Jordan Mark **Barbone, M.A.**

PRINCIPAL DATA ANALYST, R DEVELOPER

West Chester, PA

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Strong R programmer with experience in statistical programming and report automation in clinical trials

Skills

R - Advanced	package development, data analysis, statistical programming, data visualization, ETL/Data integration, tidyverse (dplyr, ggplot2, purrr, tidyr, devtools, etc), Rmarkdown
Other programming experience	Intermediate: Python Basic: SQL, Git, SAS, cmd
Clinical trials	clinical data management programming, eCOA, data review
Psychology	behavioral statistics, research methods, cognitive psychology, learning psychology

Experience

Principal Data Analyst
Conshohocken, PA

MADRIGAL PHARMACEUTICALS, LLC
Dec 2019 - Present

- Develops analyses, solutions, scripts, and packages in R; developing custom functions, analytic packages for creation of daily metrics and reports; unit testing, writing documentation; maintain source code control
- Aggregates and organizes data sources; compiles source data from multiple vendor data bases and reports; reconciles differences between data bases
- Analyzes data for: ongoing phase 3 studies; ad hoc analyses for phase 2; biomarker and PRO
- Uses, reviews, and reports on statistical testing such as: ANCOVA, LS-Means, ROC, Kruskal-Wallis, Wilcoxon rank sum, t-test, correlations (Pearson product, Spearman rho, Kendall's tau)
- Trains and onboards data analyst

Clinical Data Scientist
Wayne, PA

SIGNANT HEALTH (FORMERLY BRACKET AND CRF HEALTH)
Jan 2019 - Nov 2019

- Member of Data Services Center of Excellence for Endpoint Solutions
- Interacts with and analyzes clinical trial data quality and outcomes information to extract clinical and business insights
- Core analytics and data science responsibilities include development and implement new data products; maintain and enhance current data products; advice for new analytic and machine learning initiatives; identifies valuable data sources and automate collection and aggregation processes; defines and updates processes for deliverables; point of contact for analytic deliverables; analyzes large amounts of information to discover trends and patterns; presents information using data visualization techniques; undertakes pre-processing of structured and unstructured data.
- Administrative functions include training for and supervision of Data Scientists; develop and provide training for new and current processes, programming, and technologies/software; lead team meetings and status updates; creates and reviews process documentation.
- Collaborates with other Centers of Excellence: assists Program Managers and Project Delivery Managers for process implementation for data deliverables; provides consultation for programming and development for Clinical Data Management; liaises between Data Services and Clinical Science; provides analytic and research support for Clinical Science.

Clinical Data Specialist
Wayne, PA

BRACKET
Jan 2018 - Dec 2018

- Interacts with and analyze large amounts of raw information to find patterns allowing for the extraction of business or clinical insights; works collaboratively with other CRF Bracket stakeholders and teams to execute to provide ongoing analysis as they relate to study deliverables or internal needs.
- Participates in applicable aspects of clinical content development and delivery, which may include training material development and QC, data review, eCOA user acceptance testing, study staff contact, sponsor contact, contact with outside experts, and report writing.
- Responsible for maintenance and classification of clinical information/materials. Reviews scale administration and scoring to provide clinical feedback and remediation for raters.

Clinical Associate
Wayne, PA

BRACKET
May 2016 - Dec 2017

- Participates in applicable aspects of clinical content development and delivery, which may include training material development and QC, data review, eCOA user acceptance testing, study staff contact, sponsor contact, contact with outside experts, and report writing
- Responsible for maintenance and classification of clinical information/materials
- Provides data review for Bracket's Endpoint Reliability programs; clinical analysis on study endpoint data in order to detect the degree of administration and scoring calibration to standard training principles; and provide remediation to investigators as needed in order to recalibrate to study standards.

Clinical Assistant
Wayne, PA

Bracket

Aug 2015 - May 2016

- Develop object specific video material, clinical content for training and qualification programs for study staff in clinical trials, address and review data quality issues, clinical scheduling, ensures compliance with quality assurance, participate in reporting, analysis activities and research activities (e.g., collection and dissemination of literature and/or data) prepare reports of clinical activities.

Writing Tutor
224 Lawrence Center, West Chester, PA 19383

Learning Assistance & Resource Center

Aug 2014 - May 2015

- Tutored in 1-2 person sessions to develop skills necessary for effective writing, as well promoted independent and active learning.
- Monitored efficiency of the Academic Development Program and growth of students through maintaining daily session activity logs, utilizing Bloom's Taxonomy, biweekly student reports, and semester evaluations.

