

# Avar Consulting, Inc.

## Statement of Capabilities

### COMPANY OVERVIEW

Avar Consulting, Inc. (Avar) is a woman-owned, SBA certified small disadvantaged business (SDB) and a certified participant in the U.S. Small Business Administration's 8(a) Business Development Program. Located in Rockville, Maryland, we provide a wide range of professional services in the areas of attitude-behavior research, program evaluation, survey methodology, technical assistance/program support, data analysis/management, and IT support services. Our clients include federal, state, and local government agencies, non-profit organizations, and private corporations.

### CORE SERVICES

- **Program evaluation:** develop conceptual framework and evaluation measures, design data collection instruments and evaluation methodology, collect and analyze data, present findings, and write evaluation reports.
- **Technical assistance and program support:** review program implementation plans; design and develop web-based data collection and data tracking systems; conduct grantee training via conferences/workshops, webinars, and site visits; monitor program progress; perform on-going data quality control; and provide feedback to both government agencies and program grantees.
- **Survey design:** formulate research questions, develop data collection instruments, and determine appropriate survey mode(s).
- **Sampling design and execution:** identify and construct sampling frame(s), develop sampling strategies (e.g., SRS, stratified, cluster, PPS, multi-level, etc.), determine appropriate sample size(s), estimate sampling error and design effects, select samples in accordance with the sampling design, and manage samples throughout the course of a survey.
- **Data processing and data mining:** data entry, data cleaning/editing, data weighting, and exploratory analyses.
- **Statistical modeling, analysis, and reporting:** design statistical models/techniques based on research questions, analyze data using appropriate softwares (e.g., SPSS, SAS, etc.), present analysis results in graphics, and write study reports.
- **Database development and management:** design, develop, and manage various types of databases using Access 2003, Oracle PL/SQL, Developer 2000, DMBS 7.0, and DB4.
- **Website development and maintenance:** design, develop, host, and maintain websites for different projects or clients.
- **Web survey and web-based data management:** design and program web survey questionnaire, establish access security, import and export data, enable on-line data processing, analysis, and reporting.

- **Focus group studies:** develop sampling strategies, recruit focus group subjects, provide logistic support, moderate group discussion, analyze data, and report findings.
- **Market research:** develop predictive models to determine market potentials, perform customer segmentation analysis, evaluate the effectiveness of marketing campaigns, perform web traffic/sales analysis, and conduct customer satisfaction/insight surveys.
- **Litigation support:** provide expert consultancy on research methodology including study design, sampling design, statistical models, and analytical techniques.
- **Psychometric testing:** test instrument validity and reliability using a variety of statistical techniques.
- **Conference management:** disseminate conference information and news releases; develop and manage web-based online registration, payment, and paper/document submission; develop conference programs; and provide logistic arrangements.

## STAFF AND CONSULTANTS

Avar Consulting, Inc. has a team of highly qualified staff and consultants to deliver the core services described above. All of our key staff and consultants hold a graduate degree and have years of experience in social science research and/or information technology.

### Z. Joan Wang, Ph.D., Founder and President

Dr. Wang has over 20 years of experience in the areas of survey methodology, attitude-behavior research, and program evaluation regarding education, public health, and social services. She has special expertise in



evaluation design and implementation, survey design and implementation, sampling design, statistical modeling, data analysis, psychometric testing, report writing, and management of large databases. She is currently serving as Project Director on the 2011-2014 Annual Survey of Refugees for the U.S. Department of Health and Human Services and the Evaluation of Veterans Transition Assistance Programs for the U.S. Department of Labor. She has recently directed the Survey of 2010 LUCA Program Participants for the U.S. Bureau of Census, a technical assistance project for the evaluation of the U.S. Department of Labor's Young Parents Demonstration (YPD) Program, and a two-phase study to examine the U.S. Department of State's global exchange alumni coordination

effort. Dr. Wang has served as Project Director and/or Senior Statistician on over 30 additional survey research and data analysis projects. These include, but are not limited to, the Consumer Expenditure Records Study, the 2009 and 2011 Maryland Youth Risk Behavior Survey (YRBS), two global online surveys of U.S. exchange alumni coordinators and alumni association leaders, the 2002, 2004, and 2006 Maryland Cancer Screening (MCS) surveys, the 2006-2010 Annual Survey of Refugees, the National Follow-up Survey of Veterans' Health Care Services, the National Surveys of Veteran Entrepreneurs and Service-Disabled Veteran Entrepreneurs, the National Survey of Medicare Beneficiaries, the National Survey of Opioid Treatment Program Participants, the 2002-2010 Annual Surveys of Refugees, the National Survey of NSF Principal Investigators, the National Customer Satisfaction Survey for the National Endowment for Humanities, the Customer Satisfaction Survey of Maryland Mental Health Care Services Recipients, the Maryland Health Insurance Coverage Survey (MHICS), the National Survey of Women's Sexual Health, the Maryland Survey of Small Businesses, the Maryland Lottery

Tracking Survey, the North Carolina WIA Customer Service Satisfaction Survey, the Housing Survey of Montgomery County Residents, the FEMA Customer Service Survey, the Youth Risk Behavior Survey of the Montgomery County Public Schools, the Survey of Maryland Public School Principals, the Survey of Parents of Students in Baltimore City Public Schools, and the National Survey of School Library Media Centers. She also served as an expert survey methodologist/statistician on class lawsuits and other litigation cases.

In addition, Dr. Wang has served as Project Director and/or Senior Analyst on over a dozen other program evaluation projects including the Evaluation of Residential Resources in Maryland for Children with Special Needs, the Evaluation of the Maryland Substance Abuse Services Demonstration Project (Title IV Waiver), the Evaluation of the Maryland Child Support Enforcement Privatization and Demonstration Pilot Programs, the Evaluation of the Impact of Teachers' Professional Development, the Evaluation of the Maryland Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP), the Evaluation of the "Communities Choosing" Adolescent Pregnancy Prevention Program in San Francisco, the Evaluation of the Effect of Increased State Aid to Maryland Local School Systems through the Bridge To Excellence Act, the 2001 Evaluation of the Baltimore City Public Schools, the Evaluation of the impact of Opioid Treatment Program Accreditation, and the Evaluation of the Education and Training for Employment in Morocco. She also served as Senior Analyst on a multi-year project to establish the National Evaluation Data and Technical Assistance Center (NEDTAC) for the Center for Substance Abuse Treatment (CSAT). She developed the initial design of the CSAT Client-Level Minimum Evaluation Data Set (MEDS) to guide CSAT grantees in their program evaluation effort. She managed the Multi-Project Analysis (MPA) projects for several CSAT programs and participated in designing the Cross-Site Evaluation for CSAT programs. Dr. Wang was invited as an expert consultant by the Office of Inspector General in the U.S. Department of State to review the research methodology of one of their media impact projects, assess the validity of the study results, and provide technical advice on the research design and analytical approach. Dr. Wang holds a Master's degree in journalism studies from the University of Wales at Cardiff, U.K. and a Ph.D. in social psychology from the University of Maryland at College Park.

**Anthony (AJ) Ernst, Ph.D., Project Director/Senior Analyst**

Dr. Ernst brings more than 25 years of experience in the field of substance abuse and mental health prevention and treatment as a clinician, academician, and project director. Throughout his career, he has led strategic planning, product development, policy development, training initiatives, and overall systems change strategies across mental health and substance abuse service delivery systems to promote collaboration and build service capacities in the delivery of services to diverse populations. Currently, Dr. Ernst serves as Project Director for SAMHSA's Native American Center for Excellence at Avar Consulting, Inc., leading knowledge dissemination on community needs assessments, program evaluation and monitoring, practice- and evidence-based interventions, services integration, and revenue development to Native American programs throughout the US. As past Director of technology transfer at CDM Group for SAMHSA's Co-occurring Center for Excellence, Dr. Ernst led teams including state and community based organizations, national advisory council members, and diverse stakeholder groups to address issues related to co-occurring mental health and substance use disorders. While State Manager at state mental health and substance abuse agencies, Dr. Ernst served as the liaison for cross-sector collaboration between department stakeholders, local providers, advocacy groups, and local initiatives to standardize work force competencies and performance measures. Dr. Ernst is also the primary author of State administrative codes that ensure uniformity of clinical standards across state mental health and substance abuse service delivery systems. Dr. Ernst earned a Ph.D. in social work from the University of Texas.

