







# THE PIPE-HIGH-TECH ENTREPRENEURIAL TRAINING

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#### WWW.FAPESP.BR/PIPE/EMPREENDEDOR

The PIPE-High-Tech Entrepreneurial Training, offered by FAPESP, aims to assist companies funded through FAPESP's Innovative Research in Small Businesses program (PIPE in the Portuguese acronym) to develop a robust business model. The goal is to promote sustainable commercial development of the innovative products and services originated from FAPESP PIPE's research projects, generating significant business results. The training methodology is based on Steve Blank's Customer Development and Osterwalder and Pigneur's Business Model Canvas applied to high-tech innovation, similarly to the I-Corps program of the US National Science Foundation.

The São Paulo Research Foundation, FAPESP, has been funding small business research since 1997. The PIPE program focuses on Innovative Research in Small Businesses, targeting from startups to medium companies with less than 250 employees. Similarly to the NSF SBIR (Small Business Innovation Research) program, FAPESP's PIPE is divided in two phases. Phase 1 supports proof-of-concept or feasibility assessments, with a duration of up to 9 months. Phase 2 supports the development of the research required to develop the process or product, with a duration of up to 24 months.

#### THE TRAINNING

The PIPE–High–Tech Entrepreneurial Training selects 21 companies, based on the quality of their proposals and the benefits they could obtain from participating. Each company forms a team of three members. Two of them are nominated by the startup: the Principal Investigator and the Entrepreneurial Lead person for the company. The third member, the Mentor, is assigned by FAPESP from a pool of highly experienced, successful high-tech executives in the State of São Paulo, Brazil.

The training is organized in 4 phases. In Phase 1, the companies prepare their initial business canvas. In Phase 2, the 21 teams will work at FAPESP with the instructors during three days and learn how to interview customers and incorporate their feedback into their businesses. In Phase 3, the teams will conduct dozens of customer interviews in a structured way, adapting their business model as they progress, and have online classes and videoconference sessions with FAPESP instructors. In Phase 4, the teams will meet again at FAPESP in a live session for their final oral presentations.

The training program is based on the Customer Discovery methodology, which is an iterative process of getting out of the office/lab, going to the market to interview potential customers, partners, and competitors, to understand their needs, problems, and difficulties. After each group of interviews, the team evaluates whether the new understanding of the customer needs validates or invalidates the components of its business model. When a team detects that its hypothesis is not valid, they modify the existing business model. This iterative process continues until the team achieves a match between the product/service being offered and the needs of the market. This correspondence is called Product x Market fit.

The program will not only help the 21 startups in enhancing their business capabilities, but also develop, within the State of São Paulo, the expertise on how to apply modern startup engineering methodologies for the development of prosperous high-tech companies.

About 75% of the companies that participated in the previous editions of the PIPE High-Tech Entrepreneurial Training Program revised their business plans to adjust them to market requirements, thereby increasing the likelihood of success.



# THE SÃO PAULO RESEARCH FOUNDATION

#### WWW.FAPESP.BR/EN

FAPESP is a public foundation funded by São Paulo taxpayers to promote the development of science and technology in the state, by supporting research projects in institutions of higher education and research, official or private, which are selected by a rigorous system of analysis based on the peer-review process.

São Paulo has a population of 44 million and generates 31,5% of Brazil's GNP. Under the state Constitution 1% of all state taxes are appropriated to fund FAPESP. The stability of the funding and the autonomy of the foundation allow for an efficient management of the resources that has had a sizable impact: while São Paulo has 21% of the Brazilian population and 34% of the scientists with a doctorate in the country, the state responds for 43% of the country's scientific articles published in international journals.

The effectiveness of research carried out in São Paulo is the combined result of several factors that include the quality of the state's universities and institutes, the productivity of its researchers, high rates of participation by private, São Paulo-based companies that function within the state's R&D outlays, São Paulo's outstanding infrastructure, and the existence of FAPESP, a well-designed state research-sponsoring agency governed, maintained by its directors with excellence and with autonomy over the past half century.

Within this context, in 2018 FAPESP applied \$PPP 601.2 million in \$ purchasing power parity (PPP) in scholarships and grants.

In accordance with the Foundation's funding objectives, 36,6% of expenditure was earmarked for advancing knowledge, 6,2% was dedicated to supporting research infrastructure and 57,2% was allocated to supporting application-driven research.

FAPESP works in close contact with the scientific community: all proposals are peer reviewed with the help of panels composed of active researchers from the specific area. Many times scientists in São Paulo submit proposals for programs to the foundation which are carefully analyzed and, if deemed strong in academic terms, are shaped by the foundation into research programs that will constitute a set of related research projects in a given area.

Since FAPESP's mandate is to foster research and scientific and technological development in the state, ideas for programs that couple world class research with contributions that will impact social problems are welcome.