Education

Master of Arts
West Chester, PA

West Chester University of Pennsylvania

Aug 2017 - May 2019

- General Psychology
- Thesis: The effects of participant-selected background music on executive function task performance
- Advisor: Geeta Shivde, Ph.D.
- GPA: 4.00

Non-degree Graduate Student
West Chester, PA

West Chester University of Pennsylvania

Aug 2016 - Jun 2017

- Classes in Statistics, Research Methods, and Psychometrics
- GPA: 4.00

Bachelor of Arts
West Chester, PA

West Chester University of Pennsylvania

Aug 2011 - May 2015

- Major in Psychology, Minor in Biology
- Cumulative GPA: 3.470, Major GPA: 3.834

Tutoring

Effective Writing
West Chester, PA

Learning Assistance and Resource Center, West Chester University of Pennsylvania

Aug 2014 - May 2015

Psychology of Learning
West Chester, PA

Psi Chi, Psychology Department, West Chester University of Pennsylvania

Aug 2014 - May 2015

Introduction to Biopsychology
West Chester, PA

Psychology Department, West Chester University of Pennsylvania

Aug 2014 - Dec 2014

Biopsychology of Motivation & Emotion
West Chester, PA

Psychology Department, West Chester University of Pennsylvania

Aug 2014 - Dec 2014

Behavioral Statistics
West Chester, PA

West Chester University of Pennsylvania

Aug 2014 - May 2015

Research Methods in Psychology
West Chester, PA

West Chester University of Pennsylvania

Aug 2014 - May 2015

Papers

Peer Reviewed Publications

Solomon, T. M., **Barbone, J. M.**, Feaster, H. T., Miller, D. S., deBros, G. B., Murphy, C. A., & Michalczuk, D. (2019). Comparing the standard and electronic versions of the Alzheimer's disease assessment scale cognitive sub-scale: A validation study. *The Journal of Prevention of Alzheimer's disease*, 6(4), 237–241. `https://doi.org/10.14283/jpad.2019.27`

Irani, F., **Barbone, J. M.**, Beausoleil, J., & Gerald, L. (2017). Is asthma associated with cognitive impairments? A meta-analytic review. *Journal of Clinical and Experimental Neuropsychology*, 39(10), 965–978. `https://`

Master's Thesis

Barbone, J. M. (2019). *The effects of participant-selected background music on executive function task performance* (Master's thesis, West Chester University of Pennsylvania). `https://doi.org/10.13140/RG.2.2.34109.41446`

Posters

Madrigal - Liver disease

Harrison, S. A., Taub, R. A., Karsdal, As, M., Franc, Bashir, J., Mu, **Barbone, J. M.**, Neff, G., Gunn, N. T., & Moussa, S. (2020, November). Algorithm for predicting advanced NASH fibrosis on screening biopsy in resmetirom phase 3 MAESTRO-NASH clinical trial. *Poster presented at the AASLD Liver Meeting Digit Experience conference*. American Association for the Study of Liver Diseases (AASLD).

Younossi, Z. M., Stepanova, M., Taub, R. A., **Barbone, J. M.**, Moussa, S., & Harrison, S. A. (2020, November). Improvement of health-related quality of life is associated with improvement of fat fraction by MRI-PDFF in patients with nonalcoholic steatohepatitis treated with resmetirom. *Poster presented at the AASLD Liver Meeting Digit Experience conference*. American Association for the Study of Liver Diseases (AASLD).

Harrison, S. A., Taub, R., **Barbone, J. M.**, Franc, J., & Karsdal, M. A. (2020, March). Resmetirom, a beta selective thyroid hormone receptor agonist, reduces net collagen III deposition in nonalcoholic Steatohepatitis. *Poster to have been presented at american association for the study of liver diseases (AASLD) emerging topic conference 2020, nuclear receptors in Nonalcoholic Fatty Liver Diseases (conference cancelled)*.

Signant Health (Bracket) - eCOA data quality

Roy, M., Brown, J., Hong, B., Benecke, R., Chen-Tackett, Z., Zhou, W., **Barbone, J. M.**, Feaster, H. T., & Sachs, G. (2020, September). eCOA prompted MADRS interview: Balancing through assessment and efficiency. *Poster presented at ISCTM*.

