## ŞEHİR TTHP TEKNOLOJİ TRANSFERİ HIZLANDIRICI PROGRAMI

&

BAŞARILI SONUÇLARI

#### **Mehmet ALPATLI**

ŞEHİR Kuluçka Merkezi *incuba.city* Müdürü @ ŞEHİR TTO

6 Kasım 2017





Destekli Projeler Üniversite-Sanayi İşbirliği

FMH & Ticarileştirme

Hızlandırıcı Programları
Teknolojik & Sosyal Kuluçka
@ incuba.city



## KISA TARİHÇE

2011

ISTANBUL ISTANBUL DEUFLOPMENT

2013



2014

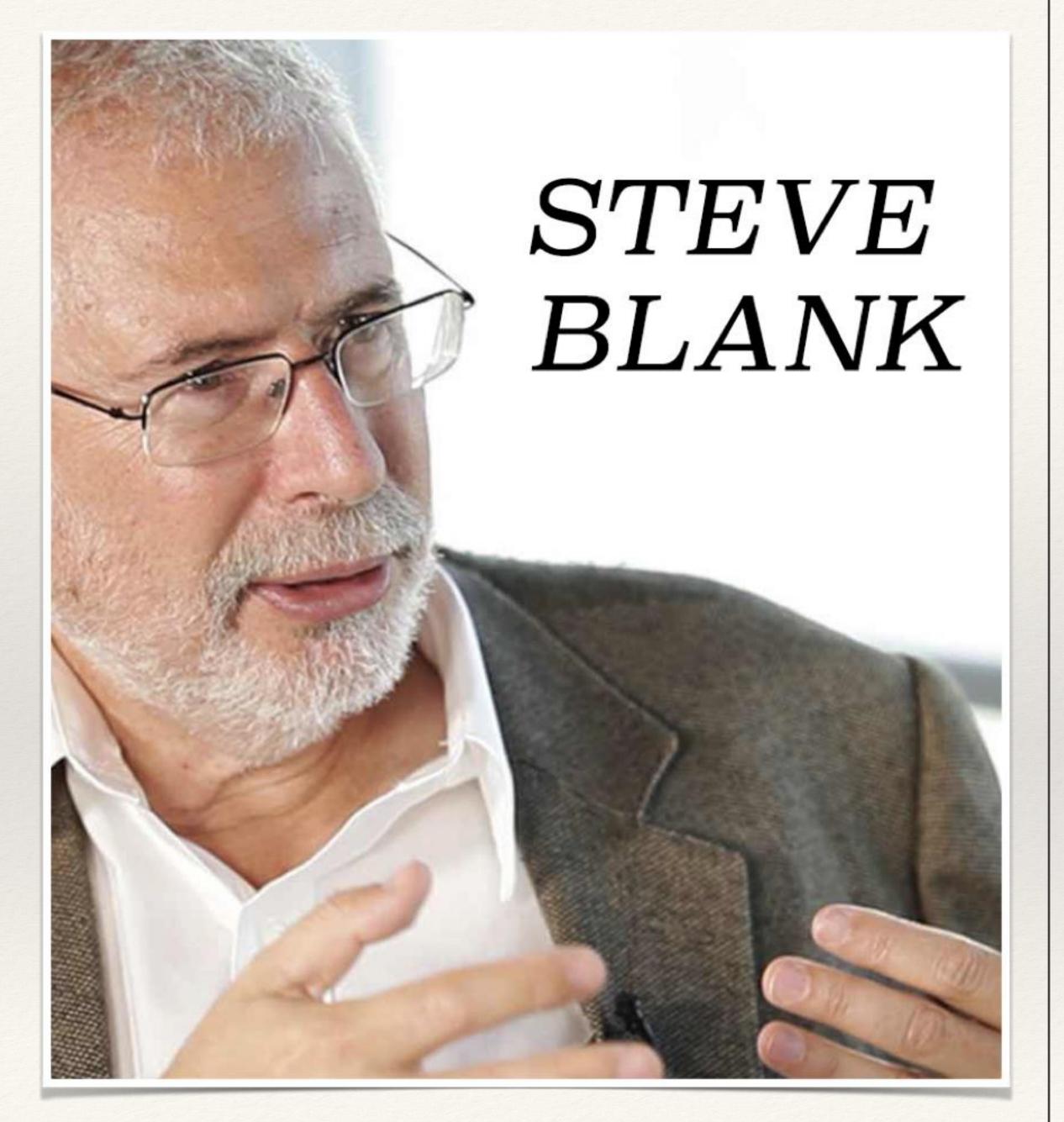


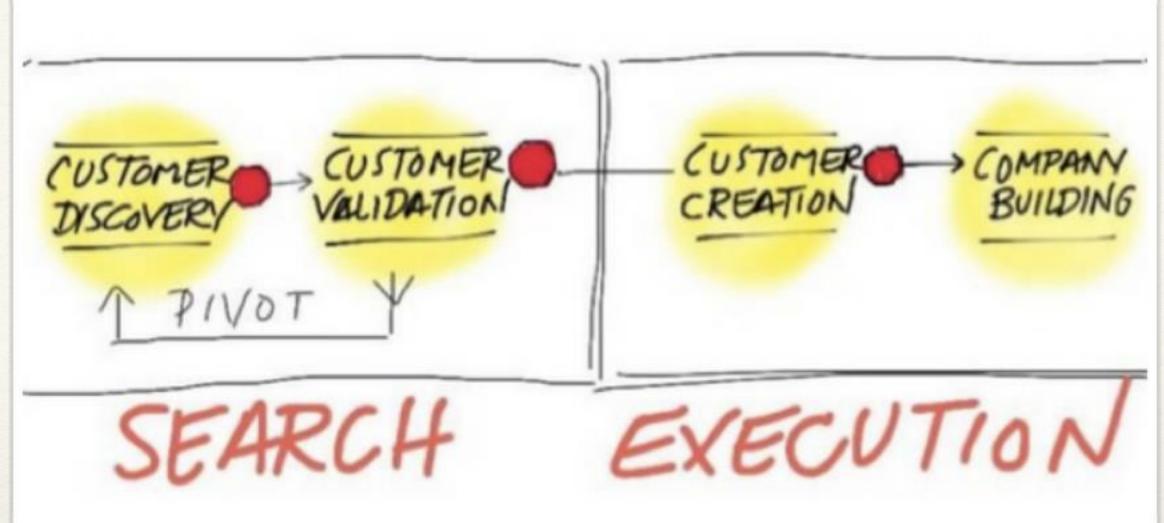


2015

MENTOR TTO







## i C INSTITUTE

THE UNIVERSITY OF TEXAS AT AUSTIN









## **Business Plan Funnel**

100 business plans come in to VC

10

left after quick screen

receives funding after extensive due diligence

## TTHP

PERFORMANS

Toplanan, incelenen ve değerlendirilen

200+ Teknoloji

Kabul edilen

30 tanesi

TTHP'yi tamamlayan

21 startup

Alınan yatırım

5 startup

Alınan yatırım taahhütleri

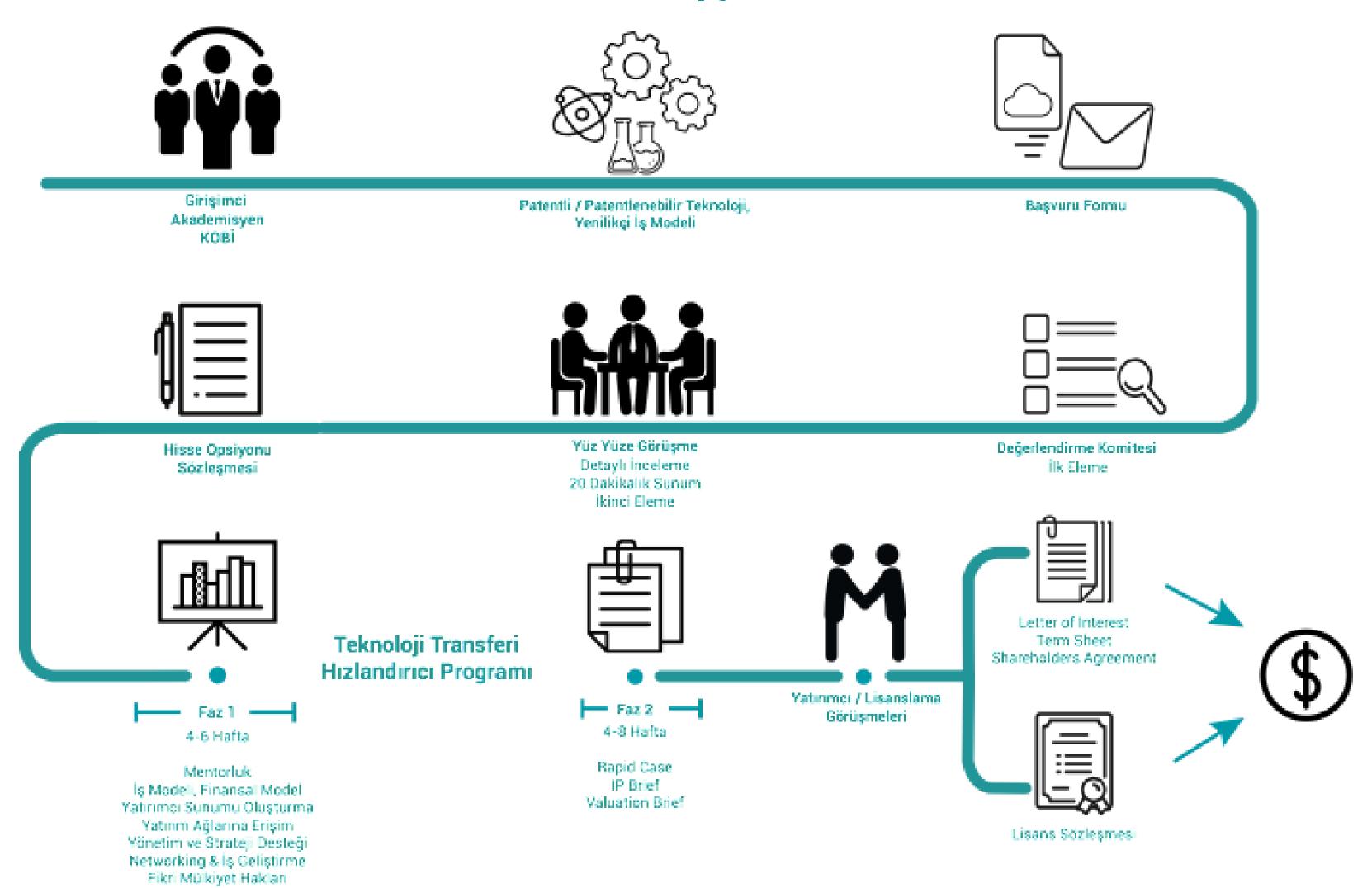
2 startup







#### TEKNOLOJİ TRANSFERİ HIZLANDIRICI PROGRAMI (TTHP) AKIŞ ŞEMASI



Tech Brief



#### TEKNOLOJİ TRANSFERİ HIZLANDIRICI PROGRAMI (TTHP) SÜREÇ ŞEMASI







Patentli / Patentlenebilir Teknoloji, Yenilikçi İş Modeli



Başvuru Formu





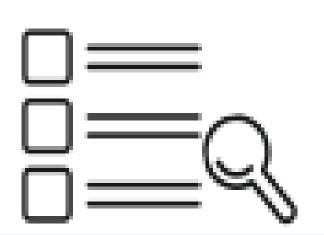
#### TEKNOLOJİ TRANSFERİ HIZLANDIRICI PROGRAMI (TTHP) SÜREÇ ŞEMASI







Yüz Yüze Görüşme Detaylı İnceleme 20 Dakikalık Sunum İkinci Eleme



Değerlendirme Komitesi İlk Eleme





#### TEKNOLOJİ TRANSFERİ HIZLANDIRICI PROGRAMI (TTHP) SÜREÇ ŞEMASI



Teknoloji Transferi Hızlandırıcı Programı

Faz 1 4-6 Hafta

Mentorluk İş Modeli, Finansal Model Yatırımcı Sunumu Oluşturma Yatınım Ağlanına Erişim Yönetim ve Strateji Desteği Networking & İş Geliştirme Fikri Mülkiyet Haklan

Tech Brief

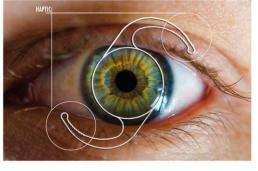




