



SIGMA XI NEWSLETTER

Iowa State University
March 2013

INITIATION BANQUET Thursday, May 2, 2013 Scheman Continuing Education Building

5:30PM: Social Hour
6:30PM: Dinner
7:15PM: Initiation and Awards
8:00PM: Retiring President's Address

Mycoplasmas: Great things come in small packages

Professor F. Chris Minion
Professor of Veterinary Microbiology and Preventive Medicine

Abstract: *Mycoplasmas are considered among the smallest, free-living organisms known. They evolved by degenerative evolution resulting in genomes that lack biosynthetic pathways. Consequently they depend on their hosts for their macromolecular precursors. Despite these shortcomings, they are the perfect pathogens, capable of infecting hosts causing chronic infections, and escaping immune surveillance. How they do all of this has been the subject of my research for the past 30 years. I work with a swine respiratory pathogen called *Mycoplasma hyopneumoniae*, focusing on a select group of surface proteins and also genetic processes that might play a role in pathogenesis. I will first characterize mycoplasmas in general and then summarize a few highlights of my studies over the past several years, hopefully giving you a glimpse of these extraordinary pathogens.*

Science Café: On Thursday, April 25 at 6:30PM the Spring 2013 Science Café will take place at Lucullan's Italian Grill (400 Main Street) in the downstairs banquet room, with social gathering from 5:30 to 6:30. The presentation will be given by Professor James Dickson of the ISU Animal Science Department, on the topic 'Food Safety and Why You Should Care'. This event is open to the public.

Upcoming election of Sigma Xi chapter officers: A ballot will be distributed to all currently active chapter members around the middle of April. At the end of this semester, Chris Minion will step down as President and Lee Burras will assume the office of chapter President. Michelle Ihmels has agreed to become President Elect and thus will also serve as Program Chairperson for 2013-14. Chris Minion and Sue Fairbanks will be retiring from the Executive Committee, although Chris Minion will continue to participate next year as immediate Past President. In this election we will therefore elect two new members to the Executive Committee. In addition, we will be electing one new member to the Membership Committee to replace retiring members Tom Sauer and Curt Struck, and a new three-member Nominating Committee. The ballot strives to retain a balance among disciplines on the various committees.

Banquet Details: All members and friends of the ISU chapter of Sigma Xi are invited to attend the annual Initiation Banquet on May 2, see details above and the reservation form on page 4 below. The cost of the banquet is \$30 per person – new initiates and Golden Anniversary members (see below) are guests of the chapter. There is a choice of dinner entrées, see the reservation form. The deadline for receipt of reservations is Friday, April 26 (please return reservations sooner, if at all possible). Last minute reservations or changes can be made by phone to Paul Sacks (294-8143). Checks, made out to **Sigma Xi**, should be sent to Paul Sacks, Department of Mathematics, ISU, before the banquet.

Golden Anniversary Members: Each year we recognize and invite as our guests to the Banquet, members of the ISU chapter who have been members of Sigma Xi for 50 years. This year, we know of nine Golden Anniversary Members: E. Walter Anderson, Adela S. Elwell, Jerry L. Hall, Paul J. Hermann, James C. Hill, Richard H. Pletcher, James L. Melsa, Richard C. Seagrave, and Walter S. Trahanovsky. We will also be pleased to welcome other previously recognized Golden Anniversary Members to the Banquet.

Dues Structure: Sigma Xi members will be receiving their renewal notices over the next few weeks. For the 2013-14 membership year, national dues for new and continuing Full and Associate Members (non full-time students) are \$90; full-time student dues are \$25; initiation fee is \$20; promotion fee is \$10. A \$60/\$45 rate is also available for emeritus/transitional members – see the Sigma Xi web page or check with the secretary-treasurer for more details. A portion of the national dues is returned to the chapter, and constitutes the largest part of the chapter's income. In addition to national dues, the ISU Chapter has an optional local dues assessment of \$11 per year which goes entirely to the chapter. As is customary, local dues are waived for initiates and those being promoted for the first year.

American Scientist Magazine: A digital subscription to *American Scientist* magazine comes with Sigma Xi membership at all levels. It is possible to receive a print version of the magazine at an additional cost of \$20 annually (within the U.S.).

Headquarters Address: For inquiries to the National Office, use the following address

Sigma Xi
3106 East N.C. Highway 54
Research Triangle Park, NC 27709

or go to the web site www.sigmaxi.org.

QUESTIONS, COMMENTS, CONCERNS? Contact Paul Sacks, Secretary/Treasurer, 396 Carver Hall,
294-8143, psacks@iastate.edu

OFFICERS OF THE CHAPTER

President	F. Chris Minion
President Elect	C. Lee Burras
President Emeritus	Diane Birt
Secretary-Treasurer	Paul Sacks

COMMITTEE ON MEMBERSHIP

Thomas Sauer	2010-13
Curtis Struck	2010-13
L Keith Woo	2011-14
Susan Lamont	2011-14
Leslie Hogben	2012-15

Executive Committee

Diane Birt	2009-13
W. Sue Fairbanks	2010-13
F. Chris Minion	2010-14
C. Lee Burras	2011-14
Maynard Hogberg	2011-14
James Raich	2012-15
Michelle Ihmels	2012-15
Paul Sacks	2010-13

**NOMINATING COMMITTEE
(one-year terms)**

Carl Jacobson
Kenneth Koehler
Lester Schmerr

Please print out and use this page to make reservations for the Sigma Xi Initiation Banquet. The deadline for receipt of reservations is Friday, April 26. Tickets indicating entrée choice will be held at the Banquet welcome table. Reservations which might not make it in the mail and late cancellations can be made by phone, 294-8143 (leave a message, if necessary). If needed, a check, made out to **Sigma Xi**, should be enclosed with this reservation form, and both sent to

**Paul Sacks, Sigma Xi
Department of Mathematics
Iowa State University
Ames, IA 50011**

SIGMA XI BANQUET, Thursday, May 2, 2013, 5:30PM, Scheman Building

Name _____ No. of tickets _____

Address _____

Cost: Initiates may receive up to two tickets at no cost. All others are **\$30.00 per ticket**. Initiates who made reservations with their acceptance need not return this form. Please indicate entrée choice, and numbers if applicable, below.

Raspberry Chicken _____ Roast Beef in Mushroom Sauce _____ Ratatouille (vegetarian) _____

(A vegan alternative is also available upon request)