

## Industrial Affiliates

*Associate Patron - \$2,000 level*  
Touchstone Energy

*Associate Member - \$100 level*  
Hoffman Environmental  
Research Institute  
Third Rock Consultants  
Wood Hudson Cancer  
Research Laboratory

## Institutional Affiliates

*Fellow - \$1,000 level*  
Morehead State University  
University of Kentucky  
University of Louisville

*Sustaining Member - \$500 level*  
Campbellsville University  
Kentucky State University  
Murray State University  
Northern Kentucky  
University  
Western Kentucky  
University

*Member - \$250 level*  
Asbury College  
Berea College  
Centre College  
Cumberland College  
Eastern Kentucky University  
Kentucky Wesleyan College  
Madisonville Community  
College  
West Kentucky Community  
& Technical College

*Associate Member - \$100 level*  
Bellarmine University  
Pikeville College  
Transylvania University

## KENTUCKY ACADEMY OF SCIENCE

### 91<sup>ST</sup> ANNUAL MEETING

Eastern Kentucky University

Richmond, Kentucky

November 10-12, 2005

The 91<sup>st</sup> Annual Meeting of the Kentucky Academy of Science will be hosted by Eastern Kentucky University and Berea College. The meeting will be at the Perkins Building on the campus of EKV in Richmond, KY. To get to the Perkins Bldg., exit I-75 at exit 87 and turn toward the Best Western motel. Go 1.4 miles and turn right at Kit Carson drive. The football stadium will be on the left and a fire station on the right. Go 0.3 miles and the Perkins Bldg. will be on the right.

The headquarters motel will be the Comfort Suites which is located just off of I-75 at exit 87. The motel has blocked in a number of rooms at a rate of \$45.00 per room for a single - quad which includes a deluxe continental breakfast. This rate is good until October 28, 2005 so make your reservations early by calling (859)624-0770. This date is the same for the motels listed below. When making your reservations be sure to identify yourself as a member of the Kentucky Academy of Science.

A preregistration form is enclosed in the Newsletter and we would encourage everyone to preregister for the meeting particularly if you are planning on going to the Awards Banquet since these tickets may be limited. **For your information**, on-site registration must be paid by check or cash. The Academy **cannot** accept credit cards nor bill the participant for the registration fee. Programs will not be sent out prior to the meeting, but will be provided to those attending the meeting and also will be on the KAS website.

#### Additional Motels at Exit 87

Jameson Inn (859)623-0063 - \$62.50 single or double, includes a hot breakfast  
Holiday Inn Express (859)624-5055 - \$71.10 single or double, includes deluxe continental breakfast  
Best Western Holiday Plaza (859)623-9220 - \$49.95 single or double, includes hot breakfast bar  
Quality Quarters Inn (859)624-3600 - \$34.95 single, \$42.95 double  
Hampton Inn (859)626-1002 - \$64. single, \$69 double-quad, includes deluxe continental breakfast

#### Additional Motels at Exit 90

La Quinta Inn (859)623-9121 - \$39.99 single - quad, includes a deluxe continental breakfast  
Red Roof Inn (859)625-0084 - \$54.99 king, \$49.99 double (2 beds), includes continental breakfast  
Knights Inn (859)624-2612 - \$32. single, \$35. double - quad.  
Super 8 Motel (859)624-1550 - \$44.95 1-2 people, \$49.95 2-4 people, includes continental breakfast

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# 91<sup>th</sup> ANNUAL MEETING OF THE KENTUCKY ACADEMY OF SCIENCE

(TENTATIVE PROGRAM)

## THURSDAY, NOVEMBER 10, 2005

- 2:00 p.m. - 5:00 p.m. KAS Governing Board Meeting  
5:30 p.m. - 7:00 p.m. Registration  
6:30 p.m. - 8:30 p.m. **SYMPOSIUM**  
**“Blue Grass Savanna Ecology” Panel Discussion**  
**Moderator: Dr. Ryan McEwan - Ohio University**  
8:30 p.m. - 9:00 p.m. KAS Sectional Officers Meeting  
8:30 p.m. - 10:30 p.m. Reception

