

## Pre-Forum Workshops



Develop new skills through hands-on pre-conference workshops. Full-day and half-day workshops are offered on Saturday and Sunday (May 30-31). Learn from workshop instructors who are experts on topics that matter to your campus and your work. You will improve your proficiency in IR, assessment, or statistical skills. Capacity is limited and workshops require pre-registration. Reserve your seat early to ensure availability.

### IR/Assessment Skills

#### **In the House! Conducting an Economic Impact Study Internally (W02) [\[minimize\]](#)**

***Saturday, May 30, 2009, 8:00 a.m. - 11:30 a.m.***

Completing an economic impact study is within the reach of most and arguably all post-secondary institutions. This workshop, hosted by IR Director and economics faculty member, both in senior leadership positions, will identify salient economic impact indicators and their sources, recent economic impact studies, and other pertinent economic research studies. The use and computation of multipliers, scope of study, and important factors to consider will also be elucidated. Economic impact study worksheets and guides will be provided to help the planning and implementation phases of an economic impact study.

**Presenter(s):** Lolita Paff, Penn State Berks

**Registration Fee:** \$75.00

#### **Introduction to Survey Design (W23) [\[minimize\]](#)**

***Saturday, May 30, 2009, 12:30 p.m. - 4:00 p.m.***

Surveys are a popular mechanism for IR offices to gather important data on perceptions, beliefs, and opinions from campus constituents. This interactive workshop will discuss the basics of designing effective surveys including how to design a study which uses survey data, how to structure effective survey questions, discuss methods to administer the survey, and include a few tips on survey analysis. Participants will also have a basic understanding of reliability and validity measures as well as sampling techniques. The workshop is designed for beginners to the more advanced IR practitioner who would like to maximize the value from survey data.

**Presenter(s):** Linda Mallory, United States Military Academy

**Registration Fee:** \$75.00

#### **Let's Do It: Available Strategies and Instruments for Assessing Student Learning in the Major (W06) [\[minimize\]](#)**

***Saturday, May 30, 2009, 12:30 p.m. - 4:00 p.m.***

If your institution needs to move beyond talking about assessment and wants to collect some actual data, come to this session to examine various strategies and instruments for measuring student learning in the major. Institutional researchers will come away from the workshop better equipped not only to assist faculty with their department based assessment programs, but also to collect useful outcomes information for the entire institution as well.

**Presenter(s):** J. FredericksVolkwein, The Pennsylvania State University

**Registration Fee:** \$75.00

**Model for Collaborative Initiatives: Key Components to Successful Partnerships (W08)**  
[\[minimize\]](#)

***Sunday, May 31, 12:30 p.m. - 4:00 p.m.***

This workshop provides concepts and effective tools to help master the mechanics of collaboration. The presenter explains a model for collaborative initiatives and shares her experiences after implementing it in higher education. Participants will learn to: (a) review the factors that influence the success of collaboration; (b) capitalize on others' strengths to encourage feedback, clarify interpretations, and resolve misunderstandings; and (c) select appropriate methods and/or tools in order to respond to and minimize resistance to collaborative initiatives.

**Presenter(s):** Liliana Rodriguez-Campos, University of South Florida

**Registration Fee:** \$75.00

**Program Assessment: Creating Effective Plans and Management Processes (W05)**  
[\[minimize\]](#)

***Saturday, May 30, 2009, 12:30 p.m. - 4:00 p.m.***

An increasing focus on accountability and continuous improvement in higher education has resulted in program assessment challenges. Two major challenges involve developing effective program assessment plans and implementing management processes to institutionalize program assessment. This workshop shows how to create assessment plans that focus on continuous improvement, including student learning. The workshop guides you to use a submission and review process that promotes a quality assurance approach ensuring continuous improvement of the assessment process. The workshop will illustrate the roles of support personnel and technology in creating a successful institution-wide system for program assessment.

**Presenter(s):** Robert Armacost, University of Central Florida and Julia Pet-Armacost, University of Central Florida

**Registration Fee:** \$75.00

**S.O.S.: Student Outcomes Solutions for Program Assessment (W19)** [\[minimize\]](#)

***Sunday, May 31, 8:00 a.m. - 11:30 a.m.***

Learn how to promote best practices in outcomes assessment at your institution! Academic and student support programs are concerned with developing and assessing student learning outcomes. Direct evidence of student learning promotes improvement and meets accreditation and accountability requirements. Participants will develop student learning outcomes and measures that will be effective for programs at their institutions the context of the mission of the program. The workshop will include suggestions for working with faculty and student support personnel. It will highlight resources available to IR assessment practitioners. Become a facilitator for programs' effective use of assessment data to promote program improvement.