Crittenden, K., Machizawa, S., Feaster, H. T., **Barbone, J. M.**, Hong, B., Verma, P., & Zhou, W. (2020, April). Cross-cultural differences in PANSS item ratings: Comparisons of six geo-cultural regions. *Poster presented at the 2020 Schizophrenia International Research Society (SIRS) Conference, Florence, Italy*. `https://doi.org/10.1093/schbul/sbaa031.103`

Solomon, T. M., Feaster, H. T., Karas, S. M., Garcia-Valdecasas, M., **Barbone, J. M.**, DiGregorio, D. T., DeBonis, D., & Miller, D. S. (2019, July). The evolution of technology in data quality programs for Alzheimer's disease clinical trials: What have we learned and where are we going. *Poster presented at the Alzheimer's Association International Conference (AAIC), Los Angeles, CA, USA*. `https://doi.org/10.1016/j.jalz.2019.06.4332`

Feaster, H. T., **Barbone, J. M.**, Miller, D. S., & Solomon, T. M. (2019, June). Rater remediation on the ADAS-cog leads to longitudinal improvement in clinical trial data quality. *Poster presented at the Alzheimer's Association International Conference (AAIC), Los Angeles, CA, USA*. `https://doi.org/10.1016/j.jalz.2019.06.3923`

Karas, S. M., **Barbone, J. M.**, Solomon, T. M., Hong, B., & Feaster, H. T. (2019, June). Impact of data quality programs on mmse inclusion criteria in Alzheimer's disease clinical research trials. *Poster presented at the Alzheimer's Association International Conference (AAIC), Los Angeles, CA, USA*. `https://doi.org/10.1016/j.jalz.2019.06.862`

Barbone, J. M., Solomon, T. M., Feaster, H. T., Garcia-Valdecasas-Colell, M., & Miller, D. S. (2018, October). MMSE screening data quality for Alzheimer's disease studies across countries. *Presented at the 11th Clinical Trials on Alzheimer's Disease (CTAD), Barcelona, Spain*. `https://doi.org/10.13140/RG.2.2.27921.68966`

Garcia-Valdecasas-Colell, M., **Barbone, J. M.**, Solomon, T. M., Feaster, H. T., & Tott, N. (2018, October). Identifying impact of rater change on MMSE and CDR data in multi-national Alzheimer's disease clinical trials. *Presented at the 11th Clinical Trials on Alzheimer's Disease (CTAD), Barcelona, Spain*. `https://doi.org/10.13140/RG.2.2.21210.80327`

Wessels, A. M., **Barbone, J. M.**, DiGregorio, D. T., Miller, D. S., Mullen, J. A., Sims, J. R., & Solomon, T. M. (2018, October). Lanabecestat- Rater performance and error characteristics of efficacy assessments in the DAYBREAK-

ALZ study. *Presented at the 11th Clinical Trials on Alzheimer's Disease (CTAD), Barcelona, Spain*. Retrieved from `https://bit.ly/32pl8au`

Feaster, H. T., **Barbone, J. M.**, Garcia-Valdecasas-Colell, M., & Solomon, T. M. (2018, July). Electronic ADAS-Cog (eADAS-Cog) data quality: How do countries compare? *Poster presented at the 2018 Alzheimer's Association International Conference, Chicago, IL, USA*. `https://doi.org/10.1016/j.jalz.2018.06.1373`

Karas, S. M., **Barbone, J. M.**, DeBonis, D., & Solomon, T. M. (2018, July). The use of statistical modeling to complement data quality programs. *Poster presented at the 2018 Alzheimer's Association International Conference, Chicago, IL, USA*. `https://doi.org/10.1016/j.jalz.2018.06.066`

Solomon, T. M., Karas, S. M., **Barbone, J. M.**, DiGregorio, D. T., Miller, D. S., & Feaster, H. T. (2018, July). Analysis of the rates and types of errors on the enhanced eCOA version of the Alzheimer's Disease Assessment Scale - Cognitive subscale and Mini-mental State Examination used in dementia clinical trials. *Poster presented at the 2018 Alzheimer's Association International Conference, Chicago, IL, USA*. `https://doi.org/10.1016/j.jalz.2018.06.070`

Solomon, T. M., **Barbone, J. M.**, Miller, D. S., & Feaster, H. T. (2018, June). Pilot validation of an Electronic Alzheimer's Disease Assessment Scale - Cognitive Subscale (eADAS-Cog). *Poster presented at the 2018 Alzheimer's Association International Conference, Chicago, IL, USA*. `https://doi.org/10.1016/j.jalz.2018.06.719`