## FRIDAY, NOVEMBER 11, 2005

- 7:30 a.m. - 8:30 a.m. KAS Past President's Breakfast  
7:30 a.m. - 5:00 p.m. Registration  
8:00 a.m. - 5:00 p.m. Vendor's Exhibits  
8:00 a.m. - 11:30 a.m. Paper Sessions  
9:00 a.m. - 5:00 p.m. Scientific Posters on Display  
10:00 a.m. - 11:30 a.m. Kentucky Community Colleges Faculty Meeting  
11:30 a.m. - 12:45 p.m. Lunch (on your own)  
1:00 p.m. - 2:00 p.m. KBRIN-INBRE NIH Grant Proposal Workshop  
1:00 p.m. - 3:45 p.m. Paper Sessions  
1:30 p.m. - 3:30 p.m. Judging of Posters for Undergrad. Research Competition  
2:30 p.m. - 3:30 p.m. Biology Workshop: Ron Rosen and Pat Calie  
**“Experiments with Eggs and Larvae of the Tapeworm, *Hymenolepis diminuta*”**  
4:00 p.m. - 5:00 p.m. **PLENARY SESSION**  
**“Undergraduate Research: Importance and Benefits”**  
Dr. John Mateja - Murray State University  
7:00 p.m. - 9:00 p.m. **ANNUAL AWARDS BANQUET**  
**“Human Adult Olfactory Epithelial Derived Neural Progenitors: A Possible Source of Progenitors for Autologous Transplantation”**  
Dr. Fred J. Roisen - University of Louisville Medical School  
9:15 p.m. - 10:30 p.m. Presidential Social

## SATURDAY, NOVEMBER 12, 2005

- 7:30 a.m. - 11:30 a.m. Registration  
8:00 a.m. - 11:00 a.m. Vendor's Exhibits  
8:00 a.m. - 10:00 a.m. Scientific Posters on Display  
8:00 a.m. - 9:45 a.m. Paper Sessions  
10:00 a.m. - 11:00 a.m. **KAS ANNUAL BUSINESS MEETING**  
11:15 a.m. - 12:00 p.m. Paper Sessions

### ATTENTION: POWER POINT PRESENTERS

Each session room will have a computer and proxima type projector. Each computer will have Office 2003 which is compatible with Office 97, Office 2000 and Office 2002 versions of PowerPoint. Presenters should prepare their presentations with one of these versions and save it to a CD or floppy (not zip). Presenters should arrive at least 15 minutes before the beginning of the session to transfer their file to the computer's desktop. This will ensure that each speaker will have the full time allotted for their presentation.

**PAPER SUBMISSION FORM**  
**KENTUCKY ACADEMY OF SCIENCE**  
**91st ANNUAL MEETING**

Co-Hosted by Eastern Kentucky University and Berea College  
 Richmond, Kentucky  
 November 10 - 12, 2005

Title of Paper (Please type or print)

**(An abstract must be submitted with this form. See reverse side for guidelines for preparation of abstract.)**

Author(s) (check presenter) (one author must be a KAS member)	KAS Member	Institutional Affiliation	Position (circle)				
	Yes	No	High School	Undergrad	Graduate	Professional	
_____	Yes	No	_____	H	U	G	P
_____	Yes	No	_____	H	U	G	P
_____	Yes	No	_____	H	U	G	P
_____	Yes	No	_____	H	U	G	P

\*Sponsor \_\_\_\_\_

\*All undergraduate or high school students who are not members of KAS must be sponsored by a member of the Academy. There is not a limit on the number of papers a member may sponsor.

