



PHARMAHACKS

2024 - 2025



MCGILL'S LIFE-SCIENCE THEMED HACKATHON



Help us make our event possible! You'll have the opportunity to present a challenge, have your own sponsorship booth, host workshops, and/or recruit talented individuals.

CHECK OUT OUR PACKAGES!

Why Choose PharmaHacks?



Expertise

With over 5 years of experience, our team of passionate students is dedicated to delivering exceptional results that drive the hackathon's success.



Proven Track Record

PharmaHacks is made possible thanks to sponsors. **Wolfram, Memrizz, AÉBINUM** and many more observed firsthand the growth of our participants throughout the weekend and recruited exceptional hackers.



Student-Centric Approach

Empowering students with the opportunity to develop computer program skills that solve biopharmaceutical, AI and bioinformatics focused challenges.

EXAMPLE CHALLENGES

For our top-tier sponsors, we offer the opportunity to create a custom challenge, named after their company, that aligns with their work and will be tackled by competitors during the hackathon.

Genomics (2024)

Participants will classify COVID-19 patient outcomes (mild/moderate or severe/critical) based on single-cell RNA expression data using the dataset by Schulte-Schrepping et al. The challenge involves generating features with the scFeatures R package and applying machine learning models for classification. Key elements include biologically sound feature selection, model performance metrics (e.g., F1 score), cross-validation, and justifying decisions. The goal is to predict outcomes and possibly identify novel insights into COVID-19's impact on immune response

Neural (2024)

Participants will train a machine learning model to predict a mouse's position in a maze based on neural activity data from Tseng et al. (2022). The goal is to minimize prediction error (MSE) while demonstrating creativity and clear communication. Code must be reproducible, and participants are encouraged to use real-world data efficiently and provide transparent reporting of their approach.

Stem cell (2023)

Participants will develop models to predict the success of cardiomyocyte (CM) production from human pluripotent stem cells based on a provided dataset. The challenge focuses on feature selection and classification to determine whether the CM content is sufficient (above 90%) or insufficient. Participants must design creative solutions while maintaining the accuracy, precision, recall, and MCC metrics used in the original research. The goal is to improve CM production for regenerative medicine applications.

Injoy (2023)

Participants are tasked with predicting how different food categories contribute to IBS symptom scores for individual users. Using a limited dataset of paired food and symptom data from 50 users, teams must build a model that accurately predicts symptom scores and explains the contribution of each food category. The project will be evaluated based on the Spearman correlation between the predicted and true food-symptom relationships, as well as the creativity and clarity of the solution.

SPONSORSHIP PACKAGES

We offer 3 different tiers of sponsorship for PharmaHacks which include a variety of benefits. Additionally we are willing to negotiate our offerings and tailor them to your organization’s needs.

	Tier 1	Tier 2	Tier 3
	\$500	\$750	\$1000
Recruiting			
Access to recruiting information of hackathon participants (LinkedIn/Portfolio/CV/Resume)	After event	After event	Before event
Sponsorship table at event to distribute company merchandise and information packets	Small	Small	Large
Workshop/info session during the hackathon about your company	N/A	30 min	1 hour
Keynote speech during the hackthon presenting your company	No	No	Yes
Branding			
Title sponsor for event	No	No	Yes
Promotion on Pharmahacks social media (Instagram)	N/A	1 post	2 posts
Logo featured on PharmaHacks website	Small	Medium	Large
Logo featured on PharmaHacks merchandise	N/A	Small	Medium
Challenge			
Custom hackathon challenge named after company and tailored to mission	No	No	Available
Selection of judging panel members	No	1 judge	Up to 4 judges