

# INTELLECTUAL PROPERTY PROTECTION AND TECHNOLOGY TRANSFER AT AUB

*Fadia Homeidan, Ph.D.*  
*American University of Beirut*



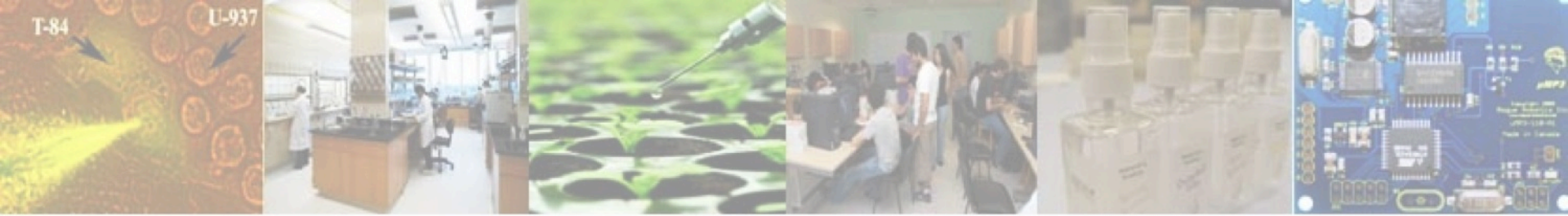
# RESEARCH, INNOVATION AND ENTREPRENEURSHIP

***Research:*** Research is the most significant example of a country's intellectual resources, economic strength and global competitiveness.

***Innovation:*** Innovation is about the application of new ideas, discoveries and inventions.

***Commercialization:*** is the process of introducing a new product or production method into commerce: making it available on the market.

***Entrepreneurship:*** the act of creating a business while building and scaling it to generate a profit. (It is also about transforming the world by solving big problems).

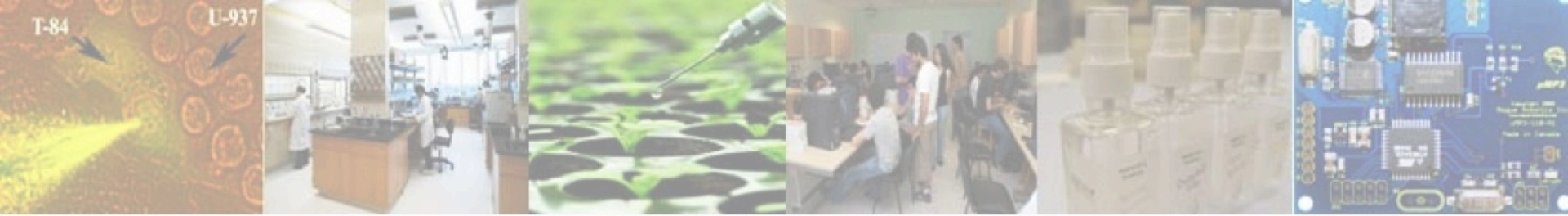


## **RESEARCH AT INSTITUTIONS OF HIGHER EDUCATION**

Like most countries, expenditures in Lebanon for Research, Development and Innovation are dominated by institutions of higher education.

These institutions need to develop support systems for faculty and students to facilitate their research and assist them in transferring their ideas into innovation technologies.

These institutions also need to increase awareness of intellectual property and the transfer of intellectual property to enterprises (through licensing and/or startups).



