

Indiana State University

2004 - 2005 Academic Annual Report

Department of Health, Safety, & Environmental Health Sciences

Year in Review

Accomplishments

As you have heard, increasing public awareness of Indiana State University's accomplishments is crucial to building student enrollment, influencing policy makers, and developing a place of pre-eminence in the Midwest. What do you consider to be your department's 5-10 top accomplishments for the 2004-2005 year that will help contribute to this effort?

Accomplishments: • Continuing annual grant from the US EPA cooperative Agreement on "Transportation Environmental Resources Center" - \$150,000 annually. Dr. Shiaw-Fen Ferng and Dr. Gregory Schwab. Dr. Ferng is developing the website and web based training courses for transportation industries in the area of environmental compliance. • Local, regional, national and international consultancies provided to organizations and industries by members of the department including Dr. Nancy Lawrence, Dr. Malcolm Legault, Dr. Ernest Sheldon, Dr. Boris Blyukher, and Dr. Earl Blair. • Drivers Education Program expanding to include Sullivan County and possibly South Vermillion Schools. • ISU presence at National Conferences with ISU booth at American Society of Safety Engineers Professional Development Conference, AIHA Employment Services, National Institute for Farm Safety and students attending the National Safety Congress. • The Safety Management Program was accredited by the National Association of Industrial Technology (NAIT) in October 2004. ISU is one of the first universities to receive this prestigious accreditation in the area of safety.

Research and Scholarship

What is your assessment of accomplishments in the area of research and scholarship? Are you satisfied overall? In which areas do you feel your department does particularly well? In which areas do you feel your department needs to improve?

Research and Scholarship: Peer-Reviewed Publications (15): Bermudez, E. (2005). Faculty internships in environmental health: Planning and implementation. *Journal of Environmental Health*. (Accepted for Publication). Blair, E.H., Twelve Best Practices for Teaching and Presenting Safety Topics, *The Educator, Academics Practice Specialty Newsletter, American Society of Safety Engineers*: Des Plaines, IL, Winter 2005, 4 (2) Blair, E. H., Leadership and the Safety Professional, *Proceedings of the American Society of Safety Engineers Annual Professional Development Conference, ASSE*: Des Plaines, IL, June 2004 Kaldahl, M. A. and Blair, E. H., "Student Injury Rates in Indiana," *Journal of School Health*, 74 (1 - 2005) 38 - 40 Blair, E.H., "Critical Competencies for Safety Educators," *Journal of Safety, Health and Environmental Research, ASSE online journal*, January 2004 Seo, D.C., Torabi, M.R., Blair, E. H., and Ellis, N. T., "A cross-validation of safety climate scale using confirmatory factor analytic approach," *Journal of Safety Research*, 35 (2004) 427 - 455 Blyukher, B. "Laboratory Scale Experimental Simulation of a Pipe Rested on a Saddle Supporting System for Verification of Numerical Modeling" (with T. Niezgoda, J. Malachowski, W.Szymczyk). Blyukher, B. Risk and Reliability and Evaluation of Components and Machinery, PVP-Vol. 488, *The American Society of Mechanical Engineers, United Engineering Center*, New York, N.Y., 2004, pp. 27-30. Blyukher, B. "Pumping Cryosystems: Theory, Practice, Experiment" (with Y. Brailovskiy). *Journal of International Institute of Refrigeration, ICR0014*, Washington DC, 2004. Ferng, S.-F., G. Schwab, and Serena Guan

