

**The  
Pennsylvania  
Junior Academy  
of  
Science**

**Sponsor Handbook**

**2006-2007**



The information in this booklet was current as of July 2006. If you have received this booklet and it is several years old please contact the PJAS State Director and request a newer version.

## Short History of the Pennsylvania Junior Academy of Science

The Pennsylvania Junior Academy of Science (PJAS) is a statewide organization of junior and senior high school students designed to stimulate and promote interest in science among its members through the development of research projects and investigations.

The state of Pennsylvania is divided into ten regions. Each region consists of two or more counties. The region has one or more directors and a treasurer that oversee the operation of the region. At the state level there is a State Director, Secretary, and Treasurer. In addition, there are committees that coordinate the judging, awards, technicians, and growth at the state level.

In the early 1930's, a national executive committee was appointed by the American Association for the Advancement of Science (AAAS) to coordinate the activities of the various State Junior Academies of Science. Thus, the junior academy movement became an integral part of the organization with the formation of the National Junior Academy of Science (NJAS).

A paper presented at the Pennsylvania Academy of Science (PAS) at its West Chester meeting in 1932 resulted in the appointment of a committee to consider the development of a junior academy in Pennsylvania. As a result the senior PAS became the parent organization of the PJAS and still elects the Junior Academy State Director every three years.

Two years later, on March 31, 1934, at Reading, PA delegates from fourteen high school science clubs representing all parts of the state met and approved a constitution the next day. The Pennsylvania Junior Academy of Science had become a reality. Dr. Otis W. Caldwell, Columbia University, as an official delegate of the AAAS welcomed the new group. Pennsylvania was then added to the states of Indiana, Texas, Alabama, Arkansas, and others that had already established junior academies.

The first State Director was Dr. Karl F. Oerlein of the California State Teachers College in California, PA. He continued in office until 1941. The PJAS has continued to grow through the efforts and dedication of many adult sponsors and students. The early state meetings were held at various resorts and convention centers throughout the state. The last such convention was at Seven Springs Resort in 1990. Because of the enormous growth in the number of students participating the State Meeting was moved to Penn State University at University Park, PA in 1991. In 2000 the school participation had grown from the original fourteen in 1934 to 424 schools. At the region level over 6000 students presented their research projects. The 2000 state meeting has grown to 2497 presenters in 290 units. The total number at the State Meeting including student presenters, technicians, sponsors and chaperons is almost 4000. Each year a different region hosts the State Meeting by preparing the program booklet, organizing the chaperone functions, helping to recruit judges and coordinating many of the activities. The Regions host in the following order: **Year ending in:** 0 - Region 9, 1 - Region 5, 2 - Region 10, 3 - Region 1, 4 - Region 8, 5 - Region 2, 6 - Region 7, 7 - Region 4, 8 - Region 6, and 9 - Region 3.

The following have served as State Directors:

|                            |              |
|----------------------------|--------------|
| Dr. Karl F. Oerlein        | 1934-1941    |
| Miss Mary Hawthorne        | 1941-1944    |
| Mrs. Marie K. Overholts    | 1944-1945    |
| Miss Sophie Moiles         | 1945-1958    |
| Mr. Charles L. Bikle       | 1958-1964    |
| Mr. Robert E. Hansen       | 1964-1967    |
| Mrs. Carolyn A. Gibson     | 1967-1971    |
| Sister M. Gabrielle, Ph.D. | 1971-1976    |
| Mr. Joseph A. Gennaula     | 1976-1979    |
| Mr. Clarence Myers         | 1979-1985    |
| Mr. Edward Testa           | 1985-1989    |
| Mr. Joseph Durkin          | 1989-1996    |
| Mr. James W. Maloy         | 1996-2002    |
| Mr. Peter Carando          | 2002-present |

The Pennsylvania Junior Academy of Science is a non-profit organization, tax exempt under Section 501(c)(3) as described in Section 509 (a)(3) of the Internal Revenue Code, and files form 990 – Return of Organization Exempt from Income Tax, on an annual basis. The Academy is also a registered charitable organization in the Commonwealth of Pennsylvania, and therefore, is authorized to solicit contributions within Pennsylvania.

The PJAS Federal Employer Number (EIN) is #23-6396183. The Pennsylvania Bureau of Charitable Organizations (State Certificate Number) is #14563. PJAS is audited yearly by Wildeman and Obrock Certified Public Accountants, 515 South 29<sup>th</sup> Street, Harrisburg, PA 17104-2104.

Fees charged for the regional meetings, state meetings, and gifts from individuals, foundations, and industry support PJAS. **All of the region directors and state officers are volunteers and are not paid a salary for the time that they dedicate to the organization and the students.**

## **PJAS Goals**

The Pennsylvania Junior Academy of Science sponsored by the Pennsylvania Academy of Science, as an Affiliate of the American Association for the Advancement of Science is organized with the following objectives:

- To promote greater participation in science and mathematics activities among the youth of Pennsylvania.
- To improve the quality of achievement in mathematics and science by encouraging students to participate in research and develop original ideas.
- To develop an understanding of the scientific community through close association with leaders in the sciences.
- To seek the improvement of science clubs activities through the cooperative regional and state meetings.
- To inculcate among its members true scientific attitudes and humanistic ideals that shall lead to the greater development of service to man.

**Student Participation** – Student participants in the PJAS program are encouraged to follow the scientific method to select a project, research the background, formulate a hypothesis, develop an experiment to prove or disprove the hypothesis, and to collect and analyze data from their experiment. The students then prepare a written report and give an oral presentation with audio-visuals to their sponsor. **Group projects are not permitted.**

Students who are selected at the school level then are registered to present their project at the regional meeting. The regional meetings are usually in February or early March each year. The students at the regional meeting are divided into units of around ten students who are all in the same area of scientific research, such as chemistry. A panel of two or more judges then evaluates the student's project presentation against set criteria. The students can receive a first, second or third award on their project. Each unit can have more than one first award. Students who receive a first award are then eligible to go to the State Meeting at Penn State University the third weekend in May.

The judges at the regional and state meetings are sponsors, graduate students, college professors, and scientists from industry. PJAS has developed a set of guidelines for judging the student presenters along with a briefing format to assure that the judging is consistent throughout the state.

### **So you have decided you want to sponsor students, now what do you do?**

**First you have to answer some questions for yourself about your commitment.**

- Are you willing to put in the time to sponsor projects?
- Are you willing to do the work for no money since most school districts do not pay sponsors?
- Will the school district pay the expenses for the Regional and State competitions?
- How will you recruit students to participate?
- Will you require the projects for a class?

- Will the projects be extra credit?
- When will the students work on the projects, during class, at home on their own, or after school?
- What other activities and sports will influence student participation?
- Will other teachers help you with the projects and students?
- Will the parents become involved?
- How will you decide who goes on to the PJAS regional competitions?
- Will the projects be used to complete the PA Department of Education, Chapter 4 requirements for a graduation project?
- Who will judge these?

**Where to start?** First contact your local Region Director (See Appendix 1 and 2) and obtain the names of sponsors at schools near you. Talk to these people and find out how they coordinate their students and how they spend their time and energy. Find out what is involved in completing the projects. Discuss with the Region Director the requirements for registration, student quotas for your school, cost, deadlines, future meetings, and other information to get you started.