# **INTELLECTUAL PROPERTY PROTECTION AND TECHNOLOGY TRANSFER AT AUB**

## **IP Protection and TT:**

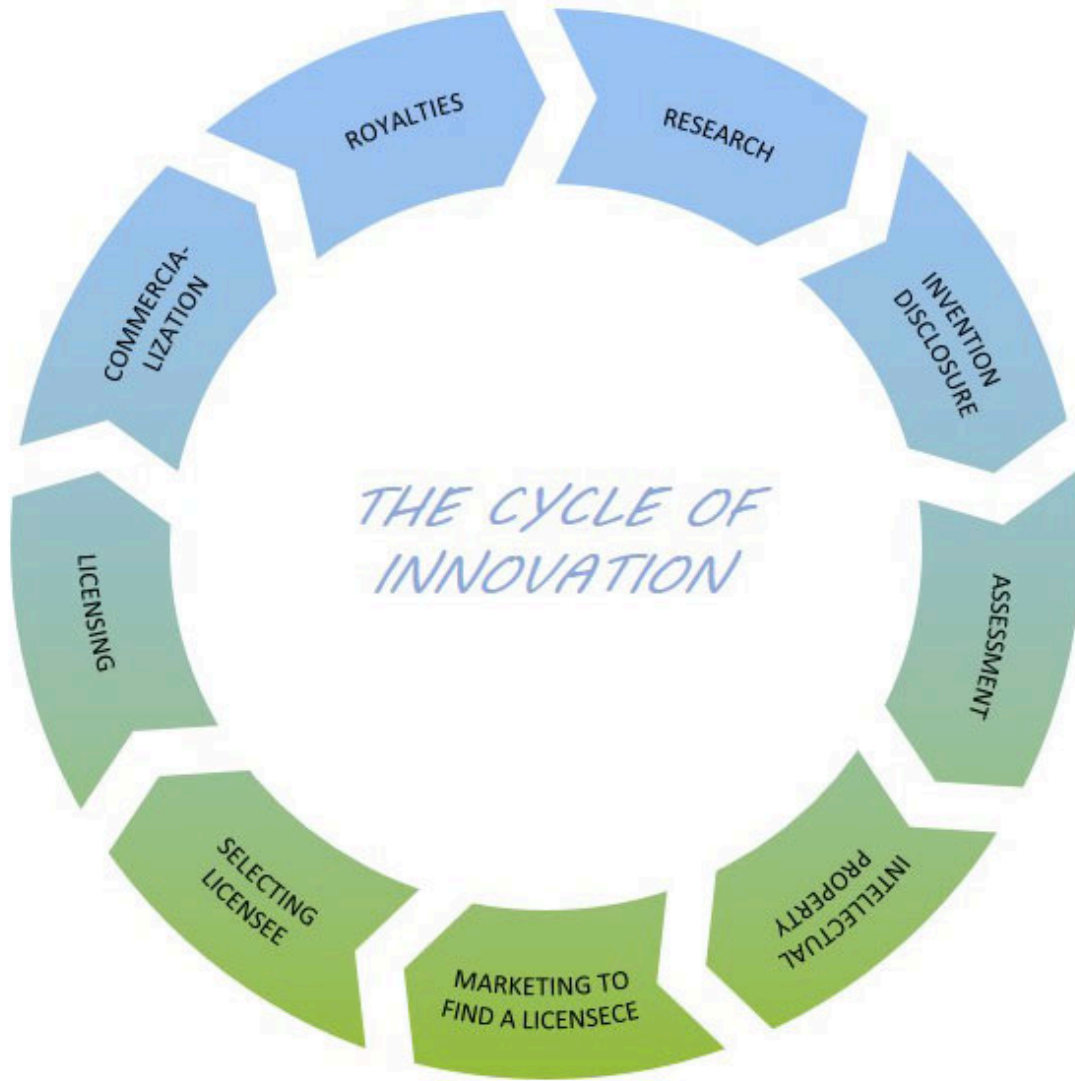
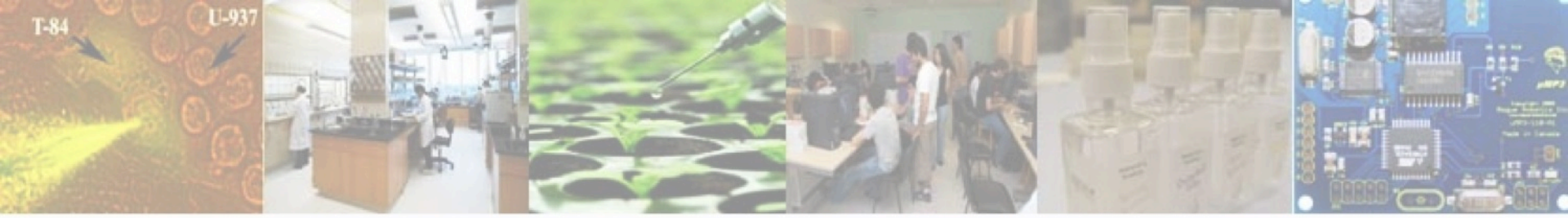
- 1. Enhances reputation of AUB, its faculty, staff and students**
- 2. Supports AUB efforts to ensure graduating students have developed entrepreneurial knowhow and understanding of IP**
- 3. Fosters enhanced research interactions with the private sector**
- 4. Facilitates the transfer of technologies (licensing or startups)**
- 5. Generates additional research funds**