#### A Medical Start-up Company / Patent Licensing

#### IOL HAPTIC

#### A Novel Intraocular Lens Haptic for Cataract Operations



HEALTTECH

#### TECH DEFINITION

A special intraocular lens leg or "haptic" to improve scleral fixation and to reduce stitch needs in cataract operations. The lens haptic can be placed either in the capsular bag or behind the iris or to sclera, with or without stitching, giving surgeon the option of completing the operation without the need of any other special lens

#### **PROBLEMS**

- Untreated cataract is the reason of almost half of all global cases of blindness
- Treatment of cataract is possible by operation but that kind of operations has several risks, such as
- Rupturing/breaking of the integrity of capsular bag.
- Myopic shift of spherical equivalent value and error in prediction (optical tilt)
- Lengthened operation time due to stitching lenses to sclera (scleral fixation)
- A longer time of recovery, higher risk of infections and even loss of vision after the operation
- Needing a second operation due to dislocated lens implant, optical tilt etc. with additional charges due to several procedures

#### APPLICATION FIELDS



Validation in Relevant Environment

#### COMPETITIVE ADVANTAGES

For the surgeon, the major benefit of intraocular lenses with the new leg design is that he will need much less to switch to any other special lens due to complications during the cataract surgery. This is especially important for regions where keeping stocks of various types of lenses may be difficult or costly.

Another benefit is that even problematic cataract surgeries can be executed by less experienced surgeons with good results and minimum post-op complications.

Its special design allows various fixation possibilities, such as fixation to capsularbag, behind the iris and to sclera, all with or without suture.