**What areas are used for doing projects?** The projects are divided into the following fields:

- Behavioral/Psychology
- Biochemistry
- Biology
- Botany
- Chemistry
- Computer Science
- Earth and Space
- Ecology
- Mathematics
- Microbiology
- Physics
- Zoology

**Project Forms:** The Region Director can provide you with *Project Outline* forms. Projects that involve humans (Behavioral/Psychology) and animals (Zoology) always require special permission forms, which vary from school to school. Even projects where students are doing taste tests between colas require parental consent forms. The booklet *International Rules for Precollege Science Research and Guidelines for Science and Engineering Fairs* is available from Science Service, 1719 N Street, NW, Washington, DC 20036. You can also contact them by phone (202) 785-2255 or via the Internet at <http://www.sciserv.org/iseff/>. The forms can be obtained by clicking on the *Document Library* part of the **2006 International Rules and accompanying forms** section. You can then print the entire set of forms or individual forms. This is an excellent source for all of the forms you would need for all types of student projects from PJAS to Science Fairs.

## Preparation for the Region Competition

**What do you have to do for the Region Competition?**

**Registration:** PJAS requires that each teacher sponsor no more than fifteen (15) students at the region competition. Thus, if you are going to have more than fifteen students you need to find someone to help you or limit the number of students. Some regions due to the large number at their Regional Meeting also set quotas on the number of students from a school. Quotas are set most often with middle schools. Each student **must** be registered for the region competition. See Appendix 3 for a sample *PJAS Registration* form. Each region has a **deadline** when these registration forms must be turned into the Region Director.

There is a **school membership fee** that is paid to the region. If you have middle school and high school students in the same building there is only one fee. If the students are in separate buildings there is a fee for each building. The **school membership fee** is \$40.00 per school; however, this varies with each region depending on expenses. There is also a **registration fee for each student** who will be presenting at the regional meeting. These fees vary depending on if lunch is provided, cost of the booklet and awards, and if the region must rent facilities and has other meeting expenses. **These fees are to be paid before the Region Competition.** Most regions provide a bill, which can be submitted, to your school business manager. **If a student decides not to attend the Region Competition the fee is not returned.**

**Presentation Units:** After the student is registered the region divides the students into units of approximately ten students. The units are divided according to grade level and research area. For example, all seventh grade chemistry projects are placed in the same unit. Some units may overlap if there are not enough students in a given research area. Most of the regions prepare a meeting booklet, which lists all of the students, their unit, the room where they will present, and the agenda for the day.

**Judges:** Each sponsor is expected to recruit one adult judge for every three-(3) students they take to the region competition. Teachers, parents, and school board members are great judges. Students that have participated in PJAS and who have graduated from high school are excellent judges since they understand the program. See **Appendix 5** for an example of a **Judge's Registration** form.

**Technicians:** Sponsors are expected to bring one student technician for every ten-(10) presenters they take to the region meeting. The technicians are used to time the presentations and to transport overhead projectors to the presentation rooms. These can be any student that you are sure will show up to help. See **Appendix 16** for the **Expectations for a Technician.**

**Overhead Projectors:** Most regions require you to bring one overhead projector for every ten (10) presenters. This is so that there are enough for all of the units to have one. **PJAS does not furnish** slide projectors, VCRs, computers or other types of audio-visual devices. The student is responsible for these devices if they want to use them for their presentation.

**Parents:** Some regions permit and some regions do not permit parents and guests into the presentation rooms to hear the students. Check with your Region Director for the region policy. The parents and guests are not permitted to make any comments during any of the presentations or to ask questions after a presentation.

**Recording:** The use of tape recorders or camcorders is not permitted during student presentations.

**Presentations and Judging:** See the **Appendix 4** on the **PJAS Judging Criteria** for how the presentations are judged. There is normally a thirty-minute briefing of the judges before they are sent to hear the student presentations so that the judging is consistent between the units. **The decision of the judges is final and can not be appealed.** Each unit can have any number of first, second and third awards. The students are competing against a specific presentation criterion and not against each other. **The scoring rubrics for science, (Appendix 18) mathematics, (Appendix 19) and computer science (Appendix 20) projects are attached to the end of the handbook.**

**Awards:** Each region has an awards assembly after the presentations to announce the results.

**First Award Students:** All students who receive a first award are eligible to go to the State Competition at Penn State University, University Park Campus the second or third weekend in May.

## Preparation for the State Competition

### What do you have to do for the State Competition?

**Registration:** Students who have received First Awards must be registered for the State Competition. In the **Appendixes 6, 7, 8, 9, 10 and 11** are examples of registration forms, which are used by some regions. The form used depends on if the student is staying on campus or off campus, if you are taking student technicians, registering adults and technicians, and if students are not going to go to the State Meeting. The students are housed two to a room at Penn State. ***You must notify the Region Director two weeks after the Region Competition, which students are going and which students are not going.*** Also, you are to list any technicians you are taking, sponsors who can judge at the State Meeting, and adult chaperons who do not judge but will be supervising students.

**Adults:** You are required to take one adult sponsor or chaperon for every five students you take to Penn State. The adults are expected to keep track of their students and to help chaperon the various student activities. It is not a time to vacation or to go downtown and party. The adults have a very important function.

**Authorization for Medical Treatment:** Each student presenter and technician, even the ones over eighteen, is required to complete **three originals** (not photocopies) of the health authorization. (See **Appendix 12** for an example of the ***Authorization for Medical Treatment*** form.) The person authorized to sign for the student *must be someone on campus* with the student. Send two copies to the Region Director and you keep one copy. The Region Director turns in his/her two copies to the nurses at Penn State. These are used to note any treatment the student may receive while on campus and medication the student may take. One copy is taken to the hospital with the student for more serious injuries. If your student requires hospital treatment you or the Region Director will go to the hospital with the student.

**Cost:** The **current fee** for the State Competition is \$105.00 for students who stay on campus and \$70.00 for students who do not stay on campus. **These fees may change each year at the fall Director's Meeting depending on the change in costs of the meeting.** The \$105.00 fee covers five meals, two nights in the dorm, the program booklet, and the award bar. The fee also covers the Penn State judges, who are hired, the rental of rooms at Penn State, hiring nurses for 24-hour coverage, security police, and many other expenses. Each region also charges a **fee** for bus transportation. **These fees are to be paid before the State Competition.** Be aware that students may back out and not go at the last minute because of sports, the prom, graduation, and AP exams. **The fee is required for any student or adult who does not cancel their reservation by April 1.** We are expecting them at Penn State and expenses are incurred even if they decide not to go at the last minute.

**Behavior:** There is a behavior code for the students. Students and adults who do not observe the rules are sent home. Every year we send someone home. Remind the students that PJAS is a school activity and all of the rules at your school apply at Penn State. See **Appendixes 13, 14, 15, 16, and 17** for information on what is expected of the students and the adults at Penn State.

**PJAS State Meeting Program Booklet:** Contact the State Director for a copy of last year's program booklet. It will give you an idea of the schedule and the scope of the State Meeting.