# INNOVATIVE RESEARCH IN SMALL BUSINESSES PROGRAM

#### AIMS AND OBJECTIVES

FAPESP's Innovative Research in Small Businesses Program (PIPE), established in 1997, aims to support the development of innovative research projects carried out in small businesses, i.e., companies with up to 250 employees, in the State of São Paulo. Centered on significant scientific and technological problems that have a high potential for commercial or social return, the projects are carried out by researchers who have formal links to the small businesses or who are associated with them for the implementation of the project.



WWW.FAPESP.BR/PIPE

#### **OBJECTIVES**

To use technological innovation as an instrument to increase the competitiveness of small companies;

To create conditions to enhance the research system's contribution to economic and social development;

To foster an increase in private investment in technological research;

To enable the collaboration of small businesses with academic researchers on innovation projects;

To contribute for the establishment of a culture that values research activities within business environments, technological innovation within small companies, and the employment of researchers in the private sector.

Since the start of PIPE in 1997, more than 2,300 grants have been awarded to companies. In 2018, 247 new projects were approved – one project per working day and 18% more than in the previous year.

Research supported by FAPESP can be consulted at FAPESP Grant Database (www.bv.fapesp.br/en).

More about the research results in the Agência FAPESP (www.agencia.fapesp.br/en) and Pesquisa para Inovação (www.pesquisaparainovacao.fapesp.br), in Portuguese

#### COORDINATION

Carlos Henrique de Brito Cruz Brazil Scientific Director – Scientific Directorate São Paulo Research Foundation – FAPESP Rua Pio XI, 1500 – Alto da Lapa – São Paulo – CEP 05468-901 dc@fapesp.br www.fapesp.br/en



An electronic engineer and a physicist, Brito Cruz is a professor at the Gleb Wataghin Physics Institute, of the State University of Campinas (Unicamp), where he was the rector from 2002 to 2005.

He graduated in electronic engineering at the Aeronautics Technology Institute of (ITA in the Portuguese acronym). He took a master's degree and a doctorate at Unicamp's Gleb Wataghin Physics Institute. He has been a professor at the Unicamp's Physics Institute since 1982. Presently is a full professor at the Quantum Electronics Department.

Brito Cruz was a visiting researcher at the Quantum Optics Laboratory at the Universitá di Roma, at the Femtosecond Research Laboratory at the Universitè Pierre et Marie Curie. and a resident researcher at the AT&T's Bell Laboratories, in Holmdel, New Jersey, and in Murray Hill, NJ. At Unicamp he was the Director of Unicamp's Physics Institute from 1991 to 1994 and from 1998 to 2002; Pro-rector for Research from 1994 to 1998, and Rector of the university from 2002 to 2005. He was the the President of FAPESP from 1996 to 2002.

Brito Cruz is a member of the Brazilian Academy of Sciences and a Fellow of the American Association for the Advancement of Science. He received the Ordre des Palmes Academiques de France, the Order of the Scientific Merit from the Federative Republic of Brazil and the Order of the British Empire, Honorary (OBE) in 2015.

#### **ADJUNCTS**

Flavio Grynszpan
Brazil
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Received the degree of Electronic Engineer from the Universidade Federal do Rio de Janeiro (1966), M.Sc. in Electrical Engineering from the Coordenação dos Programas de Pós-Graduação de Engenharia-COPPE/UFRJ, (1967) and Ph.D in Biomedical Engineering from the University of Pensylvania, (1971). Grynszpan was the head of the Department of Biomedical Engineering (1973-1976) and became Full Professor of COPPE/UFRJ (1975).

He became the head of COPPETEC, in charge of the University projects to Industry and Government (1976-1985) and the head of the Technology Innovation Center (1985-1986), to comercialize the University research results. In 1987, he founded the Technological Park of Rio de Janeiro, with 73 companies specialized in IT and Telecom. He, then, became the President of Riotec, the company that managed the research activities of the park. He was ellected as Vice President of The International Association of Science Parks (1986 to 1989).

Grynszpan founded and headed the Brazilian Association of Biomedical Engineering (1971), was a member of the Conselho Tecnico Científico of CAPES/MEC (1975) and Member of the Board of Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) from 1998 to 2002.

In 1989, he became the President of Motorola in Brazil, where he stayed from ten years and was responsible for bringing and installing Motorola's manufacturing facilities in Jaguariuna, São Paulo. In this plant, Motorola manufactured all cellular phones, radios and pagers sold in Brazil and exported to Latin America.

He became Vice President of Abinee – the Brazilian Electronic Industrial Association, until 2001, Member of the Board of Trustees of FIA – Fundação Instituto de Administração,(2000-2006) and Director of Anpei, the Brazilian Association of Innovative Enterprises, until 2008.

He is a Visiting Professor of the MBA Program of the Fundação Instituto de Administração, Director of the Technology Department of the Centro das Indústrias de São Paulo (CIESP), an organization that supports 8,500 industries in the state of São Paulo, and Member of CONIC – the Council of Innovation and Competitiveness of FIESP – the Federation of Industries of the State of São Paulo.

Grynszpan works as business consultant, specialized in innovation, commercialization of University research and entrepreneurship in Brazil and in the international market. He is now working as a consultant to the University of Virginia.