Seichepine, D. R., Solomon, T. M., Jacobs, E. B., **Barbone, J. M.**, DiGregorio, D. T., & Miller, D. S. (2018, February). Comparison between "flat" and "enhanced" eCOA of MMSE Attention and Calculation in clinical trials of Alzheimer's disease. *Presented at the ISCTM 14th annual scientific meeting, washington, D.C., USA*. `https://doi.org/10.13140/RG.2.2.16193.61289`

Solomon, T. M., Feaster, H. T., **Barbone, J. M.**, & Miller, D. S. (2017, November). Utilizing audio review to improve ADCS-ADL data quality. *Poster presented at Clinical Trials on Alzheimer's Disease conference (CTAD), Boston, MA, USA*. Retrieved from `https://bit.ly/3mlKuOc`

Enger, B., & **Barbone, J. M.** (2017, October). Distribution of performance and incorrect rantings in qualification video scoring. *Poster presented at CNS Summit, Boca Raton, FL, USA*. `https://doi.org/10.13140/RG.2.2.14096.46088`

Solomon, T. M., **Barbone, J. M.**, Karas, S. M., & Feaster, H. T. (2017, October). Longitudinal impact of audio review on data quality. *Poster presented at Clinical Trials on Alzheimer's Disease conference (CTAD), Boston, MA, USA*. Retrieved from `https://bit.ly/2DYaFtd`

Feaster, H. T., Solomon, T. M., Abi-Saab, D., Vogt, A., **Barbone, J. M.**, Harrison, J., & Miller, D. S. (2017, July). The impact of electronic clinical outcome assessments (eCOA) on Alzheimer's disease clinical trial data quality. *Poster presented at the Alzheimer's Association International Conference, London, England, UK*. `https://doi.org/10.1016/j.jalz.2017.06.1828`

Butler, A., Feaster, H. T., Miller, D. S., & **Barbone, J. M.** (2017, May). Using iterative user experience design to improve electronic clinical outcomes assessment data quality. *Presented at the ISPOR 22nd annual international meeting, Boston, MA, USA*. Retrieved from `https://bit.ly/3isANeP`

WCUPA - Asthma and music cognitive

Barbone, J. M., & Shivde, G. (2019, May). The effects of participant selected background music on executive task performance. *Poster presented at the Association for Psychological Science, washington, D.C., USA*. `https://doi.org/10.13140/RG.2.2.26125.79842`

Barbone, J. M. (2018, November). Trends in self-reported use of music while studying: Implications for research. *Poster presented at the Research and Creative Activity Day at West Chester University, West Chester, PA, USA*. `https://doi.org/10.13140/RG.2.2.14075.57124`

Irani, F., **Barbone, J. M.**, & Beausoleil, J. (2015, August). The impact of asthma on cognitive functioning. *Paper presented at the American Psychological Association Convention, Toronto, Canada*.

Barbone, J. M., Saxena, S., & Irani, F. (2015, July). Does asthma effect neuropsychological performance? A meta-analysis. *Poster presented at the American Psychological Association Convention, Toronto, Canada*.

Mulligan, R. D., **Barbone, J. M.**, Saxena, S., Carey-Jr, D., Clappsy, J., & Irani, F. (2015, March). Asthma cognition data collection. *Poster presented at the west chester university psychology research day, west chester, PA, USA.* Retrieved from `https://bit.ly/2ZAD5kn`

Barbone, J. M., Saxena, S., & Irani, F. (2015, February). Neuropsychological performance in individuals with asthma: Two meta-analyses. *Poster presented at the Eastern Psychological Association Conference, Philadelphia, PA, USA.* Retrieved from `https://bit.ly/3hu6JOi`

Extracurricular activities

Chapeter Graduate Liaison — *West Chester, PA*
Psi Chi Chapter, Psychology Department, West Chester University of Pennsylvania — *Dec 2017 - May 2019*

Graduate Member — *West Chester, PA*
Psi Chi Chapter, Psychology Department, West Chester University of Pennsylvania — *Aug 2017 - Dec 2017*

Peer Mentor — *West Chester, PA*
West Chester University of Pennsylvania — *Jan 2015 - May 2015*

Chapter Secretary — *West Chester, PA*
Psi Chi Chapter, Psychology Department, West Chester Unviersity of Pennsylvania — *May 2014 - May 2015*

Club Publicity Chair — *West Chester, PA*
West Chester University of Pennsylvania — *May 2014 - May 2015*

Student Member — *West Chester, PA*
Student Life Committee, Psychology Department, West Chester University of Pennsylvania — *Sep 2013 - May 2014*