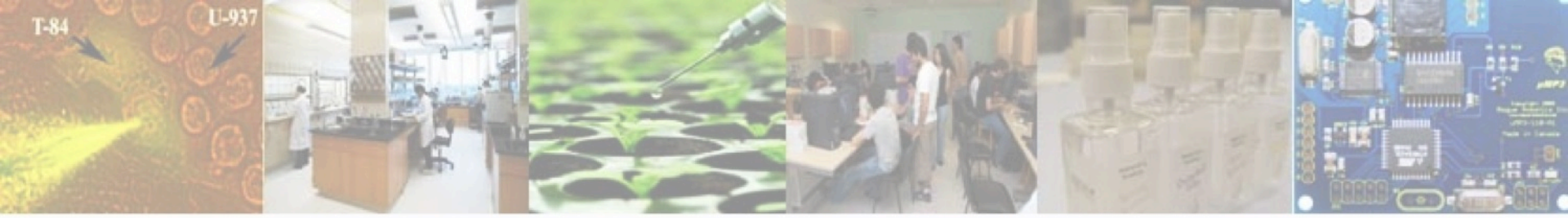




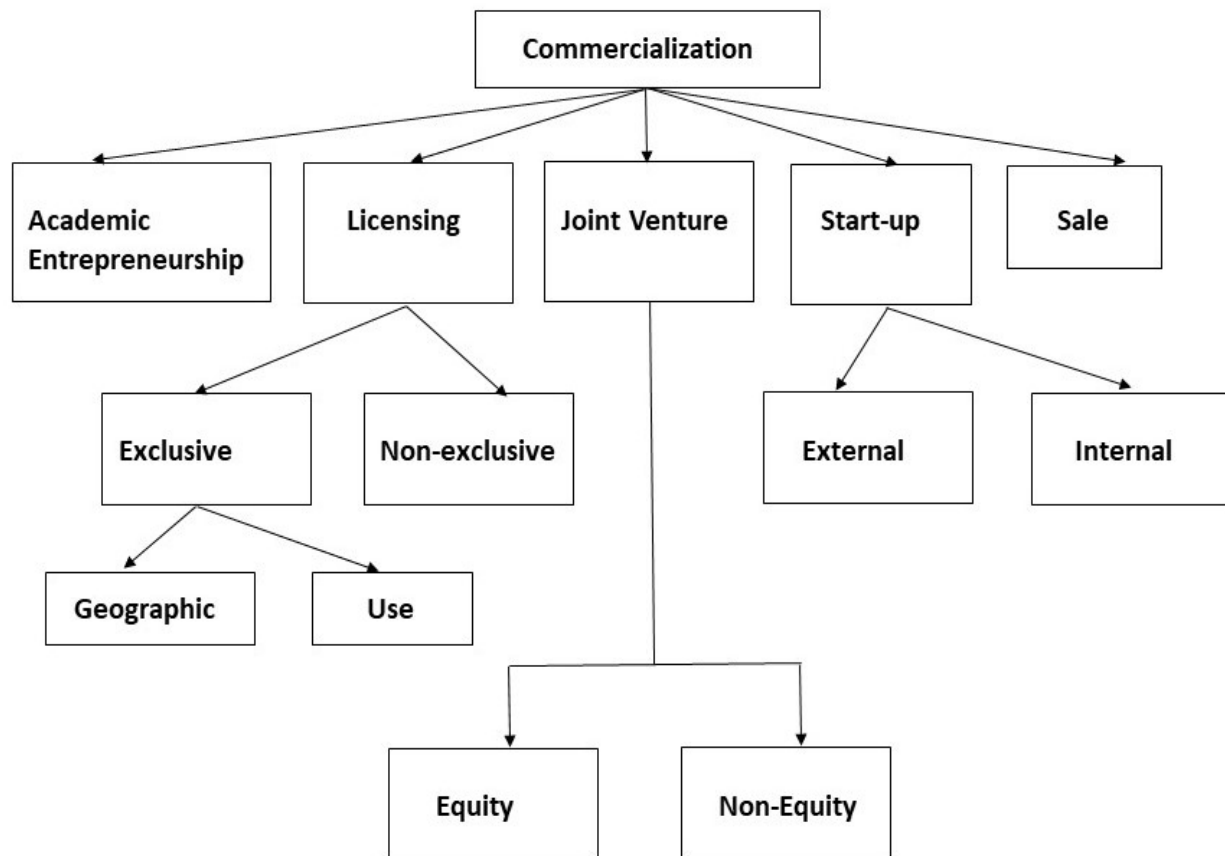
# TTU TASKS

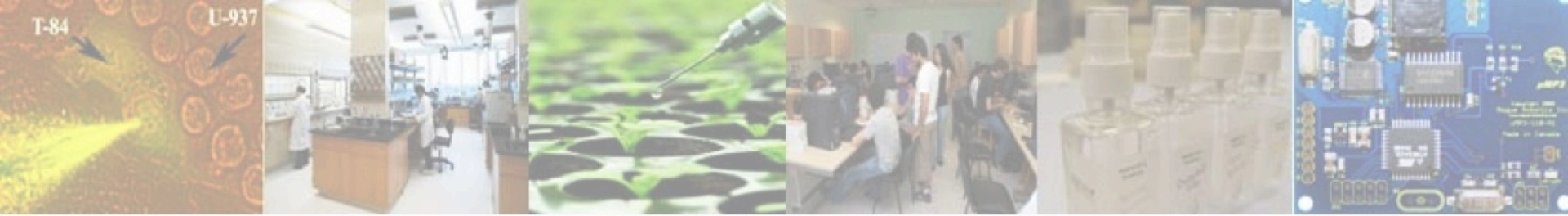
1. Amended IP policy which includes Royalty shares
2. Currently drafting students' IP ownership policy
3. Identifies Innovation/IP in Research Projects
4. Assesses patentability potential and coordination of patent filing, protection and follow up
5. Supports faculty members in transferring technology to industry and/or startups
6. Prepares MTAs and NDAs
7. Assists in defining innovative research priorities and secures funds