#### **ADJUNCTS**

Hélio Marcos Machado Graciosa Brazil Area Panel – Research for Innovation São Paulo Research Foundation (FAPESP) Rua Pio XI, 1500 – Alto da Lapa – São Paulo – CEP 05468-901 heliograciosa@gmail.com www.fapesp.br/en



Bachelor's degree in Telecommunications Engineering (1970) and Master's degree in Electrical Engineering (1972) from Pontifical Catholic University of Rio de Janeiro. Graduated from Corporative Governance Brazilian Institute as Administrative Counselor (2009).

Served as a college professor. Former President (1990-1994) and currently Emeritus Member of Telecommunications Brazilian Society.

Worked at CPqD (Telecommunications R&D Center), since its creation (1976), in several areas: digital transmission, optical communication, microelectronics, technological and strategic planning.

TELEBRÁS R&D Director (1995-1998), CPqD's President (1998-2015) and CEO of CPqD Technologies&Systems Inc. (2000-2015). During his mandate CPqD created technology based startups with manifold business model in several areas: next generation network, optical communication systems, telecommunications clearing services, radio communication systems, optical sensors, fraud detection and prevention services, integrated photonics devices.

Has been President of the Administrative Board of Telesc, Telebahia, Padtec, Trópico, Sistel, member of the Administrative Board of Telergipe, Algar, Cleartech, Telebrasil, member of Fórum Campinas Foundation Board of Trustees and Director at Telebrasil.

Presently is Research for Innovation Area Coordination at FAPESP, member of TELEBRÁS Administrative Board, startup Mentor, Director at Fiesp Telecommunications Division, Member of CONIC – the Council of Innovation and Competitiveness of FIESP, member of Brazilian IoT Consultive Council and member of IPT (Institute of Technological Research) advising council and Co-founder of Brazil iCorps Institute.

#### **ADJUNCTS**

Marcelo Nakagawa Brazil Adjunt Panel - Research for Innovation São Paulo Research Foundation – FAPESP Rua Pio XI, 1500 – Alto da Lapa – São Paulo – CEP 05468-901 mnakagawa@fapesp.br www.fapesp.br/en



Bachelors in Business Administration (USP, 1996), MSc in Business and Planning (PUC, 2002) and PhD in Industrial Engineering (Poli-USP, 2008).

Nakagawa is entrepreneurship and innovation professor at INSPER Institute of Education and Research and entrepreneurship director at FIAP (Faculdade de Informática e Administração Paulista).

Works in the field of Entrepreneurship and Innovation, having published 2 books, co-authored another 3 titles and other papers and articles. He is entrepreneurship columnist at O Estado de São Paulo newspaper and Pequenas Empresas, Grandes Negócios magazine.

He also carries out research in the fields of new business creation, innovation management, corporate entrepreneurship and startups. He developed entrepreneurship education programs including Bota Pra Fazer (Endeavor), Inovativa Brasil (MDIC), Empreenda e Conexões (SENAC) and StartupOne (FIAP).

Nakagawa has more than 20 years professional background in industries such as banking, strategic consulting, venture capital, innovation, private equity and education.

#### **TECHNICAL SUPPORT**

Lincoln Rodrigues Brazil lincolnetto@gmail.com

#### **COURSE DATES**

KICKOFF MEETING MARCH, 11

ONLINE INITIAL WORKSHOP MARCH, 23, 24 AND 25

ONLINE CLASSES MARCH 30, APRIL 06, 13, 20 AND 27

ONLINE CLOSING WORKSHOP MAY 08 AND 12

#### **COURSE EXPECTATIONS**

Each team member should commit to attending every planned session of the program. Each team must have two members that can commit to class time plus approximately 15-20 additional hours per week, for the full seven weeks of the program, on customer discovery and exercises outside of class. Additional team members must commit to 6-8 hours a week.

#### **COURSE DESCRIPTION**

Customer Discovery is an iterative process of physically getting out of the building to interview potential customers and stakeholders to understand their problems and pain points in the market and in society. These interviews, or experiments, lead to real-world learnings and insights that validate or invalidate key components of the business model, often leading to pivots.

This course will provide teams with real-world, hands-on learning experience with customer discovery and successfully transferring knowledge into products and processes that benefit society. The entire team will engage with industry. You and your team will spend your time talking to and learning from customers, partners and competitors, and learning how to deal with the chaos and uncertainty of commercializing innovations and creating ventures.

This course is about getting out of the building. You will be spending a significant amount of time outside the building, talking to customers and testing your hypotheses about what they want in products and services. We will spend our limited class time on what you learned from talking to customers, not what you already knew coming into the course. Teams should be striving for 15 interviews per week, for a total of 100 interviews by the end of the course.

