February 1, 2026

Hiring Manager
Biogen

Re: Director of Advanced Analytics, Data Science & AI

I am writing to express my strong interest in the Director of Advanced Analytics, Data Science & AI position. With a PhD in Mathematics and over 10 years of experience in pharmaceutical and biotech organizations developing and deploying advanced analytics, machine learning, and AI solutions that drive strategic decision-making, combined with proven leadership of high-performing data science teams, I am excited about the opportunity to generate data-driven insights that enhance innovative capabilities.

Throughout my career at Regeneron Pharmaceuticals, Takeda Pharmaceuticals, Gilead Sciences, and Redica Systems (supporting pharmaceutical clients including Eli Lilly and Merck), I have led the development and implementation of data-driven solutions using advanced analytics, machine learning, and AI-powered tools to extract actionable insights. At Redica, I built a production LLM classifier using OpenAI API that processes regulatory data and delivers predictive insights enabling clients to optimize resource allocation and identify risks proactively. At Regeneron, I developed predictive models using ensemble methods, PLS, and PCA that drove measurable business impact-automated limit calculations reduced manual effort by 80%, feed optimization improved manufacturing yields, and quality prediction models reduced batch failures. At Takeda, I led data science teams deploying ML models for quality risk detection and process optimization. I have extensive hands-on expertise with machine learning technology including Python, R, big data platforms (Snowflake, Databricks, Hadoop-style distributed systems), and visualization techniques, combined with 10+ years of deep experience in pharmaceutical and biotech organizations.

I have proven ability to influence end-to-end delivery of data science insights from framing business questions through designing solutions to delivering recommendations. At Gilead, I led a team of ~5 data scientists and analysts generating insights for Medical Affairs across therapeutic areas-I built BI platforms from scratch, defined KPIs measuring analytics impact, and delivered consolidated insights to stakeholders ensuring alignment with strategic objectives. I excel at breaking down technical ML/AI concepts into digestible insights for diverse stakeholders-I have presented at industry conferences (CHPA, ISPE) on AI applications in FDA-regulated industries, effectively communicating complex technical concepts to senior leadership and cross-functional teams. At Regeneron, Takeda, and Gilead, I collaborated with Manufacturing, Quality, Medical Affairs, Commercial, Regulatory, and IT teams ensuring seamless integration of analytics insights into decision-making processes and strategic initiatives. I have managed budgets, resource allocation, and timelines for data science projects, and I have built strong relationships with key stakeholders fostering cultures of data-driven decision-making.

My pharmaceutical industry expertise spans 10+ years across three major biotech/pharma companies (Regeneron, Takeda, Gilead) plus consulting work supporting additional pharmaceutical clients. While my experience has been primarily in manufacturing, quality, and medical affairs operations rather than US commercial/brand analytics specifically, the core data science capabilities-developing predictive models, deploying ML solutions, leading high-performing teams, influencing strategic decisions through data-driven insights, and communicating effectively with senior stakeholders-are directly transferable. I

stay current with latest advancements in data science and AI, continuously evaluating emerging technologies and applying them to drive innovation. I would be excited to bring this combination of advanced analytics expertise, AI/ML technical depth, pharmaceutical industry knowledge, and proven leadership to spearhead data-driven insights that bolster brands, therapeutic areas, and enterprise initiatives at your organization.

I would welcome the opportunity to discuss how my experience developing advanced analytics and AI solutions in pharmaceutical organizations can contribute to driving strategic insights and innovation. Thank you for considering my application.

Sincerely,

Matt Oremland, PhD