



# IMCAS INSIDER

VOLUME 1 | ISSUE 1

## Toxins 101

An Extensive Guide to  
Classics & New Arrivals on  
the Market

## Detective, MD

Investigating Structural Variations  
& Gender Morphologies

## 25 YEARS OF IMCAS

Revealing a Long History  
of Innovation

# SCIENCE & BEAUTY The Building Blocks OF Aesthetics

Conversations with the World's Leading Experts



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**VOLUME 1**  
ISSUE : 1

*Dear Readers,*

*Welcome to the premier edition of the IMCAS Insider Magazine – a defining milestone in our quest to shape the future of medical aesthetics.*

*IMCAS has always been synonymous with innovation, collaboration, and a relentless pursuit of knowledge. Within these pages, you will find a wealth of knowledge, thought-provoking insights, and expert perspectives. Our mission is to empower each of our esteemed readers with the latest advancements, techniques, and breakthroughs in plastic surgery and dermatology. The IMCAS Insider Magazine showcases the collective expertise and passion of our global community, further reinforcing our brand as a hub of knowledge and inspiration.*

*We extend our heartfelt gratitude to all the visionaries who have made this magazine possible – from the trailblazing contributors to the dedicated team behind the scenes. Together, we have crafted a magazine that will showcase the very essence of our brand.*

*We thank you for joining us on this transformative journey. Together, let's explore the frontiers of knowledge, embrace innovation, and create a future where the art and science of aesthetics converge seamlessly.*

*Sincerely,*

*Hugues Cartier      Sebastien Garson*

Course Directors of IMCAS Congresses

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A  
MATCH  
MADE IN  
MEDICINE

A perfect pair both in and outside the clinic, discover the combined practice of **DR. THOMAS RAPPL** & **DR. SIMONE MAY**

Rappl  
X  
May

*Dr.* Thomas Rappl has built his career over the course of his life to arrive at the summit, as both a long-standing IMCAS board member as well as a world-renowned plastic surgeon. A senior physician at the Department of Plastic, Aesthetic, and Reconstructive Surgery at the Medical University in Graz, he divides his time between teaching and practicing his craft amongst his series of successful clinics throughout Austria.

Dr. Rappl began his education at the Graz University of Arts, choosing to explore his growing interest in sports by majoring in sports medicine (1997). In 2004, Rappl combined his eye for art, as well as his love of sports and medicine, by settling into the plastic surgery specialty.

Today, he fully specializes in aesthetic and reconstructive surgery, anatomy, aesthetic surgery, and sports medicine, but keeps a foot in each world of invasive and non-invasive treatments—in great part due to his shared work with his partner and co-clinician, Dr. Simone May.

A graduate of the Medical University of Graz, Dr. May has always had a passion for healing and beauty, with commitment to making a difference in the lives of others.

ARTICLE CONTINUES ON NEXT PAGE

Like her partner, May also holds a background in sports medicine, and practices today as an aesthetic physician specializing in aesthetic medicine, anti-aging, and pain management. Her areas of focus are primarily in injectables, EBDs, and skin treatments with special attention to holistic and lifestyle considerations for healing and anti-aging.

A true hospital romance, the couple first met on duty at the university and fell head over heels performing several operations on call. They then went on to build a treatment empire together, which, according to May, wasn't always the initial plan. "At the beginning, we were skeptical because in our past we were ambitious lone fighters. But we quickly figured it out that alone we can do so little and together we can do so much. It does take two flints to make a fire."

Today, the power couple maintains three offices together that provide a variety of treatments options as well as serving a wide international client base. Their first office, based in Graz, opened 7 years ago, with a second clinic following in Vienna in collaboration Dr. Eva Wegrosteck (one of the pioneers of aesthetic medicine in Austria). Their third and more recent clinic, located in the Central Eastern Alps, operates out of a 5-star hotel castle and specializes in modern aesthetic concepts surrounding full-body care and holistic wellness. "We believe that only the holistic approach leads to a perfect outcome and looking over this edge makes it even more thrilling to proceed into new dimensions. Physicians today must recognize that working with one tool or technique only in modern aesthetic medicine & surgery it is not enough. You have to consider outside factors as well," explains Rappl.

When asked about to what they attribute their clinical success, the two remain grounded in their achievements. They respond saying that it is solid values such as self-respect, honesty, persistence, patience, passion, and creativity that are their secrets to building a group of successful clinics. Perhaps the true secret lies in the combination of their diverse skills and backgrounds. According to May, having both medical

viewpoints is a major asset. "We have different approaches, due to our differing educations. This is somehow fruitful during discussions about new treatments. There are many cases, which might be neither 100% surgical, nor 100% minimal invasive, and these are the cases to sit together with the patient to discuss conceptual treatments."

It makes for a strong clinical exchange, as Rappl notes that the two often work with patients together, especially when combined treatments are necessary or have high outcome potential. "Since Simone has a thorough knowledge in EBDs, injectables, and minimally invasive treatments, and I am more focused on thread-lifting and surgery, we develop and discuss treatment options together to combine different techniques to achieve a maximum

of aesthetic outcome and longevity." May wholeheartedly agrees, adding that, "It is the perfect match, when minimally invasive is not enough for the patient, they have the option for surgery. So, we pair our patients to the combined skillset of one another."

Outside of their busy practical schedule, the couple actively travels all over the world to partake and present their own research and clinical experiences. They remain integral IMCAS contributors deeply involved in the medical aesthetics community in order to stay up to date on the latest trends, combinations, and treatment science. They look forward to continuing their combined treatment work, making theirs a true specialty match both in and outside of the clinic. ■



# IMCAS

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6<sup>th</sup> Edition

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# ART OF INTELLIGENCE

## How AI Revolutionizes AESTHETIC PRACTICE

Over the last few decades, Artificial Intelligence (AI) has firmly established itself as a transformative force in the realms of medicine, aesthetics, and surgery. Groundbreaking innovations that range from skin analysis and imaging to diagnostic assistance, robotic surgeries, and post-treatment outcome predictions, have all become reasons for celebration. However, the prominence of AI has led many medical practitioners to question if all progress is inherently good.

### INSIGHTS FROM

DR. DIALA HAYKAL



DR. SEBASTIEN GARSON

### EXECUTIVE ALL-IN-ONE

*Dr.* Diala Haykal, an award-winning physician based in the Parisian region, and Dr. Sebastien Garson, celebrated plastic surgeon and IMCAS course director, weigh in to share their thoughts whether it will help or hurt the fields of plastic surgery and dermatology in the nearing future. When asked about how AI has integrated into aesthetics, Dr. Haykal simplifies the answer, stating, “AI is an advancement... a result of a process that started from the first electric lightbulb.” She elaborates, “Nowadays, any smart device such as your phone, TV, laptop, car, and medical machines get updates every so often... AI, however revolutionizing, is just another update. In this process, cosmetic dermatology is not an exception as it has, and will continue to use, the latest technologies to improve this field.”

While AI might seem like a recent phenomenon, the idea has existed since 1950, described by Dr. Alan Turing as a concept of using computers to simulate intelligent behavior and critical thinking. Despite a slow start, the evolution of artificial intelligence gained momentum in the 1960s, experienced setbacks in the form of “AI winters” from the late 1970s to the 1990s, and resurged in popularity in 2011

with IBM's Watson winning on Jeopardy! AI's progress continued, making its way into everyday applications like Siri and Alexa and medical applications such as Pharmabot and Mandy. In 2017, Arterys achieved FDA approval for the first cloud-based deep learning application for healthcare, introducing CardioAI.