#### **CLASS CULTURE**

We have limited time and we push, challenge, and question you in the hope you will quickly learn. We will be direct, open, and tough – just like the real world. We hope you can recognize that these comments are not personal, but part of the process. We also expect you to question us, challenge our point of view if you disagree, and engage in a real dialog with the teaching team. This approach may seem harsh or abrupt, but it is all part of our wanting you to learn to challenge yourselves quickly and objectively, and to appreciate that as entrepreneurs, you need to learn and evolve faster than you ever imagined possible.

#### **ADDITIONAL RESOURCES**

1) Request access to the Course Repository:	Pre-Planning Pt. 1	(4′55)
shorturl.at/iuFIV	Interviews Pt. 1	(5'40)
	Interviews Pt. 2	(3'49)
2) The control of the	Asking the Right Question	(2'37)
2) These short videos from	Assuming you know what the customer wants	(1'56)
Steve Blank provide helpful tips	Understanding the Problem (the right way)	(3'22)
and examples for preparing	Customers Lie	(2'37)
for your customer interviews.	The Distracted Customer	(3'12)
https://vimeo.com/groups/204136/videos	Engaging the Customer	(3'37)
https://vimeo.com/groups/204136/videos	Customer Empathy	(2'25)
	The User, the Buyer & the Saboteur	(2'24)
	Death by Demo 1	(2'18)
	Death by Demo 2	(1'45)

For a more detailed explanation of Customer Development and the Lean Startup, here are some short videos of Steve Blank from the Kaufmann Founders School:

3) All team members should purchase the textbooks outlined on the following page. The Osterwalder books have free e-version previews, and the Constable book has a full free e-version.



#### VALUE PROPOSITION AND DESIGN

Alexander Osterwalder, Yves Pigneur, Greg Pernarda & Alan Smith A free download of the first chapter of the book is available at: https://strategyzer.com/books/value-proposition-design



TALKING TO HUMANS
Giff Constable
A free download of the book is available at:
www.talkingtohumans.com

http://businessmodelgeneration.com/book



BUSINESS MODEL GENERATION
Alexander Osterwalder & Yves Pigneur
A free download of the first chapter of the book is available at:



THE STARTUP OWNER'S MANUAL Steve Blank & Bob Dorf

<sup>√</sup> www.entrepreneurship.org/Founders-School/The-Lean-Approach/Getting-Out-of-the-Building-Customer-Development.aspx

 $<sup>\</sup>checkmark www.entrepreneurship.org/Founders-School/The-Lean-Approach/Customer-Development-Data.aspx$ 

<sup>√</sup> www.entrepreneurship.org/Founders-School/The-Lean-Approach/Minimum-Viable-Product.aspx

#### REOUIRED KICKOFF ASSIGNMENTS

You should watch all of the videos in the "How to Build a Startup" course:

https://www.udacity.com/wiki/ep245/downloads

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You can watch these at your own pace, but it's recommended to have completed the lectures shown below before initial workshop:

Lecture 1: What we Now Know
Lecture 1.5A: Business Models
Lecture 1.5B: Customer Development
Lecture 2: Value Proposition
Lecture 3: Customer Segments

#### HIGHLY SUGGESTED KICKOFF ASSIGNMENTS

The following assignments augment the required assignments, and should be used to provide a greater understanding of the material. At a minimum, we recommend that you scan these readings.

Business Model Generation – pages 14-51
The Startup Owner's Manual – pages 195-199
"12 Tips for Early Customer Development Interviews" by Giff Constable:
(http://giffconstable.com/2010/07/12-tips-for-early-customer-development-interviews)

#### REQUIRED DELIVERABLES FOR THE INITIAL WORKSHOP

- A two-slide presentation.
   You may be called upon to present to the whole class and will definitely present to a group of peers and instructors in a breakout session. See the template provided on the following page.
- 2. Ten or more customer/industry contacts that you hope to interview on Day 2 of the initial workshop

#### **ADDITIONAL RESOURCES**

#### PRESENTATION TEMPLATE FOR THE INITIAL WORKSHOP

### SLIDE 1

Title Slide
Team Name
University or company logo
Product or technology picture & description (1 sentence)
Pictures & names of your team members



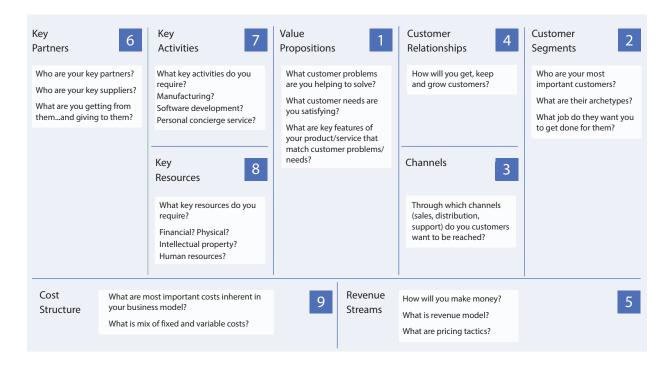
#### SLIDE 2

Populated Business Model Canvas

It's recommended to create a online template for free at Canvanizer:

https://can vanizer.com/new/business-model-can vas

Use the questions in the image below to guide your answers-focus on Customer Segments & Value Propositions