8. Carries outreach activities to AUB community
9. Hosts interns from local and regional universities





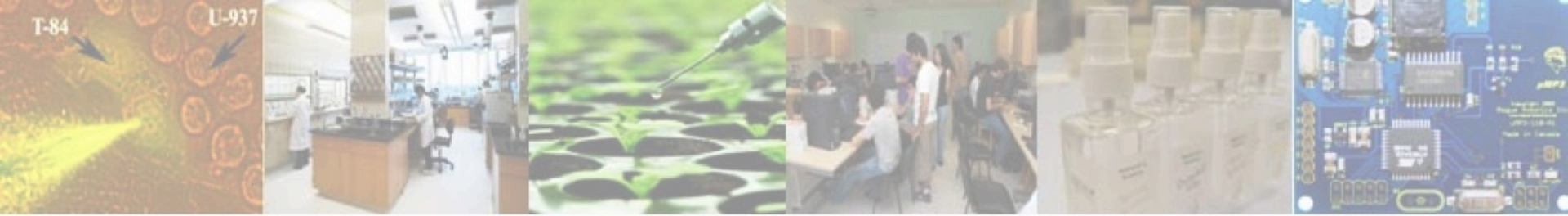
# The Commercialization Cycle ....





## State IP Protection and TT at AUB

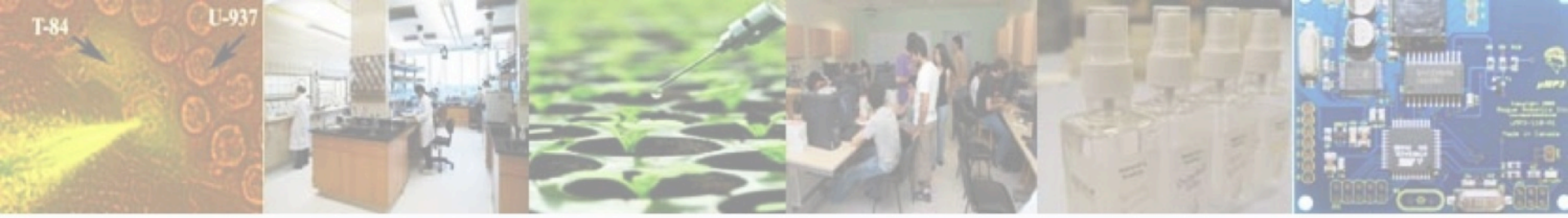
	Issued Patents	Full Patent Applications	Provisional Patents	TM	©	Licensed and/or in Negotiation	No Action	Registered in Lebanon
<b>Med/Nutr/Biomed</b>	2	7	10	1	1	5	7	1
<b>Eng/Chem/Phys</b>	1	4	11			2	12	
<b>Software/CS</b>		2	2		3	2		1
<b>Others (Ghata)</b>	3				1	1		1