The benefits of incorporating AI into medicine are extensive, including time-saving efficiency by handling repetitive tasks, researching treatment plans, reviewing data, and empowering patients to make more informed decisions. However, Dr. Garson raises concerns about the potential impact on employment. “If you look at the literature regarding the evolution of AI, the first thing will be a description of all the jobs it can do. AI is intended to do the job better, quicker, and cheaper. What will happen to people?” A perspective that cannot be ignored, the effect of using AI in the medical field would indeed entail the outsourcing and automation of countless human jobs. Dr. Haykal proposes a compromise, noting that “deep learning, on which AI technology is based, gathers all cosmetic dermatological data available from studies and the patients to suggest an accurately individualized and



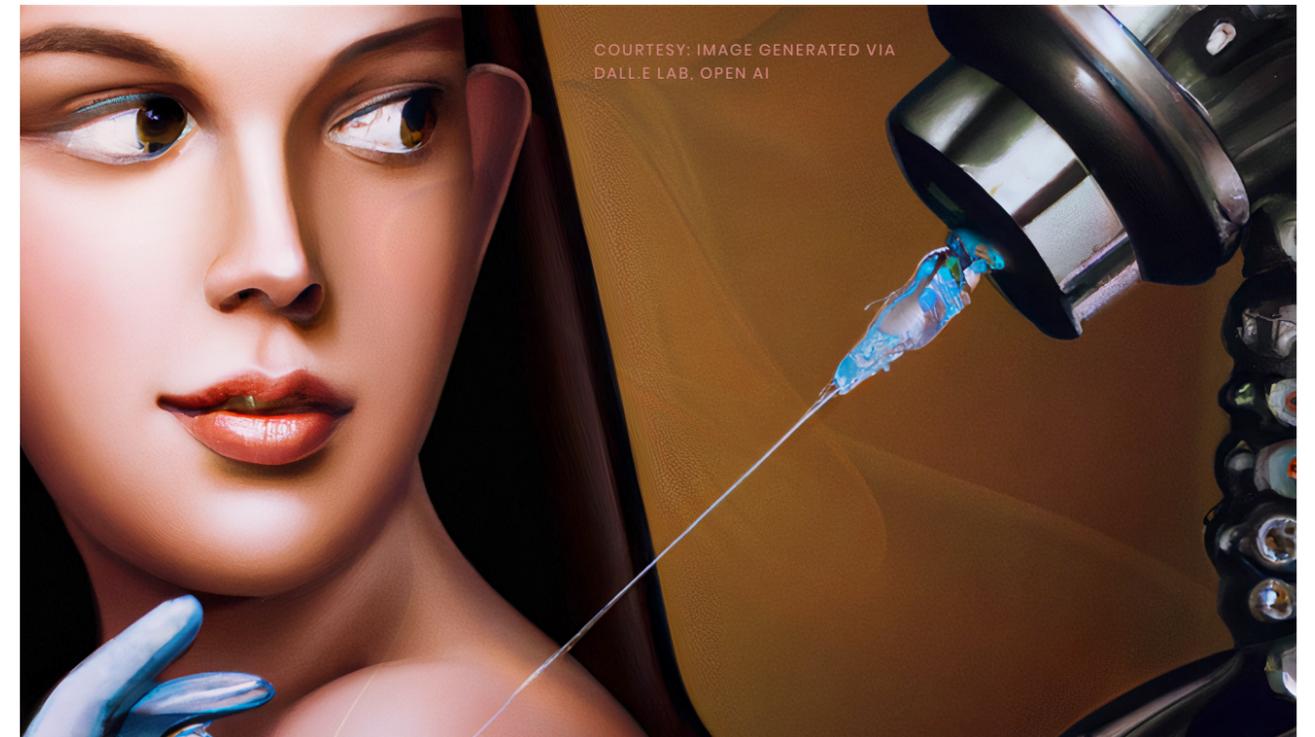
“If you look at the literature regarding the evolution of AI, the first thing will be a description of all the jobs it can do. AI is intended to do the job better, quicker, and cheaper. What will happen to people?”

DR. SEBASTIEN GARSON

realistic treatments plans and results. Through augmented reality, it makes deep tissue analysis possible with a lower rate of errors, used in try-on applications, and follow-up sessions... This level of precision is making hybrid cosmetic dermatological procedures a reliable alternative to one-on-one sessions,” creating a collaborative space between AI and medical professionals for optimal patient care.

Dr. Garson, however, emphasizes the ambiguous limitations of AI and questions how far is too far when leveraging AI in patient care. He brings attention to a potentially cynical perspective, highlighting the financial gains associated with AI in medicine. According to Dr. Garson, “AI is following the money because it’s bankable. There are a lot of projects, a lot of startups, surrounding AI.” Posing a worthwhile question, Garson adds, “Who put the money on the table to get [AI] here? If we compare types of investments, like real estate, investing money there and in your medical care don’t have the same goals. AI is a business. The bottom line is profit.”

Both doctors agree on a fundamental point: the future of AI in medicine is uncertain. Dr. Garson expresses reservations, stating, “I don’t agree with pursuing AI in my field because we don’t have a clear overview of AI’s evolution.” Dr. Haykal concurs, emphasizing the unresolved ethical concerns surrounding the idea of a robot performing medical procedures.



“This level of precision is making hybrid cosmetic dermatological procedures a reliable alternative to one-on-one sessions, creating a collaborative space between AI and medical professionals for optimal patient care.”

DR. DIALA HAYKAL

The confluence of ethical dilemmas and uncertainty regarding AI’s evolution makes it a contentious issue within the medical community. Despite existing for over seventy years, artificial intelligence remains seemingly too new and enigmatic to fully comprehend and trust, particularly in its application in the medical field. Drs. Garson and Haykal articulate compelling arguments regarding the limitations and ethical considerations of AI, spanning concerns about job displacement, the financial incentives at play, and the absence of clear boundaries for AI-led medical interventions.

In its most benign form, AI offers efficient solutions for doctors aiming to enhance patient care. In its most radical iteration, AI has the potential to entirely replace medical practitioners for profit. Perhaps the most prudent course of action is for the medical community to unite and collaboratively establish limits for the use of AI in medicine as they peer into the uncertain but potentially transformative future.■



DR. DIALA HAYKAL

*Dermatologist Dr. Haykal has dedicated herself to obtaining an extensive collection of degrees and certifications from notable institutions such as l’Université de Paris 5 & 6, Harvard Medical School, and the AAME. Dr. Haykal has treats her patients at her clinic in Palaiseau, outside of Paris, where her aim is to always deliver the best outcome for her patients.*



DR. SEBASTIEN GARSON

*Trained by some of the leading practitioners in the field, Dr. Garson is an active participant in the aesthetic medical community and is a past president of groups such as SNCPRE and SOFCEP. Today, Dr. Garson is a course director for IMCAS, while continuing his work in both private practice and hospitals.*

# BETWEEN ART & SCIENCE

## Art

[ɑ:t]

The expression or application of human creative skill and imagination, producing works to be appreciated primarily for their beauty or emotional power.

## Science

[ˈsaɪəns]

The activity encompassing the systematic study of the structure and behavior of the physical and natural world through observation and experiment.