**Albert C. E. Parker, Ph.D., Senior Survey Methodologist/Analyst**

Dr. Parker has over 25 years of experience as a survey research designer, manager, and analyst. He has directed sample survey data collection in all major modes, including personal interviews, mail, telephone, the Internet, and records abstraction. He is currently serving as a Senior Analyst on a project to support the

National Center for Education Statistics' national longitudinal studies. He recently served as a Senior Analyst on the Survey of LUCA Program Participants for the U.S. Census Bureau, taking a lead in its questionnaire design, data analysis plan, and development of the final study report. He managed two iterations of a customer satisfaction survey for the National Center for Education Statistics that included drawing samples from multiple frames, telephone screening of sample segments to establish eligibility and identify respondents, multiple modes for recruitment (e-mail and postal mail) and data collection modes (paper with key entry, Web, and telephone follow-up), unduplication and weighting, and reports that included longitudinal comparison of key indicators and comparison of satisfaction ratings across subpopulations. He has conducted research on threats to individual confidentiality in individual data files and on for preserving confidentiality while making data available to researchers. He analyzed the cost effects of alternative formats and follow-up methodologies for the 2000 Decennial Census household long and short forms, and evaluated the early implications of emerging technologies for the 2010 Decennial Census. He provided technical direction for research on imputation of missing and erroneous data in a large institutional census (public schools and school districts). Dr. Parker Received his M.A. and Ph.D. in History from Washington University at St. Louis.

#### **James Dotson, Ph.D., Senior Public Health Analyst**

Dr. Dotson has over 25 years of experience in health promotion and disease/injury prevention. As a Certified Health Education Specialist (CHES), he has extensive experience working with organizations to plan, implement and evaluate public health activities. He has been involved with a diverse range of health topics, among them substance use and abuse, obesity, physical activity and nutrition, HIV/AIDS, and other health areas. He has collaborated with clients to assess health issues and problems, and identify or develop effective strategies (programs, policies, and/or practices) to address those health concerns. He has supported initiatives and activities for a wide range of federal government agencies, including the Centers for Disease Control and Prevention, and has presented on behalf of these agencies at professional meetings. Dr. Dotson has more than 20 years of experience in federal government contracting, serving as a Corporate Monitor, Project Director/Principal Investigator, and/or Team/Task Leader on numerous projects, including multiyear/multimillion dollar contracts and task orders. He holds a B.A. degree in Biology from Washington Adventist University, and M.A. and Ph.D. degrees in Health Education from the University of Maryland at College Park. His doctoral dissertation was titled: "Physician-Delivered Smoking Cessation Interventions: An Information Synthesis of the Literature."

#### **Steven J. Fink, M.A., Senior Survey Methodologist/Analyst**

Mr. Fink has over 20 years of experience directing small and large scale research projects, specializing in all phases of survey research and program evaluation. He is currently reviewing NCES publications for the National Center for Education Statistics' Education Statistics Support Institute Network (ESSIN) for accuracy and compliance with NCES standards and publications format. He managed and wrote the final reports for several NCES Customer Satisfaction Survey studies. He also developed SPSS training materials for education researchers on the use of several NCES databases, including SASS, NCELS:88, NPSAS, and NSOPF. Mr. Fink served as a survey/evaluation specialist for large county school system, working on more than 30 projects regarding job satisfaction, work environment, program evaluation, school culture, and needs assessment studies among school staff, parents, and students. Mr. Fink has excellent communication and presentation skills and has presented research findings at numerous local and national conferences. As an SPSS trainer for over five years, he provided SPSS instruction to more than 3,000 analysts, covering wide variety of topics, including questionnaire design/writing, sample design, survey methodology, syntax programming, data collection strategies, multivariate analyses, and presentation of tables/graphs. For the past 18 years, he has been an Adjunct Sociology professor at Montgomery College. Mr. Fink received his M.A. in Sociology from the University of Connecticut, with a concentration in Survey Research.

**Lei Zhou, Ph.D., Senior Analyst**

Dr. Zhou has over ten years of experiences in research in education finance and economic growth and six years of experiences in data management and quality control. During the past six years she has been serving as a research analyst on the National Center for Education Statistics (NCES)' Education Statistics Support Institute Network (ESSIN), formerly known as Education Statistics Services Institute (ESSI). She has been leading the ESSI work on the NCES Common Core of Data finance surveys, including National Public Education Financial Survey, Local Education Agency (School District) Finance Survey (F-33), and Teacher Compensation Survey. She has performed complete review of the preliminary data, applied edits to the data, conducted disclosure risk analysis and applied data swapping to protect confidentiality, performed quantitative analysis on data, created restricted-use and public-use data files and documentations based on nation-wide individual level survey data, and generated reports and tables for clients at NCES. For her dissertation research, she conducted an empirical investigation of the relationship between globalization and inequality in per capita income within and across countries using regressions and multivariate analysis methods. She acquired the SAS Base Programming Certificate and was trained by SAS Institute on SAS Macro Language, SAS SQL, and Design and Analysis of Probability Surveys. She received both her Master's degree in Statistics and Ph.D. in Economics from Utah State University.

**Grace (Cheng-Shuang) Ji. M.E., Ph.D., Senior Research Associate**

Dr. Ji has over ten years of experience in the area of education; child development; parenting practices; parental involvement and adolescent performance and adjustment. Her expertise encompasses study design, development of research protocols, questionnaires and evaluation instruments as well as data collection and management. She has been a key investigator in several research projects focusing on parental involvement; adolescent anxiety and depression; child/adolescent social-emotional development; parent-school communications and cultural competence when she worked as research associate at the University of Maryland and Georgetown University. She conducted her dissertation research to examine the predicting effect of maternal mental health, education; acculturation; and social support in the Asian American mother's cognitive stimulation and emotional warmth toward their children as well as their involvement in the school functions and settings, using data from the Early Childhood Longitudinal Study (ECLS-K). She is the lead author of two journal articles on cultural views and parental involvement and has presented research findings at numerous national conferences. Dr. Ji also served as a Parent Specialist for the District of Columbia Public Schools (DCPS) and conducted training sessions and workshops for school registrars, teachers, counselors, and administrators for the DCPS from 2006 to 2010. Dr. Ji received her master degree in Parenting and Family Studies from the Beijing Normal University and her Ph.D. in Family Science from the School of Public Health, University of Maryland, College Park.