## Appendix 1

### PJAS Regions by Counties

**Region I (includes Regions I-A, I-B, and I-C)** - Bucks, Chester, Delaware, Montgomery, and Philadelphia

**Region II** - Lackawanna, Luzerne, Monroe, Pike, Susquehanna, Wayne, and Wyoming

**Region III** - Berks, Carbon, Lehigh, Northampton, and Schuylkill

**Region IV** - Adams, Cumberland, Dauphin, Juniata, Lancaster, Lebanon, Mifflin, Perry, and York

**Region V** - Bradford, Clinton, Columbia, Lycoming, Montour, Northumberland, Snyder, Sullivan, Tioga, and Union

**Region VI** - Bedford, Blair, Cambria, Centre, Clearfield, Franklin, Fulton, Somerset, and Huntington

**Region VII** - Allegheny and Westmoreland

**Region VIII** - Fayette, Greene, and Washington

**Region IX** - Armstrong, Beaver, Butler, Clarion, Indiana, Jefferson, Lawrence, and Mercer

**Region X** - Cameron, Crawford, Elk, Erie, Forest, McKean, Potter, Venango, and Warren

## Appendix 2

### 2006 PAS and PJAS State Officers and Region Directors

#### Pennsylvania Academy of Science:

**Dr. Deborah Ricker, PAS President**

Department of Biology  
York College of Pennsylvania  
York, PA 17405-1653  
e-mail – dricker@ycp.edu

#### PJAS State Officers: Listing includes school name and home address and phone number.

**Peter M. Carando, PJAS State Director**

2843 Graceland Road  
New Castle, PA 16105  
(724) 658-4098  
e-mail – drifly@adelphia.net

**Rebecca Papson, PJAS State Secretary**

John F. Kennedy School  
466 West Wylie Avenue  
Washington, PA 15301  
(724) 228-7182  
e-mail – bjp@pulsenet.com

**Leah Ann Williams, PJAS State Treasurer**

New Castle Senior High School  
761 Sarsi Trail  
Mercer, PA 16137  
(724) 475-4023  
e-mail – turtle761@zoominternet.net

#### REGION 1 A:

**Ms. Monica Braconnier, Co-Director**

ET Richardson MS  
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Springfield, PA 19064  
(610) 544-2951  
e-mail – mbraconnier@hotmail.com

**Mr. James Conlin, Co-Director**

ET Richardson Middle School  
5229 Fairhaven Road  
Clifton Heights, PA 19018  
(610) 284-1230  
e-mail – jjc6663@aol.com

**REGION 1 B****Dr. Sue Johnston, Co-Director**

Germantown Academy  
 281 Batleson Road  
 Ambler, PA 19002  
 (215) 542-9747  
 e-mail – sjohn@germantownacademy.org

**Rebecca Sheridan, Co-Director**

Cheltenham High School  
 7804 Tookany Creek Pkwy.  
 Elkin Park, PA 19027  
 (215) 782-8735  
 e-mail – r.sheridan@comcast.net

**REGION 1 C****Dr. Sue Johnston, Co-Director**

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 281 Batleson Road  
 Ambler, PA 19002  
 (215) 542-9747  
 e-mail – sjohn@germantownacademy.org

**Mr. Dominic Fedele, Co-Director**

C.C.A. Baldi Middle School  
 School District of Philadelphia  
 8801 Verree Road  
 Philadelphia, PA 19115  
 (215) 961-2007  
 e-mail – dfedele@aol.com

**REGION II****Dr. Clay LaCoe III, Director**

Abington Heights School District  
 2627 Bald Mountain Road  
 Clarks Summit, PA 18411  
 (570) 585-8582  
 e-mail – lacoec@ahsd.org  
 e-mail – clacoe@alumni.upenn.edu

**REGION III****Mrs. Edith I. Mauthe, Director**

Saint Thomas More School  
 6966 Blue Church Road South  
 Coopersburg, PA 18036  
 (610) 282-4703  
 e-mail – emauthe@epix.net

**REGION IV****Ms. Ellen Chapman, Co--Director**

Bishop McDevitt High School  
 5620 Fordham Avenue  
 Harrisburg, PA 17111  
 (717) 329-7099  
 e-mail – Echapman12@comcast.net

**Edward Owens, Co-Director**

109 East Park Street  
 Carlisle, PA 17013  
 (717) 249-1927  
 e-mail – eowens@psu.edu

**REGION V****Mr. Robert Everly, Co-Director**

Selinsgrove Area High School  
 RR 2 Box 58  
 Herndon, PA 17830  
 (570) 758-4981  
 e-mail – roberteverly1@yahoo.com

**Mr. William Levan, Co-Director**

5570 Wetkert Road, Box 37  
 Wetkert, PA 17885-37  
 (570) 922-0263  
 (570) 922-0263 Fax



**REGION VI**

**Mrs. Laura Fisanick, Co-Director**  
 Cambria Heights Middle School  
 156 Fisanick Lane  
 Nicktown, PA 15762  
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 e-mail – lfisanick@helicon.net

**Ashley Hollern, Co-Director**  
 Bishop McCourt High School  
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**REGION VII**

**Mrs. Duane Keenan, Director**  
 53 Rose Leaf Road  
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**Richard Mathews, Assistant Director**  
 Pittsburgh Public Schools, Sci. Prog. Dir.  
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**REGION VIII**

**Mrs. Rebecca Papson, Co-Director**  
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 e-mail – bjp@pulsenet.com

**Ms. Kay Camden, Co-Director**  
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**REGION IX**

**Mr. Raymond Greco, Co-Director**  
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 e-mail – greco@southbutler.k12.pa.us

**Leah Ann Williams, Co-Director**  
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 Mercer, PA 16137  
 (724) 475-4023  
 e-mail – turtle761@zoominternet.net

**REGION X**

**Ms. Fay Nelson, Director**  
 Our Lady's Christian School  
 620 Strathmore Avenue  
 Erie, PA 16505-1758  
 (814) 838-4451 (home)  
 (814) 838-7676 ext 32 (school)  
 e-mail – PJASRegion10Tch@aol.com

# PJAS REGIONAL FORMS

## USE THE FOLLOWING FORMS WHEN REGISTERING YOUR STUDENTS FOR THE REGIONAL MEETING.

### REGIONAL MEETING CHECKLIST

#### *For Each Participant*

- Appendix 3 : PJAS Region Registration Form or computer generated registration form
  
- ISEF Forms: ALL PROJECTS
  - Adult Checklist
  - 1A (Student Checklist) including the Research Plan
  - 1B with all signatures
- ISEF Forms: Prior Approval Forms (as needed)
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7
  - 8
  - 9

#### *For Your Delegation:*

- Check for Student Registration along with the Regional Billing Form

## Appendix 3

**PJAS Region Presenter Registration Form****Please type or print very neatly:**

\_\_\_\_\_ M \_\_\_\_\_ F  
 First Name Last Name Gender  
 \_\_\_\_\_  
 Region Grade Years in PJAS

**Research Title (limited to 60 characters)**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

School Name: \_\_\_\_\_  
 (Must be exactly the same for every student)

Sponsor: \_\_\_\_\_

Research Area: Check the research area. If the research could overlap areas please rank as 1, 2, 3.

Biochemistry (BC)     Behavioral/Psychology (BEH)     Biology general (BIO)  
 Botany (BOT)     Chemistry (CHM)     Computer (CPS)  
 Ecology (EC)     Earth and Space (ES)     Mathematics (MAT)  
 Microbiology (MIC)     Physics (PHY)     Zoology (ZOO)

Student Address: \_\_\_\_\_

\_\_\_\_\_

City State Zip

Home Phone: \_\_\_\_\_ ( \_\_\_\_\_ ) \_\_\_\_\_

We certify that this research has been conducted by the student in accordance with the Pennsylvania Junior Academy of Science rules and with advice only from others. We further agree to accept the Judge's evaluation of this research as final. In addition, we agree to make every attempt to have the student present at the Region Competition and at the State Competition should he/she receive a First Award at the Region Competition.