**Presenter(s):** Paula Krist, University of San Diego

**Registration Fee:** \$75.00

## IR Skills

### **Advanced Use of the New IPEDS Data Center (W22)** [\[minimize\]](#)

**Saturday, May 30, 2009, 12:30 p.m. - 4:00 p.m.**

This hands-on workshop is designed to provide participants with the skills needed to design analyses and produce customized reports using the advanced capabilities of the new IPEDS Data Center. Through a series of exercises, participants will gain an appreciation for the complexity of IPEDS data, and acquire experience designing a framework for analysis, determining variables required, calculating variables, performing trend analysis, building complex comparison groups, and otherwise exploring the immense flexibility of the Data Center at the advanced level.

This is a hands-on computer based workshop. Participants attending this workshop are required to bring a laptop computer. Laptop computers must be MAC or have Windows 2000 or later. MS Excel and an and an ethernet port are also required.

**Presenter(s):** Samuel Barbett, National Center for Education Statistics; Tara Coffey, National Center for Education Statistics; Janice Plotczyk, National Center for Education Statistics; and Mohamad Sakr, Innovative Solutions

**Registration Fee:** \$65.00

### **AIR Newcomers Workshop (W24)** [\[minimize\]](#)

**Saturday, May 30, 2009, 12:30 p.m. - 4:00 p.m.**

This free workshop is intended to welcome first time AIR Forum participants wanting to learn about the benefits of AIR membership and get a jump start on networking and making valuable contacts. The workshop will present a brief history of IR and a short overview of the profession: analysis and reporting, planning, assessment, and decision support. The main focus is on the origins and functions of AIR. Learn how to connect with your fellow AIR members, discover options for personal involvement, and learn about all that AIR offers throughout the year. We will also provide tips and tricks on how to get the most out of your Forum attendance.

**Presenter(s):** Karen DeMonte, University of Delaware; Yves Gachette, State University of New York Buffalo State College; Jim Lenio, Walden University; and Crissie Grove, Association for Institutional Research

**Registration Fee:** No charge

### **Effective Communication Through Visual Design: Tables, Charts, Presentations and Dashboards (W14)** [\[minimize\]](#)

**Sunday, May 31, 12:30 p.m. - 4:00 p.m.**

A fundamental responsibility of institutional researchers is the effective analysis and presentation of quantitative data. Though software applications provide innumerable ways to present data, mastering technology is not sufficient to ensure meaningful communication with one's intended audience. Institutional researchers must master both the technology of analysis and the art of presenting results. This workshop will cover three major topics: 1. The theory of and best practices in visual design of quantitative data (i.e., tables and charts) 2. Guidelines for creating effective PowerPoint presentations, and 3. Best practices in dashboard design. Participatory exercises will reinforce concepts and illustrate their application.

This is a hands-on computer based workshop. Participants attending this workshop are

required to bring a laptop computer. Laptop computers must have MS Office.

**Presenter(s):** Rebecca Carr, Association of American Universities Data Exchange and Mary Harrington, University of Mississippi

**Registration Fee:** \$75.00

### **Introduction to IPEDS Data Submission and Data Use (W10) [\[minimize\]](#)**

***Saturday, May 30, 2009, 8:00 a.m. - 11:30 a.m.***

This workshop is designed to provide new professionals with a context for understanding the IPEDS data collection and retrieval tools. It includes background information on the development and history of IPEDS, a description of the components (surveys) and data elements within IPEDS, and a discussion of institutional data submission responsibilities. Most of the workshop will be devoted to learning to use the new IPEDS Data Center.

This is a hands-on computer based workshop. Participants attending this workshop are required to bring a laptop computer. Laptop computers must be MAC or have Windows 2000 or later. MS Excel and a wireless network adapter.