# KICKOFF WORKSHOP: SCHEDULE AT-A-GLANCE

THURSDAY March, 11  13:30 pm 14:00 pm 14:00 pm Kickoff meeting with all teams to review logistics, and to connect mentors to teams 3:15 pm LECTURE #1: Using Customer Discovery to Build a Business Model, Customers & Value Propositions and required deliverables for the initial workshop 4:45 pm 5:00 pm Closing  8:15 am Zoom Test 8:30 am Welcome & Introduction 8:45 am John Zoom Test 9:30 am Startup testimony videos 9:45 am Zoom Training 10:00 am BREAK 10:15 am Team Introductions: 10 minutes for each presentations, another 5 for comments. Startups will be divided into 3 rooms in Zoom Platform.  12:15 pm LUNCH 1:15 pm LECTURE #2: Best Practices for Customer Discovery Interviews 4:30 pm Closing  TUESDAY March, 24  All Day Customer Interviews  WEDNESDAY March, 25  WEDNESDAY March, 25  Toom Team Presentations - 7 teams in each of the 3 rooms. Breakout Rooms 10 minutes for presentations 12:00 pm LUNCH 1:30 pm Optional Office Hours at Zoom 4:00 pm Closing	DATE	TIME	TOPIC
THURSDAY March, 11  3:15 pm  LECTURE #1: Using Customer Discovery to Build a Business Model, Customers & Value Propositions and required deliverables for the initial workshop 5:00 pm Closing  8:15 am Zoom Test 8:30 am Welcome & Introduction 8:45 am Intellectual Property presentation 9:30 am Startup testimony videos 9:45 am Zoom Training 10:00 am BREAK 10:15 am Team Introductions: 10 minutes for each presentations, another 5 for comments. Startups will be divided into 3 rooms in Zoom Platform.  MONDAY March, 23  12:15 pm LUNCH 1:15 pm Welcome introduction by FAPESP 1:30 pm LECTURE #2: Best Practices for Customer Discovery Interviews 3:30 pm Mentor/PI/EL Workshops Closing  TUESDAY March, 24  8:00 am Zoom Test 8:15 am Welcome Back, Q&A, Discussion 8:30 am LECTURE #3: Channels 9:30 am BREAK 10:00 am Team Presentations - 7 teams in each of the 3 rooms. Breakout Rooms 10 minutes for presentations 12:00 pm LUNCH 1:30 pm Optional Office Hours at Zoom		·	
4.45 pm Support platform training 5:00 pm Closing  8:15 am Zoom Test 8:30 am Welcome & Introduction 8:45 am Intellectual Property presentation 9:30 am Startup testimony videos 9:45 am Zoom Training 10:00 am BREAK 10:15 am Team Introductions: 10 minutes for each presentations, another 5 for comments. Startups will be divided into 3 rooms in Zoom Platform.  12:15 pm LUNCH 1:15 pm Welcome introduction by FAPESP 1:30 pm LECTURE #2: Best Practices for Customer Discovery Interviews 3:30 pm Mentor/PI/EL Workshops 4:30 pm Closing  TUESDAY March, 24  8:00 am Zoom Test 8:15 am Welcome Back, Q&A, Discussion 8:30 am LECTURE #3: Channels 9:30 am BREAK 10:00 am Team Presentations – 7 teams in each of the 3 rooms. Breakout Rooms 10 minutes for presentations 12:00 pm LUNCH 1:30 pm Optional Office Hours at Zoom		·	LECTURE #1: Using Customer Discovery to Build a Business Model,
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March, 24  8:00 am Zoom Test 8:15 am Welcome Back, Q&A, Discussion 8:30 am LECTURE #3: Channels  9:30 am BREAK  10:00 am Team Presentations – 7 teams in each of the 3 rooms.  Breakout Rooms 10 minutes for presentations  12:00 pm LUNCH  1:30 pm Optional Office Hours at Zoom		4:30 pm	Closing
WEDNESDAY March, 25  8:15 am Welcome Back, Q&A, Discussion  8:30 am LECTURE #3: Channels  9:30 am BREAK  10:00 am Team Presentations – 7 teams in each of the 3 rooms.  Breakout Rooms 10 minutes for presentations  12:00 pm LUNCH  1:30 pm Optional Office Hours at Zoom		All Day	Customer Interviews
WEDNESDAY March, 25  8:30 am  LECTURE #3: Channels  9:30 am  BREAK  10:00 am  Team Presentations – 7 teams in each of the 3 rooms.  Breakout Rooms 10 minutes for presentations  12:00 pm  LUNCH  1:30 pm  Optional Office Hours at Zoom		8:00 am	Zoom Test
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WEDNESDAY March, 25  10:00 am Team Presentations – 7 teams in each of the 3 rooms. Breakout Rooms 10 minutes for presentations  12:00 pm LUNCH  1:30 pm Optional Office Hours at Zoom		8:30 am	LECTURE #3: Channels
March, 25  Breakout Rooms 10 minutes for presentations  12:00 pm		9:30 am	BREAK
March, 25  Breakout Rooms 10 minutes for presentations  12:00 pm    LUNCH  1:30 pm    Optional Office Hours at Zoom		10:00 am	Team Presentations – 7 teams in each of the 3 rooms.
12:00 pm LUNCH  1:30 pm Optional Office Hours at Zoom			Breakout Rooms 10 minutes for presentations
		12:00 pm	LUNCH
4:00 pm Closing		1:30 pm	Optional Office Hours at Zoom
		4:00 pm	Closing