(2004). Spill Prevention Control and Countermeasures Web Based Training Program. <http://isu.indstate.edu/SPCC>. Ferng, S.-F., G. Schwab, and Serena Guan (2004). Transportation Environmental Resources Center website update and maintenance. <http://www.transource.org>. Henderson, S. L. "New Teacher Education Standard in Driver Education." IAHPERD Publication, Fall 2004. Legault, M.L. and E.J. Sheldon. 2004. The farm equipment hazard warning roadway sign: An update. American Society of Agricultural Engineers International Meeting, August 1-4, Ottawa, ON. Technical Paper No. 04-5025. Mayton, A.G., N.K. Kittusamy, D.H. Ambrose, and M.L. Legault. 2004. Jarring/jolting exposure and musculoskeletal symptoms among equipment operators. National Institute for Farm Safety Annual Meeting, June 20-24, Keystone, CO. Technical Paper No. 04-10. Sheldon, E.J. and M.L. Legault. 2004. An updated farm equipment hazard warning roadway sign? National Institute for Farm Safety Annual Meeting, June 20-24, Keystone, CO. Research in Progress Paper No. 04-08. Conference Presentations (25): Bermudez, E. (2004). Faculty internships in environmental health: A practicum experience results in a pilot study. Presented at the National Environmental Health Association Annual Conference. Anchorage, Alaska. Bermudez, E. (2004). Toxic effects of pesticides - Environmental Toxicology. Saint Mary of the Woods College. October 17, 2004. Guest speaker. Earth Literacy graduate course at Saint Mary of the Wood College. Blair, E.H. and Friend, M.A., Best Practices in Teaching and Presenting Safety Topics, American Society of Safety Engineers Academic Practice Specialty Forum, New Orleans, LA, June 2005 (invited) Blair, E.H., Introduction to Behavioral Safety, 2 day seminar at Tokyo Electron Limited corporate safety meeting, Austin, Texas, November 2004 Blair, E.H. and Friend, M.A., Human Error in Safety Management Systems, National Safety Congress, New Orleans, LA, September 2004 (Note: this session was cancelled on the presentation date due to Hurricane Ivan) Blair, E.H., Leadership and the Safety Professional, American Society of Safety Engineers Professional Development Conference, Las Vegas, Nevada, June 2004 Blair, E.H. and Friend, M.A., Critical Competencies for Safety Professionals – Implications for Educators, American Society of Safety Engineers Professional Development Conference, Las Vegas, Nevada, June 7, 2004 Blair, E.H. and Friend, M.A., Best Practices in Teaching and Presenting Safety Topics, American Society of Safety Engineers Academic Practice Specialty Forum, New Orleans, LA, June 2005 (invited) Blair, E.H., Introduction to Behavioral Safety, 2 day seminar at Tokyo Electron Limited corporate safety meeting, Austin, Texas, November 2004 Blair, E.H. and Friend, M.A., Human Error in Safety Management Systems, National Safety Congress, New Orleans, LA, September 2004 (Note: this session was cancelled on the presentation date due to Hurricane Ivan) Blair, E.H., Leadership and the Safety Professional, American Society of Safety Engineers Professional Development Conference, Las Vegas, Nevada, June 2004 Blair, E.H. and Friend, M.A., Critical Competencies for Safety Professionals – Implications for Educators, American Society of Safety Engineers Professional Development Conference, Las Vegas, Nevada, June 7, 2004 Blyukher, B. Laboratory Scale Experimental Simulation of a Pipe Rested on a Saddle Supporting System for Verification of Numerical Modeling (with T. Niezgoda, J. Malachowski, W.Szymczyk). Presented at ASME International Conference, July 25-29, 2004, San Diego, CA, USA. Blyukher, B. Pumping Cryosystems: Theory, Practice, Experiment (with Y. Brailovskiy). Presented at International Congress of Refrigeration, Aug. 17-22, Washington DC, 2003. Ferng, S.-F. and Schwab, G. (2004). Transportation Environmental Resources Center. American Association of Airport Executives 13th Annual National Aviation Environmental Management Conference. Indianapolis, IN. Henderson, S. L. "Teacher Education in Indiana." American Driver and Traffic Safety Association, North Carolina, July 2004. Henderson, S. L., "Are You Ready? Driver Education Standards in Indiana." IAHPERD, Indianapolis, Indiana, November 2004. Sheldon, E.J.*, N.F. Lawrence, and M.L. Legault. Accreditation of safety management programs. 2004 NAIT Convention: Linking Industry with Industrial Technology Programs, October 22, 2004, Louisville, KY. Legault, M.L. Agricultural Equipment Hazard Road Signs. (Invited presentation) State Farm Safety and Health Forum. Indianapolis, IN, September, 15, 2004 Legault, M.L. Pedestrian and biking safety. (Invited presentation) Forest Park Elementary, Clay County School Corporation, September 10, 2004, Brazil, IN. Legault, M.L.* and E.J. Sheldon.

