AION Labs Challenge 3:

Artificial Intelligence for Design and Optimization of Antibodies for Targeted Therapies



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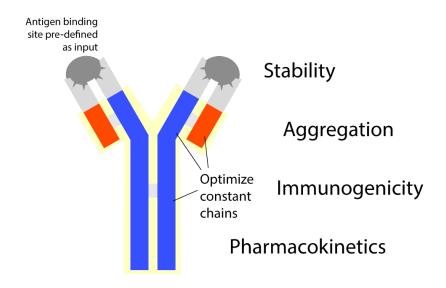
This document compiles many frequently asked questions regarding the specific challenge and the application process. Please feel free to ask any questions we missed at info@aionlabs.com.

What is this challenge all about?

Antibody discovery and development has two main stages. The first one is to discover antibodies that bind the target of interest. The second, is to optimize the antibody to make a better drug. This challenge is about the second step. The starting point is a functional antibody that modulate the desired target. You are requested to propose and build a computational platform that delivers the sequence of a modified antibody sequence. Modifications are required at multiple levels:

- Manufacturing: ensure smooth antibody production at scale. Antibodies differ in their level
 of solubility, expression levels in manufacturing cells, aggregation during purification, proper
 folding and post translational modification and more. A review that provides a detailed
 description can be found here.
- Physiological properties: pharmacokinetic and pharmacodynamics. Those terms relate to the
 concentration of the antibody in different tissues in the body and the rate of clearance from
 the body. A review article describing such parameters can be found here.

The above list of properties required is not complete. The goal is not to optimize for a specific antibody property but rather to suggest a process to optimize to any property.

























I have my own great idea. What is the advantage of joining AION Labs vs trying to create my own company?

AION Labs was created to build successful pharma AI companies. Our field is complex, spans many disciplines and validation, which happens in patients, is slow and expensive. To be a successful pharma AI company, we believe that all stakeholders should work together from day one. By joining AION Labs you ensure that you are working on an important problem for the field with your potential customers. You will have mentors from each pharma company who are experts in the field to guide you, challenge you and test your results. You will also have AWS as a partner to help you design your platform architecture and our VC partner to guide you on the business side and ensure your success as a commercial company. In our model you will be able to focus on the science and prove the value of the platform before you are forced to deal with the business aspect of a company. Once you graduate from AION Labs, you will have a network of partners and customers who know and trust your product.

I already have a company in the pharma AI area – Can I join AION Labs regardless of the specific challenge?

Yes – we have a second track allowing you to join as a company. We only require that at least 2 of our partners agree that your company is solving a key problem in our field. Please contact us at info@aionlabs.com to schedule a meeting.

How is AION Labs different from any other incubator / accelerator?

AION Labs is very different. We are an innovation lab. We focus on pharma AI companies and our team has expertise in that field. We provide substantial funding to get started (\$2M for 4 years), access to vast private data and to experts and mentors in multiple pharma companies. Your pharma mentors are also your potential customers and this type of relationship ensures a product market fit. In addition, AWS will support you on the technology side and our VC will mentor you in business and help you with building your business model. Having all partners work together by your side from day 1, is what makes our model different – we remove the roadblocks and set you up for success!

How is equity distributed between AION Labs and my startup?

The partners who are sponsoring your specific startup (minimum 2) will have direct equity in your startup. AION Labs doesn't have any equity in your company. In addition, there are no additional special rights or IP to any of the partners who joined besides equity. The exact equity will be determined based on what you bring with you as you join AION Labs. Our model is flexible, and we promise to be fair. We do not provide specific numbers because it is difficult to setup a one size fits all model. In one scenario, a young and brilliant team can join with just and idea and another scenario is a small company with a technology and even a seed investment. We will negotiate the terms and we promise that our offer will be fair.



How do I apply for the challenge?

Please apply through the BioMed X platform <u>here</u>. The application requires a proposal for solving the challenge. Even if you don't have one yet, **please register** in the system so we can communicate with you.