**Bethanie X. Wang, Ph.D., Research Associate**

Dr. Wang has 10 years of experience in the areas of education, child development, family science, and substance abuse prevention. Her expertise encompasses program design and evaluation, quantitative and qualitative analyses, survey methodology, data management and quality control, and scientific writing. She has worked on over a dozen federal, state, and county-level research projects since 2009. She is currently serving as a research analyst on the National Center for Education Statistics' Education Statistics Support Institute Network (ESSIN), performing technical reviews of NCES publications and developing issue briefs and web tables using data from the High School Longitudinal Study and the National Education Longitudinal Study. She also served as a Research Analyst on the 2009 and 2011 Maryland Youth Risk Behavior Surveys (YRBS), the 2009-11 Annual Survey of Refugees, and the U.S. Census Bureau's Survey of LUCA Program Participants, analyzing survey data and writing study reports. Using NCES's Childhood Longitudinal Study-Kindergarten Class of 1998-1999 (ECLS-K) dataset, she conducted her dissertation research on the predictors of the academic achievement and socio-emotional development of Asian American children. She participated in over a dozen studies on adolescent mental health, early childhood education and child care policy, Head Start, and effects of parental involvement on children's school education. She has also provided technical assistance to the

Department of Labor's evaluation of their Young Parent Demonstration Program and managed the content of a comprehensive website for the Native American Center for Excellence funded by the Center for Substance Abuse Prevention. Dr. Wang is highly proficient in SPSS, Microsoft Excel, and MicroSoft Power Point, and has received training certificates on Data Confidentiality from the Bureau of Labor Statistics, and Data Stewardship Awareness from the Bureau of Census. She holds a Master's degree in Education from Beijing Normal University, and a Ph.D. in Family Science from the School of Public Health, University of Maryland, College Park.

**Ariel C. Lin, Ph.D., Research Associate**

Dr. Lin has 5 years of teaching experience and 8 years of research experience in the field of education, including L1/L2 reading comprehension, motivation, digital learning, language learning strategies, and creativity. She has solid training in both quantitative and qualitative methodologies and is proficient in SPSS. Dr. Lin recently managed three expert panel meetings for the National Center for Education Statistics, analyzed data collected from these panel discussions, and prepared two comparison study papers between the 2011 National Assessment of Educational Progress (NAEP) and the 2011 Trends in International Mathematics and Science Study (TIMSS), and between NAEP and the 2011 Progress in International Reading Literacy Study (PIRLS). She is currently serving as a research analyst on the National Center for Education Statistics' Education Statistics Support Institute Network (ESSIN). Dr. Lin received her Ph.D. in Curriculum and Instruction and a certificate in Measurements, Statistics, and Evaluation both from the University of Maryland at College Park. She has presented 14 papers on the topics of reading comprehension and educational assessments in international conferences, and has several journal papers under review or in preparation.

**Joy X. Wang, Ph.D., Research Associate**

Dr. Wang has five years of experiences in statistics and intensive research in consumer behavior analysis using statistical methodology and econometric modeling. She has analyzed data for the U.S. Census Bureau's Survey of the 2010 LUCA Program Participants and the Annual Survey of Refugee funded by the federal Office of Refugee Resettlement (ORR). She is currently serving as a research analyst on the National Center for Education Statistics' Education Statistics Services Institute Network (ESSIN), performing technical reviews of NCES publications and developing issue briefs and web tables using data from the High School Longitudinal Study and the National Education Longitudinal Study. For her dissertation research, she developed econometric panel data models to simulate consumer behavior toward beef products under food risks and conducted advanced analysis of large national databases using SAS and STATA. She is proficient in both SPSS and SAS. She received both her Master's degree and Ph.D. in Applied Economics from the University of Kentucky. She has two refereed journal articles and has several refereed presentations at professional meetings in the field of applied economics.

**Gloria T. Yim, M.A., Research Associate**

Ms. Yim completed her Master's degree with a focus on welfare policy. Throughout her academic studies she has strived to improve her understanding of survey methodology and quantitative analysis. In her undergraduate program, she became a mentor to graduating seniors looking for expertise in SPSS. Throughout her graduate program, she continued to be a mentor to her cohort when it came to the understanding of SAS. She served as a Research Aide in the project Momento Crucial by ASU's College of Nursing, managing the quantitative database in a mix-methods longitudinal study on elderly care of Mexican-American families. She is currently serving as a research analyst on the National Center for Education Statistics' Education Statistics Services Institute Network (ESSIN) providing various statistical support services to NCES in the areas of publication review, data disclosure, and special studies. Ms. Yim received her M.A. in Sociology from Arizona State University, Tempe.

**Chayun Yi, M.P.P., Research Associate**

Ms. Yi has research and analysis experience in different public policy areas, including education, national security, housing, immigration, and health. She is proficient in SPSS and has solid training in quantitative, qualitative, and survey methodology. She also has experience in survey data collection and has taught social science for high school students for over six years. She is currently serving as a research analyst on the National Center for Education Statistics' Education Statistics Services Institute Network (ESSIN), providing various statistical support services to NCES in the areas of publication review, data disclosure, and special studies. She also provides support services to NCES's special projects including the Data Inventory Group (DIG), an information collection project that designs, implements, and manages database for NCES and Department of Education's Office of Management and Budget (OMB) clearance packages. Ms. Yi received her Master's degree in Policy Analysis from George Mason University, Virginia.

**Robert C. Barrett IV, M.P.P., Research Associate**

Mr. Barrett has public policy research and analytical experience in an array of different public policy fields, including education, national security, and law. Moreover, he has experience in a number of different programming languages, in addition to proficiency in SAS and STATA, and can engage in quantitative and qualitative analysis as well as in application development. He is currently serving as a research analyst to the National Center for Education Statistics' (NCES) Education Statistics Support Institute Network (ESSIN), where his current work focuses on the development and application of integrated structured databases, data catalogues, and document archives. Mr. Barrett has recently received his Master's in Public Policy at George Mason University, Virginia.

**Max W. Li, B.S., Survey Supervisor**

Mr. Li has three years of experience in the areas of optimization, statistical analysis and survey management. He has conducted research on healthcare optimization using operations research concepts including queuing theory and probabilistic and statistical modeling. Over the past two years, he has been managing the field operations for the Office of Refugees and Resettlement's Annual Survey for Refugees. Recently, he also programmed the online questionnaire for the Veteran's Employment and Training Service's (VETS) evaluation of the Transition Assistance Program (TAP) employment workshops, aimed towards separating and retiring military veterans. Mr. Li is well versed in data security methods and managing the flow of sensitive information. He is also proficient in various analytical, engineering and simulation software including Excel, SAS, SPSS, Minitab, Matlab and ProModel. He received his B.S. in Systems Engineering and Finance from Washington University, St. Louis and is currently pursuing a Master degree in Statistics at George Mason University, Virginia.

**Gregory Dwyer, B.A., Research Assistant**

Mr. Dwyer graduated *Cum Laude* from the University of Delaware with an Honors Bachelor of Arts in Political Science and History. He is currently member of the Technical Review team for the National Center for Education Statistics (NCES), assisting senior analysts with statistical and methodological reviews of NCES publications. He also serves as the team's Contractor Security Liaison responsible for acquiring security clearances necessary to work with NCES restricted use data. As an undergraduate, he worked as a Blue Hen Ambassador where he promoted the university to prospective students and their families through tours and assisted the admissions office through various recruitment programs. Additionally, he helped implement the Blue Hen Poll, a public opinion survey of more than 2,000 undergraduate students at the University of Delaware, serving as the Team Leader for Survey Design and Methodology. Mr. Dwyer further extended his experience into other arenas; he was an interviewer for the Center for Applied Demography and Survey Research, a Resident Advisor and Mentor for the Middle Eastern Partnership Initiative, as well as a Constitutional Law Researcher at the university. Mr. Dwyer is highly skilled in such programs as Microsoft

Office Suite, including Excel, PowerPoint, Word, Access, etc., and proficient in software such as SPSS and Qualtrics.