**Check if entering the Undergraduate Research Competition. The URC presentations will be given ONLY on Friday.**

**Check if entering the Graduate Research Competition. (Oral Presentations only)**

**Check Section in Which Paper will be Presented**

_____ Agricultural Sciences	_____ Geology
_____ Anthropology and Sociology	_____ Health Sciences
_____ Botany and Microbiology	_____ Mathematics
_____ Cellular and Molecular Biology	_____ Physics and Astronomy
_____ Chemistry	_____ Physiology and Biochemistry
_____ Computer & Information Science	_____ Psychology
_____ Ecology & Environmental Science	_____ Science Education
_____ Engineering	_____ Zoology
_____ Geography	

**Type of Presentation (Check one)**

\_\_\_\_\_ Oral Presentation (15 min. max.) - each room will have an overhead projector and a 2 x 2 slide projector.  
 \_\_\_\_\_ Oral Presentation using Power Point (15 min. max.) - load presentation prior to beginning of session.  
 \_\_\_\_\_ Poster Presentation - a 4' x 6' poster board with easel will be provided.

**Session Time Preference for Oral Presentation** ( 1 = first preference; program requirements may restrict honoring preferences)

\_\_\_\_\_ Friday a.m. \_\_\_\_\_ Friday p.m. \_\_\_\_\_ Saturday a.m. \_\_\_\_\_ Saturday p.m.

**Name and Mailing Address of Contact Person** (undergraduate student use mentor as contact person)

\_\_\_\_\_ Phone \_\_\_\_\_

\_\_\_\_\_ Fax \_\_\_\_\_

\_\_\_\_\_ E-mail \_\_\_\_\_

Return this form and a single spaced abstract by **October 7, 2005** to: Robert Creek, KAS Program Coordinator, Department of Biology, Eastern Kentucky University, Richmond, KY 40475. Phone (859) 623-6646; Fax (859) 622-1399; e-mail: rcreek@chpl.net.

## GUIDELINES FOR PREPARATION OF ABSTRACTS FOR PAPER AND POSTER PRESENTATIONS

1. Text of abstracts must be 250 words or less.
2. Abstracts must be on white, good quality paper (8.5 x 11 in.). They must be **single** spaced throughout and have a margin of 1 inch all around.
3. Use a type size of 10cpi and the same font throughout: do not use bold. Italics should be used only for the scientific names of the organisms and other expressions that conventionally appear in italic type.
4. Do not justify the right-hand margin.
5. The address should contain the capitalized name(s) of the author(s), department, university or company, name of the city, name of the state (use two-letter abbreviation, e.g. KY, IN, OH.) and the zip code.
6. In multi-authored abstracts, the name of the presenter of the paper will be indicated by an asterisk.
7. Use standard, well-known abbreviation when the use of abbreviations is necessary.
8. When using abbreviations for chemical compounds, spell out the name in full at the first mention and follow with the abbreviation in parentheses; use the abbreviation thereafter. Do not abbreviate chemical compounds in the title of the abstracts.
9. Any special symbols not on your word processor must be carefully drawn in by hand with fine pen and black ink.
10. Scientific names of organisms should be in italics (not underlined). Spell out generic names the first time they are used; afterwards these names should be abbreviated to first letter (plus a period) when followed by a specific epithet unless confusion may result with another abbreviated generic name in the abstract.
11. In the upper right hand corner of the abstract, type in CAPITALS the name of the section in which your paper or poster is being presented.
12. The following is an example of a portion of a proper abstract.

### BOTANY AND MICROBIOLOGY

Taxonomic status of the varieties of Seneca snakeroot, *Polygala senega* (Polygalaceae). AMY E. TRAUTH\* and ROBERT F.C. NACZI, Department of Biological Sciences, Northern Kentucky University, Highland Heights, KY 41099.

Seneca snakeroot, *Polygala senega* (Polygalaceae), is an uncommon plant ranging throughout most of eastern North America. Two varieties have been described for the species: variety *senega* and variety *latifolia*. The taxonomic

13. The abstract must be sent with your Paper Submission Form to the Program Coordinator listed at the bottom of the form.

## PUBLICATION OF ABSTRACTS IN THE *JOURNAL*

If you would like to submit your abstract for publication in the *JOURNAL*, the guidelines are the same as above except you need to send a hard paper copy and a disk or e-mail version in WordPerfect or Word. Please include with your abstract a check for \$15.00 made payable to the Kentucky Academy of Science to cover publication costs (invoices will not be sent). Abstracts for publication must be received by the Abstract Editor by December 1.