Science and art are often considered as disciplines with little in common. Science is the systematic and theoretical construction of knowledge<sup>[1]</sup>, whereas art is the intuitive and expressive construction of one's creativity. Science has a rational approach to the world and strives to eliminate ambiguity. Art, on the other hand, has an emotional approach not only to the world, but also to the individual. Art is subjective, and openhandedly welcomes ambiguity.

Despite their differences, however, science and art are inextricably interwoven. "The greatest scientists are artists as well,"<sup>2</sup> said Albert Einstein, who explained that the source of his insights has always been abstract images, feelings, and even musical patterns, instead of logical symbols or mathematical equations<sup>[2]</sup>. Take aesthetic science, for instance. Each canvas is unique, living, and breathing. It becomes a permanent representation of the work of the surgeon. As each canvas even has the ability to hold their own aesthetic value and agenda, a "successful result" becomes rather subjective.

Thus, having the "artistic eye" is as equally important as having the scientific knowledge to achieve the sense of harmony that both the surgeon and subject desire.

However, when we look further into cases of aesthetic and cosmetic procedures, it can be seen as straying away from evidence-based knowledge as one of the main causes for complications. For instance, research shows that more and more patients request cosmetic procedures to look better on social media<sup>[3]</sup>, caused by the plethora of filters available on mobile applications. These filters blur the line between reality and fantasy<sup>3</sup>, leading patients to chase an ideal that even surgeons with an "artistic eye" cannot fulfill. In this case, the logical and scientific judgement of an experienced surgeon is necessary.

**Is having an "artistic eye" what differentiates good doctors from great doctors in aesthetics?**

**Or is medical knowledge or technique abilities the most important in your practice? And why?**

1

Choi, Jeongho. "Cosmetic Surgery : Is It Science or Art?." Archives of plastic surgery vol. 42,5 (2015): 672-4. doi :10.5999/aps.2015.42.5.672

2

Calaprice, Alice. (Ed.). (2000). The Expanded Quotable Einstein. Princeton, N. J. : Princeton University Press.

3

Heron-Lagton, Jessica. "People are Getting Surgery Younger Than Ever Before." Dazed Beauty, 29 Mar. 2019.



*Artistic learning is the secret of growth. This refinement is fundamental. After this evolution, the training allied to technology is the perfect union. The possibility of handling tissues without damaging them, drawing them in three-dimensional form is more important than the quantity executed, since this concept is not in the contemporary scientific rules. Few professionals see this. In fact, the superficial anatomy knowledge has existed for 500 years, plastic surgery a century ago, and high-definition body surgeries for 15 years.*

**Felipe Massignan** (Plastic surgeon, Brazil)

*Medical knowledge is based on facts and it is objective. The artistic eye is a subjective opinion and is subject to vary according to current trends: it should be confined to art.*

**Daniel Cassuto** (Plastic surgeon, Italy)

*Most physicians have the technical skills to deliver good outcomes; however, having an "artistic eye" is critical when it come to achieving superb outcomes on a consistent and predictable manner. All patients are different and each patient must be individualized to correct the subtle nuances that escalate outcomes from good to great.*

**Maurice Nahabedian** (Plastic surgeon, United States)

*I think judgement followed by technical ability are two of the most important assets or attributes of a good surgeon. An artistic eye is important but without judgement, knowledge and technical ability it is a rare surgeon with an artistic eye that can produce a good result.*

**Foad Nahai** (Plastic surgeon, United States)

*Theoretical and practical medical knowledge is the most important. I think having knowledge in psychology and sociology is also very important in the field of aesthetics.*

**Barbara Hersant** (Plastic surgeon, France)

# Earlobe-Based Advancing Flap (ELBAF) FOR HELICAL EAR RIM DEFECTS

CASE STUDY BY

**DR. AURORE LE GUERN**

(NEXTGEN DERMATOLOGY AWARD WINNER)

## BACKGROUND

Several helical reconstruction techniques are currently available for rim defects including Antia and Buch and triangular excision. Some of these techniques lead to unsatisfactory aesthetic results or can appear to be time-consuming. The Anatomical Basis of the Earlobe-Based Advancing Flap (ELBAF), first described in 2014 by Zilinsky, seems to be a quick technique leading to good aesthetic results.

## MATERIAL AND METHODS

We report a retrospective, one center, series of 15 consecutive cases with helical rim defects reconstructed using the ELBAF technique from September to November 2022.

## SURGICAL TECHNIQUE



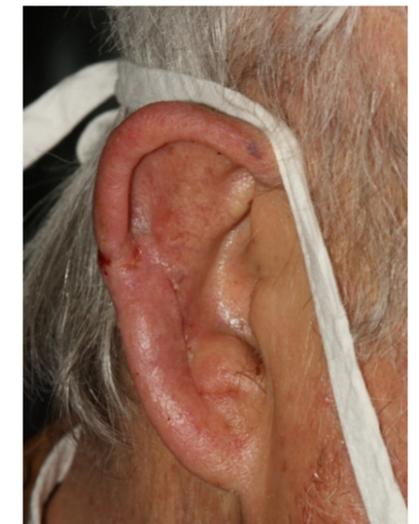
The transfixing incision was performed along the ear rim until the earlobe ; a triangular excision was made in the ear lobe, releasing the flap



The advancement movement led to closure with no tension



Immediate outcome



3 weeks outcome



GENDER	AGE	DIAGNOSIS	DEFECT (CM <sup>2</sup> ) TUMITUMOR'S	SIZE	LOCATION
M	77	BCC	2,99	0,9	middle
M	90	SCC	6,72	2,2	middle
M	87	SCC	3,8	1	upper
M	74	SCC	6	1,7	upper
M	81	SCC in situ	2,64	1,4	middle
F	91	BCC	1,8	1,1	lower
M	64	BCC	2	1,2	middle
F	82	BCC	5,98	2	lower
M	76	BCC	2,56	0,6	lower
M	50	melanoma	4,8	1,2	lower
M	98	SCC	5,29	1,5	lower
M	83	BCC	2,4	0,8	lower
M	83	SCC	1,7	0,9	middle
M	94	SCC	4,14	1,5	upper
M	75	SCC	2,8	1	middle

**RESULTS** Demographic and surgical datas are in Table 1 (above).



Two women and thirteen men were included, aged from 50 to 98 (mean age 80 years old). Tumors were represented by Squamous cell Carcinoma (SCC) 46.7% and basal cell carcinoma (BCC) 46.7% and one case of melanoma.



Tumor location was predominantly middle third (6/15), then lower third (5/15) of the ear rim.



The operating time varied between 14 to 36 minutes (average 21.5 minutes), 1 missing data.



Triangular excisions were made in 50% cases.



One case of partial necrosis was observed in a patient with SCC, in the upper third location of the ear rim, possibly due to a chondritis.



Patients were followed for up to 2 months with a good aesthetic outcome (93.3%).

**DISCUSSION**

- \* The ELBAF technique is a reliable method for reconstructing helical rim defects.
- \* Indeed, it relies on an adequate blood supply from a posterior auricle flap.
- \* This flap is viable thanks to the arterial blood supply through arteries emerging from the earlobe and running along the edge of the spiral, forming a distinct network of capillaries between the inferior and superior branches of the preauricular artery.
- \* In our study, “upper was longer”: on the upper third of the outer ear, average operating time was longer (26.7 minutes). No systematic antibioprohylaxis were prescribed. No hematoma or bleeding were observed.

**CONCLUSION**

Earlobe-Based Advancing Flap (ELBAF) appears to be quick; it uses slight stretching of the flap and reserve in the earlobe (requiring a plump earlobe). Moreover, it is possible to add a back cut to increase lobe mobilization.