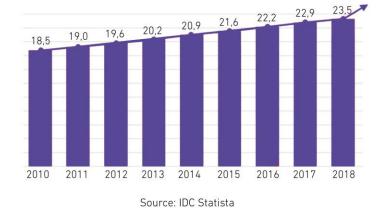
#### SOLUTIONS

- Thanks to a special lens leg (haptic) design, there is no need to keep different lens supplies during the operation
- This leg design is compatible with any current intraocular lens produced by IOL manufacturers
- It restrains the risks of rupture, dislocation or any other possible complications during the operation
- The longer length of legs prevents the risk of optical tilt
- The notches at the legs provides convenience to the surgeon and shorten the operation time
- A shorter and more convenient operation dismisses the risk of infections and loss of vision
- By preventing the risks of operation, it also eliminates the need for a second operation and additional costs

#### MARKET

- The global market for Intraocular Lenses, projected to exhibit a CAGR of over 8% during 2015 - 2020 is expected to reach US\$ 4.7 billion by 2020, driven by the rising prevalence of cataract among the aging population and strong adoption of premium IOLs, according to a report by Global Industry Analysts Inc.
- The United States represents the largest market worldwide. Society of Cataract and Refractive Surgery (ASCRS) estimated that around 3 million cataract surgeries are performed in the U.S. every year, the average cost for surgery being \$3,279.

#### Number of Cataract Procedures (in million) Worldwide



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## A novel patented mineral-based Sun Care technology



#### Available to invest: A nano-tech start-up company / patent licensing

A novel particle technology of natural minerals for cosmetics facilitates excellent UVA & UVB protection combining upsides of micro- and nanoparticles while preventing their downsides.

#### **Problem:**

#### 1. Increase in Skin Cancer

According to WHO<sup>i</sup>, with an increasing trend, between 2 and 3 million non-melanoma skin cancers and 132,000 melanoma skin cancers occur globally each year.

One in every three cancers diagnosed is a skin cancer and, according to Skin Cancer Foundation Statistics, one in every five Americans will develop skin cancer in their lifetime.

About 90 per cent of non-melanoma skin cancers are associated with exposure to ultraviolet (UV) radiation from the sun.<sup>ii</sup>

One person dies of melanoma every hour<sup>iii</sup> and the vast majority of mutations found in melanoma are caused by ultraviolet radiation<sup>iv</sup>.

#### 2. Chemical UV Blockers on Human Skin

Many well-known sunscreen brands use chemical UV blockers in their products. Today people are already exposed to various chemicals inevitably in daily life. Many people tend to use "organic" sunscreens with such consciousness. Most common physical UV blocker used in non-chemical sunscreens, due to its UV radiation blocking properties, is zinc oxide (ZnO), which is a natural mineral.

#### 3. Whitening Effect of Micro-Sized Particles

Bulkier particles of zinc oxide and titanium dioxide have been used in sunscreens for decades to reflect or absorb cancercausing ultraviolet light. The reason traditional sunscreens look white when you rub them onto your skin is because particles of this size reflect visible light. Therefore, micro-sized ZnO and TiO<sub>2</sub> particles are insufficient in respect of optical properties, causing a widely undesired whitening effect (see Figure 1).

"The need for frequent application of the right amount of sunblock makes it desirable that, in addition to efficiently stopping the UV radiation, it should have other properties that are crucial to the acceptability of the product; such as easy spreading, prolonged retention on the skin, transparency, low cost and attractive appearance, all of which are needed for the product be completely accepted. Combining these characteristics in one product is not always possible, so that, despite the great number of sunscreens on the market, the development of new formulations remains a research area that attract many scientists and companies."

Excerpt from an article on Brazilian Journal of Pharmaceutical Sciences



Figure 1. Whitening Effect

#### 4. Health & Safety Concerns of Nanoparticles

When zinc oxide and titanium dioxide are manufactured into nanoparticles – usually 25 to 50 nanometres wide – they absorb and scatter visible light, rendering them transparent on the skin, thus preventing whitening effect. The smaller the particles, the better their UV protection performance.

The new EU Cosmetic Regulation EC 1223/2009, in effect since 2013, requires indication of "nanomaterials" in any cosmetic by the suffix "(nano)" on the ingredient list of the product. In order to avoid possible negative reactions from consumers due to this "(nano)" labeling, sunscreen producers began to search for inorganic UV filters not requiring this label.

However, the Journal of the American Chemical Society has risen health & safety concerns about use of nanoparticles on human skin due to

toxicity,

•clumping together when mixed into sunscreen causing uncontrolled agglomeration on the skin,

low interaction among particles, and

insufficient covering of the applied area.

Nano sized particles can penetrate through the pores of human skin, cellular membrane, leaves of plants and many other living organisms.

#### Solution:

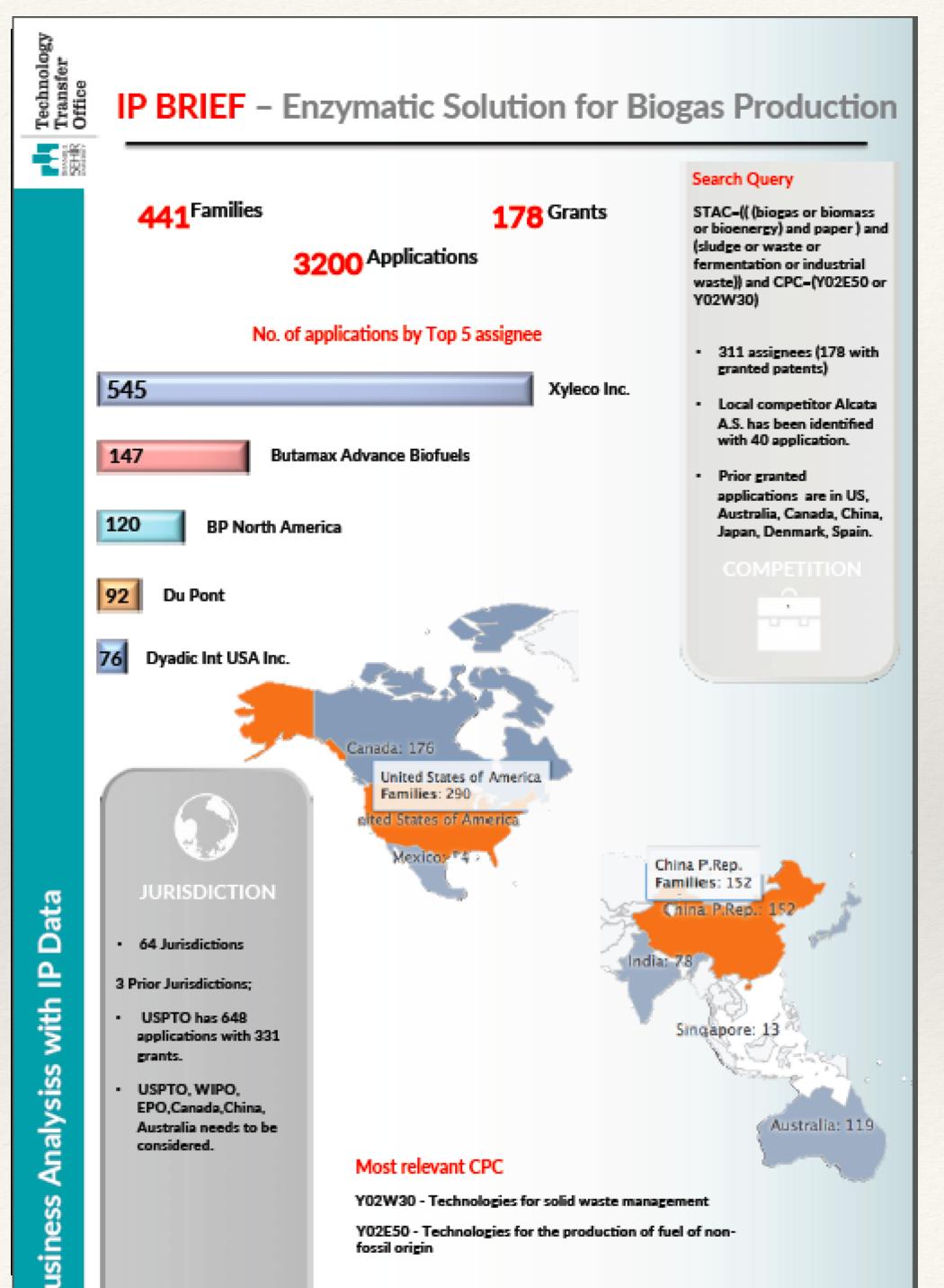
particles are designed, platelet shaped micron particles which are composed of nano primary particles to solve sunscreen manufacturers' problems, such as toxicity, surface coverage and uncontrolled agglomeration causing uneven texture on surfaces of application. (See Figure 2)

