

CALL TO COUNCIL

MHS aide Jim Fox appointed to Mason city council

Sheila Raghavendran | Editor-in-Chief

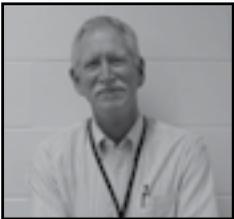


Photo by Sheila Raghavendran
MHS aide Jim Fox.

Working in public service for 37 years, Mason High School aide Jim Fox knows what it's like being at the forefront of running the city of Mason. And this year, he is reprising his role as councilman, filling Tom Grossmann's

spot, who was recently elected Warren County commissioner. Fox was sworn in on February 9 and will serve until the end of the term on December 1.

Fox said he is honored to be serving on city council during this monumental time for Mason.

"I enjoy being involved with something that is so personally important and meaningful to me," Fox said. "This time around is only 10 months, but it is during an exciting time--Mason's bicentennial year."

Mayor David Nichols said in an interview with The Cincinnati Enquirer that based on Fox's experience, his appointment was a very strategic move that will benefit the city.

"With over three and a half decades of public service, Jim (Fox) was both a great choice and an opportunity for Mason to continue to capitalize on our history and depth of experience on city council," Nichols said.

Fox said he is looking forward to using his past experience to help Mason maintain its high standards and solve problems.

"The city delivers top quality benefits and services and attracts top-notch homebuilders, businesses, and industry," Fox said. "...I hope that my experience dealing with such issues helps the city in the upcoming months."

DOCTOR'S DISCOVERY

Sauer's math research published in professional journal



Photo by Madison Krell

Dr. Johnothon Sauer made his findings on zero divisor graphs by using the Harkness Method, which is also used in his honors pre-calculus classes.

Arnav Damodhar | Staff Writer

Like Pythagoras and Euclid, Dr. Johnothon Sauer too has left his footprints in mathematics.

Honors pre-calculus and algebra teacher Dr. Sauer has evolved the field of abstract algebra, an advanced level of algebra that focuses on the format of system using letters instead of numbers. Sauer's research was part of his dissertation which was completed in 2009 and his findings on zero divisor graphs have been published this year in Semigroup Forum, a prestigious math journal.

Zero divisor graphs are coordinates of a system, which has two numbers that multiply to equal zero, but neither of the numbers can be zero, Sauer said. Through his research he has found six vertices of zero divisor graphs—a feat that hasn't been done before.

"There are certain system(s) where if you had two numbers and you multiply them together and they equal zero, it's not necessarily true that either one of those numbers were zero to begin with," Sauer said. "These systems exist. The graph that we make shows the numbers that are multiplied together to equal zero. Those that multiply to equal zero are known as zero divisors."

According to Sauer, the field of zero divisor graphs is very new. There are still a lot of questions to answer, Sauer said.

"When we started on the research, the first major paper dealing with the algebraic graph theory and zero divisor graphs came out in 1999," Sauer said. "There were a whole bunch of open questions about zero divisor graphs with relation to abstract algebra and the graph theory."

Though this discovery only contributes to the theoretical side of the field, it is still uncer-

tain if there is a practical application, Sauer said.

"It was nice, neat, pure, theoretical mathematics," Sauer said. "People are moving forward to see how much more they can find out about the zero divisor graphs, but as far as an application or anything like that, it hasn't been found yet."

The Harkness Method, a conventional way of teaching in which the teacher guides the students by asking them questions, has helped him find the answers to his questions, Sauer said. Teachers would act as facilitators and help students learn the material in a more hands-off approach.

According to junior honors pre-calculus student Emma Hodge, the Harkness Method leads to self-realization and allows her to better understand and remember fundamental principles and concepts.

"Most of the time, the class is self taught and we are challenging ourselves to solve the problem before he kind of steps in and saves the day," Hodge said. "He is there when you need him to lecture you about something. I know that if I have a question about anything, he will just go to the board and explain it until it is perfectly clear in my mind."