**Presenter(s):** Samuel Barbett, National Center for Education Statistics; Tara Coffey, National Center for Education Statistics; Janice Plotczyk, National Center for Education Statistics; and Mohamad Sakr, Innovative Solutions

**Registration Fee:** \$65.00

## **Special Topic**

### **Planning Today for Your Fiscal Tomorrow (W01) [\[minimize\]](#)**

***Saturday, May 30, 2009, 12:30 p.m. - 4:00 p.m.***

This workshop has been designed to assist individuals of all ages in personal estate and retirement planning, understanding investment opportunities and strategies, and dealing with a wide-range of fiscal and related matters. Topics to be covered include: wills; living trusts; gifts; leaving survivors well informed; tax-deferred investments; other investment opportunities; spending, borrowing and providing for future needs; home mortgages; insurance; determining liquid emergency funding needs and how to maximize related earnings; retirement needs, how to achieve planned goals, Social Security, impact of inflation, Federal Government rules; selling houses; and converting assets into life-income. Ample time provided for questions and interaction.

**Presenter(s):** Adrian Harris, University of California-Los Angeles

**Registration Fee:** No charge

## **IR Statistical Skills**

### **Adopting SPSS Macros to Maximize Office Productivity (W21) [\[minimize\]](#)**

***Sunday, May 31, 12:30 p.m. - 4:00 p.m.***

Given limited staff and resources, institutional research offices need as many tools as possible to automate routine tasks. SPSS macros are one such tool. Although SPSS macros are readily

available, many IR staff have yet to harness their capabilities. This half-day workshop is intended for experienced SPSS users familiar with command syntax that want hands-on experience with developing macros. Using a combination of lecture and exercises, presenters will review the basic building blocks of macro development and then ask attendees to apply what they have learned to some practical macro applications.

This is a hands-on computer based workshop. Participants attending this workshop are required to bring a laptop computer. Laptop computers must have SPSS 16.0 or 17.0 and an ethernet port.

**Presenter(s):** Pu-Shih Chen, University of North Texas; Shimon Sarraf, Indiana University at Bloomington; and Thomas Shoup, Indiana University at Bloomington

**Registration Fee:** \$75.00

### **Advanced Excel for Institutional Researchers (W09) [\[minimize\]](#)**

***Sunday, May 31, 12:30 p.m. - 4:00 p.m.***

This workshop provides a hands-on instructional lesson on advanced techniques within Excel 2003 for data exploration, reporting, and analysis. The workshop will cover the following capabilities within Excel 2003: PivotTables, the Analysis ToolPak, Solver Add-in, and advanced formula writing. These topics will focus on introducing these tools to users who are familiar with Excel and are interested in learning what Excel has to offer in addition to basic spreadsheet utility. Hands-on examples will focus on common reporting and analytical needs of institutional researchers including summarizing data, conducting univariate analysis, running basic statistical tests, and building complex models for planning purposes.

This is a hands-on computer based workshop. Participants attending this workshop are required to bring a laptop computer. Laptop computers must have MS Excel 2003 (with add-ons installed is preferable).

**Presenter(s):** Sandra Archer, University of Central Florida; and Yun Fu, University of Central Florida

**Registration Fee:** \$75.00

### **An Intensive Introduction to Data Mining in Institutional Research (W12) [\[minimize\]](#)**

***Saturday, May 30, 2009, 12:30 p.m. - 4:00 p.m.***

Data mining techniques are increasingly becoming popular for institutional data analysis. Data mining is often viewed as expensive, time consuming, and too technical to understand and apply. This workshop will introduce the basic foundations of data mining from an institutional research perspective. Topics presented will include the following: 1. Institutional research data types 2. Institutional research questions and data mining applications 3. Data quality 4. Data selection for data mining 5. Data mining process 6. Data mining techniques 7. Data mining tools 8. Resources Emphasis will be from a beginners perspective. A copy of the manual is provided. This is a lecture only presentation.

**Presenter(s):** Thulasi Kumar, Missouri University of Science and Technology and Sutee Sujitparapitaya, San Jose State University

**Registration Fee:** \$75.00

### **Constructing, Managing and Analyzing Longitudinal Data: Programming Efficiencies with SAS Software (W07) [\[minimize\]](#)**

**Sunday, May 31, 8:00 a.m. - 11:30 a.m.**

This hands-on workshop will expose IR professionals to numerous techniques for working with longitudinal data. Using the strength of data step programming and array processing, the novice to intermediate level SAS coder will learn how to manage multiple person record files and create cohort based data warehouses. Use of sort procedures, flags, tags, first.dot counts, and lag functions will be emphasized. Data restructuring by conversion of a single record to multiple observations, use of the retain statement, and creation of a single observation from multiple records will be demonstrated. Event history methods for analyzing time-ordered longitudinal data will be introduced.