Dr. Robert J. Barney  
Abstract Editor  
Community Research Service  
Kentucky State University  
Frankfort, KY 40601  
rbarney@gwmail.kysu.edu

**PRE-REGISTRATION FORM**  
**KENTUCKY ACADEMY OF SCIENCE ANNUAL MEETING**  
**CO-HOSTED BY EASTERN KENTUCKY UNIVERSITY AND BEREA COLLEGE**  
**RICHMOND, KENTUCKY**  
**NOVEMBER 10 - 12, 2005**

Please type or print. Duplicate as needed, but use a separate form for each person.

Name Badge to Read \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

School/Employer \_\_\_\_\_

KAS Section Affiliation \_\_\_\_\_

Telephone Number \_\_\_\_\_ e-Mail \_\_\_\_\_

(Your e-mail will be used to notify you of receipt of preregistration fees)

**PRE-REGISTRATION FEE SCHEDULE**

Category	Pre-Registration
----------	------------------

**Current 2005 Dues Paid**

Regular Member	\$25.00 _____
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Student Member	\$ 5.00 _____
----------------	---------------

**Non-Members**

Professional	\$50.00 _____
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Student	\$ 5.00 _____
---------	---------------

**2006 MEMBERSHIP DUES SCHEDULE**

Regular Member	\$35.00 _____
----------------	---------------

Family Member	\$50.00 _____
---------------	---------------

Student Member	\$15.00 _____
----------------	---------------

Life Member	\$400.00 _____
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**TOTAL FEES (Check each item) \$ \_\_\_\_\_**

**KAS AWARDS BANQUET**, Friday, November 11 \$25.00 x \_\_\_\_\_ Tickets \$ \_\_\_\_\_

URC: Yes \_\_\_ No \_\_\_ Banquet is free to students entering URC but student **must preregister** in order to receive a free ticket. If you are going to the banquet, indicate after tickets that you are an URC student.

**GRAND TOTAL ENCLOSED \$ \_\_\_\_\_**

Thursday Evening Social - Perkins Building (no charge) Attending Yes No

**THIS FORM MUST BE POSTMARKED NO LATER THAN OCTOBER 21, 2005**

**MAIL TO: PRE-REGISTRATION**  
**KENTUCKY ACADEMY OF SCIENCE**  
**SCIENCE OUTREACH CENTER**  
**UNIVERSITY DRIVE**  
**LEXINGTON, KY 40536-0078**

## Call for Nominations to KAS Governing Board

The Kentucky Academy of Science Nominations and Elections Committee is seeking assistance from the KAS membership in our effort to identify a ballot of quality candidates to assume leadership roles within the Academy for next year. KAS members interested in nominating colleagues for these vacant positions, or individuals willing to volunteer to be placed on the ballot, should forward the name, e-mail address/phone number for each candidate, and indicate the leadership position of interest. Then Nominations and Elections Committee will contact each candidate to request the necessary information to be included on the ballot. This is an extremely important responsibility for the members of KAS and the committee needs your assistance in identifying candidates for these vacancies. The membership is being contacted at this time for nominations for the following offices:

### **Vice President Biological Sciences Division Representative At Large Representative**

Any member may nominate another member for the Vice President and At Large positions. However, for Biological Sciences Representative, the nominator must identify with that Division. Please send nominations by August 1, 2005 to:

Dr. Robert Barney  
Community Research Service  
Kentucky State University  
Frankfort, KY 40601  
(502) 597-6178  
rbarney@gwmail.kysu.edu

## Invitation to Submit Papers

John Thieret invites submission of papers for the Journal of the Kentucky Academy of Science, a peer-reviewed semiannual publication. Papers should be prepared according to the instructions given in JKAS 63(2) and sent to Dr. Thieret at Biological Sciences, Northern Kentucky University, Highland Heights, KY 41099. Any questions? E-mail the editor at thieretj@nku.edu or visit the Kentucky Academy of Science web at

<http://kas.wku.edu/kas/HTJourPub.asp>.