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## RapidCASE

A patented box, making possible to produce portable custom XRay systems





#### VALUATION BRIEF Andread Names delicated

Bread Court Through with Surel Drug Selberry Approach

#### Valuation

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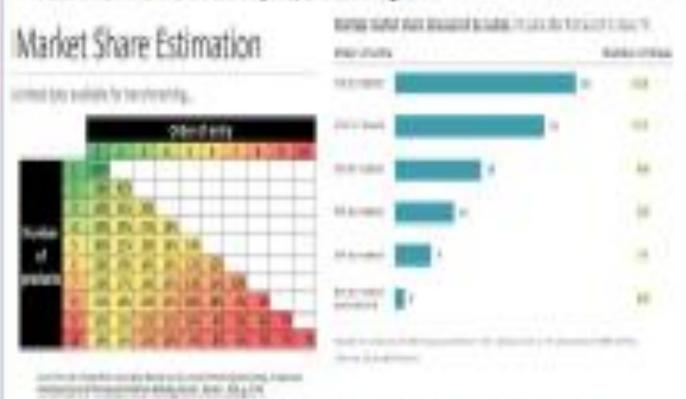


Figure 15. Harber Book Indication

Figure 15- America Martini Share, N. 51 pain the the last room

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## FINANSAL PROJEKSIYONLAR







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Alınan yatırım taahhütleri

2 startup

= £6.1m



### Teknoloji Transfer Ofisi











# LONDON Demo Day 2 0 1 7

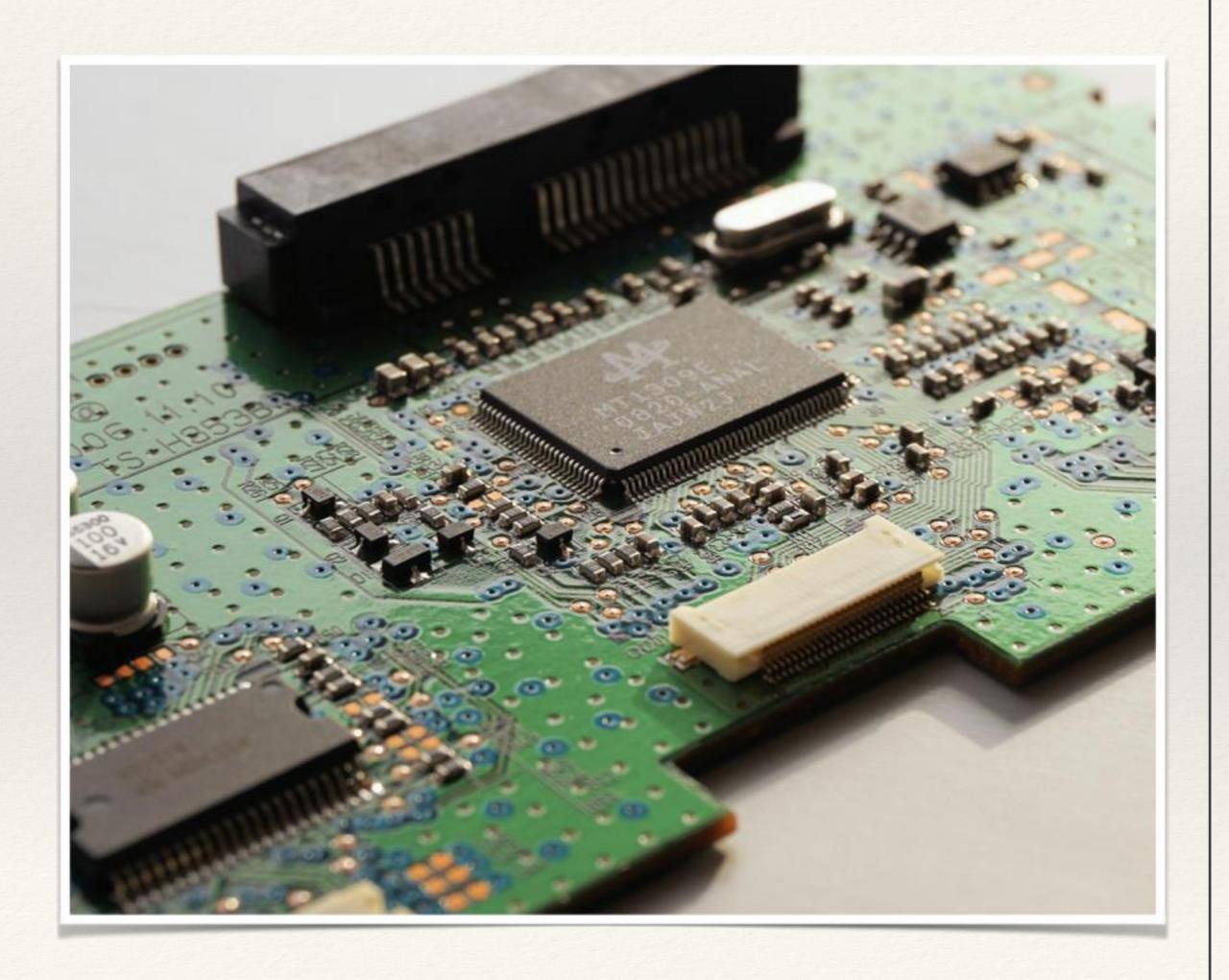




#### Teknoloji Transfer Ofisi

## Innovat

Daha hafif telsiz üretimini kolaylaştıran elektronik çip teknolojisi!