In our experience, it is mostly indicated for defect of 1/3 middle-1/3 lower ear rim, and allows to maintain ear aesthetics in helical rim reconstruction. ■

**ABOUT THE AUTHOR**

**Dr. Aurore Le Guern** is a practicing dermatologist at Hôpital Saint Vincent de Paul in Lille, France. She won the illustrious NextGen Dermatology Awards at IMCAS World Congress 2023, a prestigious competition for young physicians showcasing pioneering projects and research in dermatology.



Dr. Le Guern’s prize-winning presentation addressed the implementation of the ELBAF (Earlobe-Based Advancing Flap) technique for the reconstruction of helical rim defects.

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Mentoplasty is the surgical technique used to correct chin deformity. It consists of an osteotomy in the lower edge of the jaw that allows the movement of the chin in three dimensions and fixation in the new desired position. The first available publications of this surgical technique date back to 1957<sup>[1]</sup>.

First through an extraoral approach by Gillies and Milard and a little later through an intraoral approach by Trauner and Obwegeser. Since then, mentoplasty surgery and facial surgery in general have come a long way. The key to the best surgical outcome is an optimal surgical

plan. In recent years, the concept of 3D surgery has been developed, which allows virtual surgical planning of the location of the cuts and the desired movement prior to surgery. 3D surgery allows us to move away from on-site planning of the surgery to pre-surgical planning of the desired movement, with a simulation and preview of the result at the bone and soft tissue level. Surgical guides allow us to transfer the information from the virtual planning to the operating room, enabling surgeons to carry out the surgical plan in the OR<sup>[2]</sup>. Surgical guides are patient-customized devices that allow the surgeon to carry out the surgical plan in the surgery field. The cutting guides allow the surgeon to

guide the point of the cut in the bone to avoid damage of important structures. The positioning guides allow the surgeon to bring the segment to the desired and previously planned position with a millimeter level of accuracy<sup>[3]</sup>.

Advances in 3D printing technology have the potential to significantly improve the workflow of maxillofacial surgical planning. In-house printed customized positioning and cutting guides allow for intraoperative reproduction of pre-planned osteotomy cuts, which can result in greater surgical accuracy and patient safety while maintaining an acceptable cost-effectiveness ratio (3-7).

**CASE REPORT**

The first step is to interview and explore the patient to determine their needs and goals. Within the physical exploration, a fundamental step is the facial analysis which allows us to determine the anthropometric measurements of the face and analyze the required corrections. In addition, a facial CT scan is requested to be able to perform the surgical planning.

**1. VIRTUAL SURGICAL PLANNING:**

Once we have the information from the facial analysis and the facial CT scan, we move on to virtual planning. For virtual planning, Dolphin Imaging® software (Patterson Dental, Saint Paul, Minnesota, USA) is used. Alternative free options are available. With the CT image file and scan data, we plan and simulate the surgery according to the required needs. It allows to see the pre and post results both at the bone and soft tissue level. We design the cutting lines on the bone for the type of movement we want to achieve.

Once we have the pre and post surgical models, we take them to a 3D file editing software. In our case, we use Meshmixer® (v 3.5, Autodesk Inc., San Rafael, CA, USA). We use the pre-surgical model to generate the cutting guide and the post-surgical model to generate the positioning guide, (Fig. 1).

**2. 3D PRINTING:**

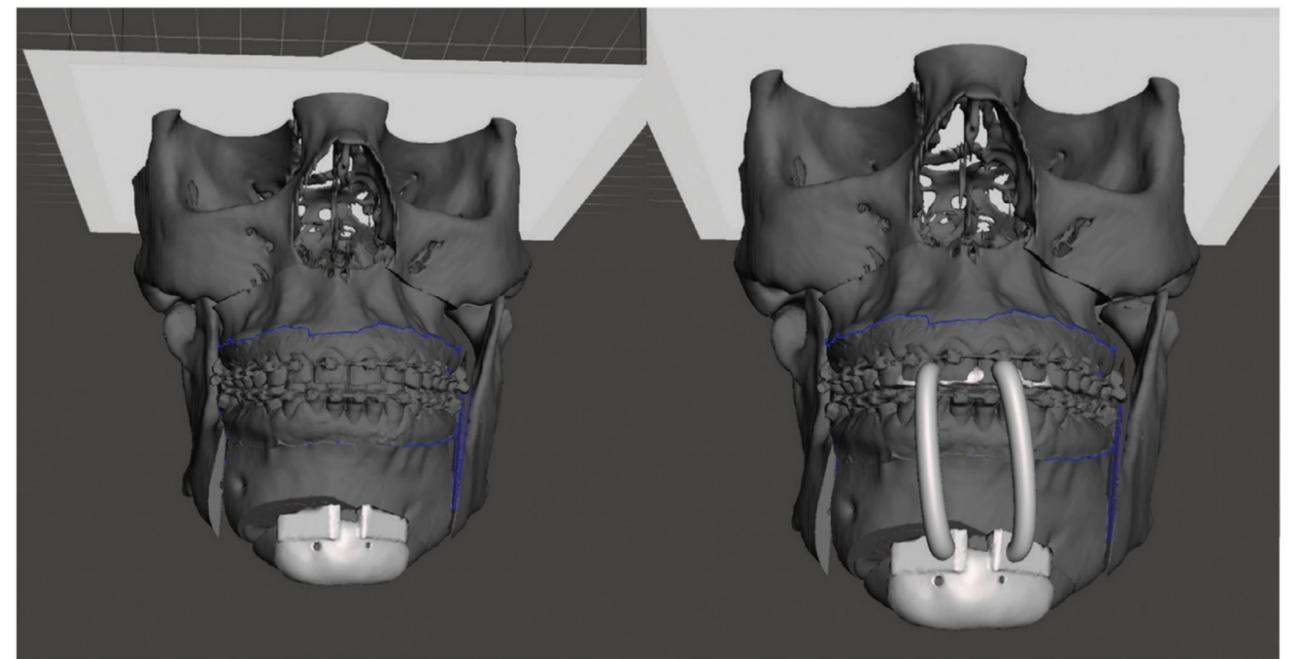
The designed guides are exported in STL format for the 3D printing stage. The digital models are fabricated using a stereolithography (SLA) 3D printer (Form 2, Formlabs, Somerville, MA, USA) and Surgical Guide resin (Formlabs)

with a printing resolution of 0.1 mm. After printing, the guides undergo a cleaning process in a Form Wash (Formlabs) containing 99% isopropyl alcohol for 20 minutes to remove excess liquid resin. They are subsequently subjected to post-curing at 60 °C for 30 minutes in a Form Cure (Formlabs) to ensure biocompatibility and optimal mechanical properties. Finally, the models are sterilized and sent to the operating room. We can also export and print a post-surgical model of the chin on which we can pre-fold the surgical plates to save surgical time. The printing time is four hours and 23 minutes, washing and curing time is approximately 40 minutes, therefore printing and post processing time is around 5 hours to have the in-house guides ready to send for sterilization.

Regarding the cost, the total amount of resin required for this case is less than 70ml. The price of 1 liter of biocompatible resin suitable for surgical use is 225€, so the approximate cost for this case is 15€.

