Sheila Braun

Statistician

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# Professional Summary

Statistician, programmer, writer, and editor with 15 years of work and management experience doing statistical and biostatistical research in highly regulated academic settings. Specialty areas include overseeing teams for medical and non-medical research according to strict timelines and budgetary requirements; clinical trials; regulatory and IRB submissions to the highest ethical standards and integrity; quality initiatives driven by committee standards; guidance on standards, processes, and technical topics to project leads; quantitative and qualitative analysis; literature reviews; developing research questions; data gathering; database design; study design and implementation; reporting results; recommendations for policy changes and further research; presentation of results through live presentations, powerpoint, or documents. Varied career encompassing graduate study in biostatistics and English as well as a Bachelor’s degree in communication reflects versatility and ability to learn quickly and adapt to any challenging environment. Spoken languages are English and Portuguese with a smattering of Spanish.

# SKILLS

* Creating strategies for study design and analysis
* Project leadership; management of research and programming teams across multiple projects in a variety of settings
* Data management and data structure design with software such as SQL
* Defining project requirements to meet specific endpoints
* Creating statistical plans for all clinical and case study research phases
* Excellent communication and teamwork skills
* Software engineering in many languages and operating systems (Python, C, C++, BASIC, FORTRAN, machine language, R, and so forth)
* Building analytical models for clients and analyzing their data
* Statistics programming scripting languages and others, such as in Stata, R, XML, SPSS, PSPP, Mathematica, Matlab, SAS, Statistica, Atlas.ti, and others; Bayesian analysis, including the use of Markov chain Monte Carlo methods (programming in R)
* Prototyping models as clients required
* Numerous statistical methods (ANOVA, regression, power analysis, and a large number of methods for analyzing binary, categorical, scalar, or qualitative data)
* Experiential knowledge not only of how to perform statistical analyses, but when doing so is appropriate (matching data to analysis procedure)
* Creating strategies for studies of various sorts, including background research, proposals, study design, analysis, reporting results, and recommendations for policy changes or additional study
* Randomization and sampling methods
* Survey design and deployment
* Establishing protocols for data collection
* Blind and non-blind study methods, including unblinding treatment assignments related to unexpected events and appropriately handling unblinded information
* Assessment of the statistical impact of protocol deviations and ability to update strategies, keeping the project endpoint in view
* Statistical reporting according to standardized documentation standards
* Excellent writing skills: familiar with clinical study protocols and case report forms (CRFs) as they pertain to statistical strategies and methodologies
* Editing and contributing to peer-reviewed articles or white papers
* Deriving new statistical strategies from other people’s research; keeping up to date on the latest relevant statistical methodologies
* Preparation of IRB documentation; identification of specific ethics issues
* Teaching (as teaching assistant in English at Boston College and in SAS at the University of Vermont)
* All aspects of Microsoft Office (Excel, PowerPoint, Word, Access, Publisher) and other suites of office tools, including the use of macros
* Windows, Linux, and Macintosh operating systems
* Git, GitHub, Markdown, Knitr
* Web site design and development
* Editing of technical, academic, and other types of documents
* Presentation of results to groups or individuals using PowerPoint and other presentation aids
* Writing reports to justify ongoing research
* Ad hoc statistical consulting on a large variety of projects
* Extremely fast learner
* Able to adapt to any new work or living environment, overseas or in the U.S.
* Conversational Brazilian Portuguese
* Familiarity with being on the receiving end of medical devices

# EXPERIENCE

## Anovisions, 606 Fiske Road, Rochester, VT 05767, Phone (802) 382-7349 *- President and CEO - Statistician – Biostatistician.*

February 2009 to Current

* Founded and developed a successful statistics and editing consulting firm
* Hired and manage a team of 6 sub-contractors to work on a variety of studies
* Tasks include study design, proposals, presentations of study plans, background research, methodology descriptions, sampling methods, survey design and deployment, data validation, database design, reports of results, recommendations for policy change or further study, using the skills listed above in this resume
* Edit dissertations and provide dissertation coaching
* Review journal articles prior to publication
* Maintenance and aggregation of data sets; intensive analysis of these data sets to provide a detailed picture of what can be learned from them; authoring macros to automate a variety of complex processes related to statistical analysis of this data (SPSS, SAS, R, Word, and other macro languages)
* Code transfer from SPSS or SAS to R
* Website development

## Parent *Engaged in professional and other activities consistent with working at home caring for children before and during the growth of the digital age*

January 1996 - 2009

* Ambulance driver
* Real estate developer – Managed a team of architecture and engineering professionals to develop a 26-unit project from land acquisition through sales of units
* Horse rescue activities, acquiring, training, and rehoming homeless horses

## National Institutes of Health, 9000 Rockville Pike, Bethesda, MD 20892, Phone (301) 496-4000 *– Statistician & Researcher*