Signature of Student \_\_\_\_\_ Date \_\_\_\_\_

Signature of Parent \_\_\_\_\_ Date \_\_\_\_\_

Signature of Sponsor \_\_\_\_\_ Date \_\_\_\_\_

# PJAS REGIONAL BILLING FORM

SCHOOL: \_\_\_\_\_

SPONSOR: \_\_\_\_\_

\_\_\_\_\_ STUDENT PRESENTERS x \$5.00 = \_\_\_\_\_

***Please include this form with remittance.***

Make checks payable to PJAS Region 4

Remit to: Phil Schmelzle  
33 Country Club Place, West  
Camp Hill, PA 17011

OR

Bring to January meeting

Remittance due on or by January 17, 2007

# PJAS STATE JUDGING - THE SHORT COURSE

## General Nature of PJAS Competition

Students wishing to present their researches for PJAS competition are grouped into units with other students of similar grade and category of research and evaluated by a small team of judges. Students give timed oral presentations about their projects after which judges may ask questions for a timed period. Judges score the student on their individual worksheets after each presentation. The student is rated numerically by his success in each of 5 independently-evaluated criteria. Later when all students in the unit are finished the judging team returns to Judging Headquarters to obtain the official tally sheet. On that paper they will compile their individual scores into a composite average score for each student.

## General Procedures for Judges

1. Judges will show knowledge of the field he or she is judging as demonstrated by academic degrees or experience in the field.
2. New judges will submit a registration form to the Judging Committee.
3. New judges will attend an orientation session conducted by the Judging Committee.
4. *Judges should make sure that a timekeeper is available with an official log sheet and that the projection equipment is working properly. It is imperative that no one enters or leaves the room during the presentation. Judges must maintain proper decorum inside and outside the room so that no student can be interrupted during his presentation. We suggest that a member of the judging team explain these operating procedures to those in the room at the beginning of the session.*
5. Each student will give his presentation in the order listed in the program book. Judges may make an exception for unusual circumstances, such as special interviews, multiple-projects, or a wide disparity in grade levels.
6. Judges may NOT add a student to their unit without official written notice from the registration committee or its representative.
7. Students are not in competition with each other for some single top award; rather they are evaluated on how well they succeed in fulfilling the 5 PJAS State Criteria. Therefore, there is no limit to the number of each award that may be awarded in a given Presentation Room.
8. Only judges are permitted to question the presenters. The questioning period will not exceed five minutes.
9. Each judge's evaluation of the presentation shall be made independently from other members of the judging team. However, after all the presentations have been heard, judges are encouraged to consult with one another in determination of the final awards.
10. It is important that all judges in the team return to the judging headquarters when the individual worksheets are completed to record their scores on the official tally sheets. All worksheets and the tally sheet must be personally signed when they are submitted. Furthermore, judges are often called upon to fill out individual comment sheets on the students or make recommendations about special awards for which they may be eligible.
11. Awards will be solely based on the mathematical averages of the scores. But judges should be aware that data entry into the computer scoring program is by using the individual judge's scores in each of the 5 criteria.
12. Room Technicians. The judging team will be assisted in the presentation rooms by one or more technicians. Their duties are to:

- a) Act as a timekeeper, using flash cards to aid the participant and judges, recording the times on the official log sheet.
- b) Set up the audio-visual equipment, aiding in its use during presentations, and returning equipment at the end of the session.
- c) Control the door and hallway so that the participant is not distracted during his presentation.

*In rare cases where no technician is available, judges may NOT serve as timekeepers themselves. They should make arrangements with student presenters to serve as timers. Students at the front or back end of the "batting order" are usually more amenable to this request.*

12. Remember these PJAS participants are **CHILDREN** who are just beginning to work and think as scientists; **they are not Ph.D. candidates**
13. **Questionable Research Topics:** Judges should know that PJAS adheres very closely to the rules and procedures of the *International Science and Engineering Fair* regarding living vertebrate and human subjects, recombinant DNA, tissue acquisition, the use of lasers, and the use of controlled substances.

Before any such experimentation can be registered for regional competition the student and his sponsor must submit detailed research plans and obtain a series of certifications and clearances to ensure proper adult supervision during the planning and execution of the project.

For a project in the above list to appear at a Regional or State PJAS competition, the judge must assume the project has met the necessary qualifications at the regional level. The judge is welcome to ask the Judging Committee to check the validity of the certification that resides in the hands of the Regional Director.

More precise details about the certification process can be obtained from the booklet *PJAS Rules and Regulations for Conducting and Judging of Student Research* or *The PJAS Sponsor Handbook*.

## **PJAS Presentation and Scoring Rules**

**The participant's research and presentation must conform to the following rules:**

1. Each research will be judged on its own merit in meeting the Criteria for Judging rather than in competition with other research.
2. Eligibility. The student doing the presentation must be the one who conducted the research. (ABSOLUTELY NO SUBSTITUTES).
3. No student may present a research topic from a previous year without conducting significant additional research on the topic during the current year.
4. Presentation specifics:
  - A student shall not be interrupted during his presentation.
  - No three-dimensional objects may be used in the presentations.
  - Any two-dimensional representation (charts, pictures, graphs, posters, slides, projections etc.) may be used to enhance and supplement the talk, but not to replace the speaker.
  - The actual experiment may not be used in the presentation. No materials may be passed to the judges during the presentation. Only in rare, unique situations might the judges request materials during the questioning period.
  - Only a PJAS technician may assist with the use of the audiovisual equipment.
  - Specialized presentation media such as video recording, tape cassettes, computer screens, etc. should be used only when absolutely necessary to establish a point that

cannot be made with standard media and should constitute at most 10% of the total speech.

- In cases of doubt as to the appropriateness of a presentation, the State Judging Chairmen will make the final ruling.
5. Measurements must be in metric except where highly specialized equipment is calibrated in other units. Presentations in which the measurements were not done in metric will not receive a first place award, regardless of score.
  6. The presentation will not exceed a maximum time limit of 10 minutes and will be given proper notice by a timekeeper. No reduction in score will be given for a presentation of less than 10 minutes. Presentations **exceeding 10 minutes will not receive a first place award**, regardless of score. There will be a grace period of approximately 10 seconds before this penalty is applied.
  7. Upon completion of the presentation the researcher may be questioned **BY THE JUDGES** for a time period of **NOT MORE THAN 5 MINUTES**. Judges may ask questions to seek clarification of a student's methods, conclusions, and/or understanding. It is inappropriate for judges to criticize or comment on a student's project.
  8. The researchers may use notes in their presentations but reading the report to the judges is considered bad form.
  9. Scoring specifics. Each category of the Judging Criteria shall be scored on a 5 point **integer** system:

**(Excellent) 5 - 4 - 3 - 2 - 1 (Unacceptable)**

10. The student shall receive award based on the average score per judge, calculated by the following formula:

$$\text{Average Score} = \frac{\text{Total Score of All Judges}}{5 \times (\text{Total Number of Judges})}$$

11. The standards for awards at the State Meeting are:
  - 1st award - average score 4.0 or higher
  - 2nd Award - average score 3.0 or higher
  - 3rd Award - average score below 3.0
12. Judges may not disqualify a student. It is the responsibility of the Judging Committee to decide disqualifications.
13. Questions concerning infractions of the State Rules for Judging are subject to the investigation and ruling of the Chairmen of the State Judging Committee and the Regional Directors if appropriate.
14. Non-PJAS Awards. Judges should be aware that outside agencies often are interested in rewarding some of our participants, identified either by judges' high scores or a set of criteria of their own.

