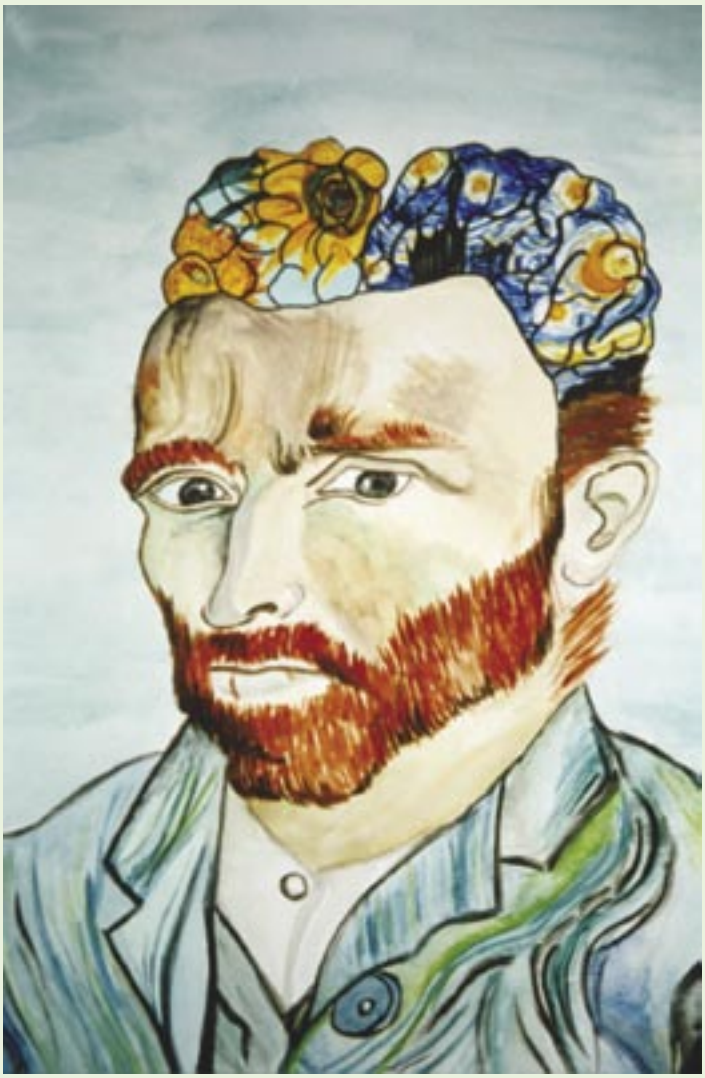
# Brain Art Meets Brain Science

Norbert Myslinski

As a neuroscientist and educator, I believe it is important to devise innovative ways to help students catch the excitement of science, particularly brain science. When they learn about the significance of the brain and how it operates in health and sickness, they are more likely to make healthy choices in life.

One successful method I have used for high school students takes the form of an annual competition that gives them the opportunity to produce works of art about the brain. This approach makes the learning process fun, easy, and rewarding. The winning entries have been exhibited at libraries and national conferences and some have appeared in the print media. In this manner, as brain science meets brain art, they promote each other among students and the public at large.



Van Gogh's Brain. *A painting by Alexandra Person of Mount de Sales Academy in Catonsville, Maryland.*

## How It Works

I introduced the High School Brain Art Competition in 1999, as one of the featured activities for students involved in Maryland Brain Awareness Week. It should be noted that Brain Awareness Week, held in March of each year, is a nationwide project founded by the Dana Alliance for Brain Initiatives, to raise public understanding of how the brain works. In my general guidelines for the participants, I give them the latitude to portray anyone's brain, in any context, using any method of drawing or painting—including pencil, crayon, and brush. The work may be anatomically accurate or abstract. In 2003, I expanded the competition to include the categories of computer-generated brain art and brain sculpture.

The students may, for instance, create an impression of a famous person's brain or their own; the brain of someone asleep or composing a symphonic masterpiece; the brain of a person on drugs or contemplating the future. Each student may submit any number of entries, giving a title for each piece of art.

For the panel of judges, I normally select artists, scientists, and other faculty and staff from the University of Maryland in Baltimore (UMB). The winners are honored with cash prizes and certificates of recognition, presented at public awards ceremonies. On occasion, the winners have been feted at gala celebrations of organizations such as the Foundation for Biomedical Research. Furthermore, the best fifteen pieces of art are displayed at UMB's Health Sciences and Human Services Library.

## Results

This competition has turned out to be an effective means of encouraging students, especially nonscience majors, to study the human brain. While shaping their ideas of the brain, they happily learn some basics about its form and functions. Teachers from participating schools have indicated that the competition has generated much enthusiasm among their students.

Moreover, exhibition of the artwork helps raise public interest in finding out more about how the brain works. In addition, the competition fosters interactions between students, teachers, and neuroscientists, and creates partnerships between educational institutions and other sponsoring groups. Besides UMB, major sponsors of the competitions have included the Maryland Higher Education Commission, the Society for Neuroscience, Thadikonda Foundation, and Dr. Eric Braverman of PATH Medical.


A Brain Divided. *A painting by Sarah Tringali of Mount de Sales Academy in Catonsville, Maryland. It portrays how the functions of the left and right sides of the brain are divided for analytical and creative activities, respectively.*

Each year, we have received between 70 and 100 entries. They have included renditions of the brains of such well-known figures as Beethoven, Shakespeare, van Gogh, Walt Disney, and Dr. Seuss. One winning entry, titled "My Mind: On Your Mind," was an anatomically accurate image of a brain consisting of a painting and collage of numerous clipped words in varying fonts and colors. Another entry depicted the brain of an eight-year-old girl after the tragedy of September 11, 2001. Computer-generated entries have included works titled *Brain of a Student Athlete* and *Brain Maze*.

Among the sculptures submitted, one depicted a person's head almost entirely enclosed in a box, but the brain was placed outside. It was titled *Thinking Outside the Box*. Another, labeled *Split Brain*, showed how the left side of the brain is used in processing language and logical thinking, while the right side deals with creative output. A third, called *Brain Storm*, had a brain within a globe that, when shaken, produced the effect of a blizzard coming down on the brain.

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This competition has been successfully duplicated in the states of New York and Georgia, and plans are underway to disseminate it to other states. If you are involved in the education of high school students, I encourage you to start such a program in your area as well. I would be happy to extend my support and supply additional details.

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**NATIONAL STANDARD**

*Students make connections between visual arts and other disciplines.*

**WEB LINKS**

*apu.sfn.org/content/Publications/BrainFacts/index.html*

*neuroscience.umaryland.edu/braain_week.htm*