Timothy Bullock

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Goleta, CA

Summary:

Timothy Bullock has 15+ years of lead programming experience in Medical Device Submission and Health Data Analytics. He has written two SAS programming methods papers on the use and integration of Medical Device data in the CDISC SDTM Clinical Data Model. His research experience in academic, governmental, biotech, and pharmaceutical settings spans 20 years. He worked at UCSB as a staff researcher for 6 years. He has extensive experience as a lead programmer in SAS and SQL and is also trained in R and Python. He possesses a solid knowledge of statistics, database management and manipulation, and modeling as well as strong communication, presentation, and technical writing skills.

**Skills:**

* FDA Approval Studies: Performed main and QC clinical programming to support Medical Device submissions at Allergan. Working closely with biostatisticians, created and validated specifications to generate Analysis Data Sets (ADS) and Tables, Listings and Figures (TLFs). Reviewed CRFs. Reviewed fellow programmers’ SAS code and output to match specifications. Created and validated submissions in CDISC SDTM and ADaM format.
* **SQL and SAS programming**: Base and Advanced certification in SAS. Multiple years of programming in both SQL and SAS. Experience with combined SAS/SQL programming techniques**,** SAS Macro Language, SAS ODS facility, SAS GRAPH, and SAS STAT. Part of the SAS macro development team at Allergan.
* Python and R programming: Led a team in learning Python at IBM. Switched mainly to R in the last two years to take advantage of the well-developed and documented statistical packages. Experience employing Shiny and FlexDashboard to create interactives and dashboards
* Modeling of Regression and Survival Analyses: Experience with Xplorys and other Real World Data (RWD) sources, applying Multiple Regression, Kaplan-Meier and Cox Proportional Hazards analyses
* Use of MarketScan Database: Extensive programming and training experience in this resource while at Truven Health Analytics and IBM Watson Health. Conversion of MarketScan Database to the Observational Medical Outcomes Partnership (OMOP) Common Data Model (CDM). Utilized MarketScan Database to assess HPV Vaccination Coverage. Led training in the use and programming of MarketScan data.

**Education:**

Doctorate in Life Sciences, Molecular Biology, University of Oregon, OR

B.S Biochemistry, University of California at Santa Cruz, CA

**SAS Certifications**

* Base SAS, 2010; Advanced SAS, 2015

**GitHub**

* [Profile](https://github.com/timothyLbullock/timothyLbullock); [SAS - Generate a Sample of Medical Device Clinical Data in CDISC SDTM Format](https://github.com/timothyLbullock/Medical-Device-Data-Sample--CDISC-Standardization)

**Professional Experience:**

**NORC at the University of Chicago, Remote**

**Aug 2022 - Apr 2024**

**Senior Data Scientist**

* Worked with Medicaid and Medicare data to perform program evaluation and assist states in federal compliance.
* HCCI 2.0 Research Data Base: Data loading and management of this national All-Payer Claims Database (APCD). Generate Data Submission QC Reports using Tableau and send to the customer, HCCI. Run data reduction and data enrichment steps in the database production cycle

**IBM, Santa Barbara, CA**

**Feb 2016 - Aug 2022**

**Team Lead Programmer**

* Xplorys(Electronic Health Record) based longitudinal real world evidence (RWE) atherectomy study: Compared post-surgical outcomes following implantation of atherectomy devices under various conditions using EHR data.

**Truven Health Analytics, Santa Barbara, CA**

**Dec 2014 – Feb 2016**

**Senior Statistical Programmer**

* MarketScan(Claims Data) based longitudinal real world evidence (RWE) HPV Vaccination Coverage study: Examined HPV vaccine adoption across states

Allergan, Santa Barbara, CA Feb 2011 – Nov 2014

Senior Statistical Programmer 2013-2014

Statistical Programmer 2011-2013

* Voluma (Clinical Data) Device Pre-market Approval Study: Main and Quality Control programming for FDA submissions. Developed models for standardization of clinical device data in Clinical Data Interchange Standards Consortium (CDISC) Study Data Tabulation Model (SDTM) format.

**Publications**

* Yull Edwin Arriaga, Bedda L Rosario, Elisabeth Scheufele, Amol Rajmane, Brett South, Sarah Kefayati, Judy George, Timothy Bullock, Gretchen Purcell Jackson, Kyu Rhee. Complete human papillomavirus vaccination coverage over a 13-year period in a large population of privately insured U.S. patients. ASCO 2020. Poster
* Kasten Jessica, Kate Sredl, Heidi Cohen; Tim Bullock, Carol V. Irvin, Julia Baller, Kimberly Proctor, Jessie Parker. “Identifying and Benchmarking the Number of 1915(c) Waiver Participants in 2016.” TAF DQ Brief #7041. Baltimore, MD: CMS, 2019.
* Bullock TL, Krishnamurthy R. Referencing medical device data in standard SDTM domains. PharmaSUG 2014. Paper DS06. 2014.
* Bullock TL, Nair S, Krishnamurthy R, Gross T. Mapping unique aspects of implantable medical device study data to CDISC SDTM medical device domains. PharmaSUG 2013. Paper DS16. 2013.
* Bullock TL, Rodriguez-Hernandez A, Franzen E, Perona J. A rationally engineered misacylating aminoacyl-tRNA synthetase. Proceedings of the National Academy of Sciences. 2008;105:7428-33.
* Bullock TL, Uter N, Amar Nissan T, Perona J. Amino acid discrimination by a class I aminoacyl-tRNA synthetase specified by negative determinants. Journal of Molecular Biology. 2003;328:395-408.
* Sherlin LD, Bullock TL, Nissan TA, Perona JJ, Lariviere FJ, Uhlenbeck OC, Scaringe SA. Chemical and enzymatic synthesis of tRNA for high-throughput crystallization. RNA. 2001;7:1671-8.
* Bullock TL, Sherlin LD, Perona JJ. Tertiary core rearrangement in a tRNA aptamer. Nature Structural Biology. 2000;7:497-504.
* Bullock TL, McCoy AJ, Kent HM, Roberts TM, Stewart M. Structural basis for amoeboid motility in nematode sperm. Nature Structural Biology. 1998;5:184-8.

**Patents**

* Davis CG, de los Rios MA, Oh KJ, Bullock TL, Johnson PT, Ostrowski J, inventors. Compositions and methods for treating B-cell malignancies. US Patent US8067011. November 29, 2011.