## Episome

Kağıt hamuru çamurundan biyogaz üretimini kolaylaştıran ilk enzimatik çözüm!







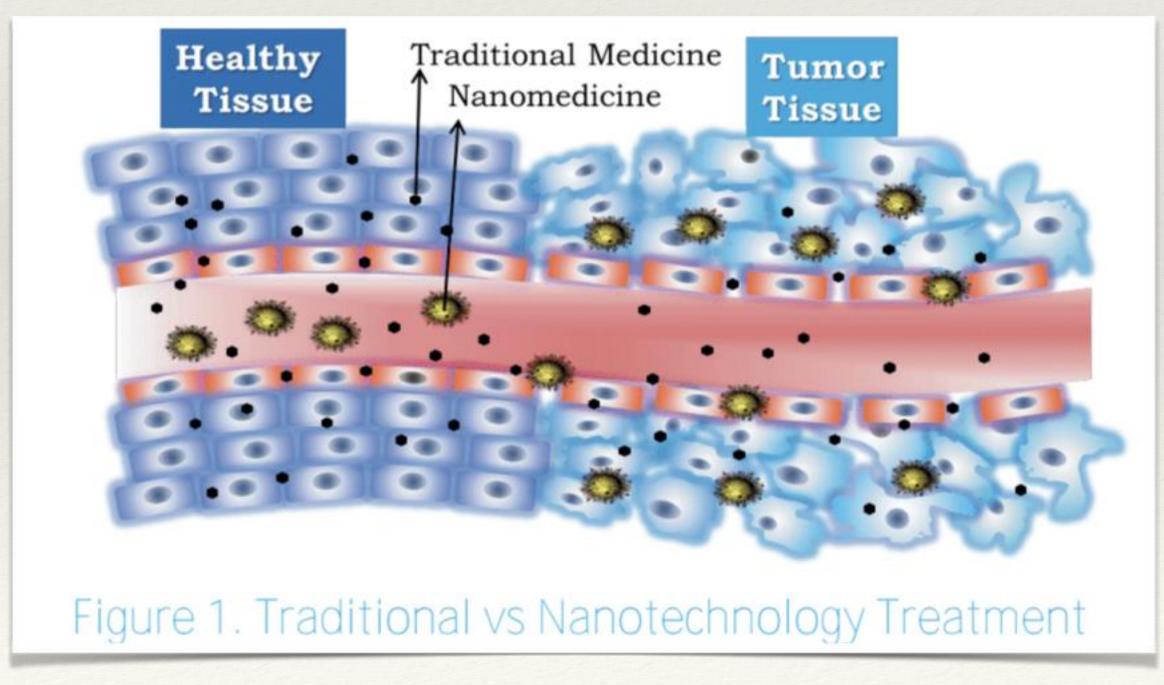


## RS Research

Hedefli kanser ilaçları iletim teknolojisi!











## MAGSPIN

Çizilmez transparan seramik teknolojisi!





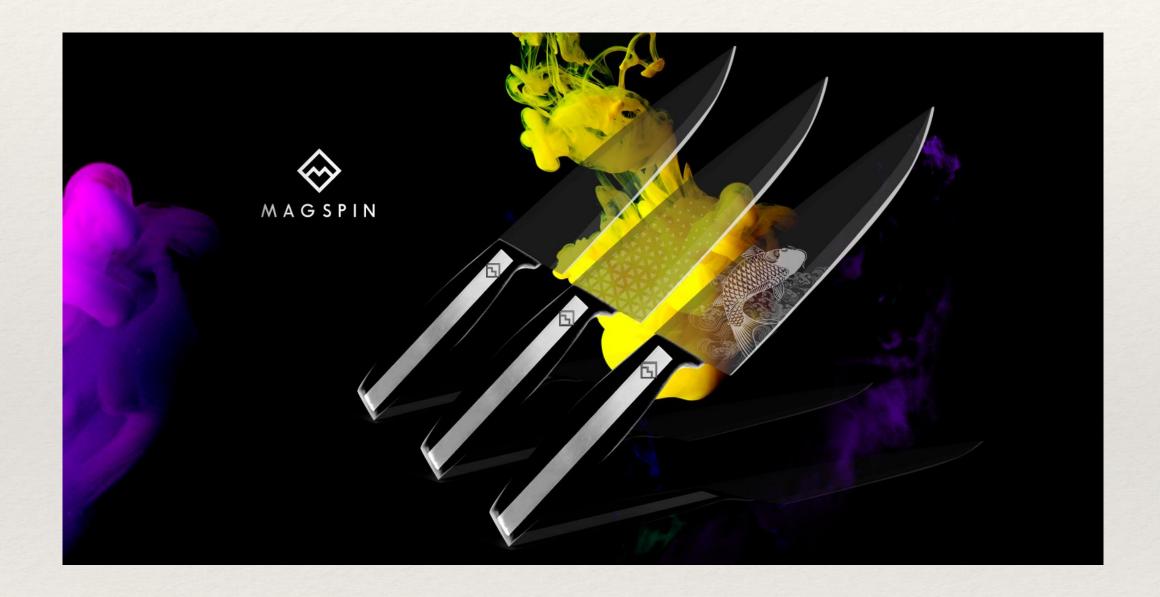




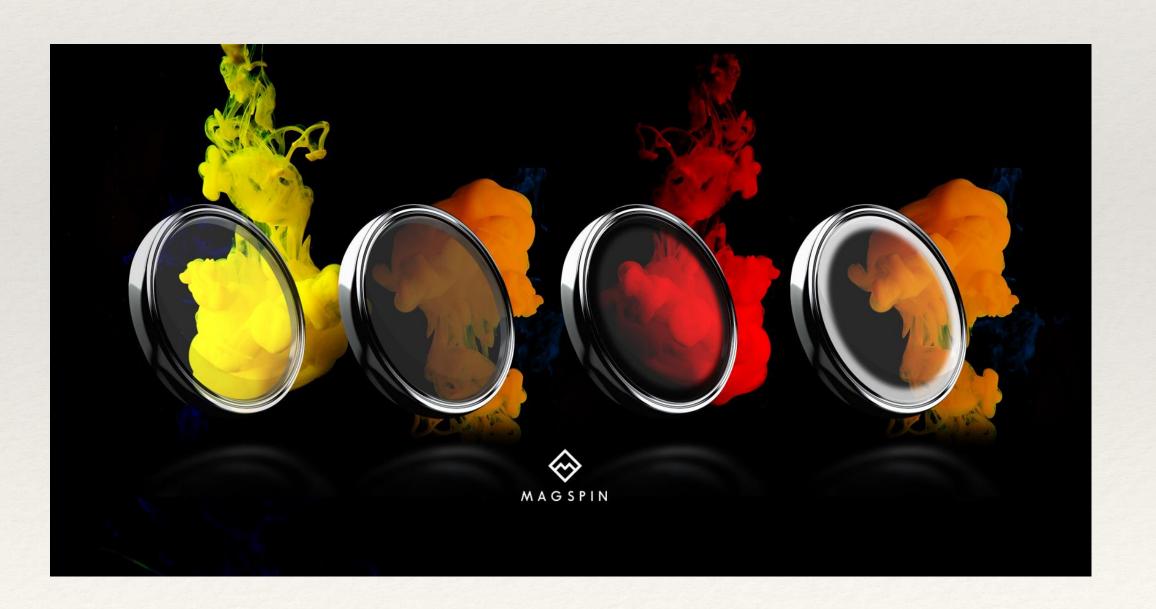


## MAGSPIN

Çizilmez transparan seramik teknolojisi!