**3. SURGICAL CASE:**

The first step is to perform the usual intraoral approach for mentoplasty surgery. Once the chin is exposed, the customized cutting guide is attached. It is perfectly adapted to the bone contour because it has been designed on the 3D model of the surgical planning with the CT images. Using this guide, the chin osteotomy is performed, (Fig. 2). Once the osteotomy has been performed, the positioning guide is placed to move the distal segment to the desired and previously planned position. Keeping the positioning guide, we place the lateral osteosynthesis plates and finally the central one, (Fig. 3).



**Fig. 1: Surgical guide design.**

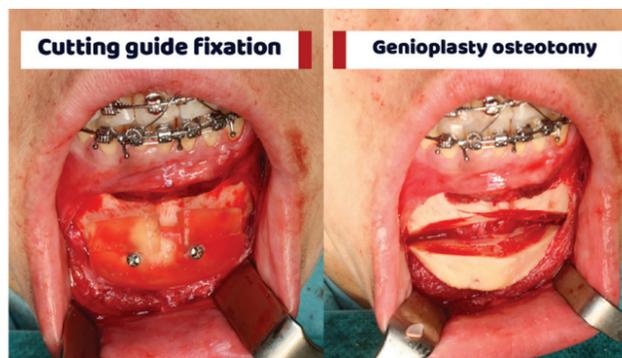


Fig. 2: Cutting guide surgical use and osteotomy.

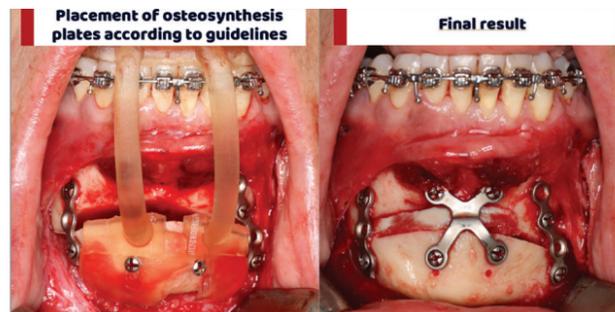


Fig. 3: Positioning surgical guide use and plate fixation. Note that these plates can be premolded on the final 3D printed model of the chin to save surgical time.

“The use of in-house cutting guides seems a reliable and recommended alternative in mentoplasty surgery. It allows to determine the cuts with greater precision and in a predictable way to the surgical planning. It is also a cost-effective option for saving surgical time.”

**DISCUSSION**

The two main advantages of using self-made cutting guides are cost savings and production time savings. We have the high initial cost of the necessary equipment, the learning curve in the use of the necessary programs, and the time spent in the design to contend with.

A custom design plate and cutting guides for mentoplasty performed by a commercial company cost approximately € 1,500 and have an average delivery time of 7 to 10 days including the design, planning, and production phases<sup>[7]</sup>.

With in-house cutting guides, the total cost is reduced to around € 100 per case. The cost of the plates and screws should be added. In addition, the design and production times are less than 48 hours.

The use of in-house cutting guides seems a reliable and recommended alternative in mentoplasty surgery. It allows to determine the cuts with greater precision and in a predictable way to the surgical planning. It is also a cost-effective option for saving surgical time.

The learning curve for developing expertise with planning software and printing settings is compensated by increased surgical predictability and decreased operating time, making this type of planning a worthwhile investment.

We can therefore say that the use of self-created guides has some advantages, among which the following stand out:

- Less dependency on industry.
- Less need for time margin, which allows the patient to be operated on earlier.
- Lower cost per case. ■

**REFERENCES**

1. Trauner R, Obwegeser H. The surgical correction of mandibular prognathism and retrognathia with consideration of genioplasty. Oral Surg, Oral Medicine, Oral Pathology. 1957;10:677-89.
2. Pugliese L, Marconi S, Negrello E, Mauri V, Peri A, Gallo V, et al. The clinical use of 3D printing in surgery. Updates Surg. 2018;70:381- 388.
3. Wang L dong, Ma W, Fu S, Zhang C bin, Cui Q ying, Peng C bang, et al. Design and manufacture of dental-supported surgical guide for genioplasty. J Dent Sci. 2021;16:417-23.
4. Li DTS, Leung YY. Patient-Specific Implants in Orthognathic Surgery. Oral Maxillofac Surg Clin North Am. 2023;35:61-69.
5. Arcas A, Vendrell G, Cuesta F, Bermejo L. Advantages of performing mentoplasties with customized guides and plates generated with 3D planning and printing. Results from a series of 23 cases. Journal of Cranio-Maxillofacial Surgery. 2018;46:2088-95.
6. Arcas A, Vendrell G, Cuesta F, Bermejo L. Mentoplasty with Customized Guides and Plates Using 3D Technology: A More Precise and Safer Technique. Plast Reconstr Surg Glob Open. 2019;7:e2349.
7. Oth O, Durieux V, Orellana M, Glineur R. Genioplasty with surgical guide using 3D-printing technology: A systematic review. J Clin Exp Dent. 2020;e85-92.

**ABOUT THE AUTHOR**

Dr. Iñigo Aragon-Niño is a medical resident at La Paz University Hospital's Oral and Maxillofacial Surgery Department in Madrid, Spain. He achieved first place in the NextGen Surgery Awards at IMCAS World Congress 2022, a prestigious competition for young physicians showcasing pioneering projects and research in plastic surgery. Dr. Aragon-Niño's winning case focused on advancements in 3D technology and its diagnostic and therapeutic applications in surgery.



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**WHO IS IT FOR?**

All skin conditions undergoing advanced treatments such as microneedling, RF Microneedling, Fibroblast Skin Tightening, lasers and chemical peels.

**PRO RESOLUTION TECHNOLOGY:**

**Omega-3 from Algae** helps to calm the skin to address post-treatment redness and irritation.

**Oligopeptide-1 Epidermal Growth Factor** (plant derived) to improve skin's texture and resilience.



Post-microneedling treatment: decrease of side effects

**Right after microneedling at 1.25mm**

Subject received one microneedling treatment all over face. On one side of the face, Pro Restore was applied prior to microneedling, was used during microneedling, and applied post microneedling. On the other side of the face, a control conventional Hyaluronic Acid serum for microneedling was used.



Post-fibroblast skin tightening treatment: reduced downtime

**Day 5 post-treatment**

Subject received one fibroblast skin tightening treatment on the crows' feet area. On one side, Pro Restore was applied from the second day post-treatment morning and evening. On the other side, nothing was used (conventional method).

## TECHNOLOGY FOR YOUR BEAUTY AND HEALTH

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rollactive RF



**symmed**  
elite

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## NEW GENERATION RADIOFREQUENCIES

## GAME CHANGERS

The pursuit of non-invasive, safe, and effective treatments in aesthetic dermatology has spurred the development of new generation radiofrequency (RF) devices. These cutting-edge devices offer a promising solution for addressing concerns such as skin laxity, facial volume repositioning, cellulite, and body contouring. With an impeccable safety profile, dermo-aesthetic technology stands out as one of the most promising technologies for the next decade.

**Non-invasive radiofrequency stands out as one of the most promising dermo-aesthetic technologies of the next decade.**

Understanding the biological fundamentals of RF involves volumetric tissue heating and electrical stimulation of cell membranes. It's crucial to note that while the technology's electrical and thermal effects contribute to increased collagen, elastin, and hyaluronic acid in the skin, fat reduction, and body contouring result from hyperthermic effects on the hypodermal layer. The subtle differentiation between the electrical and thermal effects is key to distinguishing between an effective treatment and one with unwanted side effects.