**Wayne Ni, M.S., Data Manager/SPSS Programmer**

Mr. Ni has over 10 years of experience in the areas of data management and IT development. He has in-depth understanding of data lifecycle from collecting data from multiple sources to have deliverables to clients, and all phases of software development life cycle. He has served as Developer, DBA, Data Manager, Business Analyst, Project Manager, and System Architect on multiple projects for government, private sector, and non-profit organizations. He has developed project management system and streamlined the operations of multiple research projects for various U.S. Government programs including ORR Annual Survey of Refugee, Native American Center of Excellence, and Survey of LUCA Program Participants. He has delivered on-line real-time progress report, greatly improved the operations efficiency. He has managed data deliverables for multiple projects, including ORR Annual Survey of Refugees, Survey of LUCA Program Participants. Mr. Ni is proficient in technologies including SAS 9.1, SPSS 19, SQL Server 2005, ASP.Net, Oracle 10g, and project management methodologies. Mr. Ni holds a Master of Science in Information Management specialized in Information Security, and a certificate of Advanced Studies in Information Security, both from Syracuse University.

**Kevin Ji, B.S., IT Specialist**

Mr. Ji has over seven years of experience in computer sciences and IT technology. Mr. Ji has fulfilled various positions including mobile programmer for Department of Education, multimedia technician for LeBow Tech, and Performance analyst for Siemens Medical Solutions around the enterprise solution Soarian. From troubleshooting hardware to securing corporate networks, from programming web application to implementing enterprise solutions, Mr. Ji has a wide spectrum experiences working with government agencies and business clients. Soon after joining the Avar team, Mr. Ji has been involved with development of a national online inventory of healthcare services datasets/databases for the Agency for Healthcare Research Quality (AHRQ), two web-based global surveys for the U.S. Department of State, a web-based random assignment and monitoring system for the evaluation of the U.S. Department of Labor's Young Parents Demonstration Program, and programmed the Office of Refugee Resettlement (ORR) annual survey. Mr. Ji also has experience in designing the logo and graphical materials for Circle of Care of Substance Abuse and Mental Health Service Agency (SAMHSA), and data release publication for TIMSS and PIRLS of 2012. Mr. Ji is currently involved with optimizing database, building front end interactive web portal, designing and developing web survey questionnaires, managing the day-to-day IT operations, and the processing of survey data. Mr. Ji holds a B.S. in Information Systems from Drexel University, Philadelphia, PA and is currently pursuing the Master of Cybersecurity degree from University of Maryland University College.

**Michael Larsen, Ph.D., Senior Statistician (Consultant)**

Dr. Larsen is an Associate Professor at George Washington University (GWU). He joined GWU's Department of Statistics and Biostatistics Center in 2009. Before joining GWU, Dr. Larsen was on faculty at four universities, most recently Iowa State University, where he earned tenure. He has consulted for and collaborated with researchers at a number of government agencies, research organizations, and academic departments. His interests include survey sampling, missing data, record linkage and administrative records, disclosure limitation and confidentiality, Bayesian statistics, hierarchical and mixture models, and statistical modeling of complex data. From 2008-2010 he was Executive Editor of [CHANCE](#) magazine. Currently he is associate editor for three journals and serves on a National Academies of Sciences Panel on Census 2010. In 2010, he became an elected member of the International Statistical Institute and the program chair-elect/program chair of the American Statistical Association's Survey Research Methods Section for 2011/2012. Dr. Larsen received his Ph.D. in Statistics from Harvard University.

**James A. Swartz, Ph.D., Public Health Specialist (Consultant, Substance Abuse Treatment & Prevention)**

Dr. Swartz has 20 years of experience in mental health and substance abuse treatment and prevention research, which has resulted in over 30 peer reviewed publications, eight books and book chapters, over 20 study reports, and numerous presentations. His research topics include screening for serious mental illness in populations with co-occurring substance use disorders; the mediating effects of substance use between serious mental illness and arrest; substance abuse treatment and prevention for women; substance abuse treatment in the criminal justice system; and the impact of welfare policy on substance abuse. Dr. Swartz has served as a reviewer for a number of professional journals such as *International Journal of Mental Health and Addiction*, *Contemporary Drug Problems*, *Substance Use and Misuse*, *American Journal of Public Health*, *Women & Criminal Justice*, *Crime and Delinquency*, *Criminal Justice and Behavior*, and *Journal of Offender Rehabilitation*. He also served as a grant reviewer for the National Institute on Drug Abuse and the Robert Wood Johnson Foundation Substance Abuse Policy Research Program. Dr. Swartz holds a Master's degree in behavioral research from Loyola University at Chicago, Illinois, and a Ph.D. degree in clinical psychology from Northwestern University Medical School. He is currently an Associate Professor at Jane Addams College of Social Work, University of Illinois at Chicago.

**Suzanne Bowler, Ph.D., Health Policy Analyst (Consultant)**

Dr. Bowler has 20 years of experience in designing, conducting, and managing single- and multi-site public health research and evaluation projects for Federal and State Government clients including the Centers for Disease Control and Prevention (CDC), Centers for Substance Abuse Prevention (CSAP) and Treatment (CSAT), SAMHSA, the National Institute on Alcohol Abuse and Alcoholism (NIAAA), the National Institute on Allergy and Infectious Diseases (NIAID), and the National Cancer Institute (NCI). Specific skills include process and outcome evaluation design, evaluation training, survey research, qualitative and quantitative data collection including site visits and in-person interviewing, focus group facilitation, case study research and analysis, content analysis of primary and secondary data, cross-site data analysis, and data management. She has also written technical reports and publications including Federal monographs and peer-reviewed journal articles, and technical and grant proposals for a variety of Federal initiatives. Dr. Bowler holds an M.A. and Ph.D. both in Anthropology from the University of California at Berkeley.

**Sukari Ivester, Ph.D., Social Epidemiologist (Consultant)**

Trained as a social epidemiologist, Dr. Ivester's general research interests are in the social and structural determinants of health outcomes, particularly among vulnerable populations. Her research experience includes several evaluations in the areas of Maternal/Child Health and Substance Abuse Prevention funded by the U.S. Department of Health and Human Services since 1997. Dr. Ivester is a Research Fellow at the School of Public Health at the University of California, Berkeley as well as an Adjunct Professor of Medical Sociology at the California State University, East Bay. She is currently leading an evaluation for the State of California of the Mental Health Service Act (MHSA), a \$350 Million effort to transform Mental Health Services in the state. In addition to a qualitative analysis of the Proposition 63/Mental Health Services Act (MHSA) Evaluation. she is investigating urban health vulnerabilities from a spatial perspective as related to food access and the built environment. She has also been funded by the National Institutes of Health for both pre-doctoral and post-doctoral research. Dr. Sukari Ivester received her BA. in Sociology from the University of California, Berkeley, and earned her Ph.D. in Sociology from the University of Chicago.

**L. Dee Torre, Ph.D., Education Specialist (Consultant, Early Childhood & Special Education)**

Dr. L. Dee Torre has more than 30 years of experience in education evaluation and policy analysis, especially in early childhood mental health and behavioral issues, special education, parental involvement and education administration. For eight years, she was a master teacher and administrator for students with disabilities ages 1-7 years. She has also worked extensively as an advocate for interagency collaboration regarding students

with intense individual needs. Dr. Torre has served as Project Director and/or Principal Investigator on numerous evaluation or research studies including: a three-year project to evaluate the Judith P. Hoyer Early Care and Education Enhancement program for the Maryland Department of Education; a seven-year longitudinal study that assisted the New York State Education Department in determining the long-term effect of preschool special education programs and services; the evaluation of California's Child Care Development Block Grants; a comprehensive study for the Florida Commission on Children with Developmental Delays; the Maryland, Arkansas, Georgia, Nevada and South Carolina Reading Excellence Act Program Evaluations; the evaluations of Reading First funding outcomes for K-3 students in New Jersey, Mississippi, Arkansas, and Kentucky. Dr. Torre holds a doctoral degree in Educational Administration and Policy Studies (with a minor in Educational Psychology, Testing, and Measurement) from the State University of New York at Albany. Additionally, she has an M.S. degree in Special Education, with a minor in reading, and is a certified teacher and superintendent. She has recently retired as a senior evaluator and partner in a national firm where conducted statewide and local agency evaluation and planning projects in 12 states and is now pursuing projects of high interest as an independent consultant.