# **ONLINE AND CLASSES: ASSIGNMENTS**

### **REQUIRED ASSIGNMENTS**

You should watch all of the videos in the "How to Build a Startup" course:

https://www.udacity.com/wiki/ep245/downloads

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You can watch these at your own pace, but you must have completed the lectures shown below by May and June.

Lecture 4: Channels

Lecture 5: Customer Relationships

Lecture 6: Partners

Lecture 7: Revenue Models

Lecture 8: Resources, Activities, and Costs

#### **ADDITIONAL ASSIGNMENTS**

The teaching team may assign additional short readings or tasks throughout the course as deemed necessary based on the progress of teams.

# ONLINE AND CLASSES: SCHEDULE AT-A-GLANCE

DATE	TIME	TOPIC	
MONDAY	1:00 pm	Test Zoom	
March, 30	2:00 pm	Team Presentations *	
(ONLINE)	4:00 pm	LECTURE #4: Problem Solution Fit	
		Value Proposition Canvas: Customer Profile & Value Map,	
		Customer Pains/Gains	
	5:00 pm	Closing	
MONDAY	1:00 pm	Test Zoom	
April, 06	2:00 pm	Team Presentations *	
(ONLINE)	4:00 pm	LECTURE #5: Customer Relationships & Revenue Models	
	5:00 pm	Closing	
MONDAY	1:00 pm	Teste Zoom	
April, 13	2:00 pm	Team Presentations *	
(ONLINE)	4:00 pm	LECTURE #6: Key Partners	
	5:00 pm	Closing	
MONDAY	1:00 pm	Test Zoom	
April, 20	2:00 pm	Team Presentations *	
(ONLINE)	4:00 pm	LECTURE #7: Business Model Fit	
		Resources, Activities and Costs: how to build and validate	
		the rest of your business model	
	5:00 pm	Closing	
MONDAY	1:30 pm	Test Zoom	
April, 27	2:00 pm	Team Presentation *	
(ONLINE)	4:00 pm	LECTURE #8: Lessons Learned Presentations & Story Videos	
		Overview and directions for the final course deliverables	
	5:00 pm	Closing	

#### \* TEAM PRESENTATIONS

Teams present their business model canvas in three concurrent tracks. Each team is allotted 15 minutes total to include 10 minutes for presentations and 5 minutes for teaching team comments.

# LESSONS LEARNED WORKSHOP: SCHEDULE AT-A-GLANCE

### ONLINE CLASSES AND PRESENTATION

DATE	TIME		
	8:15 am	Zoom Test	
	8:30 am	Welcome Back	
FRIDAY	9:00 am	Review Videos & Draft Presentations	
May, 08	11:30 am	LUNCH	
	2:00 pm	Chat with investors	
	4:00 pm	Optional Office hours	
	5:00 pm	Closing	
	8:15 am	Zoom Test	
	8:30 am	FAPESP Introduction of Final Presentations	
THESDAY	9:00 am	Team Presentations: 6 teams	
TUESDAY May, 12		(10 min presentations / 5 min comments)	
,, . =	10:30 am	BREAK	
	11:00 am	Team Presentations: 7 teams	
		(10 min presentations / 5 min comments)	
	12:45 pm	LUNCH	
	2:00 pm	Team Presentations: 8 teams	
		(10 min presentations / 5 min comments)	
	4:00 pm	Closing Ceremony and Certificate Release	

Company 01: ACTINOBAC AGROSCIENCES (Cidade: Ribeirão Preto/SP)

Name of the project: Identificação e screening biológico na busca por agentes antimicrobianos produzidos

por actinobactérias contra o cancro cítrico

Entrepreuner: Tânia Petta / E-mail: taniapetta.usp@gmail.com
Principal investigator: Danilo Tosta Souza / E-mail: danilo\_tosta@hotmail.com

Mentor: Dalton Pessoa

Company 02: AVINAMICS (Cidade: São José dos Campos/SP)

Name of the project: Desenvolvimento da metodologia de subescala dinâmica para realização de ensaios

em voo usando aeronaves remotamente pilotadas

Entrepreuner: Alessandro Silveira Davi / E-mail: ales\_davi@yahoo.com.br Principal investigator: Ricardo Galdino da Silva / E-mail: ri\_galdino@yahoo.com.br

Mentores: João Botelho e José Ricardo Marar

Company 03: BIOSMART NANOTECHNOLOGY LTDA (Cidade: Araraquara/SP)

Name of the project: Estratégias tecnológicas para administração de um composto antivirulência no

combate à Salmonelose em animais de criação.

