

BACKGROUND

The Monell Chemical Senses Center, established in 1968, is an independent, non-profit scientific institute devoted exclusively to research on the mechanisms and functions of taste, smell and chemical irritation. Since its inception, the Monell Center has made a strong commitment to the education and training of local high school students.

In 1981, the Center began participating in the National Institutes of Health Minority High School Student Research Apprenticeship Program. Although this program started modestly with the training of three high school students, it has grown, as has the Center. More than twenty-nine high school and college students apprenticed at the Center in 2000. This program is currently supported by Mrs. Patricia Kind, The Minute Maid Company, the Annenberg Foundation, the John S. Mennella Fund, and Monell Institutional Funds.

MISSION

The mission of the program is to:

- ★ Increase scientific knowledge and provide “hands-on” research training for high school and undergraduate students
- ★ Facilitate communication skills
- ★ Encourage local students to pursue studies in science and medicine

CURRENT PROGRAM

To accomplish these goals, our current program consists of:

- ★ Full-time structured research activity during the summer with a Monell scientist. Because Monell scientists devote 100% of their time to research, this experience is intense and at the forefront of scientific research in the chemical senses.
- ★ A lecture series on various scientific topics including the mechanisms and functions of the chemical senses.
- ★ Training events that cover laboratory safety, and the handling of both animals and chemicals.
- ★ Enrichment activities that include public speaking and written communication; and ethical principles guiding human and animal research.
- ★ Occasional field trips to medical facilities and corporate research facilities.
- ★ Post-program contact for students to discuss current research findings and career opportunities in science.
- ★ Additional research experience and sponsoring of science fair projects for many of the students.

ACCOMPLISHMENTS

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More than 98% of the students who participated in our program since 1990 have enrolled in college. Over eighty percent of these students majored in a science during their freshman year in colleges including the University of Pennsylvania, Yale University, Bryn Mawr College and Wesleyan University.

Several apprentices gained the highest level of recognition for their research projects by winning first prize in both local and national science fairs, and some co-authored a manuscript or abstract with their scientific mentors.

FUTURE GROWTH

Monell scientists are enthusiastic mentors, and strong relationships with students are maintained throughout the years. Several students continue to apprentice throughout the school year and during college summer vacations, which allows the students to continue their involvement with research projects in which they played such important role. In addition to the potential for these highly motivated college students to expand their interests and capabilities, they make a significant contribution to Monell’s research progress and also serve as strong role models for future high school students.

IN THEIR OWN WORDS...

“Monell has been one of the positive experiences that I will never forget. It showed me many new aspects of science and ways of relating to people. There have been numerous people here who have touched my life.” (Brian)

“The past eight weeks have been filled immensely with joy, pride and a sense of belonging. My summer experience...hopefully is only the beginning of a long bond that I will form with this institution...If I had to summarize my summer into one word, it would be incredible.” (Minthe)

“The experience I’ve had has helped me understand the scientific method better. It also helped me realize how significant a role research plays in the world...My goal in life is to pursue a science career and with the knowledge this Center has given me, I will be able to be well on my way.” (Kamile)

“I learned that answers do not come overnight, but through patience and a series of steps they do eventually come. I have achieved a firm foundation in scientific procedure and protocol, and also in chemical processes. I have a far greater understanding of science than I had thought.” (Rena)

“I filled my summer with knowledge and insights into scientific research while being paid at the same time. Truly, it was an absorbing experience that will put me a step ahead in my studies and my future.” (Sydrick)

“During this summer at Monell, I gained better experimental skills, learned the importance of consistency in an experiment, and had the opportunity to collaborate with others in a laboratory setting. I discovered that I can accomplish anything if I set my mind to it.” (Mayla)

FACILITIES

The Center occupies its own five-story building with laboratories, a library, conference and lecture rooms, a human testing facility and facilities for maintaining a variety of species.

With a location on the perimeter of the University of Pennsylvania and Drexel University campuses, and within the University City Science Center area, Monell benefits from a rich scientific and intellectual environment.

HOW TO APPLY

Applications can be obtained from our website: www.monell.org/studentprogram.

Each student application must be submitted by April 15, along with a letter of recommendation from a science teacher or counselor.

Inquiries should be addressed to:

Program Coordinator
Monell Chemical Senses Center
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Philadelphia, PA 19104-3308
E-mail: studentprogram@monell.org



**Monell
Research
Apprenticeship
Program**