**Alberto F. Cabrera, Ph.D., Education Specialist (Consultant, Higher Education)**

Dr. Alberto F. Cabrera is a full professor at the College of Education, the University of Maryland. He has conducted over 20 years of research in college choice, college students, classroom experiences, minorities in Higher Education, and economics of education. He was also a faculty member at the University of Wisconsin-Madison, Penn State University, SUNY-Albany, and Arizona State University-West campus. Dr. Cabrera has served on the National College Access Network's board of directors as well as in the editorial boards of the top journals in higher education in the USA and Spain (e.g., *Journal of Higher Education*, *Review of Higher Education*, *Research in Higher Education* and *Revista Complutense de Educación*). He was a member of the advisory board for Pathways to College Network and currently serves on the GEAR UP Evaluation Council of the National Council for Community and Education Partnerships (NCCEP), a 14-member group charged with a mandate to develop a conceptual research framework and data collection design that will be implemented in GEAR UP programs nationally. His work on classroom practices, the role of finances on college persistence and on determinants of default behavior has received several awards. He was the co-leader of the Diversity Institute, a project funded by NSF seeking to create inclusive teaching practices in STEM fields (<http://www.wcer.wisc.edu/cirtl/diversityinstitute>). He was co-principal investigator for the IES grant titled Dream Deferred which provided a most comprehensive review of the impact of GEAR UP on awareness and readiness for college among low-income middle school students. Dr. Cabrera holds a Ph. D. in Educational Administration from the University of Wisconsin-Madison, Madison.

**George Ji, M.B.A., Senior Internet Service Specialist (Consultant)**

Mr. Ji has over 10 years of experience in program management and Internet-based development and services, including web-based survey design, programming and hosting, website planning, design, development, hosting and maintenance, web-based database development and data management, as well as online business transactions. He has led/worked on more than 20 internet service projects. Leading a team of IT specialists, Mr. Ji has successfully transferred a large, on-going web survey, including its software applications, survey databases, records, and other associated materials from a Citrix server to Avar's multi-platform server without interrupting the survey operation. He is currently leading a number of Avar's web-based projects as follows: 1) hosting and management of the Transforming Church Index survey and producing customized on-line reports; 2) hosting and management of the Performula Assessment, a 360 degree performance review tool for corporate clients; 3) hosting and management of the Healthy Business Index, an on-line organizational assessment tool; 4) design and development of an on-line inventory of healthcare services databases for AHRQ; and 5) providing website, e-mail, and intranet hosting and data archiving services for a number of companies and organizations. Mr. Ji holds a Master's degree in American Studies from Shanghai International Studies University and an M.B.A. from Webster University at St.Louis with an emphasis on technology management.

## CORPORATE EXPERIENCE

### **Transition Assistance Program Employment Workshop Evaluation - Veterans' Employment And Training Service(VETS), U.S. Department of Labor (DOL)**

DOL/VETS conducts Transition Assistance Program (TAP) Employment Workshops that provide employment information, training opportunities, and vocational guidance to allow separating service members to make informed career choices. A redesign of the employment workshop curriculum was completed in November 2011. The implementation of the redesigned curriculum will be phased in, beginning with 11 identified pilot sites in February 2012. The purpose of this project is to conduct an evaluation of these TAP Employment Workshops. The study consists of the following components: (1) design and development of various data collection instruments such as site observation protocols, key personnel interview protocols, and questionnaires for the workshop facilitators and participants surveys; (2) site visits to 11 bases piloting the revised TAP curriculum; (3) key personnel interviews with program staff and workshop facilitators; (3) three paper and web-based surveys (customer satisfaction, facilitator, and follow-up); (5) analysis of qualitative and quantitative data regarding the delivery and effectiveness of the TAP curriculum; (6) presentation of results to DOL through interim and final reports and regular briefings; and (7) revision of the published written and online curriculum based on study findings. Contact person: Tim Winter, (202) 693-4705.

### **Education Statistics Services Institute Network (ESSIN) 2012-2016**

The Education Statistics Services Institute Network (ESSIN) is a series of contracts that support the National Center for Education Statistics (NCES), U.S. Department of Education. The current round of contracts was awarded in late 2011 to begin in January 2012. Avar was awarded three tasks as prime contractor.

#### ***Tasks 1 & 2: Statistical Standards Program Support***

These tasks provide various statistical support services to NCES in the areas of publication review, data disclosure, and special studies. Review of NCES publications covers reports written by NCES staff or contractors based on data collections sponsored by NCES, including national universe surveys of elementary and secondary education (the Common Core of Data) and of higher education (Integrated Postsecondary Education Data System [IPEDS]), the National Assessment of Educational Progress (NAEP), periodic surveys, and longitudinal studies. Review also includes compendium publications such as *Condition of Education*. Review activities include initial technical reviews for accuracy and compliance with NCES standards and publications format, and compliance review after revision by authors. Avar and its subcontractors also contribute new materials and updates to the *NCES Handbook of Statistical Methods*; and monitor the use of NCES data in professional journals, education association Websites, Congressional testimony, and proposed or enacted legislation. In support of NCES confidentiality and disclosure policies, we review disclosure risk avoidance plans, apply statistical methods such as perturbation to NCES data sets prior to public use, and monitor contractor security clearance documentation. The National Institute of Statistical Sciences (NISS) is also a subcontractor for these tasks. Contact person: Marilyn M. Seastrom, (202) 502-7303.

#### ***Task 4: Elementary and Secondary Longitudinal Support***

In this task, the Avar team supports three large-scale longitudinal studies of elementary and secondary education: the National Education Longitudinal Study of 8th graders (NELS:88), the Educational Longitudinal Study of 2002 (ELS:2002), and the High School Longitudinal Study of 2009 (HLS:09). All three studies are currently in various follow-up stages. Support activities include conducting special studies/analyses using data collected from these surveys; developing research syntheses, issue briefs, research papers, and compendia; reviewing questionnaires/assessment instruments; producing and reviewing questionnaires and assessment instruments; producing and checking sampling plans and data collection strategies; evaluating field test procedures and surveys; reviewing Office of Management and Budget (OMB) clearance packages and data collection activities; conducting non-response bias analysis and quality control checks; developing composite

statistics and weights; producing data files and documentation; training users in the use of longitudinal data bases; and compiling annotated bibliographies of publications using data from the three surveys. Contact person: Laura LoGerfo, (202) 502-7402.

**The Native American Center for Excellence (NACE) - Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services**

NACE is a national resource center for Native and non-Native audiences throughout the United States to address Native American substance abuse prevention and related behavioral health issues. NACE provides onsite and offsite training and technical assistance and online information resources via its website at <http://nace.samhsa.gov>. NACE is funded by the Substance Abuse and Mental Health Services Administration Center for Substance Abuse Prevention. Under a five-year contract with SAMHSA, Avar is currently operating and managing NACE and providing various technical assistance to the American Indian communities. Tasks include: (1) convening expert panel meetings, (2) training and technical assistance and consultation, (3) identifying and developing innovative and evidence-based programs, practices, and policies to prevent and identify substance abuse in native american communities, (4) instrument development and data collection and analysis, (5) information dissemination, (6) hosting and managing the NACE website and other IT support, (7) conducting program evaluations, and (8) conference planning and meeting logistics. Contact Person: Josefine Haynes-Battle, 240-276-2563.