## **PJAS Judging Criteria**

### **General comments on the criteria:**

**Note that of the 5 criteria** to be used to evaluate the student, two (Presentation and Judges Opinion) are the same in all three of the research fields chosen (science presentations, math presentations, and computer science presentations). The other three criteria are referring to content of the project and will vary according to the nature of the specific discipline. The official criteria will appear here in bold face print with discussion or suggestions as to interpretation found in regular print.

## Science Presentations

**SCIENTIFIC THOUGHT** - *Selection and statement of the problem, experimental validity and value, scope of design.*

The ultimate aim of science research is to promote new knowledge and understanding of the world in which we live. From reading and observation one comes up with a basic concept. This idea permits formulation of a meaningful question or hypothesis to which an answer may be found through a suitably designed experiment.

Thus judging the "scientific thought" criterion involves consideration of such questions as:

- a) Does the student exhibit sufficient background understanding of the principles and concepts involved in the topic?
- b) Is there a significant basic thought in the project? Is it clearly stated?
- c) Does it admit formulation of an age-appropriate meaningful question?
- d) Is the scope of the problem sufficiently limited to permit a meaningful experiment?
- e) Is there a single, formal hypothesis?

**EXPERIMENTAL METHODS**- *Choosing/developing techniques for valid analysis. Use of original materials or using old materials in an original way. Proper controls and sample size.*

This criterion refers to the details of a **well-designed experimental procedure** intended to answer the question posed. The project may require designing, building and using material hardware. **The presenter must design and carry out his/her own experiment.**

- a) Is the project well designed for the problem at hand?
- b) Is the experiment basically sound, with sufficient sample size and control of variables? Did the experiment have both a control group and experimental group(s)?
- c) Does the procedure follow a logical sequence?
- d) Have any original or ingenious materials or methods been used?
- e) Were results measurable/quantifiable and done in **metric**?

**ANALYTICAL APPROACH** - *Ability to draw valid conclusions. Full use of data and findings. Interpretations of weakness of design. Suggestions for further research.*

Book reports and research theories unsupported by practical data cannot achieve success in PJAS competitions because of this criterion. The student must have personally accumulated some actual data to analyze, even if the trend is negative or neutral to his hypothesis. The critical thing for a student to exhibit to judges is that he knows what the data MEANS.

- a) Is the body of data sufficient to draw valid conclusions?
- b) Do the conclusions refer back to the original question or hypothesis?
- c) Is the student grouping the data properly to enable comparisons between groups? Is the data fully used to draw conclusions?
- d) Is he evaluating the significance of his own data properly?
- e) Has the student thought about how his experiment could be improved if it were to be repeated? Is he aware of sources of error?
- f) Is the student able to make suggestions for further researches related to his topic or perhaps see a practical application of his findings to the real world?



**PRESENTATION** - Ability to convey the information gained to others. To demonstrate new and improved ways of expressing and communicating scientific ideas.

The presentation should, preferably, be in the form of a free talk employing good oral communication skills. The time restrictions in the rules necessitate planning and rehearsal. The critical question is "When the student is finished do you understand exactly what he did and why?"

- a) Does the talk cover all the essentials of the project - the basic premises, the hypothesis or problem, the experimental methods, the data, and the conclusions?
- b) Is the talk well-organized and flowing in a logical pattern?
- c) Do the audiovisual aids enhance the audience's understanding?
- d) Does the student demonstrate through the presentation and his responses during the questioning period a firm understanding of the basic scientific principles involved?

**JUDGE'S OPINION** - Consider the age level and project correlation when necessary. Also, consider your overall feeling of the problem and the quality of the student's work.

This criterion covers simply the judge's overall reaction to the nature of the project and its handling by the student.

## **Mathematics Presentations**

*Mathematics presentations are expository in nature, not experimental.*

*Appropriate projects should either be of a level beyond what the student is currently studying or on an enrichment topic.*

**FULFILLMENT OF PURPOSE** -

- a) Did the presentation have focus?
- b) Considering the topic and time allowed, was the scope of the presentation suitable?
- c) Did the student use appropriate mathematical vocabulary?
- d) Did the student show depth of understanding of mathematical concepts and principles?

**CONTENT**

- a) Did the presentation have specific and illustrative content?
- b) Was the presentation free from mathematical errors?
- c) Is there a practical application or any correlation or interaction with other disciplines?
- d) Did the student use correct mathematical notation?

**DEVELOPMENT**

- a) Was there unity, coherence and inherent logic in the sequence of ideas?
- b) Does the student show insight?
- c) Does the student show sufficient examples or counter-examples?
- d) Can the student make suggestions as to related topics needing further investigation?

**PRESENTATION**

The presentation should, preferably, be in the form of a free talk employing good oral communication skills. The time restrictions in the rules necessitate planning and rehearsal.

- a) Is the talk well organized and flowing in a logical pattern?
- b) Do the audiovisual aids enhance the audience's understanding?

- c) Is the quality of exposition of a high degree?
- d) Is the student's competency with the principles such that he can answer questions with clarity, and elaborate where necessary to make a point?

### **JUDGE'S OPINION**

This criterion is an overall subjective evaluation of the student's work considering age level, depth, complexity of the subject matter, as well as the student's success in achieving his purpose or objective.

## **Computer Science Presentations**

**PROPER PLACEMENT DECISIONS:** As in the mathematics projects this category is expository in nature of its presentations and seldom involves the controlled experiments required of science projects. Judges, sponsors and students must realize that projects that do have data accumulated in a controlled experiment where the computer's role is merely to serve as a tool to analyze the data, draw pretty graphs, and do statistical conclusions **DO NOT BELONG IN THE COMPUTER SCIENCE category**. Such projects more properly fit the judging criteria for the specific science field such as biology or physics in which the project was done and should be transferred there before being judged.

The PJAS State Judging Committee feels that a small modification of a pre-existing (canned) program is not a suitable project to present in our competition. Pre-existing programs may be used, however, if they are a small part of the student's own work. A wide disparity exists between schools in their offerings of formal computer science courses. It is the task of the judges to identify students who have gone beyond the standard opportunities provided by their schools.

### **STATEMENT OF THE PROBLEM**

- a) Is the objective of the project clearly stated?
- b) Does the problem chosen have relevance or practical application in today's world?
- c) Did the student use appropriate computer vocabulary?
- d) Did the student show depth of understanding of relevant programming concepts and principles?
- e) Does the project entail creative thinking in approach techniques?

### **METHODS**

- a) Was there unity, coherence and inherent logic in the sequence of the presentation?
- b) Does the student follow accepted procedures, using either structured programming or object-oriented programming? Is the underlying logic sound?
- c) Did the student explain the project design using a high level diagram?
- d) Did the student include an explanation of difficult, unique and/or significant section(s) of the program?

### **FULFILLMENT OF PURPOSE**

- a) Did the student show the results of his work? Was the objective obtained?
- b) Does the student have a quality product?
- c) Did the project include exceptional features and/or coding?
- d) Does the presenter know of areas for further expansion or improvement of the project?

**PRESENTATION**

The presentation should, preferably, be in the form of a free talk employing good oral communication skills. The time restrictions in the rules necessitate planning and rehearsal.

- a) Is the talk well organized and flowing in a logical pattern?
- b) Do the audiovisual aids enhance the audience's understanding?
- c) Is the student's competency with the principles such that he can answer questions with clarity, and elaborate where necessary to make a point?
- d) If the student is employing special medium, such as a VCR or computer screen, is its value to the speech significant? Was its use limited to less than 10% of the total speech?
- e) It is acceptable for a student to show key parts of code line by line. However, the presentation should not consist of a student explaining his/her program line by line. A high-level method should be used instead.