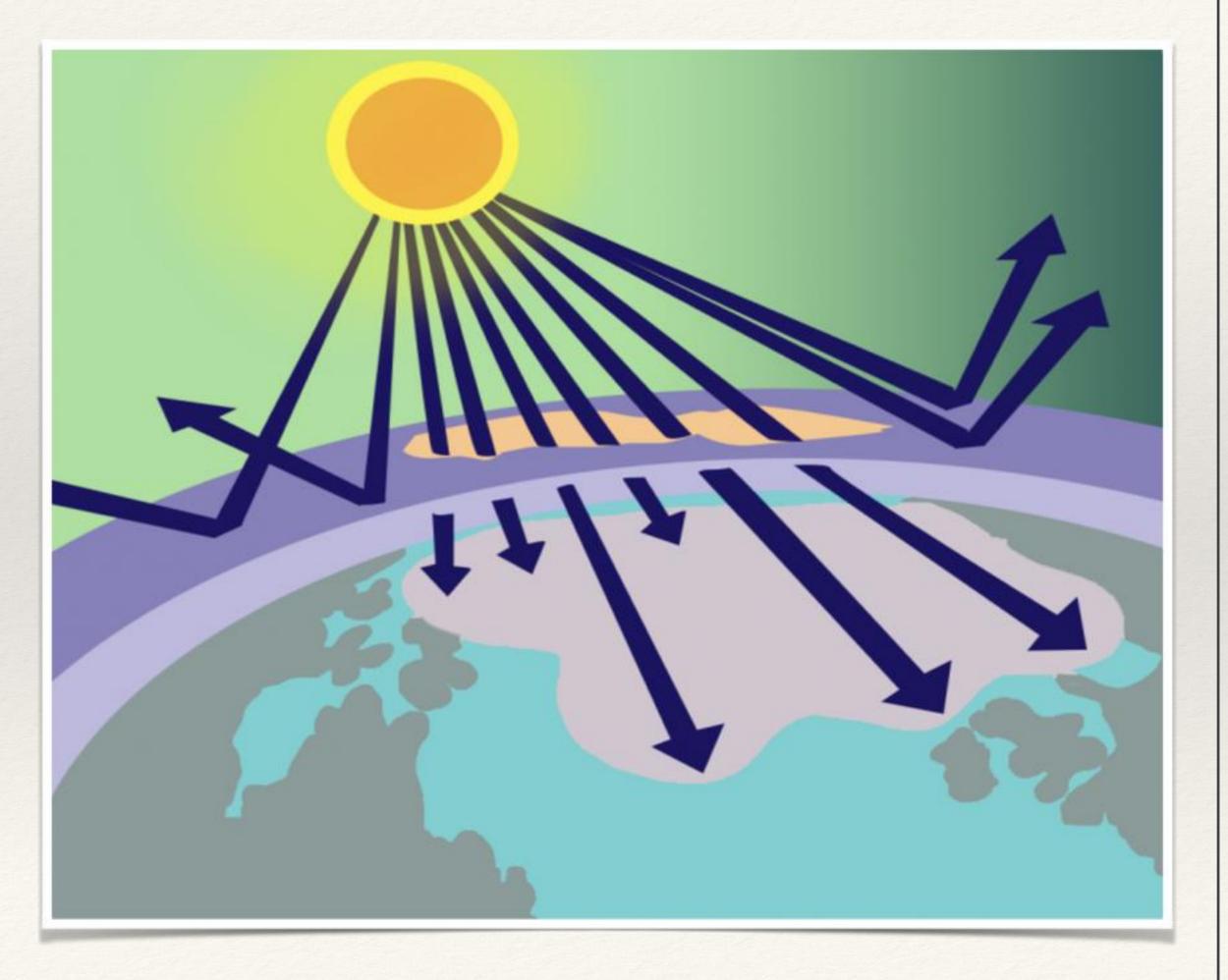


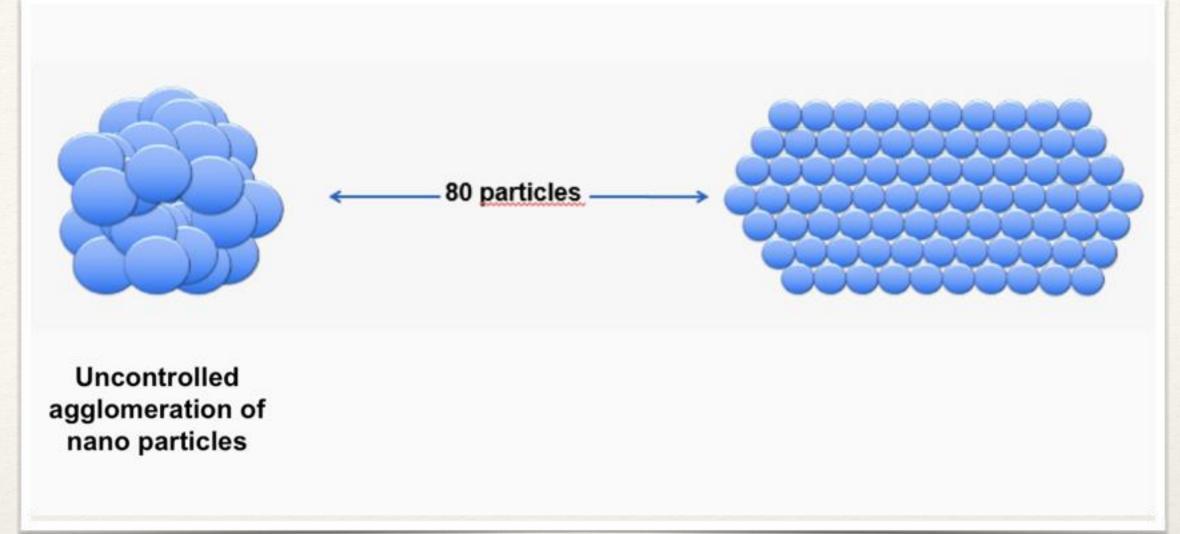






## Güneş kremlerinin yeni parçacıklarla üretimine imkân tanıyan Güneş Kremi Etken Madde Teknolojisi





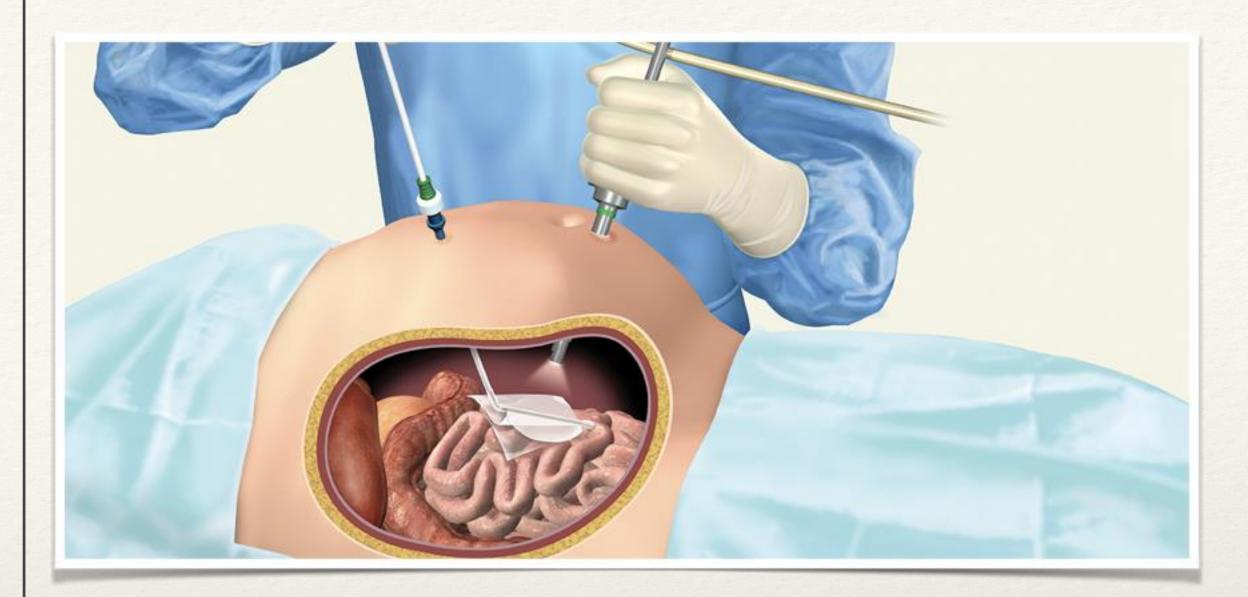