The scientific explanation behind this differentiation is straightforward: electrical stimulation of the tissue induces progressive heating, transitioning through three phases of treatment—athermic, thermal,

and hyperthermic. Only the first two phases exhibit constructive effects, activating dermal fibroblasts, increasing the production of extracellular matrix fibers, mainly collagen and elastin, and improving tissue vascularization. Hyperthermic temperatures, achieved later in the treatment, activate lipolysis, inhibit adipogenesis, and initiate thermal damage response processes (through the activation of heat shock proteins HSPs) crucial in body contouring treatments.

**Non-invasive radiofrequency stands out as one of the most promising dermo-aesthetic technologies of the next decade.**

WHAT ARE THE CHALLENGES FOR THE FUTURE?

On one hand, innovating in a field eager for new, effective and safe treatments requires a coherent combination of dermo-aesthetic technologies to enhance results and provide faster solutions and innovative applications.

On the other hand, adapting a mature technology to a new scenario involving fillers, neuromodulators, tensor threads, and mesotherapy with thermolabile active ingredients poses an additional challenge.

In line with these challenges, Termosalud, the Spanish company with the widest range of medical-aesthetic technology on offer, has been a manufacturer for more than 35 years and proposes ZIONIC rollactive and Symmed Elite Aesthetic as flagships of its latest generation

of radiofrequency equipment that allow facial rejuvenation and body contouring treatments in practically all current scenarios.

**ZIONIC: The new frontier of body contouring.**

This is a global treatment device that acts on the dermal layers and on the circulatory and muscular tissues. In a unique technological synergy patented by Termosalud S.L. that combines deep rotational massage and monopolar radiofrequency, ZIONIC is capable of stimulating the tissues with its triple electrical, thermal, and mechanical effect.

HOW DOES ZIONIC WORK?

The ZIONIC rotational applicator, with a working surface of over 75 mm, delivers an intense massage activating circulation, draining tissues, and improving tissue oxygenation. Simultaneously, monopolar radiofrequency raises tissue temperature to 41-42°C, activating neocollagenogenesis in the dermis and lipolysis in the hypodermis, allowing comprehensive remodeling work. This multi-layered approach positions ZIONIC as an excellent tool for body rejuvenation and contouring treatments. Achieved later in the treatment, activate lipolysis, inhibit adipogenesis, and initiate thermal damage response processes (through the activation of heat shock proteins HSPs) crucial in body contouring treatments.

**Electric and mild thermal stimulation activates fibroblasts. Hyperthermic stimulation is related with lipolysis.**

## WHAT DOCTORS SAY

"Our experience with ZIONIC gives us remarkable results even in difficult cases. It is a technology with great lipolytic and tightening capacity. The results are fast, and, being non-invasive, it allows us to combine it with other medical treatments for body remodeling."

Dr. Valverde

"ZIONIC has become the best body treatment. The results in third-degree cellulite and localized adiposity are incredible. Patients are the happiest. ZIONIC has a high therapeutic attachment to being a comfortable treatment and being able to treat the patient comprehensively."

Dr. Lupian

"The ZIONIC medical device has transformed Balmori Aesthetics Center by elevating the quality of treatments and patient satisfaction. This innovative technology has proven to be a powerful duo in the quest for healthier, more radiant skin, aligning with the clinic's ongoing commitment to excellence and innovation in aesthetic medicine."

Dr. Balmori

## SYMMED ELITE AESTHETIC: Redefining the limits of radiofrequency

Although non-invasive radiofrequency is an excellent treatment to restructure the dermal matrix and combat the effects of skin ageing, the increase in temperature in the dermal and muscular layers can compromise the duration of injectable products, accelerating their degradation or absorption. This means that these types of treatment should be discontinued in patients with these characteristics. EnhanceCell® technology is a game changer. It allows the treatment of areas with dermal fillers and toxins.

SYMMED ELITE AESTHETIC with its EnhanceCell® technology, exclusive to Termosalud, is a game changer and allows the treatment of patients with dermal fillers, neuromodulators, collagen inducers, tensor threads, and other facial mesotherapies with peptides and vitamins.

## HOW DOES ENHANCECELL® WORK?

EnhanceCell® proposes a new way of working with a modulated radiofrequency that stimulates the dermis with high doses of energy without producing temperature increase, so the integrity of the injectable products is maintained.

## The benefits of the technology are:

- Stimulation of collagen and elastin synthesis.
- Stimulation of circulatory tissues.
- Improvement of cellular microenvironment.
- Protection of the fatty support tissues of the face.
- Treatment of sensitive areas and eyelid area.

## WHAT DOCTORS SAY

"With SYMMED ELITE, I have enhanced results obtained with hyaluronic acid fillers and collagen-inducing treatments. Two weeks after any injectable treatment, we recommend six SYMMED ELITE sessions on the neck, neckline, and face, once or twice a week. The EnhanceCell® system, allowing athermic conditions, made me choose SYMMED ELITE after tensor thread treatments. The PowerCell® system works in pulsed hyperthermia, ensuring absolute control over the treatment."

Dr. Miguel Paule, Paule Clinic

"Facial harmonization treatments are part of our daily routine in the clinic. SYMMED ELITE AESTHETIC every two weeks improves and maintains treatment results. The possibility of treating areas previously treated with IPL and ablative lasers without inflammation increase is a paradigm shift. It also allows us to treat the eyelid area before considering more invasive techniques."

Dr. Guadalupe Villa

## KEEPING UP WITH THE TECHNOLOGY

SYMMED ELITE AESTHETIC's versatility extends beyond facial rejuvenation, offering body, facial, and hair treatments. Born from innovation, ZIONIC and SYMMED ELITE AESTHETIC provide advanced technological functionalities to improve medical practice and boost results. ■

## REFERENCES



Fig. 1: Patient treated with a combination of microneedling and ZIONIC treatment to address hypertrophic adiposity. Credits: Dr. Valverde, México.



Fig. 2: Before and after photos of the SYMMED ELITE AESTHETIC treatment after a full medical facial session with neuromodulators, HA fillers and injectable collagen inducers. Credits: Dr. Paule, Paule Clinic, Spain.





*Dr. Benjamin Ascher is a board-certified plastic surgeon, educator, and inventor who is the Founder & honorary President of IMCAS. He is a member of the French, American, and International Societies of Plastic, Reconstructive, & Aesthetic Surgery (SOFCPRE, SOFCEP, ISAPS, ASPS). Dr. Ascher is a practicing surgeon with extensive experience teaching medical aesthetics. He also works frequently as a consultant for diverse company projects. He is the ThinkIn Medical Director. Please head to [thinkin.fr](http://thinkin.fr) to see the agenda of his trainings and services offered by his THINKIN Center.*



DR. BENJAMIN ASCHER

THE TELL-ALL GUIDE TO

# Botulinum Toxins

WELCOME TO THE NEW PLANET OF AESTHETIC TOXINS



Injectable treatments have firmly established themselves as the blockbusters of the aesthetic industry. Around 250,000 physicians perform injections worldwide, incorporating toxins and fillers into their daily practice. The market for these treatments is steadily expanding, boasting an average annual growth rate of 9%. Currently, approximately 20 million individuals benefit from injectable treatments, and this number is evenly distributed between the utilization of fillers and toxins. From an economic perspective, the United States leads in first place while Europe, which once held the second position, has now yielded its place to Asia.