Entrepreuner: Geralda Cristina de Freitas Ramalheiro / E-mail: geralda.ramalheiro@gmail.com

Principal investigator: Vânia Santos Braz / E-mail: vania.braz@unesp.br

Mentor: Fabio Zoppi Barrionuevo

Company 04: BRATS IND. E COM. DE PROD. MET. ESP. LTDA (Cidade: Cajamar/SP)

Name of the project: Desenvolvimento de ferramentas de corte e de conformação mecânica a partir de

Carbonetos de Nióbio (NbC)

Entrepreuner: Daniel Rodrigues / E-mail: daniel@brats.com.br

Principal investigator: Eduardo Cannizza / E-mail: eduardo.cannizza@gmail.com

Mentor: Francisco Matulovic

Company 05: COGNITA TECHNOLOGY (Cidade: Espírito Santo do Pinhal/SP)

Name of the project: Comprovação da efetividade de nanopartículas lipídicas carreadoras de fitoesteróis

livres na redução de colesterol

Entrepreuner: Kamila Ramponi Rodrigues de Godoi / E-mail: kamila.ramponi@hotmail.com

Principal investigator: Valéria da Silva Santos / E-mail: santosilvaleria@hotmail.com

Mentor: Jadir Nunes

Company 06: COMMUNITARIA CONSULTORIA SOCIAL (Cidade: São Paulo/SP)

Name of the project: Plataforma de gerenciamento de projetos e medição de resultados Entrepreuner: Adriana lelo Deróbio / E-mail: adriana.derobio@communitaria.com.br

Principal investigator: João Contart Neto/ E-mail: jcontart@ctgi.com.br

Mentor: Alberto Ozolins

Co-mentor: Paulo Henrique Batalha

Company 07: CONFIANCE GESTÃO (Cidade: Piracicaba/SP)

Name of the project: Desenvolvimento de um sistema de gestão de qualidade e software para laboratórios

acadêmicos com base na norma NBR ISO/IEC 17025:2017

Entrepreuner: Flávia Lordello Piedade / E-mail: flpiedade@yahoo.com.br Principal investigator: Maria Beatriz Calderan / E-mail: biacalderan@yahoo.com.br

Mentores: Stefan Salej e Odair Gomes Salles

#### Company 08: FRUTUROS - PESQUISA E DESENVOLVIMENTO DE PRODUTOS ALIMENTÍCIOS LTDA

(Cidade: Piracicaba/SP)

Name of the project: Pesquisa e desenvolvimento de farinha de semente da jaca fermentada, com aroma

de chocolate, para uso industrial

Entrepreuner: Carla de Freitas Munhoz / E-mail: carlamunhozbio@yahoo.com.br

Principal investigator: Juliana de Paula Vital / E-mail: pvitaljuliana@gmail.com

Mentora: Gisele Camargo

#### Company 09: GEDANKEN (Cidade: Ribeirão Preto/SP)

Name of the project: Plataforma de big data público de mapeamento de indícios de irregularidade nas

compras públicas, comparação municipal e efetividade dos gastos públicos

Entrepreuner: Lucas Madureira dos Anjos / E-mail: lucas@gedanken.com.br

Principal investigator: Taís Barreto Malta / E-mail: tais@gedanken.com.br

Mentores: João Lencioni e Jarib Fogaça

#### Company 10: GENOA (Cidade: São Paulo/SP)

Name of the project: Desenvolvimento de ferramenta para apoio à tomada de decisão para a programação

de tarefas portuárias

Entrepreuner: Renata Rodrigues / E-mail: renata.rodrigues@genoads.com.br
Principal investigator: Afonso Celso Medina / E-mail: afonso.medina@genoads.com.br

Mentores: Glauber Vaz e Norma Garcia

#### Company 11: HAKKUNA (Cidade: Piracicaba/SP)

Name of the project: Pesquisa e desenvolvimento de sistema otimizado e semi-automatizado da biofábrica

Hakkuna para produção massal de grilos Gryllus assimilis (Orthoptera: Gryllidae )

Entrepreuner: Luiz Filipe Carvalho / E-mail: luiz@hakkuna.com

Principal investigator: Marcelo Romano Teixeira / E-mail: marceloromanoteixeira@gmail.com

Mentor: Fabio Pacheco Muniz de Souza

## Company 12: ITEPEC AMBIENTAL LTDA (Cidade: Sorocaba/SP)

Name of the project: Encapsulamento de sementes com biopolímeros para o aumento da eficiência da

semeadura direta em projetos de restauração florestal

Entrepreuner: Débora Zumkeller Sabonaro / E-mail: dzsabonaro@hotmail.com

Principal investigator: Vanderlei dos Santos / E-mail: vanderlei@itepec.com.br

Mentores: Vitor Mondo e Roberto do Coutto

#### Company 13: JUSTY BIOSOLUTIONS LTDA (Cidade: Piracicaba/SP)

Name of the project: Desenvolvimento de biocomposto para remediação de áreas impactadas por

contaminantes

Entrepreuner: João Justiniano Régo / E-mail: justybiosolutions@gmail.com Principal investigator: Ana Paula Justiniano Régo / E-mail: anapjustiniano@gmail.com