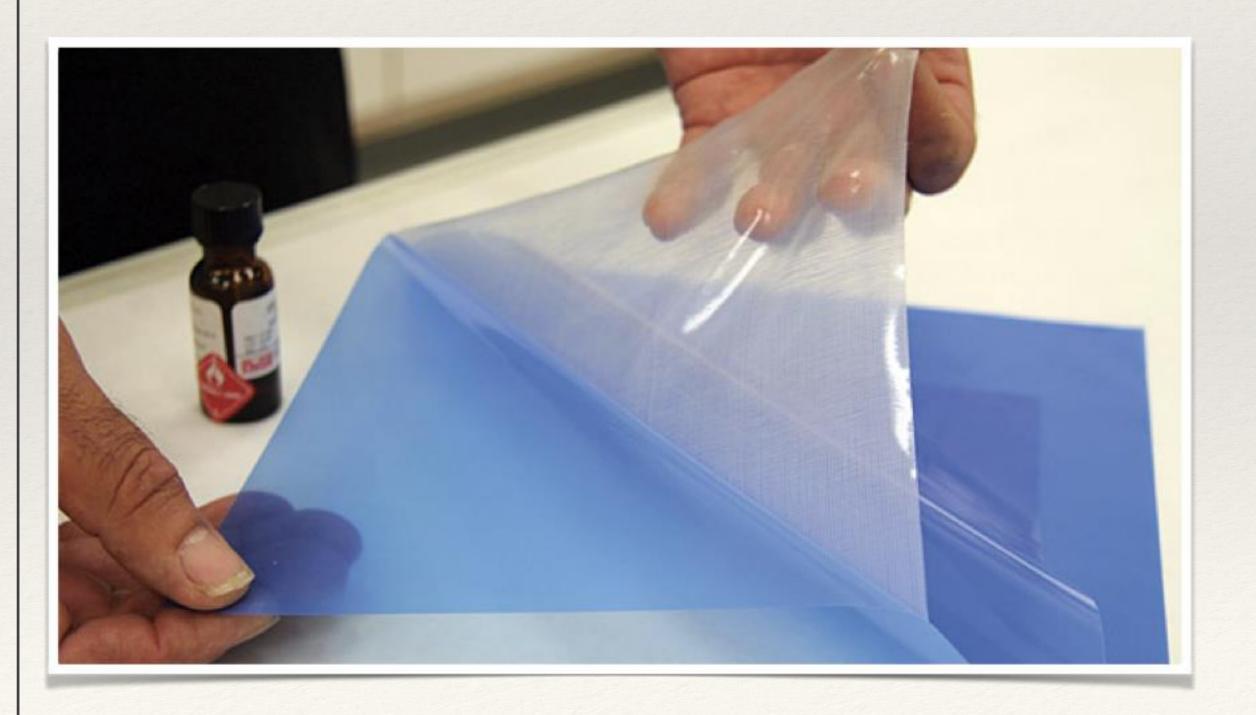


## ADEZYON BARIYERI

Cerrahi Adezyonun Önlenmesi için Nanolifli Cerrahi Adezyon Bariyerleri

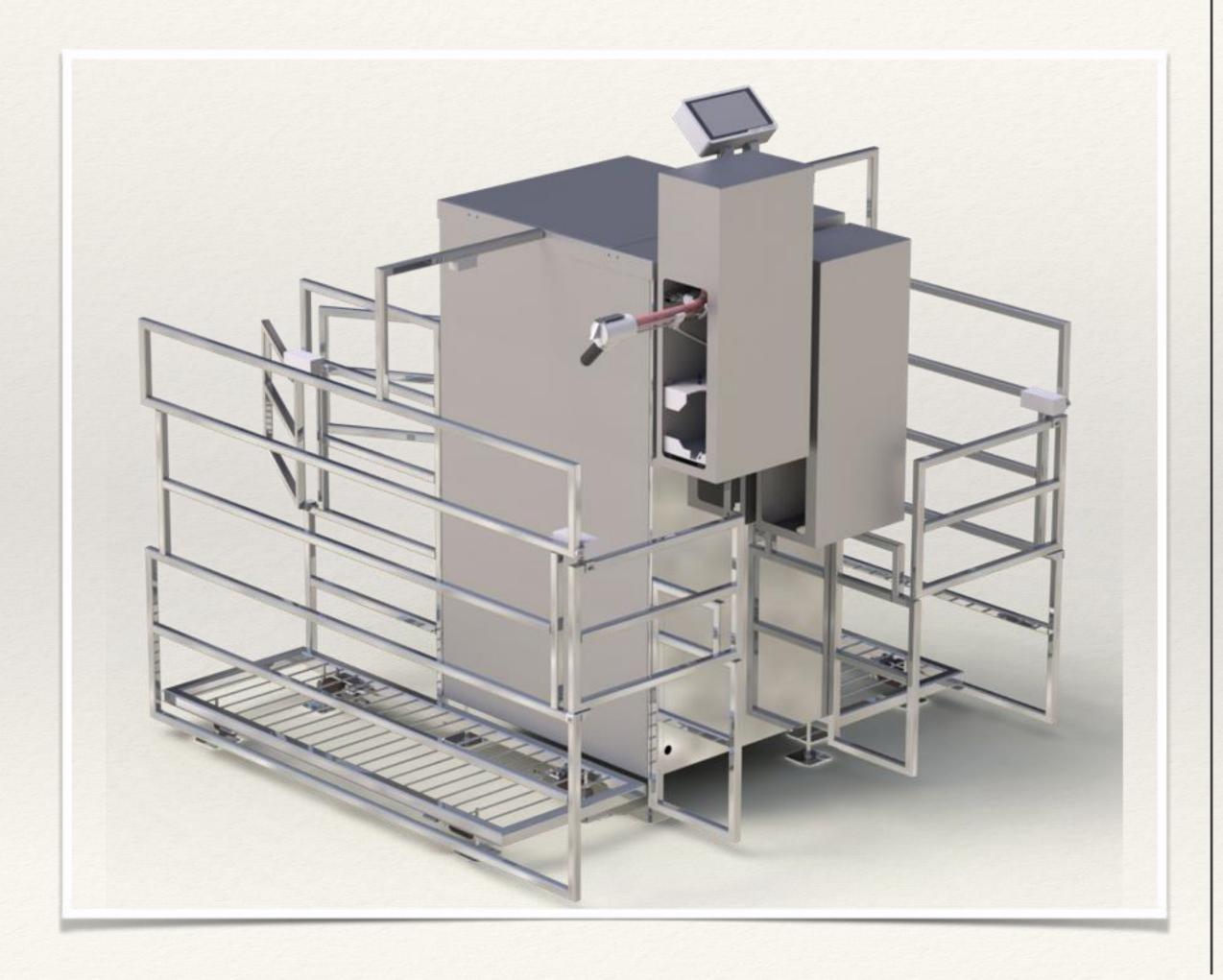


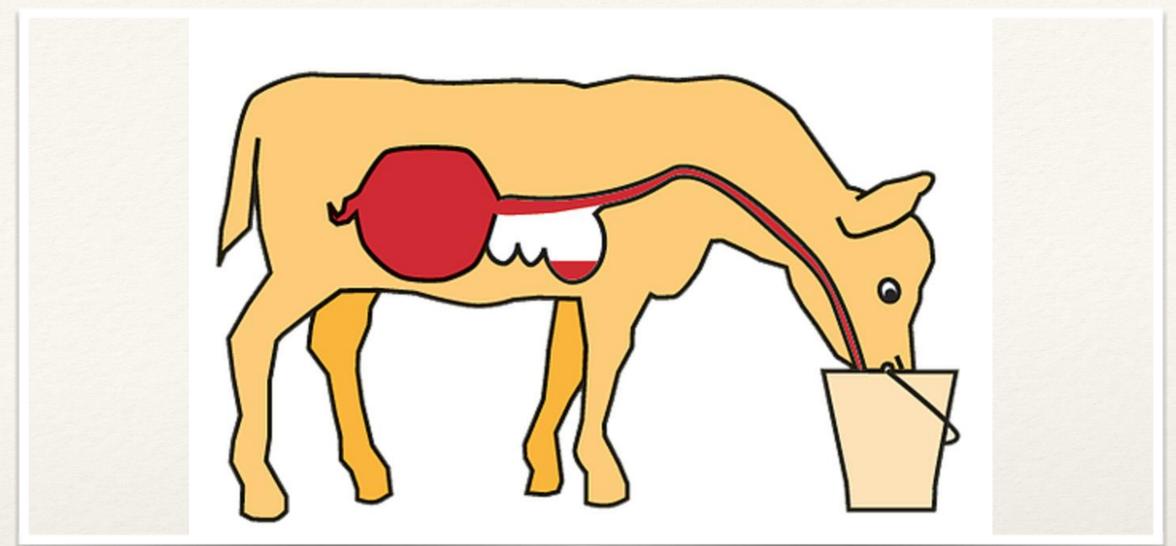


