Dear Hiring Team,

I am writing to express my strong interest in the Head of Machine Learning position. With my unique background combining molecular biology, chemistry, and machine learning leadership, I am well-positioned to lead your data science team in advancing generative design for drug discovery.

Throughout my career, I've successfully bridged the gap between complex scientific domains and cutting-edge ML solutions. During my postdoctoral research at NCBI, I developed predictive models for the FDA/CDC to detect foodborne disease outbreaks and created novel algorithms for RNA structure comparison. This work required close collaboration with domain experts to translate biological complexity into effective computational solutions – a skill directly relevant to DeepRec.AI's mission of combining ML with chemoproteomic technologies.

As Director of AI at KUNGFU.AI and Head of Data Science at KPMG, I've demonstrated the ability to learn new domains and deliver impactful ML solutions rapidly. I've built and led high-performing teams that developed transformer-based architectures and deep learning solutions across diverse industries, consistently achieving significant improvements in accuracy and efficiency. My experience scaling ML operations and ensuring robust validation aligns perfectly with your need for production-ready solutions in drug discovery.

My academic background in cellular/molecular physiology (Ph.D.) and chemistry (minor) provides me with a strong scientific foundation that will help me quickly understand and collaborate with your chemistry and proteomics teams. While my experience with chemical structure ML is limited, my track record shows I can rapidly learn new scientific domains and translate complex requirements into effective ML solutions.

I am particularly excited about DeepRec.AI's innovative approach to targeting undruggable proteins through the combination of ML and small molecule chemistry. I would welcome the opportunity to discuss how my experience leading cross-functional teams and delivering validated ML solutions could contribute to advancing your mission.

Thank you for considering my application.

Best regards,

Lawrence Gray, PhD