112th Annual Meeting The Ohio Academy of Science Hosted by

The University of Findlay Findlay, Ohio April 4-5-6, 2003

About the Annual Meeting

The Ohio Academy of Science's Annual Meeting is for academic, governmental, and industry scientists and engineers, university and pre-college educators and teachers, and pre-college, undergraduate, and graduate students, and interested lay citizens in the Ohio region. Annually workshops, symposia, an All-Academy Lecture, and field trips on local geology and plant sciences compliment the several hundred scientific presentations.

Welcome!

The University of Findlay welcomes you to the 112th Annual Meeting of The Ohio Academy of Science. We invite you to explore our campus and to share in the excitement and opportunities provided in this program.

REGISTRATION: Registration is required for all meeting presenters and attendees. On-site registration will be available at a higher rate. To assure reservations for meals, The Ohio Academy of Science must receive forms by **March 20, 2003.** Please use Registration Form on the last page. Mail completed form and fee to:

OAS Annual Meeting Registration

The Ohio Academy of Science PO Box 12519 Columbus OH 43212-0519 FAX 614/488-7629 (for Credit Card or PO only)

Registration by credit card or purchase order only will be accepted by FAX at 614/488-7629. Your registration materials, receipt, and name tag will be ready at the meeting registration desk upon your arrival. For further information, please call 614/488-2228.

An Adobe PDF form is available at:

http://www.ohiosci.org/FindlayRegistrationForm.pdf

Online payment option www.merchantamerica.com/ohiosci

Friday, April 4: Your registration materials will be available at the door if you will be attending the Friday evening dinner in the Alumni Memorial Union.

Saturday, April 5: Registration in the Alumni Memorial Union from 8:00AM-3:00PM. On-site registration is possible by check, VISA, or MasterCard. Cash is discouraged.

Special Acknowledgments: The Ohio Academy of Science expresses its appreciation to Metcalf & Eddy for financial support of the Saturday, April 5 Science Policy Breakfast.

PARKING: Free parking is available in lots located off Frazer Street south of the Alumni Memorial Union.

SMOKING POLICY: Smoking is not permitted in any building on campus.

MEALS: Friday, April 4: Preregistration required by March 15 for The Ohio Academy of Science Annual Meeting Dinner. Saturday, April 5: Metcalf & Eddy hosted Science Policy Breakfast, by invitation only. Lunch will be available for \$4.50 advance price or onsite for \$5 in the Henderson Dining Hall. There is no Saturday evening meal.

HOUSING: Please contact hotels and motels directly. See list on page 4.

GENERAL SCHEDULE

Friday, April 4, 2003

3:00 PM The Ohio Academy of Science

Board of Trustees Meeting Alumni Memorial Union

6:00 PM Annual Dinner

Alumni Memorial Union

7:30 PM Special Public Address

Alumni Memorial Union

Dr. Paul P. Rega

Toledo Hospital Emergency Physician and Medical Supervisor for the Toledo Disaster Medical Assistance Team Program Manager, Public Health/Medical Community, University of Findlay Center for Terrorism Preparedness

Saturday, April 5, 2003

7:30 AM Metcalf & Eddy hosted Science Policy Breakfast (by invitation only; must be pre-registered)
Endly Room

andry Room

Alumni Memorial Union

Special Guests: 2002-2003 Academic year Environmental Science and Environmental Engineering Undergraduate Scholarship Recipients

8:00AM-3:00PM

General Meeting Registration
Lobby of Alumni Memorial Union

9:00 AM -11:00 AM

Morning poster session in the Alumni Memorial Union and podium presentations in the William B. Brewer Science Center

9:30 AM- 11:00 AM

Workshop: Introduction to the General Linear Model: Applications for Individual Research Questions and Decision Making

Malcolm Lecture Hall, Brewer Science Building

Arranged and conducted by Dr. Isadore Newman Assisted by Heather K. Guthrie The University of Akron

Goal 1: To demonstrate the flexibility, power and ease of using the General Linear Model to reflect research questions.

- A. To demonstrate how to state research questions in common language. B. To teach how to write models to reflect these research questions.
- C. To demonstrate the set up of a SAS program and interpretation of the printout.
- D. To explain the relationship between regression and t tests, ANOVA, ANCOVA, dependent t tests, repeated measures, trend analysis, curvilinear relationships and path analysis.