This is a hands-on computer based workshop. Participants attending this workshop are required to bring a laptop computer. Laptop computers must have SAS v9.1 or 9.2 installed and operational.

**Presenter(s):** Keith Guerin, Raritan Valley Community College

**Registration Fee:** \$75.00

**Full-day Hands-on Training of Both Clustering Techniques and Predictive Modeling Skills Using a Live Mock Admissions and Registration Database (W15) [\[minimize\]](#)****Sunday, May 31, 8:00 a.m. - 4:00 p.m.**

Attendees will study both clustering techniques and predictive modeling skills using a live mock database and the SPSS Clementine 12 data mining program. Specific hands-on topics include:

- Extracting data from a transactional data warehouse
  - Preparing data into an analytical file format
  - Conducting a data audit and visualization
  - Using TwoStep and K-means clustering nodes
  - Using Neural Net and C&RT predictive modeling nodes
- Lecture portions include:
- Comparison between traditional statistics and data mining
  - Concepts in segmentation
  - Potential use of data mining techniques in government, higher education sectors
  - Tiered Knowledge Management Model (TKMM)
  - Advanced data-mining applications

This is a hands-on computer based workshop. Participants attending this workshop are required to bring a laptop computer with 2 GB RAM 2-3 GB disk space free for installing the SPSS Clementine 12 and data files, SVGA/XGA card with 128 MB RAM (64 MB OK), and an ethernet port.

**Presenter(s):** Thulasi Kumar, Missouri University of Science and Technology

**Registration Fee:** \$180.00

**Introduction to Logistic Regression (W13) [\[minimize\]](#)****Sunday, May 31, 8:00 a.m. - 11:30 a.m.**

Logistic regression has become increasingly popular as a tool for institutional research. Common topics for study using logistic regression include student retention and graduation, but the applications are stretching farther. At last year's AIR Forum, researchers addressed cut-off points for basic skills placement, transfer rates, and tuition discounting using logistic regression. This workshop explains logistic regression analysis concepts and demonstrates their utility using popular statistical packages to apply those concepts. Concepts will be demonstrated using a case study approach exploring four-year graduation rates for a cohort of first-time students.

**Presenter(s):** Marianne Guidos, The Pennsylvania State University and Nicholas Warcholak, The Pennsylvania State University

**Registration Fee:** \$75.00

### **Time Series Forecasts by ARIMA and Grey Models (W04) [[minimize](#)]**

***Sunday, May 31, 8:00 a.m. - 11:30 a.m.***

This workshop is intended for institutional researchers who want to learn more about time series analysis. Live data are used to illustrate how forecasting models are constructed. ARIMA model is the central focus for a 43-year enrollment series from Oklahoma State University. Grey model is applicable to the study of a 4-year first-time enrollment data for U.S. medical schools to monitor the likelihood of physician shortage beyond 2015. Linear regression and various exponential smoothing methods are employed as supplementary tools to offer comparisons in terms of applicability and accuracy. The intended audiences are researchers with some experience in linear regression.

**Presenter(s):** Chau-Kuang Chen, Meharry Medical College

**Registration Fee:** \$75.00

### **Understanding and Developing Hierarchical Linear Models (W18) [[minimize](#)]**

***Saturday, May 30, 2009, 8:00 a.m. - 11:30 a.m.***

Hierarchical linear models (HLM) was developed to account for dependence among individuals within groups. HLM allows for “1) improved estimation of effects within individual units, 2) the formulation and testing of hypothesis about cross-level effects and 3) the partition of variance and covariance components among levels (Raudenbush & Bryk, 2002, p.7).” The purpose of this workshop is to teach participants how to develop a hierarchical linear model involving subjects within a nested structure using SAS (proc mixed), SPSS (mixed procedure) and STATA (xtmixed).

This is a hands-on computer based workshop. Participants attending this workshop are required to bring a laptop computer. Laptop computers must have either SPSS or SAS, and if possible STATA.

**Presenter(s):** Alexander Yin, The Pennsylvania State University

**Registration Fee:** \$75.00

### **Visual Basic Programming in Excel (W16) [[minimize](#)]**

***Saturday, May 30, 2009, 8:00 a.m. - 4:00 p.m.***

This workshop will provide instruction on using Visual Basic for Applications (VBA) in Excel. VBA can be used to maintain, manipulate, and automate report production with Institutional Research data. In the morning session we will explore the VBA editor, record and edit VBA code, manipulate Excel objects, and program control statements. In the afternoon we will create custom user interfaces.