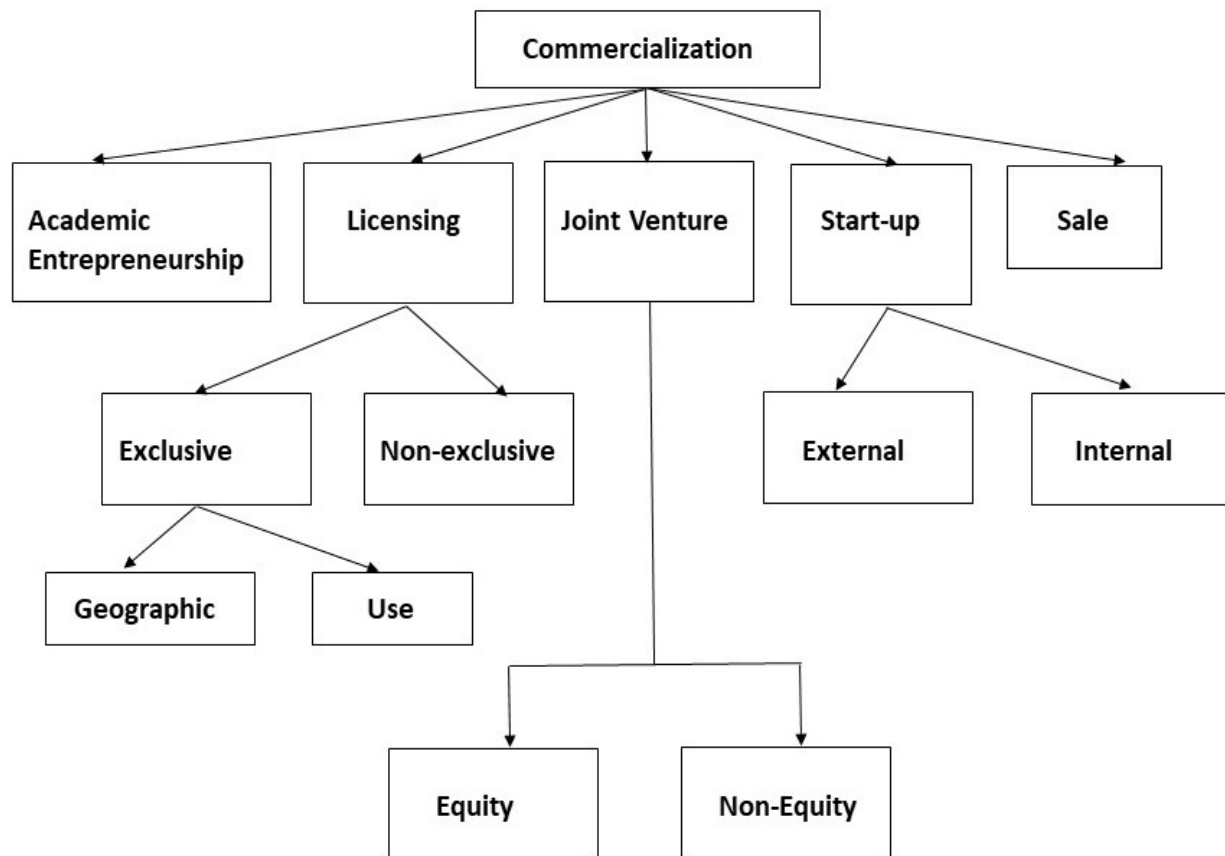
## **IP and TT Challenges**

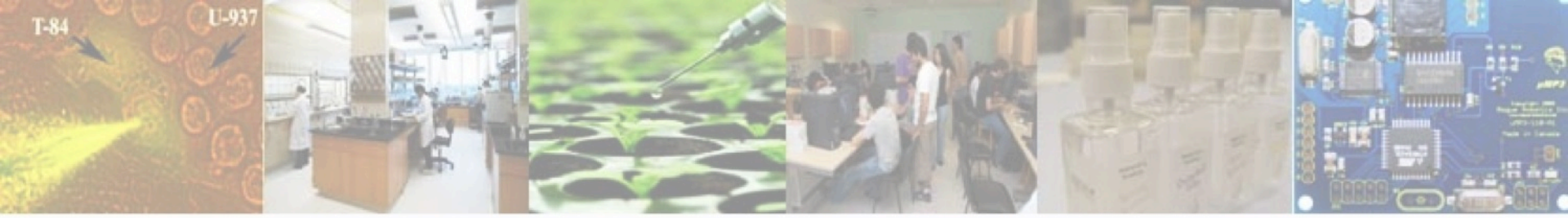
1. Limited financial resources in universities
2. Lack of qualified personnel in TT
3. Limited access to relevant industries in Lebanon and the region
4. Absence of National IP Policy /Strategy
5. Low national funding for R&D
6. System of IP registration in Lebanon
7. Absence of IP law enforcement





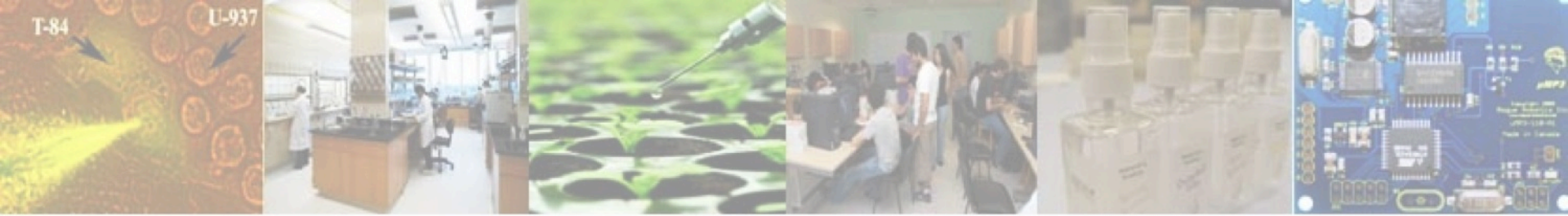