Goal 2: To demonstrate application of the General Linear Model by having the audience share their research questions and developing models that will reflect those questions.

Value: This workshop will show how the multiple linear regression technique frees the researcher from wondering if an analysis can be done and refocuses him or her back to the central concern: the research question itself.

Instructional Methods and Techniques: The workshop leader will use material from the book McNeil, K., Newman, I, & Kelly, F. (1996). Testing Research Hypotheses with the General Linear Model. Southern Illinois University Press. Carbondale IL. In addition he will use simulated computer setups and printouts.

Presenter's Experience: Isadore Newman received his PhD in educational psychology with a specialty in statistics and measurement from Southern Illinois University in 1971. He has been a professor at the University of Akron since 1971. During his professional career he has served on over 300 dissertation committees and has presented hundreds of papers at state, national and international meetings. He has written 9 books and monographs and has served on many editorial boards, in addition to being the editor of Multiple Linear Regressions Viewpoints, the Midwestern Educational Researcher, and Editor of The Ohio Journal of Science.

9:30 AM-11:00 AM

Tour of the Occupational Therapy Home located on Trenton Ave. on the west side of The University of Findlay. It is an educational center for occupational therapy students, the elderly and their caretakers. Visitors will see this specially designed house and learn how to maintain independence at his or her own home through occupational therapy services. Assistive technology and home modifications are incorporated into the design of the adapted home for occupational therapy students to develop knowledge and practical skills to work with the elderly.

11:15AM All Academy Lecture

Alumni Memorial Union

Update On Bioterrorism: 2003

STEVEN MARK GORDON, M.D.
Staff Physician and Epidemiologist
Cleveland Clinic Foundation
Department of Infectious Disease

Academic Appointments: Associate Professor Clinical Medicine, The Ohio State University School of Medicine; Associate Professor Clinical Medicine, Penn State University School of Medicine; Employment: August 1993 - Present, Staff Physician, Cleveland Clinic Hospital; Epidemiologist, Department of Infectious Disease, Cleveland Clinic Foundation; July 1992-July 1993 - Senior Associate of Medicine, Division of Infectious Diseases, Grady Memorial Hospital, Emory University School of Medicine, Atlanta, Georgia; Education: 1980-84 - Cornell University of Medical College, M.D.; 1976-1980 - Hamilton College, B.A. Biology (Magna Cum Laude), Clinton, New York; Post-Graduate Training: July 1990-June 1992, Fellow, Division of Infectious Diseases, Department of Medicine, Emory University School of Medicine; July 1989-June 1990, Preventive Medicine Resident, Commissioned Corps of the United States Public Health Service, Centers for Disease Control, Atlanta, Georgia and Division of Health and Human Resources, State of Georgia, Office of Epidemiology, July 1987-June 1989, Epidemic Intelligence Service Officer, Commissioned Corps of the United States Public Health Service, Centers for Disease Control, Center for Infectious Disease, Hospital Infections Program, Epidemiology Branch, Atlanta, Georgia; July 1984-1987, Intern and Resident, Internal Medicine University of Chicago Hospitals and Clinics; Professional Organizations: Member, American Medical Association; Associate, American College of Physicians; Member, Society of Hospital Epidemiologists, Appointed on Membership Committee January 2000; Awards and Honors: Achievement Medal, Commissioned Corps, United States Public Health Service (1990); Unit Commendation, Commissioned Corps, United States Public Health Service, Epidemiology Program Office (1990); Physician's Recognition Award, American Medical Association (1990); Unit Commendation, Commissioned Corps, United States Public Health Service, Hospital Infection Program (1989); Education: Teaching Activities: Annual Intensive Review of Internal Medicine Symposium, Cleveland Clinic Foundation, "New and Emerging Infectious Diseases" (June, 1994-2000); Infectious Diseases for the Generalist, course codirector, Cleveland Clinic Foundation, August 28-29, 1996; Preceptor for Introduction to Clinical Medicine General Clerkship, The Ohio State University School of Medicine, 3rd year students, June 1996 - 2000; Instructor, Senior Student Course in Infectous Diseases, Emory University School of Medicine (1990-92).