## Funding Request Deadlines

October 1, 2005 KAS Special Research Program

November 15, 2005 Undergraduate Research Supply, Summer Undergraduate Research

## Need Information?

If you are looking for information about the Kentucky Academy of Science—our history, goals, membership, meetings, publications, or grant programs—please visit our website at [kas.wku.edu](http://kas.wku.edu). To inquire about membership status or lost Newsletter/Journal issues, please contact the Kentucky Academy Office:

The Kentucky Academy of Science  
Science Outreach Center  
University Drive  
University of Kentucky  
Lexington, KY 40536-0078  
Phone: (859) 221-3369  
e-mail: [kasexecutivedirector@yahoo.com](mailto:kasexecutivedirector@yahoo.com)

The Journal of the Kentucky Academy of Science is published twice annually. Original papers based on research or review in science will be considered, also contributions to the "Scientists of Kentucky" series. To submit an article for publication, see the information on the web at [kas.wku.edu/kas/HTJourPub.asp](http://kas.wku.edu/kas/HTJourPub.asp) or contact:

Editor, Journal of the KAS  
Dr. John W. Thieret  
Department of Biological Sciences  
Northern Kentucky University  
Highland Heights, 41099  
Phone: (589) 572-6390  
Fax: (859) 572-5639  
e-mail: [thieretj@nku.edu](mailto:thieretj@nku.edu)

To submit an item for publication in the Newsletter, contact:

Susan B. Templeton, Editor  
Atwood Research Bldg.  
400 East Main Street  
Kentucky State University  
Frankfort, KY 40601  
Phone (502) 597-6030  
Fax (502) 597-6381  
e-mail: [stempleton@gwmail.kysu.edu](mailto:stempleton@gwmail.kysu.edu)

Submission deadlines for the Newsletter are December 1, March 15, and July 15. KAS members should receive a Newsletter in January, May, and August.

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# Request for Nominations for Superlative Awards

The Board of Directors encourages all members of the Academy to submit nominations for the following awards presented annually to outstanding and distinguished members of the Academy. Members of all Sections for the Academy are eligible to be considered for each award. The deadline for nominations is September 30, 2005. All nominations and supporting materials should be sent in electronic format; e-mail attachments may be either in MS Word or text files. Send to:

Nigel Cooper, Ph.D.  
Department of Anatomical Sciences and  
Neurobiology  
Room # 807A University of Louisville Health Sciences Center  
Louisville, KY 40292  
(502) 852-1474  
nigelcooper@louisville.edu

## *Outstanding Academy Service Award*

*Qualifications:* The recipient shall have been a long time member of the Kentucky Academy of Science and shall have made significant contributions to the growth and development of the Academy. Contributions should be interpreted broadly to mean contribution directly to the leadership of the Academy that has resulted in significant enhancement of the image of the organization and has led to its growth and recognition throughout the Commonwealth. The recipient will also be a scientist and/or teacher who has been recognized for significant contributions to his or her discipline as a researcher and/or teacher. The recipient should be or should have been a resident of Kentucky during the time contributions were made.

*Nomination packet should include:* an abbreviated curriculum vitae (5 pages or less) containing information pertinent to the award and a list of publications; documentation of special contributions to the Academy; and letters of recommendation from at least three but not more than five professional colleagues well acquainted with the candidate's contributions to the Academy and with his or her qualifications for this award.

## *Distinguished College/University Scientist Award*

*Qualifications:* The recipient shall have made some significant contribution to academic research in Kentucky. Contributions should be interpreted broadly to mean contribution directly to the Commonwealth, or to the improvement of the quality of life in the Commonwealth, or to intellectual growth in the Commonwealth. The recipient normally should be a resident of Kentucky and shall be a member of KAS.

*Nomination packet should include:* an abbreviated curriculum vitae (5 pages or less) containing information pertinent to the award and a list of publications from the last five years; documentation of special accomplishments as a science teacher or academic researcher; and letters of recommendation from at least three but not more than five professional colleagues well acquainted with the candidate's qualifications.