# The Commercialization Cycle ....





## **INFLUENCE OF EDUCATION ON ENTREPRENEURIAL SUCCESS**

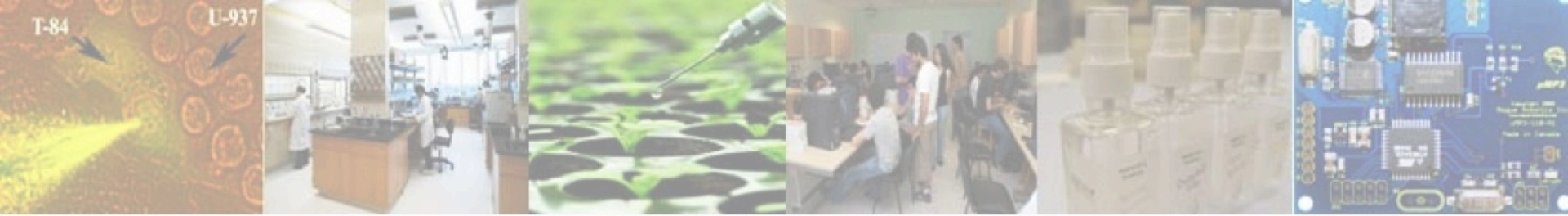
1. Business survival is much higher for those students who attend university.
2. A university graduate is likely to achieve 25% greater sales than a high-school dropout.
3. A student with a postgraduate degree is likely to achieve 40% greater sales than a high-school graduate.
4. Furthermore, a recent study of high-growth businesses created in the United States over 20 years determined that 85% had been created by college graduates.