12:15 PM Lunch

Lunch will be available onsite for \$5 in the

Henderson Dining Room

1:15 PM OFFICIAL NOTICE

of Annual Business Meeting for Academy Members Only Alumni Memorial Union 2:00 PM-5:00 PM

Afternoon poster and podium presentations

2:00 PM

PANEL DISCUSSION

Ohio's Homeland Security: Bioterrorism and Emerging Health Threats

MR. RANDY VAN DYNE, Moderator; Director, School of Environmental and Emergency Management, The University of Findlay

Dr. Steve Wagner, Chief, Bureau of Environmental Health, Ohio Department of Health

Dr. MICHAEL BISESI, Department of Environmental and Occupational Health, Medical College of Ohio

Dr. Todd Stewart, Director, Program for International and Homeland Security, The Ohio State University

DR. DAVID ROBINSON, Vice President, Battelle Memorial Institute, Aerosol Engineering and Biodefense Sciences

Ms. JUDY CANTWELL, Executive Director, Hancock County American Red Cross, Member of the National Red Cross Disaster Team

Sunday, April 6, 2003 Field Trip

9:00 AM-12:00 Noon

Field Trip to Environmental Resource Training Center

The National Center of Excellence for Environmental Management (NCEEM) invites you to explore the Environmental Resource Training Center (ERTC) facilities field site. ERCT has a staff of 45 field-experienced specialists in areas such as emergency response, industrial hygiene, spill containment, and hazardous materials management. Staff will facilitate hands-on demonstrations and problem-solving activities. The outdoor five-acre site located on the Fostoria Road (SR 12) about five miles east of the main campus, includes eight full-size railroad cars, a stream/pond system, well testing, and mock dumpsites. Meet at 9:00 AM in the circle drive east of the Old Main building on campus and then proceed to the NCEEM.

About Our Host

DR. KENNETH E. ZIRKLE is President of The University of Findlay. He welcomes all meeting attendees to Campus.

Ms. RITA INMAN serves as Chair of Local Arrangements.

he University of Findlay is a flexible, forward-looking institution that is constantly seeking ways of better serving students and the community. Education at The University of Findlay is offered in formats that

accommodate students of all ages and their time-pressured lifestyles.

The University of Findlay has more than 60 majors leading to baccalaureate degrees and seven master's degrees. Unusual and well-recognized programs include equestrian studies, preveterinary medicine, nuclear medicine technology, occupational therapy, physical therapy, physician assistant, intergenerational studies and technology management, as well as environmental, safety and occupational health management. Business, education, equestrian studies (English and western), pre-veterinary medicine, technology management and criminal justice administration have the largest enrollments.

The University of Findlay offers a master of arts in education, a master of arts in teaching English as a second language (TESOL) and bilingual education, a master of business administration, a master of science in environmental management, a master of physical therapy, a master of occupational therapy and a master of arts in liberal studies. Both the MBA and Master of Science in environmental management are offered entirely online, in addition to classes held on campus.

As a result of focus on innovation and service, enrollment at Findlay has grown dramatically from a total of 2,606 students in 1990-91 to 4,586 in 2002-2003. The University also has a significant number of international students studying on campus, with 426 students from 41 countries enrolled in 2002-2003.

The University of Findlay is a private institution founded by the Churches of God, General Conference, and the city of Findlay in 1882. The University of Findlay is located in a small city that is pleasant and progressive. The University of Findlay is accredited by the Higher Learning Commission, the Ohio State Board of Education and the national accrediting organizations for teacher education, nuclear medicine, physical therapy, occupational therapy, physician assistant and social work.

Hotel/Motel Listing for Findlay, Ohio

Findlay Inn and Conference Center 200 East Main Cross Street 419-422-5682 www.findlayinn.com

Holiday Inn Express 941 Interstate Drive 419-420-1776 www.holidayinnexp-findlay.com

Cross Country Inn 1951 Broad Ave. 419-424-0466 www.crosscountryinns.com

The Hampton Inn 921 Interstate Dr 419-422-5252 www.hamptoninn.com Country Hearth Inn 1020 Interstate Court 419-423-4303

Ramada Inn 820 Trenton Ave. 419-423-8212

Hawthorne Suites 2355 Tiffin Ave. 1-800-599-7869 www.pinnaclehotelsusa.com

Fairfield Inn by Marriott 2000 Tiffin Ave. 419-424-9940