**2011-2014 Annual Survey of Refugees -- Office of Refugee Resettlement, U.S. Department of Health and Human Services**

To follow up and assess the refugees' adjustment to the United States, a telephone survey of approximately 2,500 refugee households and 5,000 individuals has been conducted every year since 1970s to collect data on the status of their English proficiency, education, employment, income, self sufficiency, and use of available government programs. Some of the issues are addressed at the individual level while others at the household level. Each cohort of the sampled refugees is followed up for 5 years, and each year a new cohort is added to the sample while an old cohort retires. Avar is currently under a four-year contract with the Office of Refugee Resettlement (ORR) to conduct the 2001-2014 Annual Survey of Refugees. Specific tasks include (1) assisting ORR in questionnaire revision and sampling design, (2) tracing the sampled refugees on an ongoing basis, (3) collecting survey data via the internet and computer assisted telephone interviews in over a dozen languages, (4) processing survey data, (5) creating cross-sectional and longitudinal data files at both individual level and household level, (6) performing basic and post-stratification weighting, (7) conducting cross-sectional and longitudinal data analyses, (8) presenting analysis results in appropriate graphics, and (9) preparing the "Economic Adjustment" section of ORR's Annual Report to Congress, which can be accessed on the ORR website via <http://www.acf.hhs.gov/programs/orr/data/arc.htm>. Contact person: Pete Torres, 202-401-4736.

**U.S. Participation in the Trends in International Mathematics and Science Study (TIMSS) 2011 and Progress in International Reading Literacy Study (PIRLS) 2011 – U. S. Department of Education**

The National Center for Education Statistics (NCES) of the U.S. Department of Education supports a variety of international activities to collect and report data on education in the United States and other countries. These include TIMSS, PIRLS, and the National Assessment of Educational Progress (NAEP). TIMSS is an international assessment that focuses on the mathematics and science knowledge and skill of fourth-and eighth-graders while PIRLS is an international assessment that focuses on the reading knowledge and skills of fourth-grade students. NAEP is a U.S. national assessment that measures fourth-, eighth-, and twelfth-grade students; performance in reading, mathematics, and science. All three assessments are conducted regularly to allow the monitoring of student outcomes over time. Westat, Inc. is contracted with NCES to implement the U.S. participation in TIMSS and PIRLS. As a subcontractor to Westat, Avar has recently completed a comparison study of these international assessments with their U.S. counterpart in terms of the assessment goals, frameworks, and cognitive items. This study consisted of activities such as (1) reviewing the NAEP, TIMSS, and PIRLS frameworks, (2) convening a meeting of external experts to cross compare the items in the three

tests, (3) performing analyses of the reading passages in PIRLS and NAEP, and (4) providing summary statistics and analysis of the outcomes of these reviews and comparison. Based on the study results, Avar has produced two research papers: one comparing TIMSS with NAEP on mathematics and science at the 4<sup>th</sup> and 8<sup>th</sup> grade levels and the other comparing PIRLS with NAEP on reading at the 4<sup>th</sup> grade level. Avar is also responsible for producing the released item sets of TIMSS and PIRLS and disseminating them to the U.S. public via a web portal, CDs/DVDs, and print media. The items sets will be in two formats: one with each release item accompanied by its associated scoring guide and statistics on the percentage of students in the participating countries that correctly answered the item; and the other with items alone without the scoring guide and statistics. Contact person: David Kastberg, 301-294-3811.

**2012-2014 Medicare Complaint Resolution Survey – Centers for Medicare and Medicaid (CMS), U.S. Department of Health and Human Services**

Medicare beneficiaries who received services often have complaints followed by a resolution process. CMS contracts IMPAQ International (IMPAQ) to monitor the effectiveness of the current complaint resolution process. Under a subcontract with IMPAQ, Avar is conducting an ongoing web-based survey of Medicare beneficiaries who filed a complaint(s) about the services they received. The information system pays particular attention to issues of data security, confidentiality, and redundancy to ensure constant availability. It is possible for users to look up their CMS complaint cases based on email invitation code, Medicare number, or other information such as zip code. New cases are augmented into the survey sample on a weekly basis. The production system supports at least 100 concurrent users, validates user identity so that only eligible respondents can enter the survey, and is 508 compliant. Contact person: Jasmine Ainetchian 202-289-0004 ext. 502

**Survey of 2010 Census Local Update of Census Addresses (LUCA) Program Participants – U.S. Bureau of Census**

To prepare for each decennial census, the Geography Division of the U.S. Bureau of the Census sends its records of housing unit addresses to local governments (cities, counties, minor civil divisions) for review, correction, and updating. The Local Update of Census Addresses (LUCA) Program is a partnership the Census Bureau established under the Census Address List Improvement Act of 1994 (Public Law 103-430). It utilizes the local knowledge of the tribal, state and local governments to improve the accuracy and completeness of the address list by having the relevant government agencies review and update their portion of the Census Address List prior to each census. Census 2000 was the first one that benefited from this effort and a survey was conducted of the LUCA participants thereafter to collect their feedback. Under a 15-month contract with the Census Bureau, Avar supported the agency in conducting the Survey of the 2010 Local Update of Census Address (LUCA) Program Participants, a mixed mode survey of approximately 11,500 local governments that participated in updating addresses for the 2010 Census. Data were collected via both USPS mail and the internet. Avar's responsibilities included: (1) reviewing a draft questionnaire prepared by the division and suggesting revisions in wording, format, and content to improve the validity and reliability of the questionnaire; (2) creating a database to manage and record responses to five different versions of the questionnaire; (3) receiving and processing paper and electronic responses from the local governments; (4) editing the survey data; (5) creating survey data files; (6) analyzing the data; (7) presenting a draft report to the division; and (8) developing a final report in accordance with client comments. Contact Person: Ethel Taylor, 301-763-8439.

**U.S. Consumer Expenditure Records Study – U.S. Census Bureau**

The U.S. Consumer Expenditure Quarterly Interview Survey (CEQ) is a monthly survey developed and conducted by the Census Bureau for the Bureau of Labor Statistics (BLS) to capture continuous information about the current buying habits of American consumers. Since the CEQ is a long, complex survey requiring a high level of burden for the respondent, the Census Bureau and the BLS are concerned that the CEQ might be subject to various forms of measurement errors because of underreporting. To investigate and reduce underreporting of household expenditures in the CEQ, the Census Bureau conducted a study - U.S. Consumer

Expenditure Records Study to explore the extent to which measurement error was a problem as well as to investigate the use of respondent records to reduce error. As a subcontractor with RTI International on this project, Avar assisted in developing the survey methodology, interview protocols, and data analysis plan; conducted quantitative and qualitative analyses of several subsets of the survey data, and prepared relevant sections of the final study report. Contact person: Emily (McFarlane) Geisen, 919-541-6566.

**Research and Development 2014: Assessment, Planning, and Analysis – U.S. Bureau of Census**

As the leading source of quality data about the nation's people and economy, the Census Bureau needs to stay abreast of the latest statistical, methodological, and technological advances. Under this five-year multiple-award IDIQ contract, Avar will provide the Census Bureau with research and development support and services in six (6) sub-areas: survey planning, cost and workload modeling, survey assessment, survey management assistance, technical analyses, and technology assessment. Contact Person: Kristee Camilletti, 301-763-2870

**The State of Minority- and Women-Owned Business Enterprise (M/WBE) -- Maryland Department of Transportation**

To ensure compliance with constitutional mandates and M/WBE best practices, Maryland Department of Transportation (MDOT) conducts a series of studies to examine the past and current status of M/WBEs in the State's geographic and product markets for contracting and procurement, to provide the evidentiary record necessary for the State's consideration of whether to implement renewed M/WBE policies that comply with the requirements of the courts, and to assess the extent to which previous efforts have assisted M/WBEs to participate on a fair basis in the State's contracting and procurement activity. Under a subcontract with RK&K, LLC, Avar provides statistical consultation to MDOT with regard to the design and results of these studies. Specific tasks include (1) advising MDOT on general principles, statistical issues, and methodologies involved in setting goals for MBE/DBE participation; (2) advising MDOT on the usefulness of various databases for calculation of MBE/DBE availability and perform preliminary data analyses as needed; (3) assisting MDOT in computing MBE/DBE availability figures and making appropriate adjustments of such figures; (4) advising MDOT staff on any statistical or issues that may arise in connection with the MBE Disparity Study; and (5) providing assistance in litigation related matters. Contact person: Richelle Thomas, 410-865-1242.

