ABSTRACT
Recruiting in the hopes of identifying and retaining highly qualified staff becomes more difficult each year. Since DataCeutics’ is a Full Service Provider, our staff is placed in many highly visible positions throughout our clients. Following a process that eliminates applicants that cannot function independently and produce high level deliverables is critical. We follow a proven process to hire employees. The process includes determination of communication skills, following directions, abstract thinking, and understanding of clinical statistical programming by a verbal discussion and programming, and lastly a background check. The applicant speaks with at least three staff who determines the possibility of a fit within our company. This paper will go into detail on each step followed during the hiring process.

INTRODUCTION
All companies struggle with hiring and retention. DataCeutics follows a process that has been proven to hire quality staff and retain them. Many of our staff has been with DataCeutics over 10 years with two staff celebrating their 20th anniversary this year. In 2013, we received 369 resumes of possible candidates, 272 were phone screened, 241 continued onto the testing and 26 were hired. This paper will discuss the hiring process and what steps DataCeutics’s takes to retain staff. Figure 1 describes the flow of the hiring process.

Figure 1. The Process
THE RECRUITING COMPANY

DataCeutics uses multiple recruiting firms, sometimes working with a dozen at one time. When a new recruiting firm is hired, the Vice President of Professional Services holds a meeting to discuss the requirements of the position. DataCeutics requires at the minimum, eight years’ experience, preferably ten years in the pharmaceutical industry. All candidates must be proficient in SDTM and ADaM standards. The recruiting company will then send possible candidates for review. A critique is done on each of the resumes so the recruiting company can fine tune the search.

REVIEW OF RESUMES

All resumes are reviewed by the Vice President of Professional Services. The resume is, of course, reviewed for the technical skills of the candidate and length of career. There are a few other points that are reviewed: Is everything spelled correctly? Is the grammar correct? Is the resume presented neatly and easily read? These points may seem minor but the errors found in the resume usually are also found in the testing that is performed.

THE PHONE SCREEN

The Vice President of Professional Services speaks with every candidate considered for employment at DataCeutics. The call is used to cover a number of points. During the call, specific questions are asked to better understand key points on the resume. This helps determine, at a high level, if the candidate has the technical experience required. Two part questions are asked to decipher multiple levels of understanding and if communication is clear. Since DataCeutics performs all work remotely, it is extremely important that communication is clear and concise.

GRAMMAR AND WRITING EVALUATION

The Grammar and Writing Evaluation is designed to assess the ability to follow directions, grammar, logic and writing style. The grammar evaluation portion is first, simple, straightforward questions revolving around basic grammar taught in middle school, and following directions. The second part determines logic and reasoning and following directions. The writing portion asks the applicant to write a two paragraph essay in response to a question concerning their technical abilities, and again they need to follow directions! This test determines how an applicant will proceed on a normal work day with assignments. A recruiter, who had never seen the evaluation, felt it was “tricky” and difficult to complete. A 15 year old high school student took the evaluation and scored an 85%, so all applicants should be able to complete the evaluation successfully. Many highly educated applicants do very poorly on this test due to not following the directions. They assume what is being asked versus reading the directions and following them. This trend can then be seen during the SAS test.

SAS TESTING

The SAS testing process begins with a Verbal test which consists of 18 questions. There are some basic SAS questions and then some clinical questions. The basic SAS questions start with how to read in data and how the data becomes stored as a SAS dataset. Other questions examine the differences between some specific data steps, procedures and functions. The structure of a dataset and how it relates to SAS and Clinical environment is also queried. The applicants clinical background is assessed by requesting information about human health and where this information would be stored as data. To further assess the clinical background the candidate is asked a series of questions about the process in which data moves from entry to final report. The applicants familiarity with CDISC standards are discussed in detail.

If the candidate successfully passes the verbal portion, they then proceed to the written portion. They are asked to reproduce a report using basic SAS code. This code should read in some existing SAS datasets, perform a successful merge, and use a Proc Report statement to generate the report using ASCII output. Neatness, readability and the aptitude to follow along with the provided instructions are also assessed. The results of these tests are evaluated and forwarded to the hiring manager along with the tester’s evaluation and recommendations.

APPLICATION AND BACKGROUND CHECK

Each applicant completes an application which includes past work history, education and references. The application is reviewed for completeness and accuracy.
A background check is performed through American Databank. Social Security Number Trace is done to validate the SSN and identify state and year of issue. The report provides a residency history, duration of residency and possible alias names, as well as dates of birth used in the past. It is used to obtain alias names and date of birth to use when conducting criminal record checks. It also checks the applicant work history against addresses to identify gaps. County and Statewide Criminal Record Searches are also performed. This search provides the most accurate, up-to-date criminal records information, as most cases are prosecuted at the county level. The report is used to identify a criminal record that would preclude an applicant from a position, either because of job-relatedness or regulatory requirement.

**THE OFFER**

The final decision is based on the communication of the applicant, grade received on the grammar and writing evaluation and the SAS test, and the completion of the application and background check. Each of these pieces is weighed and it is determined if the applicant will be a good fit for our clients. We do not hire only for specific criteria, rather higher for technical ability that can be used at all of our clients. The staff is highly educated with all having college degrees or higher, highly motivated with the desire to further their careers, highly skilled with the average length in the industry at 19 years and highly dedicated. An offer is made verbally and followed up with an offer letter and employment agreement.

**WE’VE HIRED THEM BUT HOW DO WE KEEP THEM**

All companies struggle with retention. Currently, there are more SAS jobs than SAS programmers. A retention plan needs to be designed to entice staff to stay. DataCeutics has a number of pieces for the plan.

First, all staff work remote. This allows DataCeutics to hire the best and the staff is placed at the client because of technical skills not geographical location. Working remote allows the staff flexibility of work hours so that personal needs are met and family remains important. DataCeutics employees find that telecommuting improves the work-life balance; it reduces their carbon footprint on the globe and reduces their fuel usage. Telecommuting also frees up the equivalent of 15 to 25 workdays a year (time they would have otherwise spent commuting), and saves thousands of dollars per year in travel and work-related costs.

Second, employees are paid competitive salaries and are eligible for medical and dental benefits, 401k matching program and spot recognition bonuses. An employee is eligible for the spot recognition bonus, which is given 3-4 times a year, for “going the extra mile” for the client. This encompasses working extra hours to meet deadlines, finding innovative ways to complete tasks, taking on additional responsibilities and being available on “off hours” as needed by the client. They are also eligible for a $5,000 bonus for referring other staff.

Thirdly, all staff has the ability to further their career by growing into different roles. DataCeutics believes in promoting from within so staff is considered for Lead Consultant, Project Manager and Senior Project Manager while at DataCeutics.

**CONCLUSION**

The recruiting process takes approximately 2 weeks per applicant, due to scheduling and time needed to complete all the parts. For DataCeutics, approximately 15 man hours are used per applicant. This takes into account all the time spent throughout the process by multiple staff. This may seem high, but the level of staff and longevity of employment currently at DataCeutics demonstrates the success of this process. This process has now been in effect for ten years, and it is a proven success.

**CONTACT INFORMATION**

Your comments and questions are valued and encouraged. Contact the author at:

- Name: Kathy Greer
- Enterprise: DataCeutics, Inc.
- Address: 1610 Medical Drive, Suite 300
- City, State ZIP: Pottstown, PA 19464
- Work Phone: 610-970-2333 ext 217
Recruiting for Retention, continued

Fax: 610-9704664  
E-mail: greerk@dataceutics.com  
Web: www.dataceutics.com  
Twitter:

SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registration.

Other brand and product names are trademarks of their respective companies.