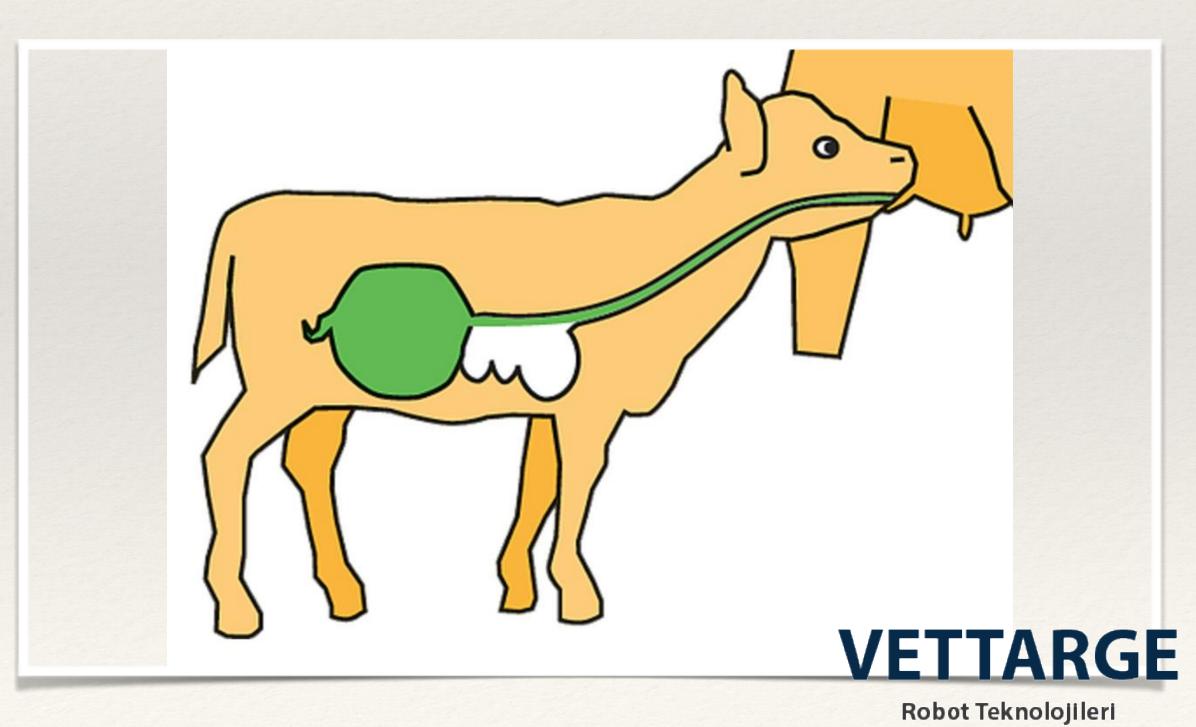


## SMARTMOM

Özgün, patentli, tam otomatik buzağı besleme ünitesi









### DİNLEDİĞİNİZ İÇİN TEŞEKKÜRLER...

#### **Mehmet ALPATLI**

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6 Kasım 2017