**Technical Assistance for the Young Parents Demonstration Grant (Round 2) – Employment Training Administration (ETA), U.S. Department of Labor**

Funded by the Workforce Investment Act (WIA) Pilot, Demonstration and Research funds, ETA's Young Parents Demonstration (YPD) program was designed to add enhancement services to existing education/training programs that targeted young parents or serve a broader population of youth that included young parents. A randomization design was employed to systematically evaluate the added value of the enhancement strategies or service components. Program participants were randomly assigned to a "bump-up" experiment group in which they would receive the additional services or a "control" group in which they would receive the existing services offered by the original program. Avar was under a one-year contract with ETA to provide technical assistance to Round 2 YPD grantees to ensure that the evaluation design was rigorously implemented. The project team (1) planned and convened grantee conferences, meetings, workshops, and training sessions; (2) conducted site visits and on-site training to grantees across the country; (3) managed travel and meeting arrangements; (4) conducted online training via Webinar; (5) developed and managed an on-line Participant Tracking System (PTS) to collect and monitor program participant information and facilitate the random assignment; (6) developed and managed a data quality control system to monitor random assignment build-up, analyze data completeness and accuracy, and produce weekly reports to ETA, the evaluation team, and the grantees; (7) conducted weekly conference calls with grantees to resolve issues as needed; (8) developed training materials and data collection forms; (9) managed/shared project documents via SharePoint; and (10) established a toll-free help hotline. Contact Person: Gloribel Nieves-Cartagena, 202-693-2771.

### **Review of Exchange Alumni Coordination – U.S. Department of State**

The Bureau of Educational and Cultural Affairs (ECA) at the U.S. Department of State (DOS) fosters mutual understanding and respect between the United States and other countries through international educational, professional and cultural exchanges and programs. A growing number of DOS Posts overseas (i.e., embassies and consulates) started to designate full- or part-time Alumni Coordinators to promote greater contact and cooperation among host country alumni of US-sponsored exchange programs. Under a contract with ECA, Avar completed an 18-month review to examine the functions of the designated alumni coordinators and the implementation process of the State Department's overseas exchange alumni coordination, identify best practices, and recommend future strategies. The study was implemented in two phases. Phase 1 served as a pilot study to conduct preliminary research on alumni programming and coordination in preparation for the main study in Phase 2. Phase 1 consisted of numerous in-depth interviews with the ECA staff at different levels and two overseas site visits (Nepal and Russia) during which the study team conducted interviews with the Post staff, meetings with alumni association leaders, and focus groups discussions with alumni individuals. Based on information collected from Phase 1, Phase 2 launched two additional site visits (Colombia and Vietnam) and two web-based global surveys, one of all the DOS overseas Posts regarding their exchange alumni coordination and the other of all the established exchange alumni associations around the world. The survey operations, each lasting 6-7 weeks, consisted of e-mailing an advance notice one week prior to the surveys and an ECA cover letter at the time of the survey; posting questionnaire on a secured website, and conducting a number of e-mail non-response prompting. The entire study involved extensive effort in designing, developing, and testing/re-testing of various types of data collection instruments (e.g., survey questionnaires, interview protocols, and focus group discussion guides); conducting quantitative and qualitative data analyses; developing reports for each phase and each site visit; and producing a camera-ready final study report including graphic presentations of statistical results and overall graphic design of the report layout (covers, content arrangement, etc.). All of these activities were conducted in house by the project team. The final study report has been published and distributed within ECA. Entitled "Review of the Role of Alumni Coordinators," it can be accessed at the DOS website <http://exchanges.state.gov/programevaluations/completed.html>. Avar also managed all its overseas travel arrangements and visa applications. Contact person: Dr. Robin Silver, 202-692-6321.

### **2009 and 2011 Maryland Youth Risk Behavior Survey (YRBS) Monitoring and Coordination – Maryland State Department of Education (MSDE)**

The Youth Risk Behavior Surveillance System (YRBSS) was developed in 1990 by the Centers for Disease Control and Prevention (CDC) to monitor priority health risk behaviors such as tobacco use, unhealthy dietary behaviors, physical inactivity, alcohol & other drug use, sexual behavior/ STD'S/ HIV/AIDS/unintended pregnancies, and violence/injury. Maryland began conducting the Youth Risk Behavior Survey (YRBS) in 2005. Students in grades 9-12 are surveyed in the spring of odd years. Under a multi-year contract with the Maryland State Department of Education (MSDE), Avar coordinated the sampling and data collection activities of the 2009 and 2011 Maryland Youth Risk Behavior Survey (YRBS), monitored its data analyses, interpreted data analysis results, participated in the design and development of the final report, performed in-depth analyses regarding significant issues; and will participate in presentations/testimonies to the Maryland Board of Education. Avar is currently conducting the same activities for the 2013 YRBS. Contact person: Richard Scott, 410-767-0288.

### **Development of a National Online Library of Healthcare Services Datasets and Databases - Agency for Healthcare Research Quality (AHRQ)**

With the increasing costs of health care, it has become more important than ever to use health services efficiently, yet care and information about care is often collected and delivered in isolation without coordination across sites or providers of care. Funded by the Agency for Healthcare Research Quality (AHRQ), this project was intended to comprehensively inventory all health care data collection initiatives (e.g., administrative datasets, survey data, distributed datasets) in each of the 50 states, the District of Columbia, as well as other specific geographic areas of particular interest (e.g., health planning areas, multi-state regions); and to provide guidance to the AHRQ on the potential synergy across such initiatives and how the data and information that they collected and maintained might be used to inform Federal,

state and local health care policymakers, clinicians and consumers. As a subcontractor with Econometrica, Inc., Avar designed and developed an online inventory of all the relevant datasets. It consisted of a back-end relational database that interfaces with a website portal to enable both public and security-protected online search and data access. The back-end relational database contained a description of each of the healthcare service datasets, name of the funding agency/organization, location of the dataset, name and contact information of the managing agency/organization, as well as the format of each key data element. The front-end portal presented itself on a well-designed website that allowed users to search by keywords and apply multiple filters on a variety of criteria to obtain information in accordance with their designated level of access. Using the search result, the user was able to visit the actual dataset, export what they found, and save, share or modify their search. The system was built in compliance with NIST Special Publication 800 and Section 508 of the Rehabilitation Act. Contact person: Dr. Richard Hilton, 301-657-1035.