**JUDGE'S OPINION**

Evaluate the complexity and quality of the project with respect to the age and grade level of the student and the amount of previous experience with computers. Remember schools vary considerably in what computer offerings they can make available to students.

## **General Notes on the Use of Audiovisuals**

- a) No 3-D objects are permitted. Nothing may be passed to the judges.
- b) Most students prepare either overhead transparencies or posters. Both are acceptable.
- c) Judges are reminded in their briefing that schools vary considerably in the types of equipment that they have available to make transparencies. Content is more important than flashy color transparencies. Making the transparencies by hand is acceptable. The poster or transparency should not be too "busy".
- d) Students may use slides. The student is responsible for bringing the slide projector and setting it up. Students may use audio (tapes or CDs) when necessary. The student is responsible for bringing the tape/CD player and setting it up.
- e) PJAS presentations are an educational activity. For this reason, presentation visuals (transparencies, posters, slides, etc.) must be clearly visible to all in the presentation room. Any audio must be audible to all in the presentation room.
- f) Before using any specialized media, please review the pertinent section of the Short Course: PJAS Presentation and Scoring Rules, #4 – Presentation Specifics.

*This Short Course (revised 04/04) is an excerpt from Pennsylvania Junior Academy of Science Rules and Regulations for Conducting and Judging of Student Research.*

**Scoring rubrics for science, mathematics, and computer science projects are included in Appendix 18, 19, and 20, respectively.**

# PJAS STATE FORMS

## USE THE FOLLOWING FORMS WHEN REGISTERING FOR THE STATE COMPETITION

### STATE MEETING CHECKLIST

*For Your Delegation:*

- ❑ Appendix 5 Judges' Registration form (at least 1 judge from each school attending)
- ❑ Appendix 6 PJAS Male Student Housing-Transportation for State Meet
- ❑ Appendix 7 PJAS Female Student Housing-Transportation for State Meet
- ❑ Appendix 8 Adult Housing-Transportation for State Meet- Complete one for every adult attending.
- ❑ Appendix 9 Technician Housing-Transportation for State Meet-Complete one for each technician attending.
- ❑ Appendix 10 PJAS Day Packages for State Meet
- ❑ Appendix 11 Non-Participating Students at PJAS State Meet
- ❑ Appendix 13 Student Behavior agreement with signatures
- ❑ Appendix 14 Bus Registration fee

*For **EVERY** person (adult or student or technician) that is attending the State Meet:*

- ❑ Appendix 12 (p 24): PJAS Authorization for Medical Treatment
  - 3 forms with original signatures are required. DO NOT COPY the forms with signatures. ALL SIGNATURES SHOULD BE IN BLUE PEN SO THAT THEY CAN BE RECOGNIZED AS ORIGINAL SIGNATURES IMMEDIATELY.

## Appendix 5

**PJAS Judges Registration Form**

The Region \_\_\_\_\_ Meet is on (date) \_\_\_\_\_ at (location)

\_\_\_\_\_. The Judges' Orientation begins at (time)

\_\_\_\_\_ in (building) \_\_\_\_\_.

**Please type or print:**

\_\_\_\_\_  
Title First Name Last Name Sci/Math/Com profession

Business Address: \_\_\_\_\_  
\_\_\_\_\_

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

Business Phone: \_\_\_\_ (\_\_\_\_) \_\_\_\_\_ Home Phone: \_\_\_\_ (\_\_\_\_) \_\_\_\_\_

Home Address: \_\_\_\_\_  
\_\_\_\_\_

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

I prefer to Judge in the \_\_\_\_\_ Junior Division (grades 7, 8, 9)

\_\_\_\_\_ Senior Division (grades 10, 11, 12)

I \_\_\_\_\_ will \_\_\_\_\_ will not judge in another division if needed.

**Please mark your preferred judging areas as 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>.**

\_\_\_\_ Biochemistry (BC) \_\_\_\_\_ Behavioral/Psychology (BEH) \_\_\_\_\_ Biology general (BIO)

\_\_\_\_ Botany (BOT) \_\_\_\_\_ Chemistry (CHM) \_\_\_\_\_ Computer (CPS)

\_\_\_\_ Ecology (EC) \_\_\_\_\_ Earth and Space (ES) \_\_\_\_\_ Mathematics (MAT)

\_\_\_\_ Microbiology (MIC) \_\_\_\_\_ Physics (PHY) \_\_\_\_\_ Zoology (ZOO)

-----  
I \_\_\_\_\_ will \_\_\_\_\_ will not judge in another area if needed.

I am the parent/teacher/sponsor/other of a student participating from (school)  
\_\_\_\_\_ and do not wish to judge students from that school.

I am currently a college \_\_\_\_\_ undergraduate \_\_\_\_\_ graduate student.

Years I have judged \_\_\_\_\_ 1, \_\_\_\_\_ 2, \_\_\_\_\_ 3, or \_\_\_\_\_ years.

Return this form to: Curt Lyter e-mail: clyter@pc.net

## Appendix 6

**PJAS MALE STUDENT  
HOUSING – TRANSPORTATION for STATE MEET**

School \_\_\_\_\_

Please note any special needs of a student. e.g. meals, handicap, medical problems.

Number of years in PJAS includes this year.

Circle the "T" if a student Technician is staying with a Presenter.

| Male Students staying together | bus (circle) | Technician (circle) | # of years in PJAS |
|--------------------------------|--------------|---------------------|--------------------|
| 1. _____                       | yes no       | T                   | _____ years        |
| 2. _____                       | yes no       | T                   | _____ years        |
| -----                          |              |                     |                    |
| 1. _____                       | yes no       | T                   | _____ years        |
| 2. _____                       | yes no       | T                   | _____ years        |
| -----                          |              |                     |                    |
| 1. _____                       | yes no       | T                   | _____ years        |
| 2. _____                       | yes no       | T                   | _____ years        |
| -----                          |              |                     |                    |
| 1. _____                       | yes no       | T                   | _____ years        |
| 2. _____                       | yes no       | T                   | _____ years        |
| -----                          |              |                     |                    |
| 1. _____                       | yes no       | T                   | _____ years        |
| 2. _____                       | yes no       | T                   | _____ years        |



## Appendix 8

**ADULT****HOUSING – TRANSPORTATION for STATE MEET**

First Name: \_\_\_\_\_

Last Name: \_\_\_\_\_

Sex: M F

Home Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_, PA \_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_\_

School: \_\_\_\_\_

**Check one**

\_\_\_\_ Chaperon only – Can not judge      \_\_\_\_ Judge (staying on campus)

\_\_\_\_ Day Judge (not staying on campus)      \_\_\_\_ State Committee

\_\_\_\_ Regional Officer      \_\_\_\_ State Officer      \_\_\_\_ PAS Officer

**Judging Area:** Write “1” by first choice, “2” by second choice, etc.

\_\_\_\_ Biochemistry (BC)      \_\_\_\_ Behavioral (BEH)      \_\_\_\_ Biology (BIO)

\_\_\_\_ Botany (BOT)      \_\_\_\_ Chemistry (CHM)      \_\_\_\_ Computer (CPS)

\_\_\_\_ Ecology (EC)      \_\_\_\_ Earth and Space (ES)      \_\_\_\_ Math (MAT)

\_\_\_\_ Microbiology (MIC)      \_\_\_\_ Physics (PHY)      \_\_\_\_ Zoology (ZOO)

Staying on Campus: \_\_\_\_ (yes)      \_\_\_\_ (no)

Going on bus: \_\_\_\_ (yes)      \_\_\_\_ (no)

Person to room with: \_\_\_\_\_

Please note any special needs: (meals, handicap, etc.) \_\_\_\_\_



## Appendix 9

**TECHNICIAN****HOUSING – TRANSPORTATION for STATE MEET****First Name:** \_\_\_\_\_**Last Name:** \_\_\_\_\_**Sex:** M F**Home Address:** \_\_\_\_\_**City, State, Zip:** \_\_\_\_\_, PA \_\_\_\_\_**Phone:** (\_\_\_\_) \_\_\_\_\_**School:** \_\_\_\_\_**Sponsor:** \_\_\_\_\_

Going on bus: \_\_\_\_\_ (yes) \_\_\_\_\_ (no)

State technicians are required to stay on campus.