I am not sure I can come up with a great proposal in the time provided, what should I do?

We don't expect you to solve this complex issue within a few days in a short proposal. We are looking for proposals that show you understand the main issues of this field and demonstrate your creativity. You will have a chance to refine your proposals in our boot camp. Don't miss your opportunity to shine!

I would love to work in the suggested field but it's not really my field of expertise. Should I apply?

Yes! The key to team success is diversity. Do your best to bring your point of view in the application process and go for it.

I am not sure which role to apply for, Group Leader / Scientist Founder or Postdoctoral Researchers / Scientist Co-Founders. Can you explain the difference?

A startup company will initially have one group lead and two researchers. The group lead is responsible for the startup and the person who will be the leader of the new company. The boot camp winner will be a person who applied for the group lead position. Once the winner is announced, he/she can choose 2 researchers who will be co-founders.

If you wish to lead the startup and have experience beyond a PhD, you should apply as a group lead. However, if you recently completed a MSc or PhD, you have better chances to join a startup team if you apply as a scientist / co-founder.

Is the boot camp fully paid for by AION Labs?

Yes! If you are among the selected candidates, we will cover all travel costs and take care of everything for you including flights, hotel and local transportation.

Do I have to attend the boot camp physically or can I participate remotely?

We believe it is extremely important for you to be present in person. It will allow you to meet other people who might be your co-founders in a new startup. You will also have a chance to visit the place where you will live and work for the next 4 years. Therefore, we require all participants to be present physically in Israel, unless there are very unusual circumstances which prevent you from traveling (visa issues, covid restrictions, etc.).



How many people are invited to the boot camp?

We invite 5 group leader / founder candidates and 10 scientists /co-founder candidates.

What should I expect in the boot camp?

The boot camp is all about pushing your proposal to the next stage or starting from scratch and creating a completely new one with your team. We will help you to associate in groups of 3 (group leader + 2 researchers) and you will be working intensively on your proposals with close feedback from our mentors. It is a crash course in how to build a scientific work plan. On the 5th day, you will be facing our judges who will select the winning team and plan.

As a group leader, what happens after I win the boot camp?

Congratulations! As the winner, we will offer you a contract to start your own company in AION Labs. You will be able to choose up to 2 co-founders from the boot camp who will join you. In addition, your startup will receive funding in the amount of at least 500,000 USD per year for a period of up to 4 years, free access to our facilities in Rehovot, 100,000 USD cloud credits from AWS, and continuous support from our experienced mentors.

If I win, do I have to relocate to Israel?

Yes. All our startup teams at AION Labs are required to be present in our innovation lab. The lab is designed in a way that will allow our startup teams to be synergistic when co-localized and this will also be the best way to become part of the Israeli healthcare ecosystem and form strategic partnerships with industry and academia. That said, it doesn't mean that all employees must be local. It will be possible for a startup to hire remotely if needed.

I heard that Israel is a very expensive place to live. Will my salary allow me to live comfortably?

Yes. At AION Labs the budget allocates industry level salaries to all employees. This is important to allow us to compete for local talent and to make sure you can live comfortably and focus on your work.

Me and my family don't speak Hebrew. Is it easy to communicate with people in English?

Yes. Almost all Israelis everywhere in the country speak English. You will also be part of a multinational community at AION Labs where everyone will default to speaking English all the time.

What about schools and kindergartens? Are there international schools?

Once you win the boot camp and decide to move to Israel, our team will you and your family with everything you need. There many international schools in Israel since this is a state that has many immigrants every year from many countries. We will be happy to answer specific questions.

Can my company grow beyond the initial team?

Of course! Like any other company, you we will support you in raising additional funds and grow. However, at AION Labs we believe in elegant scientific proof of concept before scaling. You have very





strong partners who are by your side and can push you a long way – 4 big pharma companies, AWS as your technology partner and IBF as your VC partner. All of us, including the AION Labs CTO, are committed to your success and we will push you forward in solving the key challenges. If the company is successful, we will all be committed to grow it further.