### **Transfer, Host, and Manage the Web-Based Transforming Church Index (TCI) Survey – TAG Consulting**

Developed by Kevin Graham Ford and funded by TAG Consulting, the TCI survey is one of the most influential congregational surveys and assessment tools in the United States and around the world. It is an on-going web-based survey for different congregations to assess their needs for improvement by collecting opinions from their members using a multi-dimensional development index. Approximately 10,000 congregational members participate in the survey every year and the survey database currently contains data from over 50,000 respondents. The instrument consists of 15 function areas which are organized under five major domains/key indicators. Survey results are automatically generated in terms of mean scores, median scores, overall composite score, standard deviations, percentages, and presented in bar graphs, stars, and arrows. Domain and composite scores of each congregation are automatically compared to those of the national norm. Data are also reported about the characteristics of the respondents, the top and bottom scores, and the overall composite scores of the various subgroups. Under a long-term contract with TAG Consulting, Avar has successfully transferred the entire web-based survey software applications, survey databases, records, and other associated software applications from TAG's old Citrix server to Avar's multi-platform server without interrupting the survey operation. Avar's multi-platform server is running on the latest version of Windows 2008 64bit server edition operating system. It features a 2.6Ghz dual-core Opteron processor, with 4024MB memory, 450GB expandable storage, and directs up to 100Mb of web traffic per second. All data are backed up automatically on a daily basis and protected by Cisco external firewall solution on top of the server's own firewall. The web server sports a dedicated SSL certificate with 256-bit encryption for conducting Internet transactions of sensitive information with confidence. We are currently hosting the TCI survey; providing survey management, IT services, and statistical support; and conducting customized survey programming, data analysis, and report writing to meet additional needs of the clients. Contact person: Mr. Kevin Ford, 703-352-0660 ext 201.

### **Data Collection Support and Analytic Report Development – Maryland Health Care Commission (MHCC)**

The Maryland Health Care Commission (MHCC) is required by law to analyze and report on health care utilization and spending in Maryland. To support these activities, the MHCC developed the Maryland Medical Care Data Base (MCDB), which contains information on health professional services and prescription drugs provided to Maryland residents. Each year, all the healthcare providers and prescription drug providers in Maryland are required to submit their service records to MCDB. As a subcontractor with the Social & Scientific Systems (SSS), Inc., Avar provided SAS programming and statistical analysis support in collecting, processing, validating, editing, analyzing, and reporting these data on an annual basis. The annual reports included: Report on State Health Care Expenditures for Maryland residents, Report on Practitioner Payments and Utilization, and Report on prescription drug spending in the State. All reports provided comparisons of the Maryland spending and utilization patterns and trends with those in neighboring states and the national. Contact person: Katrina Hedlesky, 301-628-3210.

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**2006-2010 Annual Surveys of Refugees -- Office of Refugee Resettlement, Department of Health and Human Services**

Under a subcontract with DB Consulting Group, Inc., Avar was responsible for constructing the sampling frame; editing, cleaning, validating, and weighting the survey data; performing data imputation where necessary; creating cross-sectional and longitudinal datasets; furnishing documentation for the data files; conducting both cross-sectional and longitudinal analyses using univariate, bivariate, and multivariate statistical techniques; producing graphic presentations; and participating in the preparation of the ORR Annual Report to the Congress. Data validation/processing involved logic checks to identify out-of-range values and data elements inconsistent with the design format; internal consistency tests of key measures; identification of outliers; and cross-validation of key variables with baseline data, with other similar studies, or with known population statistics (Census, etc.). Contact person: Ms. Rebekah Brown, 301-589-3955.

**Evaluation of the "Communities Choosing" Adolescent Pregnancy Prevention Program -- Administration for Children and Families (ACF)**

Funded by the Administration for Children and Families (ACF), this was a multi-year program implemented in the San Francisco middle schools. The multi-year evaluation was conducted by the School of Public Health at the University of California, Berkeley. Avar was contracted with UC Berkeley to perform statistical analysis of the pre- and post intervention survey data and prepare the quantitative analysis report. Contact person: Dr. Sukari Ivester, 510-643-3366.

**Evaluation of the Effect of Increased State Aid to Local School Systems through the Bridge To Excellence Act -- Maryland State Department of Education**

Under the *Bridge To Excellence Act* in 2003-04, each local school system in Maryland developed and started implementing a five-year comprehensive Master Plan outlining the goals, objectives, and strategies for improving student achievement and meeting Maryland's performance standards. The State funding for education was increased to finance the initiative. The Maryland State Department of Education (MSDE) awarded a contract to MGT of America, along with REDA International Inc., to conduct a comprehensive review and evaluation of the effect of increased state aid to local school systems on student, school, and school system performance. Under an agreement with the MGT/REDA team, Avar was responsible for editing and weighting the survey data collected from the school principals and Master Plan committee members, performing statistical analyses to address the relevant evaluation questions, and assisting in the preparation of the survey report. Contact person: Dr. Jerry Ciesla, 850-386-3191.

**Professional Development Impact Study (Reading) -- U.S. Department of Education**

Under the No Child Left Behind legislation, the U.S. Department of Education contracted with the American Institutes for Research (AIR), along with MDRC, Sopris West and REDA International, to conduct a five-year quasi-experimental study to assess the impact of professional development on reading instruction and student achievement. The study was focused on second grade teachers who were already using popular scientifically based reading programs: *Open Court Reading* or Houghton-Mifflin's *Nation's Choice* or *Legacy of Literacy*. Under a consulting agreement with the AIR/REDA team, Avar participated in classroom observations to identify the difference in teaching instructions between teachers in the experimental and control groups as well their behavioral change over time. Contact person: Dr. Stephanie Cronen, 202-403-5368.

**Study of Rural Egypt 2005 -- Chemonics International**

Sponsored by the Chemonics International and the University of Utah, it was part of a 4-decade longitudinal study of the social, economic, and political changes in rural Egypt. Five surveys were conducted respectively of Egyptian rural households, farmers, women, village council members, and district agencies. Under a consulting agreement with REDA International, Avar was responsible for data cleaning, data management, data analysis, and consultation in statistical modeling and interpreting the analysis results. Data management techniques included merging and transposing datasets, computing and recoding variables, creating scales, and integrating

multi-level data into an analysis database. Statistical techniques included frequency analysis, mean comparison, cross-tabulation, scaling, factor analysis, regression, and multi-level analysis. Contact person: Dr. James B. Mayfield, 801-673-4405.

### **Web-Based Database and Data Collection for the Mulan Foundation**

The Mulan Foundation is a non-profit performing art organization devoted to promoting the Sino-US cultural exchange in Chinese and Western classic music. Avar Consulting's IT specialists developed the foundation's online data management and collection mechanism to collect customer contact information and conduct financial data transaction. An online customer survey was also conducted by the Avar team to collect data for the foundation on market needs and customer satisfaction. Using Access in the Microsoft Windows environment, data collected via the website were stored automatically into an Access database on a secured server and retrieved to produce customized summary reports as needed. Contact person: Dr. Patrick Lu, 240-606-5039.

### **Server Hosting and Management**

TAG is an organizational consulting firm based in Virginia. It uses a multi-functional virtual desktop to connect all its partners, staff, and consultants across the country via internet. This virtual desktop also supports PDA accessible corporate e-mails, three (3) online surveys, and several online data analysis and reporting tools. Avar migrated the virtual office in its entirety from the previous service provider onto a number of Avar's multi-platform servers running on the latest version of Windows 2008 64bit server edition operating system. The server blades run on Opteron processors and direct up to 100Mb of web traffic per second. All data are backed up automatically on a daily basis and protected by Cisco external firewall solution on top of the server's own firewall. The web server sports a dedicated SSL certificate with 256-bit encryption for conducting Internet transactions of sensitive information with confidence. In addition, Avar is also providing online survey management, statistical support, technical support, and feature enhancements for all the virtual office functions. Contact person: Ms. Karen Robbins, 703-352-0660.

## **CONTRACT VEHICLES**

- Certified participant in the SBA's 8(a) Business Development Program
- SBA certified Small Disadvantaged Business (SDB)
- Certified Minority Business Enterprise (MBE) in the state of Maryland
- Certified vendor on the GSA/MOBIS schedule
- Education Statistics Services Institute Network (ESSIN, ID/IQ Contract), National Center for Education Statistics
- Research and Development 2014: Assessment, Planning, and Analysis (ID/IQ Contract), U.S. Bureau of Census

## **CONTACT US**

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