What is particularly noteworthy is the rapid growth rate in Asia, which is in the double digits, unlike the more modest growth rates observed in Europe and North America. LATAM from fourth place also shows a good level of growing. Botulinum toxin, in particular, plays a pivotal role in these treatments. Over the course of three decades, toxins have evolved to encompass more than 30 indications beyond aesthetic applications. The center of the technique was to inject into the muscle with accuracy and refinement. Recent advancements, particularly stemming from research in South Korea, highlight the efficacy of intradermal injections in yielding the following outcomes:<sup>(1)</sup> the classic

reduction of muscle-related wrinkles and<sup>(2)</sup> improvement in superficial skin appearance. In this comprehensive guide, you will get an in-depth overview of the current products available in the market, along with insights into the innovative arrivals that will shape the future of the toxin industry. Additionally, gain a sneak-peek into the future of toxin-based treatments, delving into the emerging technologies, the growing use of ultrasonic guidance, and the new contenders poised to revolutionize the field.

ON NEXT PAGE DISCOVER BOTOX TYPE A

# BOTULINUM TOXIN Type A

Explore the current range of products available in North America, Europe, and Asia, as well as the various partnerships and distribution agreements that are instrumental in bringing more products to the global market.

NOTE: ONE PRODUCT IS NOT INTERCHANGEABLE WITH BONT-A UNITS FROM OTHER COMMERCIAL PRODUCTS.

## THE CLASSICS IN EUROPE



**1**  
**VISTABEL®**  
**AKA BOTOX®**  
ONABOTULINUM TOXIN A  
\* By **Allergan**  
\* FDA approved for glabellar lines in 2002 and EMEA approved in 2003, FDA approval for canthal lines in 2013  
\* Available in more than 90 countries

**2**  
**AZZALURE®**  
**AKA DYSPORT®**  
ABOBOTULINUM TOXIN A

\* By **Galderma**, product under license from **Ipsen** for aesthetic indications  
\* FDA & EMA approved for glabellar lines in 2009, EMA approved for lateral canthal lines in 2017  
\* Available in more than 80 countries



## PRODUCTS IN AMERICA

**1**  
**JEUVEAU®**  
**AKA NUCEIVA®**  
PRABOTULINUM TOXIN A  
\* By **Evolus**, product licensed from **Daewoong**  
\* FDA approved for glabellar lines in 2019  
\* Available in the US as Jeuveau®, in EU, UK, ANZ and Canada as Nuceiva®



**2**  
**DAXXIFY®**  
DAXIBOTULINUM TOXIN A  
\* By **Revance**  
\* FDA approved for glabellar lines in 2022  
\* Available in the US only



**3**  
**BOCOUTURE®**  
**AKA XEOMIN®**  
INCOBOTULINUM TOXIN A  
\* By **Merz**  
\* EMA approved for glabellar lines in 2009 and FDA approved in 2011, EMA approval for canthal lines in 2016  
\* Available in more than 70 countries

## MADE IN KOREA

**1**  
**MEDITOXIN®**  
**AKA NEURONOX®**  
NEUBOTULINUM TOXIN A  
\* By **Medytox**  
\* Korean FDA approved for glabellar lines in 2006  
\* Available in parts of Asia and in development in the US



**2**  
**BOTULAX®**  
LETIBOTULINUM TOXIN A  
\* By **Hugel**  
\* Korean FDA approved in 2009, launched in 2010  
\* Available in 30 countries outside US and EU

**3**  
**NABOTA®**  
PRABOTULINUM TOXIN A  
\* By **Daewoong**  
\* Korean FDA approved in 2013, launched in 2014  
\* Available in Asia, MENA, and LATAM



## NEW IN EUROPE

**LETYBO®**  
LETIBOTULINUM TOXIN A  
\* By **Croma**, product licensed from **Hugel**  
\* Approved for glabellar lines in parts of EU, Australia and Canada in 2022, FDA approval expected in 2024  
\* Available in 29 countries



## NEW TOXIN TYPES MAKING ENTRIES

Liquid toxins: Ready-to-use toxins that do not require dilution

**ALLUZIENCE®**  
\* By **Galderma**, product under license from **Ipsen** for aesthetic indications  
\* EMA approval for glabellar lines in 2021  
\* Available in several European countries



**INNOTOX®**  
\* by **Medytox**  
\* Korean FDA approved since 2013  
\* Available in certain countries outside US and EU

**AI-09**  
\* By **Eirion**  
\* Currently in phase two





# The Challengers Arriving

CONTINUING ARTICLE

## TECHNIQUE UPDATES

### INCORPORATION OF ULTRASOUND

- \* Injection of toxins under ultrasonography guidance mainly for masseter and corrugator.

### INTRADERMAL INJECTIONS

- \* Intradermal Injections: Injecting toxins into the dermis via multiple injection points in low doses.

## New strains of botulinum toxin type A from South Korea

Globally equal to existing toxin products with a good balance of safety vs efficacy.

- \* The Toxin by Jetema, in the registration phase with the FDA.
- \* Hutox by Huons, available in Korea since 2022 and entered countries in the Middle East and Northeast Asia, pending export to Europe via contract with Sesderma.
- \* ATGC-110 by ATGC, entered a licensing agreement with Huadong Medicine (parent company of Sinclar) for the development and commercialization of product.



## Toxins-Related Technologies

- \* Electronic injection system: one pressure the right dosage.
- \* Antidote for botulinum toxin called Anticholinesterase – to diminish or neutralize complications, in development by two startups: ReViVox & DN Delnova.

## The Future Botulinum Toxin Types

### Relabotulinum Toxin A

- \* QM-1114 by Galderma, currently in phase three in the US and Europe.

### Topical toxins

Toxin powder put in a cream using nanotechnology

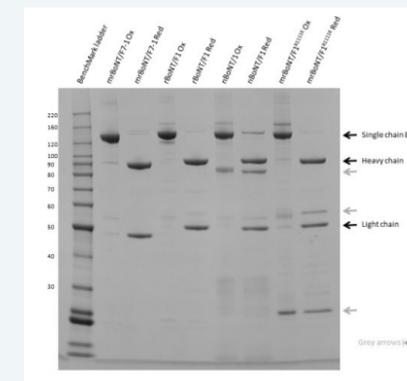
- \* ET-01 by Eirion Therapeutics, currently in phase two for hyperhidrosis.

The market for botulinum toxin treatments is steadily expanding, with an average annual growth rate of 9%

## Fast-Acting Recombinant Neurotoxins

### New Recombinant Botulinum Toxin E:

Produced by a cell whose genetic material is modified by genetic recombination by Ipsen and Bonti (company acquired by Allergan).



New Modified Recombinant Botulinum Neurotoxin Type F with Enhanced Potency, 2021 Nov 24 <https://pubmed.ncbi.nlm.nih.gov/34941672/>

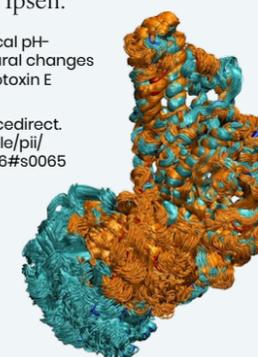
## Modified Neurotoxins

### Modified botulinum neurotoxin serotype AB (AB Chimeric):

Combines botulinum toxins type A and B, currently in phase two under the supervision of Ipsen.