Undergraduate Member — *West Chester, PA*
Psi Chi Chapter, Psychology Department, West Chester University of Pennsylvania — *Mar 2013 - May 2014*

Undergraduate Member — *West Chester, PA*
West Chester University of Pennsylvania — *Aug 2012 - May 2014*

Awards

WCUPA Psychology Service Award — *West Chester, PA*
Psychology Department, West Chester University of Pennsylvania — *Apr 2015*
- Dedicated service to the Psychology Department through positions an undergraduate club, a student-faculty committee, and the honor society

Psychology Research Achievement Award — *West Chester, PA*
Psychology Department, West Chester University of Pennsylvania — *Apr 2015*
- Involvement in research activities, poster presentations, and work on conducting and reporting on a meta-analysis for publication

CRLA Certified Tutor Level II — *West Chester, PA*
Learning Assistance and Resource Center, West Chester University of Pennsylvania — *Apr 2015*
- Successfully completed standardized CRLA training for tutors

Dean's List — *West Chester, PA*
College of Arts and Sciences, West Chester University of Pennsylvania — *Dec 2014*
- Completed 12 or more graded hours in an academic semester and achieve a semester GPA of 3.670 or better

CRLA Certified Tutor Level II — *West Chester, PA*
Learning Assistance and Resource Center, West Chester University of Pennsylvania — *Dec 2014*
- Successfully completed standardized CRLA training for tutors

Dean's List — *West Chester, PA*
College of Arts and Sciences, West Chester University of Pennsylvania — *May 2013*
- Completed 12 or more graded hours in an academic semester and achieve a semester GPA of 3.670 or better

Programming courses

Data Scientist with R Track — *DataCamp*
HTTPS://WWW.DATACAMP.COM/STATEMENT-OF-ACCOMPLISHMENT/TRACK/B95FA8556C521B7AEF3E27A695E162EB588622F1

Statistician with R Track

DataCamp

HTTPS://WWW.DATACAMP.COM/STATEMENT-OF-ACCOMPLISHMENT/TRACK/F5C18FDED8EFD5CE7DC57F91D14CDE3166F6439B

R Programmer Track

DataCamp

HTTPS://WWW.DATACAMP.COM/STATEMENT-OF-ACCOMPLISHMENT/TRACK/09B64B5B5242159381D75837ED90198454E9FC58

Data Analyst with R Track

DataCamp

HTTPS://WWW.DATACAMP.COM/STATEMENT-OF-ACCOMPLISHMENT/TRACK/3041F1BFC05674C2E957C479FDDBB8F55573DB45

R Programming

DataCamp

HTTPS://WWW.DATACAMP.COM/STATEMENT-OF-ACCOMPLISHMENT/TRACK/327633AAE130FC18FD36A34A476D535CEFCF930D

Importing & Cleaning Data with R Track

DataCamp

HTTPS://WWW.DATACAMP.COM/STATEMENT-OF-ACCOMPLISHMENT/TRACK/525FABE528901A0BBB048608D5C84E9C553E1805

Machine Learning Fundamentals in R Track

DataCamp

HTTPS://WWW.DATACAMP.COM/STATEMENT-OF-ACCOMPLISHMENT/TRACK/57ECB920DD927F26CBF2D25CAA0F689F131653B3

Statistical Fundamentals with R Track

DataCamp

HTTPS://WWW.DATACAMP.COM/STATEMENT-OF-ACCOMPLISHMENT/TRACK/4A64ACC738CC6DCF6E19E5E7F9955C7A6DE410A0

Statistical Fundamentals with R Track (Old Track)

DataCamp

HTTPS://WWW.DATACAMP.COM/STATEMENT-OF-ACCOMPLISHMENT/TRACK/67629E7267C73B14E0DBD964A4B9D35F0957BDF0

Python Programming Track

DataCamp

HTTPS://WWW.DATACAMP.COM/STATEMENT-OF-ACCOMPLISHMENT/TRACK/D7E95156F4DD81D658D48DFBBC1B8792D7164D7D

SQL Fundamentals Track

DataCamp

HTTPS://WWW.DATACAMP.COM/STATEMENT-OF-ACCOMPLISHMENT/TRACK/C5EE6F9F354942E37AE6D84115227D6B98BA5F78

SAS Programming 1: Essentials

SAS

HTTPS://GITHUB.COM/JMBARBONE/BARBONE-CV/BLOB/MASTER/DOCS/EPG194_CERTIFICATE OF COMPLETION.PDF