Participants will work through examples while the presenters provide hands-on assistance. Commented code samples for each topic will be provided via <http://www.purdue.edu/OIR/irvba/default.htm>. The intended audience is researchers who use Excel for reporting and have some experience programming in any language.

This is a hands-on computer based workshop. Participants attending this workshop are required to bring a laptop computer. Laptop computers must have MS Excel 2003 or 2007.

**Presenter(s):** Christopher Maxell, Purdue University and Ottlie Webb, Purdue University

**Registration Fee:** \$180.00

### **World Class Macros: Practical Applications of Microsoft Excel Macros for an Institutional Research Office (W20) [\[minimize\]](#)**

***Saturday, May 30, 2009, 12:30 p.m. - 4:00 p.m.***

Institutional research offices produce a wealth of reports, often under tight deadlines and with limited resources. Accordingly, processes that automate routine tasks are invaluable. Microsoft Excel macros allow users to accomplish complex reporting tasks that regularly demand hours of staff time with the click of a button. This half-day workshop is designed to establish an understanding of Excel macro basics and share practical applications of macros for an IR office. Interactive examples will be used to help participants develop the ability to modify and create their own macros. Participants are encouraged to bring laptop computers loaded with Microsoft Excel 2007.

This is a hands-on computer based workshop. Participants attending this workshop are required to bring a laptop computer. Laptop computers must have MS Excel 2007.

**Presenter(s):** Ali Korkmaz, Indiana University at Bloomington; John Moore, Indiana University at Bloomington; and Thomas Shoup, Indiana University at Bloomington

**Registration Fee:** \$75.00

## **IR Strategies**

### **Balanced Scorecards in Higher Education - Developing Content and Using Them in Strategy Execution (W17) [\[minimize\]](#)**

***Sunday, May 31, 8:00 a.m. - 4:00 p.m.***

Participants will get a basic understanding of balanced scorecards, some of the key components and methods for their development and use including: – A basic understanding of Balanced Scorecards, Dashboards, KPIs and Strategy Maps – Developing draft KPIs for an institution – Identifying key leadership roles in building a scorecard and how the IR office interacts with them effectively – Identify sources and methods of setting benchmarks and signal values – Understand components of implementation plan for scorecard - Effectively using the scorecard system to improve strategy execution

**Presenter(s):** Jan Lyddon, Organizational Effectiveness Consultants and Bruce McComb, Organizational Effectiveness Consultants

**Registration Fee:** \$180.00

### **Dashboards in Excel made Easy (W11) [\[minimize\]](#)**

***Saturday, May 30, 2009, 8:00 a.m. - 11:30 a.m.***

When the boss tells you she needs a dashboard that the higher-ups can use to instantly judge your institutions performance on a number of metrics, what's an institutional research to do?

Think you don't have the staff or software needed? Think again. If you attend this workshop you'll learn how to create a dashboard in Excel that dynamically updates as new data is added, sets traffic light colors automatically and handles reporting on multiple departments or campuses. Topics covered include the Choose and Offset functions as well as how to build traffic light performance indicators.

This is a hands-on computer based workshop. Participants attending this workshop are required to bring a laptop computer. Laptop computers must have Windows XP or Windows Vista with MS Excel 2007.

**Presenter(s):** Craig Abbey, State University of New York-System Administration

**Registration Fee:** \$75.00

**Learning by Doing: Using External Environmental Scanning and Forecasting to Improve Strategic Planning (W03) [\[minimize\]](#)**

***Sunday, May 31, 8:00 a.m. - 4:00 p.m.***

This workshop will emphasize strategic planning, i.e. from the "outside-in" rather than the "inside-out." Handouts and presentations will enable participants to learn the distinction between strategic and operational planning; what is and the need for external environmental scanning and forecasting; types of changes, especially trends, in the external environment; major international and national trends; and examples of college strategic plans developed from trends will be shared. Participants will be involved in a scan team exercise to link learning with doing, and advice for starting and sustaining a successful scanning and forecasting activity will be included and discussed.

**Presenter(s):** Joel Lapin, Community College of Baltimore County

**Registration Fee:** \$180.00