## *Outstanding College/University Teacher Award*

*Qualifications:* The recipient shall have made some significant contribution primarily to science teaching but also to research at the college/university level in Kentucky. Contributions should be interpreted broadly to mean contribution directly to the Commonwealth, or to the quality of life in the Commonwealth, or to intellectual growth in the Commonwealth. The recipient normally should be a resident of Kentucky and shall be a member of KAS.

*Nomination packet should include:* an abbreviated curriculum vitae (5 pages or less) containing information pertinent to the award and a list of publications from the past five years; documentation of special accomplishments as a teacher of science; and letters of recommendation from at least three but not more than five professional colleagues well acquainted with the candidate's qualifications.

## *Outstanding Secondary School Science Teacher Award*

*Qualifications:* The recipient shall have made some significant contributions to the teaching of science at the middle and high school level in Kentucky. Contributions should be interpreted broadly to mean contribution to the academic welfare and intellectual growth of secondary students of the Commonwealth, contribution directly to the Commonwealth, or to the quality of life in the Commonwealth. The recipient is not required to be a resident of Kentucky nor a member of the Kentucky Academy of Science, but candidates who meet these specifications will be given special consideration.

*Nomination packet should include:* an abbreviated current curriculum vitae (5 pages or less) which addresses the professional background, experience, and development of the candidate; documentation of special accomplishment as a teacher of science, especially measures of student success, participation in student development beyond the classroom, and science curriculum development; and letters of recommendation from an administrator or supervisor, a teaching colleague, a student, and a parent, not to exceed five letters.

## *Industrial Scientist Award*

*Qualifications:* The recipient shall have made some significant contributions to industrial science in Kentucky. Contributions should be interpreted broadly to mean contribution directly to commerce or industry or to the improvement of the quality of life in the Commonwealth. The recipient normally should be a resident of Kentucky and shall be a member of KAS.

*Nomination packet should include:* An abbreviated curriculum vitae (5 pages or less) containing information pertinent to the award and a list of publications from the past five years; documentation of special accomplishments as an industrial scientist; and letters of recommendation from at least three but not more than five professional colleagues well acquainted with the candidate's qualifications.



The Junior Academy was begun over fifty years ago to foster an interest in science for middle school and high school students in Kentucky. Members of the Kentucky Junior Academy have the opportunity to :

- interact with other high school students across the state who are interested in science and technology,
- apply for money to design and complete science projects,
- present projects at the annual KJAS meeting, and
- publish an abstract in the Journal of the Ky Academy of Science.

Are you interested in joining the Kentucky Junior Academy of Science or just want to learn more about it? Check out the web site at [www.kyjas.org](http://www.kyjas.org) or contact the KAS/KJAS office at:

University of Kentucky  
 Outreach Center for Science & Health Careers  
 102 Chandler Medical Center Annex 5  
 Lexington, KY 40536-0078

Special congratulations to Suhail Malhorta and Jessica Miles who will represent Kentucky at the national American Junior Academies of Sciences meeting in St. Louis, MO in February 16-20, 2006.

## Yes, I Want to Join the Kentucky Academy of Science

*Check appropriate boxes*

### Individual Membership

(January to December)

- \$35 Active Member
- \$15 Student member (Collegiate)
- \$10 KJAS member (High School)
- \$50 Family member
- \$400 Life member

### Educational/Industrial Affiliate Membership

- \$5,000 Patron
- \$2,000 Associate Patron
- \$1,000 Fellow
- \$500 Sustaining Member
- \$250 Member
- \$100 Associate Member
- \$25 High School Member

Section Choice \_\_\_\_\_

Payment Enclosed \$ \_\_\_\_\_

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Employer or School \_\_\_\_\_

E-mail \_\_\_\_\_

Please make checks payable and mail to:

The Kentucky Academy of Science  
 Science Outreach Center  
 University Drive  
 University of Kentucky  
 Lexington, KY 40536-0078



The Kentucky Academy of Science  
 Science Outreach Center  
 University Drive  
 University of Kentucky  
 Lexington, KY 40536-0078