Student presenter or technician you are to room with: \_\_\_\_\_

Please note any special needs: (meals, handicap, etc.) \_\_\_\_\_

Appendix 10

**PJAS STUDENT DAY PACKAGES for STATE MEET**

**School:** \_\_\_\_\_

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

Please list all of the students who will be going to Penn State for the PJAS State Meeting that will not be staying on campus and who will not be riding the bus.

| <b>Student Name</b> | <b>Number of years in PJAS</b> |
|---------------------|--------------------------------|
| 1. _____            | _____ years                    |
| 2. _____            | _____ years                    |
| 3. _____            | _____ years                    |
| 4. _____            | _____ years                    |
| 5. _____            | _____ years                    |
| 6. _____            | _____ years                    |
| 7. _____            | _____ years                    |
| 8. _____            | _____ years                    |
| 9. _____            | _____ years                    |
| 10. _____           | _____ years                    |
| 11. _____           | _____ years                    |
| 12. _____           | _____ years                    |

## Appendix 11

**NON-PARTICIPATING STUDENTS at PJAS STATE MEET**

**School:** \_\_\_\_\_

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

**Please list all of the students who will NOT be going to Penn State for the PJAS State Meeting.**

**If your entire school is NOT participating we need to know that also.**

PJAS must pay for every student registered for the State Meeting whether that person attends or not. Thus, your school must pay for all registered students even if they do not go to Penn State. Listing non-participating students allows us to remove the student from the computer data base and helps to keep costs down.

**Save us a Call:** If the student is not listed as going to the meeting we must call you to make sure the student was not accidentally overlooked.

**Student Name**

---

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_

## Appendix 12

|                    |                                  |
|--------------------|----------------------------------|
| Region             | School                           |
| Region Director(s) | Chaperon or Sponsor at PJAS Meet |



Pennsylvania Junior Academy of Science  
Authorization for Medical Treatment  
Please type or print information.

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Name of student                   | Date of Birth                     |
| Name of Parent or Legal Guardian  | Day Phone (        )              |
| Address                           | Evening Phone (        )          |
| Health Coverage Plan              | City, State, Zip                  |
| Family Physician and Phone Number | I.D. or Contract Number           |
|                                   | Family Physician and Phone Number |

| Medication or its Generic Equivalent May Be Given: | Yes | No |
|--|-----|----|
| Aspirin  |     |    |
| Nuprin   |     |    |
| Advil  |     |    |
| Tylenol  |     |    |
| Kaopectate   |     |    |
| Pepto Bismal                                       |     |    |

| Special Medical Condition | Yes/No | Additional Information (Use back if needed) |
|---------------------------|--------|---|
| Diabetes                  |        |   |
| Asthma                    |        |   |
| Allergies                 |        |   |
| Allergic Reactions        |        |   |
| Prescription Medications  |        |   |
| Other (Please Indicate)   |        |   |

Except in a true emergency, medical, dental or hospital services may be rendered to a child only with the consent of the parent or legal guardian. It is important to prepare this form carefully, especially if it may be difficult to reach you. Please make sure the person named above as sponsor or chaperon is the person who will be attending the PJAS Meet. If your child needs unexpected medical treatment, the responsible adult will present this document to the appropriate person - nurse, physician, dentist or hospital representative. **Please prepare three originals of this form with signatures.**

I/We being the parent(s) or legal guardians of the above named student do hereby appoint the region director(s) and sponsor or chaperon named above to act in my/our behalf in authorizing unexpected medical, dental, surgical care and hospitalization for the above named student for the period.

from \_\_\_\_\_ to \_\_\_\_\_.

\_\_\_\_\_  
Parent/Guardian Signature                      Date

\_\_\_\_\_  
Parent/Guardian Signature                      Date

\_\_\_\_\_  
Address

\_\_\_\_\_  
Address

\_\_\_\_\_  
Person to be contacted if parents can't be reached

\_\_\_\_\_  
Phone

*Copy and distribute to all adults and students attending the State Meeting.*

## **Pennsylvania Junior Academy of Science Student Behavior Code**

Students, Parents, Sponsors, and School Districts are reminded that the behavior code of the student's home school district is in effect during the student's participation in both Region and State PJAS activities. It is expected that sponsors and school districts will discipline the student according to that district's policy if the student violates the behavior code while at the PJAS activity.

**Students will be sent home immediately from the PJAS state meeting at Penn State University for the following behaviors:**

1. Refusing to follow PJAS State Meeting rules.
2. Acts of vandalism
3. Fighting
4. Theft
5. Possession of weapons, drugs, explosives, tobacco, or alcohol
6. Males in female dorms
7. Females in male dorms
8. Participation in any intimate activity.
9. Involvement in any behavior that threatens the health and safety of the participant or other participants.
10. Involvement in any activity that results in police intervention.
11. Any activity that the sponsor and/or chaperone finds to be a violation of the school district's behavior code.

**The student's future participation in PJAS Region and State meetings will be affected by their behavior. Continued participation will be determined by the student's region, sponsor, and school and may include the following:**

1. A student sent home automatically forfeits any award or scholarship for which he/she may have been eligible.
2. The student may be required to bring a parent as a chaperon while staying on campus.
3. The student may be required to stay off campus with a parent as a chaperon.
4. The student may not be permitted to participate in the PJAS State meeting for one or more years.
5. The student may not be permitted to participate in both PJAS region and state meetings for one or more years.
6. The student may not be permitted to participate in any PJAS activities the remainder of their middle school and high school careers.

---

(Student signature)

---

(Parent Signature)

# BUS REGISTRATION FORM

May 20, 2007 departure from Bishop McDevitt High School at 1:00 pm  
May 22, 2007 arrival at Bishop McDevitt High School at 11:00 am  
Cost TBD

1 suitcase limit. Check Sponsor Handbook for what to bring and what NOT to bring. Make sure your students are aware.

I would like to reserve \_\_\_\_\_ seats on the bus. Please list the names of the people that will be riding the bus below.

When notified, send payment to Phil Schmelzle, 33 Country Club West, Camp Hill, PA 17011

\_\_\_\_\_ (initial) Our students will find alternative transportation with the understanding that the driver is responsible for all parking fees. (at parking lot hourly/daily fee)

Send form to Ellen Chapman, 5620 Fordham Ave., Hbg., PA 17111  
Or e-mail ([Echapman12@aol.com](mailto:Echapman12@aol.com)) or fax it to 717-561-9914

Bus Riders: (write in below or attach a list)

## Appendix 15

### What to Bring and Not to Bring to the State Meeting

*Copy and distribute to all adults and students attending the State Meeting.*

#### What to Bring

- Your Project - all of your presentation materials (note cards, transparencies, posters, and pen or pencil)
- Dress will be casual for all events, except that you will need dress clothes for your presentation. You will be walking long distances so wear comfortable shoes and be prepared for the weather. You may wish to bring a swimsuit.
- You will need towels (at least 2), pillow, blanket, soap, shampoo, deodorant, other toiletries, hair dryer, flip-flops for the shower. An alarm clock would be a good idea.
- **Bedding: Sheets are provided. Pillows and blankets are NOT provided.**
- Money for lunch on the way to and from Penn State, if a stop is planned.
- Any medication that is needed for medical problems such as allergies, asthma, diabetes, etc.