# Center for Research and Innovation

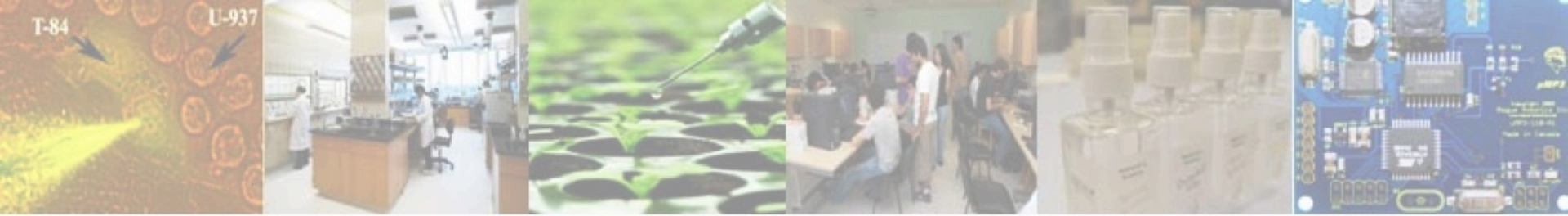
*A culture of entrepreneurship* is an important factor in generating economic gains from university entrepreneurial activities. Supporting student/faculty/staff entrepreneurs will impact our communities and contribute to job creation and economic growth.

CRInn is for those with entrepreneurship potential, to meet with people who can shape their ideas, to sit in a place where they can discuss ideas and find teams, and team members.



# **AUB-Center for Research and Innovation**

1. Serves as a platform for entrepreneurship and a hub for emerging technology startups
2. Runs business plan competition to identify viable startups
3. Provides educational and training sessions / workshops / seminars / inspirational talks/networking events
4. Provides mentorship for startups
5. Provides workspace and access for resources including equipped meeting rooms, event spaces and access to labs



# Admission Criteria

Members must

- Be associated with AUB
- Have an idea to solve a problem
- Have a scalable, potentially profitable idea
- Commit to forming a team
- Commit to the residency requirements in CRInn
- Commit to attending events planned to help startups
- Commit to a timeline for advancing in their business
- Commit to participating in business competitions



## STARTUPS

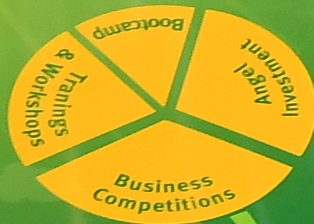
HAVE A BRILLIANT  
**BUSINESS  
IDEA?**

JOIN  
Office of Grants and Contracts | OGC  
Technology Transfer Unit | TTU  
Center for Research and Innovation | CRInn

# CRInn

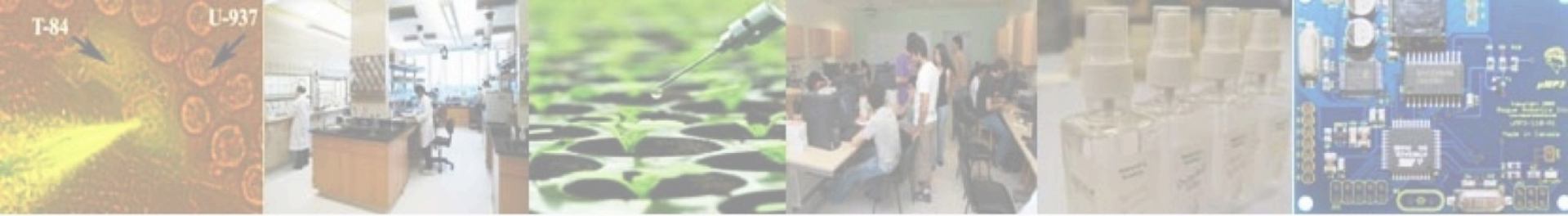
A hub for emerging startups

- Connects you with investors, advisors, influencers and entrepreneurs
- Supports startups through mentorship and legal consultation
- Supports a seamless immersive culture of innovation and entrepreneurship at AUB
- Co-working space for AUB entrepreneurs



## CRInn Services

- *Co-working space*
- *Designated workstations*
- *Entrepreneurship trainings*
- *Ideation sessions*
- *Business plan trainings*
- *Mentoring/coaching*
- *Media exposure*
- *Business financing trainings*
- *Business development workshops*
- *Connections to accelerators/incubators/investors and funders*
- *University resources and faculty and student talent*
- *Intellectual Property rights and protection*
- *Peer-to-peer knowledge transfer*



