

# 2003 UAB MATH TALENT SEARCH REPORT

Dear Colleagues,

The first annual UAB MTS (Math Talent Search) Contest took place on campus on Saturday, March 8, 2003.

Students began arriving at the 15th Classroom Building at 8 a.m. There were 157 students from grades 10 and 11 from 20 high schools participating. With coaches and chaperones, we had a crowd of 200 people.

At 8:30 a.m. students began the two-hour test, and their teachers and chaperones enjoyed the hospitality room. At 9:15 a.m. the teachers were invited to a session where Dr. Blokh, director of UAB MTS, explained the solutions to the test problems. Dr. Blokh's presentation was well received by an audience of interested and enthusiastic math teachers.

At 10:30, when the test was over, students and teachers were treated to pizza, juice and cookies. The UAB math faculty began the challenging task of grading and judging the answers of the 157 students. The faculty graders did an excellent job of determining winners. By noon the outcome of the contest was decided.

During the grading of the tests, students gathered in the Chemistry Building for a motivating presentation, "Numbers, Chaos and Natural World," by Dr. Robert Kauffman. Bob discussed power shortages and how the power is lost as we try to transmit it through wires, pollution and drilling wells to sample water underneath, the vulnerability of internet, identity theft, quadratic formula, Fermat's Last Theorem, Wiles, Sarnak, winning \$100,000 prizes, and how all that is related to what UAB Math Department faculty members are doing. He talked about dropping leaves in rapids, donuts covered with irrational unstable manifolds and colliding molecules -more topics which faculty members are researching. ( Let us point out that despite the title of the lecture at no time has he become chaotic! ) This was an enlightening and entertaining experience for the students and faculty members present.

The Awards Ceremony began at 12:20 with prizes presented by Dr. Blokh as Dr. John Mayer read the list of winners. Schools participating in the contest received recognition prizes of books with mathematical puzzles and problems for their school libraries.

The following individual prizes for top scores were awarded:

10th grade Individual Winners

1st place: Ivy Wu (Vestavia, perfect score of 285 points)

2nd place: Jim Watson (Vestavia)

3rd place: Fan Young (ASFA)

4th place: Chris Louis (Vestavia, 205)

School Winners in the 10th grade

1st place - Vestavia

2nd place - Homewood

3rd place - ASFA

11th grade Individual Winners

1st place: Kyle Fritz (Hoover, perfect score)

2nd place: shared by Misha Kotov (Vestavia, perfect score) and Jordan Myers (Hoover, perfect score)

4th place: Yang Su (Hoover).

School Winners in the 11th grade

1st place - Hoover

2nd place - Vestavia

3rd place - shared by Cold Springs and Homewood

Schools trophies were awarded based on the composite score of 3 highest individuals.

Following the Awards Ceremony, the students were guests at the Blazers'-Memphis basketball game at Bartow Arena. All in all, it was a full day of activities for student visitors and the UAB Math Department.

Our thanks to the sponsors of this event: Dean J. McClintock (who supported our efforts in all respects from the very beginning), Coach W. Brown (who provided tickets for the basketball game) and to our chairman Dr R. Weikard who encouraged us and helped us all along in our efforts to run the contest.

Our thanks also to the following students and members of our Department who helped the first MTS Contest succeed:

- M. Wyatt
- J. Wilson
- C. Wilson
- R. Weikard
- N. Wang
- C. Wailes
- G. Stolz
- N. Simanyi
- G. Russell
- L. Oversteegen
- N. Mavinga
- J. Mayer
- J. Lian
- M. Kulkarni
- E. Kravchuk
- C. Kilpatrick
- R. Kauffman
- J.-P. Kapuya
- Y. Karpeshina

- S. de Jong
- W. Johnson
- J. Hutchison
- D. Childers
- C. Curry
- C. Boudreaux
- A. Blokh

Until UAB MTS 2004,

Best wishes,

Carolyn Wailes, Coordinator

Alexander Blokh, Outreach Director