#### *Optional Items*

- Money for PJAS T-shirts and sweatshirts, Penn State items, video games, between meal snacks. Small bills and quarters are preferable to larger bills.
- Athletic equipment (basketball, volleyball and/or tennis racquet)
- Snacks. Rooms are equipped with a small refrigerator and microwave.

#### What NOT to Bring

- Boom Boxes, Radios
- Laser Pointers
- Roller Blades, Skates, or Skateboards
- Water Guns or Super Soakers
- Alcohol and/or illegal drugs
- Candles or incense
- Any item that may cause injury to you or others.
- **Penn State Security reserves the right to confiscate any items that may cause injury or be hazardous to you or others.**

## Appendix 16

## General Directions for the State Meeting

***Copy and distribute to all adults and students attending the State Meeting.***

### PJAS State Meeting – Penn State University, May 20 – 22, 2007

Participants from all regions are expected to follow the rules.

***Registration for Everyone Staying on Campus:*** Bryce Jordan Center, Sunday, May 20th, 3:00 p.m. to 5:00 p.m.

***Registration for day packages not Staying on Campus:*** Your registration will be at a separate time and place. Contact your Region Director for the location and time.

***Housing:*** Students and adults will be housed in the East Halls complex and/or other dorm complex with two persons per room.

***Parking:*** The designated parking lot for PJAS cars and vans changes each year due to Penn State construction and other needs. Follow the PJAS signs and the Penn State Police will be there to direct you. Vans and cars **will need parking tags**, which are available at the registration area from the State Director.

***Sponsors and chaperones: Please realize that your job is a huge responsibility.***

- Arrange regular check-ins with your students. Set up a meeting place and time and require all students to report to you at that time. It is suggested that you eat with your students.
- Check rooms on arrival and departure for any conditions that need attention. Students will be charged for room damage.
- Make a bed check each night at curfew time. Assure that the students stay in their assigned rooms.
- Inform students of YOUR room number and the name of their Regional Director.
- You should have the name, address, and phone number of parents of all your students. It is best if you carry this information with you.

### ***Room Keys:***

- Sponsors are to pass out room keys and meal cards to each student.
- On Tuesday morning sponsors are to collect and check off the student name and key number. The list and the keys are to be turned in directly to your Region Director.
- **The charge for lost or missing keys is \$36.00.** The region/student/school will be assessed this fee.

### ***INSIST ON PROPER BEHAVIOR.***

- No running, no throwing, no horseplay are permitted at any time.
- Female students are not allowed in male dorms; male students are not allowed in female dorms.
- **Students must wear their nametags at all times.** Nametags must be on the lanyard, worn around the neck with name clearly visible from the front.
- Nametags must not be worn on pant legs and belts.
- All students must observe all curfews and must be quiet after lights out.

All sponsors and chaperons should feel free to correct any student who is acting improperly. Determine which region the student is from and report the student to your region director who can then report to the student's region director.

The answers to most questions can be found in the state booklet. If you have additional questions, there is an **information desk** in the Findlay/Johnston Commons.

A little preparation work with your students will prevent many problems. Have each student check the booklet to find the project-judging unit to which he/she has been assigned. Make sure that each student knows the time and location for the unit. Campus maps are provided. If there is a problem, see your regional director.



## **Duties of Presenters, Sponsors, Chaperons, and Technicians at the State Meeting**

***Copy and distribute to all adults and students attending the State Meeting.***

**There are *mandatory meetings* for presenters, sponsors, chaperons and technicians on Sunday evening. Please read your PJAS program booklet for the time and location. Please be on time.**

### **Presenters**

Presenters are expected to study the **schedule** listed in the front of the state booklet. Attendance is **mandatory** at all meetings, sessions and ceremonies. It is your responsibility to be present and on time.

Check the state booklet immediately for your **presentation unit**. Make sure that you know the time and location of your judging unit. Campus maps are provided. Shuttle buses are available.

If there is a **problem** (i.e., not in program booklet, wrong category), tell your sponsor at once. You and your sponsor should report to one of the unit change sessions listed in the booklet.

There are a number of **special awards** (listed in the state booklet). If you receive a first place award, you must attend the Special Awards Ceremony Monday evening. If your name is called and you aren't at the ceremony, you forfeit the award. *There are no excuses for missing the Special Awards ceremony.*

Juniors and seniors may interview for **scholarship and trip awards**. See the state booklet for more information on interview location and time. **These students should bring their high school transcript and a letter of recommendation to the state meeting to use at the interview.**

### **Technicians**

Technicians will need a watch to use for timing and a pen or pencil.

There is a mandatory **technician meeting** Sunday evening. Check the state booklet for time and place. It is imperative that all technicians attend.

### **Sponsors and Chaperons**

A sponsor or a designated **school representative must attend the state meeting** with the students and be available at all times to supervise your students.

Sponsors are to pick up their **judging packets** on the second floor of Findlay/Johnston Commons. All sponsors will be assigned to judge.

All chaperons will be **assigned to supervise** in areas such as the natatorium, gymnasium, auditorium and dance. Chaperoning packets will be already in your registration packet. All chaperons must report to their assigned area. Please be on time.

### **Advanced Placement Examinations**

College Board Advanced Placement Examinations are given on the Penn State campus through State College High School. Contact the guidance counselor at State College High School for the location of the exam and how to request that the exam be sent to State College HS. **You need to make the contact in March or early April.** The phone number for State College HS is (814) 231-1111 or (814) 231-5020. There are two State College High School buildings. Their web address is: <http://www.scasd.k12.pa.us>. ***PJAS does not make arrangements for the AP exams. PJAS will provide van transportation to the testing site and move your presentation time if necessary for you to take the exam.***

## Appendix 18

**Expectations of a Technician at the State Meeting**

***Copy and distribute to every student attending the state meeting as a technician.***

1. All students serving as technicians will report to the **mandatory** Technicians' Meeting on Sunday night to pick up their assignment. The time and location will be in the Program Booklet.
2. All students will go to the Technicians' room Monday at their assigned time.
3. All technicians will bring a watch, a pen or pencil, and be dressed neatly.
4. Any changes in your assignment will be announced at the Monday meeting.
5. Write down the telephone number for the information desk. This is where you will call in case there is a problem.
6. You will note the various times on the technician's score sheet. Mark the beginning time, the time at five minutes to go, at two minutes to go and when they stop. If you have a speech of say 6 minutes, leave the two minutes to go column empty and fill in the ending time in the conclude and stop column.
7. If the student exceeds their time limit or the judges exceed their time limit, please place a \* in front of the participant's number.
8. Sign your sheet and have the judges sign the bottom of the sheet also.
9. Return the timing sheet AND any other equipment that was given to you to the Technicians' room at the end of the session.
10. Be sure to find your room on Sunday night so that you won't be late on Monday. You must be in your room at least 10 MINUTES BEFORE the start of the session.
11. Students listed as day-only packages may not serve as technicians at the state meeting.
12. If you fail to do your assigned duties as a Technician at the State Meeting you will not be permitted to attend next year's State Meeting even if you receive a First Award at the Region Meeting.