clearly made that connection. The purpose of this sample is to demonstrate format, not content.

Pre-application for STAR Graduate Fellowship

Page1

1. Name: Beckett, Samuel John
Current Address: 68, Dane Avenue, Somerville, MA 02899
Permanent Address: C/o John Beckett, Rte. 2, Box 98, Elk Ridge, Indiana 54096
Home Telephone: 101-555-1234
Work Telephone: 101-555-1111
Fax: 101-555-1010
E-Mail: Xxxxx@yyy.com
Gender: Male
Race: White

- Citizenship Status: U.S. Citizen, Born in Elk Ridge, Indiana (Note: If this Student Were a Permanent Resident Alien, He Would Indicate His Green Card Number Here.)
- Degree Applying For: Ph.D. Expected 6/04
- Education Level at Start of Fellowship: Continuing Doctoral
- Sorting Code: F02-STAR-Z1-Mathematics
- Title: The Development of Mathematical Relationships to Describe the Behavior of Chemical Contaminants at Hazardous Waste Sites.
- Current School and Department: Massachusetts Institute of Technology, School of Mathematics and Physics, Department of Theoretical Mathematics, Cambridge, MA
- Name and Address of Graduate Advisor (Sponsor):

J. C. Armstrong
Chairman, Department of Theoretical Mathematics
Room 464-82
Massachusetts Institute of Technology
Cambridge, MA 02899
Office Phone:(101) 555-1235 Fax: (101) 555-4321
E-mail: Xxxxxxx@mit.edu

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- Statement of Objectives: This is a written account of your academic and environmental career goals, in which you relate your past accomplishments and future plans, and describe how your proposed plan of study or research will tie these together. The quality of this section is a key criterion for review, so be as articulate and thorough as possible.

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- Education and Experience:

1/98 to Present: Enrolled in Ph.D. Program at Massachusetts Institute of Technology. Current GPA: 4.0
1/98 to Present: Teaching Assistant MIT, Department of Mathematics. Contact: Philip Lonicro, (617)111-0001
11/97 to 1/98: Invented a Plasma Energy Drive System (Patent Number 876GB5F457YD)
1/96 to 1/98: Employed at Highbrow Technologies, Riverside CA.
1/94 to 12/95 California Institute of Technology, MS Applied Mathematics.
10/90 to 12/93 University of Indiana B.S. Mathematics (Summa Cum Laude) 4.0 GPA (4 point scale)

- Publications

Smith, A.B., Jones X,Y, and Beckett S.J. "Algorithms for Hazardous Waste Site Management". Environ. Sci. Tech. 1(11), 111-222 (1997).
Smith, A.B., Jones X,Y, and Beckett S.J. "Spatial Analyses for the Assessment of Hazardous Waste Sites". Environ. Sci. Tech. 2(8), 1-22 (1998).

Pages 4-8

12. Narrative Statement
Sam Beckett, our hypothetical candidate, must provide a detailed scope of work for his proposed research, because he is a continuing Ph.D. student, he may not exceed five pages in describing the goals, rationale, approach, and references for his project.

Pages 9 and Beyond.

13. Transcript Data

Institution	Year	Course #	Title	Credit Hrs	Grade
MIT	1996	744	Special Project	5	In Progress
MIT	1996	740	Topology	5	In Progress
MIT	1996	735	Number Theory	4	In Progress
MIT	1996	722	Adv Topics in Chaos	4	In Progress
MIT	1996	719	Special Project	5	A
MIT	1996	716	Transfinite math	5	A
Cal Tech	1995	Ph-96	Number Theory	8	A
Cal Tech	1995	Ph-85	Euclidian Geometry	4	A
Cal Tech	1995	R-65	Applied Physics	4	A
Cal Tech	1995	R-64	Applications Theory	4	A
Cal Tech	1994	R-63	Linear Geometry	4	A
Cal Tech	1994	R-62	Basic Java Language	4	P
Cal Tech	1994	R-61	C++ Programming	5	P
Cal Tech	1994	R-60	Special Project	4	A
Cal Tech	1994	R-59	Research Project	4	A
U. Indiana	1993	620	Applied Geometry	4	A
U. Indiana	1993	621	Advanced Calculus	4	A
U. Indiana	1993	666	Computing	4	A
U. Indiana	1992	431	Advanced Math	4	B+
U. Indiana	1992	444	Physical Education	4	P
U. Indiana	1991	522	English	4	C

U. Indiana	1991	101	Math	4	A
U. Indiana	1991	122	Geography	4	A
U. Indiana	1991	177	Statistics	4	A