April 1993 to April 1994

* Analyzed data for a longitudinal study led by [Frank W. Putnam](http://www.nasonline.org/publications/biographical-memoirs/memoir-pdfs/putnam-frank.pdf), PhD regarding long-term psychobiological effects of childhood sexual abuse.
* Cleaned data
* Analyzed data and found some interesting effects that had not yet been published

## Axyal Corporation, a wholly-owned subsidiary of Thomson-CSF, 2733 Crystal Dr, Arlington, VA 22202, Phone (703) 838-9685

## *Software Engineer*

May 1991 to April 1993

* Managed a team of 5 programmers who used in-house software to translate supervisory control and acquisition data (SCADA and GIS) into images for the software that controls the trains for the Washington Metro. Used a wide variety of platforms, including VMS, Unix, Microsoft, and Apple operating systems and software.
* In December 2010Thomson was renamed to the “Thales Group”.

## Nuevia *- Software Engineer, Technical Writer and Editor*

January 1991 – May 1991

* Software programming in C++
* Wrote supporting documentation for in-house and end users
* Worked from home

## Roadnet Technologies, 849 Fairmount Ave, Towson, MD 21286, Phone (410) 847-1900 *– Technical Writer*

September 1989 – January 1991

* Supported United Parcel Service’s (UPS) research projects with in-house and end-user documentation
* Projects included the first hand-held data collection device used by UPS package car drivers, early mapping software for plotting routes for drivers, and image-recognition software for use in sorting facilities

# EDUCATION

## University of Vermont *- Master of Science in Biostatistics, in process*

* Teaching Assistant in SAS Programming, correcting assignments and helping students with questions
* Invitational Fellowship in Transportation Issues

## Boston College *- Master of Arts in English, 1989*

* Teaching Assistant in English Writing Skills with full responsibility for a class of freshmen
* Wrote for the Boston College Newspaper

## Messiah College *– Bachelor of Science, 1984*

* *Who’s Who in American Colleges and Universities*
* Active in many extracurricular activities, including writing and acting

## Christopher Dock *– High School Diploma, 1980*

* Writer’s Award
* Active in many extracurricular activities, including acting, singing, and writing
* Editor of the school newspaper
* Worked part time selling chicken at a market in central Philadelphia
* Underwent major surgery for spondylolisthesis, which included having medical devices for stabilizing my spine inserted around my lumbar and sacral vertebrae. Became familiar with wheelchair use and developed a deeper understanding of coping with injuries and illnesses

# CERTIFICATIONS

* [R Programming, Johns Hopkins University](https://www.coursera.org/account/accomplishments/records/38HG25NZTC2Z), License #2HWX3JADBU23. From April 2018, no expiration. Grade: 92%.
* [Getting and Cleaning Data, Johns Hopkins University](https://www.coursera.org/account/accomplishments/records/ADJ7DQ2LVLNX), License #W73H5EWB93N9. From April 2018, no expiration. Grade 94.1%
* [Research Data Management and Sharing](https://www.coursera.org/account/accomplishments/records/CYT8KD6N3B4R), University of North Carolina and the University of Edinburgh, License #MVKL6TZ5ZR2N, From April 2018, no expiration. Grade: 97.2%.
* [The Data Scientist’s Toolbox, Johns Hopkins University](https://www.coursera.org/account/accomplishments/records/9SQXADARHUL7), License #GU4R7YKBK6Z6. From April 2018, no expiration. Grade: 100%.
* [Exploratory Data Analysis, Johns Hopkins University](https://lnkd.in/dwZghe9), License #JTLKP2BB5Q3N. From May 2018, no expiration. Grade: 97.2%.

* [Reproducible Research, Johns Hopkins University](https://www.coursera.org/account/accomplishments/records/9XMEH9PJPU9K), License #NG4WWCLZMP7U. From May 2018, no expiration. Grade: 100%.
* [Getting Started with Python, University of Michigan](https://www.coursera.org/account/accomplishments/records/7KZ63GCGKVUK), License #QW4BSNPGNGVF. From May 23, 2018, no expiration. Grade: 100%.
* [Python Data Structures, University of Michigan](https://www.coursera.org/account/accomplishments/records/LM6YKN3LB7UD), License #6ZL4LY28CHDC. From May 25, 2018, no expiration. Grade: 99.2%
* In process: Currently studying under Jeff Leek, PhD, Roger D. Peng, PhD & Brian Caffo, PhD at Johns Hopkins University towards an advanced certificate in Data Science to supplement my statistics graduate work at UVM, which was completed before the development of important new tools; and also studying Big Data Applications and Hadoop Platform and Application Framework under Natasha Balac, PhD, Paul Rodriguez, PhD, and Andrea Zonca, Phd, at the University of California at San Diego.

# INTERESTS

* Equine activities including endurance racing up to 50 miles
* Quilting by hand using methods learned as a Mennonite child
* Playing recorder: Sopranino, soprano, alto, and tenor
* Reading fiction and nonfiction

# TRAVELS

* Two years in accumulated travel to various locations in Brazil
* Four months accumulated hiking in England’s National Trust-managed trails