The farm equipment hazard warning roadway sign: An update. 2004 ASAE Annual Meeting, August 2, 2004, Ottawa, ON. Mayton, A.G., N.K. Kittusamy, D.H. Ambrose, and M.L. Legault*. Jarring/jolting exposure and musculoskeletal symptoms among farm equipment operators. 2004 National Institute for Farm Safety Annual Meeting, June 22, Keystone, CO. Peterson, Y. and Gabany, S. "Results of a Web-based Tobacco Survey among College Students." Accepted to the American College Health Association, June 2004 Peterson, Y. Tobacco Education Strategies: What Works or Not! The American Association of Health, Physical Education, Recreation and Dance, April 2005 Sheldon, E.J and M.L. Legault*. An updated farm equipment hazard warning roadway sign? 2004 National Institute for Farm Safety Annual Meeting, June 22, Keystone, CO.

Grants, Contracts & Off Campus Professional Service

What is your assessment of accomplishments in the area of grants, contracts, and off campus professional service? Are you satisfied overall? In which areas do you feel your department does particularly well? In which areas do you feel your department needs to improve?

Grants 2004 – 2005 Environmental Health Students Recruitment Grant - Awarded by the Association of Environmental Health Academic Programs. \$5,800.00. (PI – Eliezer Bermudez, Co-Pi – Shiao-Fen Ferng). Peterson, Y. Higher Education Communities of Excellence II -\$17,000.00, Chances for Indiana Youth / ITPC - January 2004 - June 2005 , \$14,000 10/2003 – 9/2008. United States Environmental Protection Agency Cooperative Agreement on "Transportation Environmental Resources Center". Subcontractor to American Association of Airport Executives. \$150,000.0 annual grant from EPA (ID# CC-83144001-0; CFDA 66.305). Drs. Shiao-Fen Ferng and Gregory Schwab are served as Principal Investigators for this project. Role of Dr. Ferng is to develop the website and web based training courses for transportation industries in the area of environmental compliances. Henderson, S. L. project director, 2005 Indiana State University and Indiana Department of Education Motorcycle Rider Education Contract, \$47,500 Awards and Accomplishments Peterson, Y. – Elected "Who's Who Among American Teachers" Legault, M. – Passed the Associate Safety Professional exam under the Board of Certified Safety Engineers Sheldon, E. - Inducted into the Epsilon Pi Tau Honorary for Industrial Technology during the NAIT Conference in Louisville, KY Publications, Presentations, Grants and contracts - Accomplishments, Strengths, Areas for Improvement: The department contributed to a number of high-profile publications and national/regional conference presentations. There is always room for improvement. Department faculty could contribute more to scholarly activities and grant proposal writing if they had a lighter teaching schedule. It's a trade-off – plus, there's no guarantee the department would be more productive with scholarly activities if the teaching load were lightened.

Future Goals

Future Goals

The University is highlighting experiential learning, community engagement, and eminent programs as aspects of our campus that will attract students and resources. How is your department planning to contribute to these strategic initiatives in ways that will help ISU be recognized as a Pre-eminent University?

Strategic Initiatives and Future Goals As a department of professional disciplines, we are well placed to continue with experiential learning and community engagement. Our programs routinely place intern students and coops as part of the curriculum. One idea the department is considering is installing a capstone experience as part of the required internships.