Brain Awareness Week programs hosted by the Binghamton University Neuroscience Club

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Abstract

Each year, the Society for Neuroscience sponsors an outreach program known as Brain Awareness Week (BAW). This year, the students of the Binghamton University Neuroscience Club participated in this week-long event with various onand off-campus programs. Among them included a novel BAW fencing tournament that attracted over 50 people from local and regional fencing clubs. Participants and observers from non-science backgrounds asked members questions about the nervous system. The Club also printed and distributed their own newsletter. Titled Brain Waves, students and faculty contributed short research-based articles that highlighted on- and off-campus research in an interesting and non-technical fashion. Previous topics included drug-addiction, learning and memory, genetic engineering, among others. With respect to BAW, during the tournament, t-shirts were sold, displaying fencing neurons and the slogan "get the point across". In addition to the tournament, the Club held other informational tabling sessions on campus in the student union, and more importantly, visited local public and private elementary schools. On two separate occasions, third- through fifth-graders were taught about the central nervous system, particularly the structure and function of the brain through entertaining activities. The children enjoyed hands on activities, such as play-doh neurons, cerebrospinal fluid science experiments, and brain origami. The mission of BAW is to raise awareness of the human nervous system and to get people to actively think about the brain. The Binghamton University Neuroscience Club accomplished this with novel programs designed for broad nonscientific audiences.

About Us

The Binghamton University Neuroscience Club is a student organization chartered by the University's Student Association.





- > Purpose—We prepare students for future careers in science, medicine, research, and other allied health professions.
- *Responsibilities*—Executive Board offer members academic advising and peer counseling on coursework and available research internships.
- Past accomplishments:
 - Faculty Workshops—Professors regularly give short discussions about their research.
 - > Loneliest Road Campaign—In 2007, we raised funds for pediatric patients with Stage IV Neuroblastoma.
 - > Community Service—We volunteer regularly at the local Salvation Army Soup Kitchen.
 - Brain Awareness Week (BAW)—Last year, the Club hosted several on- and off-campus programs.
 - Brain Waves—The club publishes a newsletter every month about neuroscience.
- Long term goals:
 - > Expand the <u>Brain Waves</u> readership and contribution pool
 - > Develop lasting relationships with SfN and add new programs to next year's BAW at Binghamton.

To follow the Club's activities, visit our website: http://www.binghamtonsa.org/Neuro

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2009 Brain Awareness Week Programs



"Get the point across!"

Binghamton University Fencing Tournament

- To kick-off Brain Awareness Week, the Club co-hosted the first ever Brain Awareness Fencing Tournament with the university's fencing club.
- > Over 50 people participated in or observed the tournament. Active club members answered questions about the nervous system and distributed SfN's
- literature and pamphlets.
- function.
- The Club sold personalized neuron t-shirts to instill lasting awareness that would outlive the weeklong programs.
- \succ The first volume of <u>Brain Waves</u> (issues 1 3) was printed and distributed for the first time!



Students' Union Tabling and Faculty Discussions

- > The Club invited two faculty members from the psychology and biological sciences departments.
- > They discussed their research on gustation, from two different perspectives, behavioral and physiological.
- Students from the humanities attended, and this is significant, because students from these disciplines are not exposed to neuroscience in their courses.
- A taste demonstration using Jelly Beans was exhibited. Members of the Club also setup an informational booth in the Student's Union
- during BAW.
- During the tabling session, members answered questions about the brain and they demonstrated the Jelly Bean taste experiment with other students.



Public School and Community Outreaches

- Members of the Club went to two schools during BAW: St. John's Elementary School and Thomas Jefferson Elementary School (both Binghamton, NY). Volunteers talked about the human nervous system with third through fifth graders. A poster board was made that simplified the discussion, highlighting the relationship between brain function and structure.

- With the teachers' assistance, hands-on demonstrations were also performed: Students explored the retina's blind spot —As their gaze moved laterally, they watched a mark on paper *disappear*.
 - Play-doh Neurons Students constructed networks of neurons made of play-doh, and the volunteers briefly discussed the network's function and structure.
 - **Brain Origami**—Sheets of paper where printed with the names of brain structures and matching functions. Students were shown how to fold these, making a fun game also a learning experience.

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- > Throughout the tournament, an informational booth hosted a poster about the brain and it's



Active members distributed SfN literature and Brain Waves.

Brain Waves

Brain Waves is a student-run newsletter that is published monthly by the Club's executive board. Monthly publications are electronic, but after each academic semester, the past three issues are then re-printed and distributed in physical form:

- Students and faculty contribute short research-based articles.
- Articles highlight on- and off-campus research in an nontechnical, yet interesting fashion.
- Each monthly issue focuses on a particular topic from a psychobiologists' perspective.
- > As neuroscience is an interdisciplinary field, faculty and student contributors come fromvarious fields: Psychobiology, biological sciences, chemistry, and psychology, among others.
- ✓ **Broadly**, the newsletter is designed to introduce interesting, brain-related topics to the university's student body.
- ✓ <u>Ultimately</u>, it is designed to facilitate psychobiology students into undertaking research of their own.

Previous topics included:

- Communication and language
- Drug abuse and addiction
- Obesity and gustation
- Learning and memory
- Psychotherapeutics
- > Genetics
- Brain disorders and awareness.

Future topics include:

- Study-enhancing drugs, like caffeine
- Social relationships and cooperation
- Rare neurological diseases and novel treatments

Full text and more information are available online, at the Club's homepage (see About Us)

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BRAIN WAVES