## *Center for Research and Innovation*

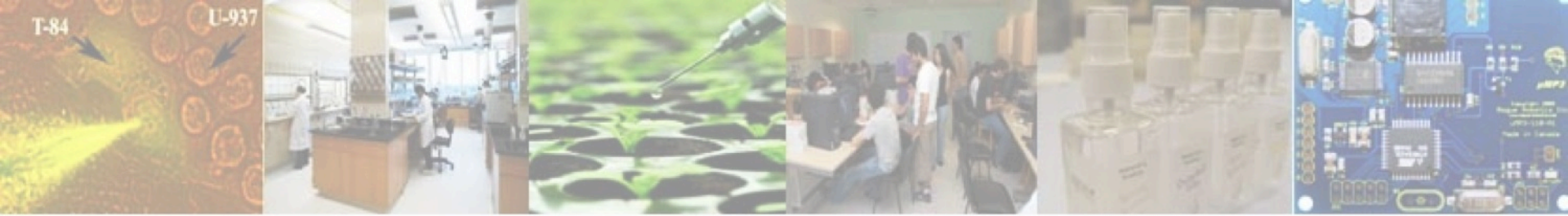
CRInn Serves as a platform for AUB's community innovation and entrepreneurship activities.

In the last 3 years, the interest by students for entrepreneurship training and for starting their own businesses had greatly increased.

The center does not invest in startups. It only provides resources to get the startups ready for investment and/or incubation/acceleration.

	15-16	16-17	17-18	Total
<b># Students Trained</b>	183	755	633	1,571
<b>#Attendees in the events</b>	386	1,220	1,125	2,731
<b># Events</b>	20	40	51	111
<b># Startups Approved for Residency</b>	7	24	47	78

<b># Startups that Took Residence in CRInn</b>	<b>78</b>
<b># Startups that have Launched</b>	<b>10</b>
<b># Serious and Active Startups</b>	<b>30</b>
<b># Startups Employees to-date</b>	<b>120</b>
<b># Interns within Startups</b>	<b>11</b>



## EXAMPLES OF OTHER ENTREPRENEURSHIP TRAININGS AND TEACHING PROGRAMS AT AUB

Competition / Program	Running Since	Total number of participants
<b>IBDAA</b>	2007	250 participants per year, with 8-10 winners
<b>The Samir and Claude Abillama competition</b>	2014	10 applicants per year coached and trained to improve their idea or product with 1-2 winners
<b>The Darwazah Competition</b>	2012	80 applicants and had 1-2 winners every year





# Launched Startups



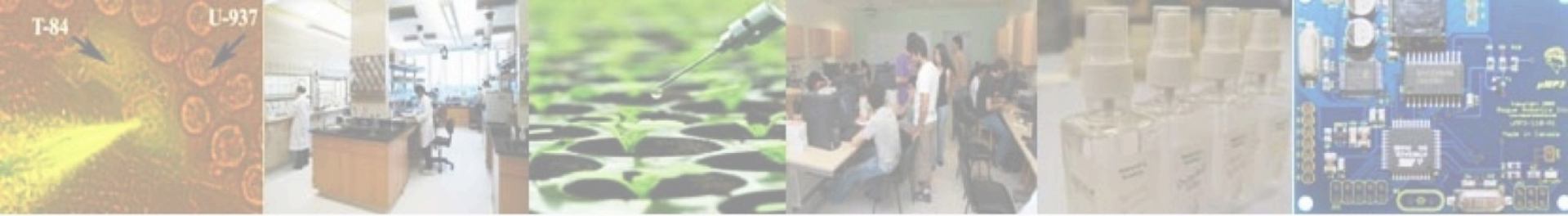
Gasometer



**E2**

[Mr. Grocer](#)  
[@mrgrocer](#)





## **EXAMPLES OF STUDENT STARTUPS**

### **Startups which Received Investment**

**Smart Tash Can**

**Instabeat**

**Moodfit**

**PROShield**

**Yalla Bus**

**Carpolo**

**Mr. Grocer**

**Gasometer**

**Kill My Routine**

**Find A Nurse**

### **Examples of other Functional and students' innovative ideas being currently developed**

**Resense**

**Nanotechnology**

**Pitcrew**

**Gravity**

**Bus Map**

**Forward Osmosis**

**Cold-Brew Coffee**