Mentores: Roberto Paranhos e Ayrton Aguiar

#### Company 14: M. M. DA SILVA FIBRAS E RESINAS SINTÉTICAS (Cidade: São Carlos/SP)

Name of the project: Manufatura de tubos e perfis estruturais em compósitos reforçados por fibras pelo

processo de filament winding

Entrepreuner: Márcio Marques da Silva / E-mail: marciomsil@gmail.com

Principal investigator: Yuri Factor / E-mail: yurifactor@gmail.com

Mentor: Marcelo Pilar Co-mentor: Rodrigo Soares Company 15: MAPSKY (Cidade: São José do Rio Preto/SP)

Name of the project: Sistema automático de prevenção de acidentes para ARP (Drones)

Entrepreuner: Grazziani Resende Rodrigues da Costa Marques / E-mail: mapskysp@gmail.com

Principal investigator: Rodrigo Aparecido Xavier Cruz / E-mail: mapskydev@gmail.com

Mentor: Luiz Carlos Heiti Tomita

Co-mentor: Anders Angelin

#### Company 16: MTG SOLUTIONS SOFTWARES DE OTIMIZAÇÃO PARA ENGENHARIA LTDA

(Cidade: São Bernardo do Campo/SP)

Name of the project: Protótipo de inteligência computacional interativa para projeto e otimização de

circuitos integrados analógicos

Entrepreuner: Salvador Pinillos Gimenez / E-mail: sgimenez@fei.edu.br
Principal investigator: Rodrigo Alves de Lima Moreto / E-mail: rmoreto@uol.com.br

Mentor: Wagner Ferreira e Israel Gurati

#### Company 17: R&R NOVABIO PESQUISA E DESENVOLVIMENTO EM CIÊNCIAS NATURAIS LTDA

(Cidade: Campinas/SP)

Name of the project: Desenvolvimento tecnológico de composições farmacêuticas para a fibrose sub-

retiniana em modelos pré-clínico. Implicações na consolidação de uma empresa com foco em pesquisa e inovação de terapias para doenças oculares do segmento posterior

Entrepreuner: Mariana Aparecida Brunini Rosales / E-mail: rosalesmab@gmail.com

Principal investigator: Franco Aparecido Rossato / E-mail: rossatofap@gmail.com

Mentora: Christine Nogueira
Co-mentor: José Domingos Neto

## Company 18: REDEMAR ALEVINOS (Cidade: Ilhabela/SP)

Name of the project: Produção de juvenis de garoupa em alta densidade – GAROUPATEC Entrepreuner: Claudia Ehlers Kerber / E-mail: claudiakerber62@gmail.coom Principal investigator: Pedro Antonio dos Santos / E-mail: redemarpedro@hotmail.com

Mentoras: Carla Guimarães e Kathleen Martin

#### Company 19: SOLEIL PAPA PESQUISA E DESENVOLVIMENTO LTDA (Cidade: Vargem Grande do Sul/SP)

Name of the project: Pesquisa e Desenvolvimento de novo métodos de enxertia de batata para o

incremento da produção sustentável de batata semente livre de vírus

Entrepreuner: Daiana Bampi / E-mail: daianabampi@yahoo.com.br

Principal investigator: João Batista Gonçalves de Souza / E-mail: jbg.sousa@terra.com.br

Mentor: Lilian Anefalos

Co-mentora: Jocimara Rodrigues de Souza

#### Company 20: VERUM INGREDIENTS (Cidade: Botucatu/SP)

Name of the project: Desenvolvimento de ingredientes naturais prebióticos derivados de subprodutos de

cadeias agrícolas brasileiras

Entrepreuner: Luciana Gomides Freitas / E-mail: luciana@verumingredients.com Principal investigator: Ricardo Luís Araújo Dias / E-mail: ricardo@verumingredients.com

Mentor: Marcio Chiba Co-mentor: Aloisio Espindola

#### Company 21: VETADVISORY VETERINÁRIOS & ASSOCIADOS LDTA (Cidade: Atibaia/SP)

Name of the project: Carreadores lipídicos nanoestruturados contendo buparvaquona aplicados ao tratamento

das leishmanioses: desenvolvimento, avaliação físico-química e testes pré-clínicos

Entrepreuner: Valdir Avino / E-mail: valdir@veadvisory.com.br
Principal investigator: Lis Marie Monteiro / E-mail: lis@vetadvisory.com.br

Mentor: Lauro Moretto Co-mentora: Paula Lima



# FUNDAÇÃO DE AMPARO À PESQUISA DO ESTADO DE SÃO PAULO

SÃO PAULO RESEARCH FOUNDATION

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