Elucidation of critical pH-dependent structural changes in Botulinum Neurotoxin E 20 June 2022

<https://www.sciencedirect.com/science/article/pii/S1047847722000466#s0065>



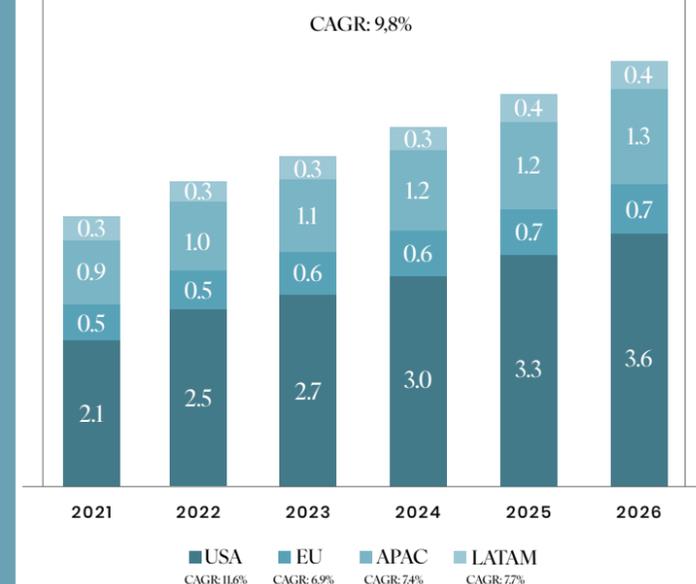
# TOXIN MARKET OVERVIEW



GLOBAL MARKET

GROWING STABLE DECREASING

## Botulinum Toxin Market (\$ BN), 2021-2026



Source: Clarivate, 2023





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**21-23**  
**2024**



In a world shaped by the ongoing global conflicts and economic fluctuations, it's crucial to thoroughly examine the trends, challenges, and strategies for the aesthetics market, regardless of whether you are a medical professional or representative of the industry.

TRENDS  
& INNOVATIONS  
FOR THE  
EARLY ADOPTER

KEY ANALYTICS YOU NEED TO KNOW FOR THE FUTURE OF  
DERMATOLOGY, PLASTIC SURGERY, AND AGING SCIENCE

Understanding  
Today's Global  
Aesthetic Market

FROM THE GLOBAL MARKET  
SUMMIT DURING IMCAS WORLD  
CONGRESS 2023

1

According to Clarivate, the aesthetics market is poised for substantial growth, with a projected value of \$20 billion by 2026 and a compound annual growth rate (CAGR) of 6.3%. However, various factors may influence this trajectory, including the recent pandemic, anticipated economic challenges in the coming years, and currency exchange rates.

## KEY MARKET SEGMENTS

### Injectables

The injectables market is expected to reach a staggering \$11 billion by 2026, driven by a compound annual growth rate of approximately 8%. Despite macroeconomic uncertainties, emerging players in this segment are anticipated to continue to thrive. This underlines the steady demand for non-invasive cosmetic procedures.

### Breast Implants

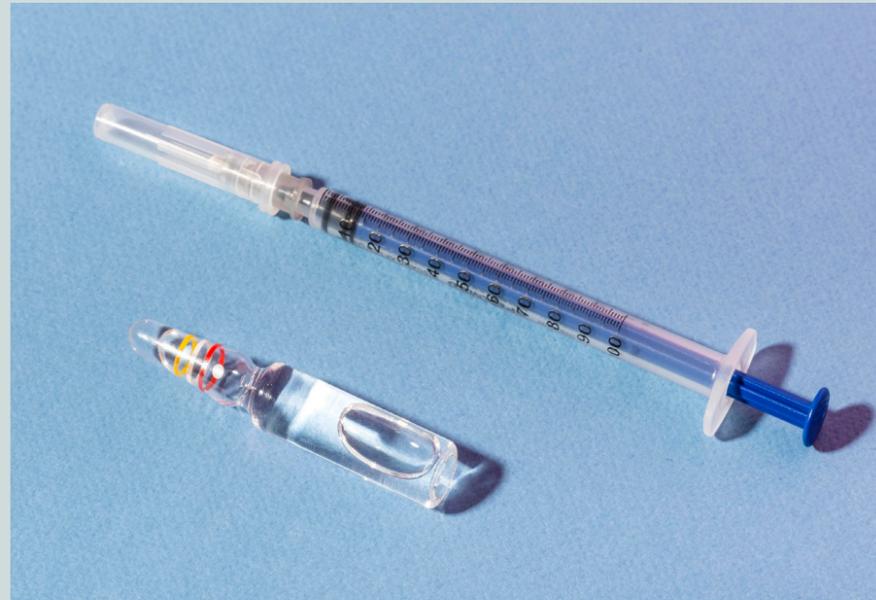
Surprisingly, the breast implants market is displaying remarkable resilience with an expected 20% growth rate in 2023. Innovations brought forth by emerging companies are fueling this impressive performance, offering new possibilities in breast augmentation.

### Physician-Dispensed Cosmeceuticals

This market is projected to reach \$2.8 billion by 2026. The global skincare phenomenon is propelling growth, emphasizing product innovation and inclusiveness. Consumers are increasingly focused on achieving healthy, radiant skin, making this a pivotal segment in the aesthetics market.

### Energy-Based Devices

Anticipated to reach \$4.1 billion by 2026 with a 6% CAGR, the majority of revenue in this segment is derived from body contouring procedures. Innovations in technology and expanding platforms are key drivers, making this a dynamic and evolving aspect of the industry.



#### GLOBAL MARKET DYNAMICS

The aesthetics market is deeply intertwined with various external factors. Macroeconomic conditions, consumer trust, and the growing emphasis on well-being post-pandemic all play pivotal roles in shaping the market's direction. To ensure continued growth, establishing and maintaining trust with customers and offering personalized experiences are paramount.

#### PHYSICIAN AND PATIENT ENGAGEMENT

Understanding the diverse interests and preferences of physicians in different countries is a critical aspect of navigating the global aesthetics market. Building trust-based relationships with both physicians and patients is essential for success. Recognizing the unique needs of various markets and tailoring services accordingly can make a significant difference in the level of success.

#### INNOVATION AND PERSONALIZATION

In a world marked by constant disruption, innovation is a driving force in the aesthetics industry. This extends beyond just product development and encompasses technology advancements and overall experiences for patients and physicians. It's vital to keep products natural and inclusive to cater to future generations and meet evolving expectations.

In the face of potential economic headwinds, the aesthetics market is expected to persevere, albeit with some minor disruptions. Trust-based relationships with patients and physicians, innovation, and a strong emphasis on inclusiveness are key strategies for successfully navigating the short-term challenges. In summary, it's important to highlight the remarkable resilience of the aesthetics market, the pivotal roles of innovation and trust, and the increasing importance of personalized experiences in driving future growth. The future of the global aesthetics market is bright, but only for those willing to adapt, innovate, and embrace the evolving landscape.

For this segment, David Amsellem, Managing Director of Piper Sandler, offers insights into how public investors perceive the United States' medical aesthetics landscape, shedding light on key insights that shape their investment decisions. This market, a dynamic fusion of biopharma innovation and a consumer-centric cash-pay model, stands out as a unique investment arena, distinct from traditional pharmaceuticals.

## A View From Wall Street

FROM THE GLOBAL MARKET  
SUMMIT DURING IMCAS WORLD  
CONGRESS 2023

# 2

**1. A DISTINCT CONSUMER-FOCUSED MODEL**

Medical aesthetics is distinguished by its consumer-focused approach. It seamlessly combines biopharmaceutical innovation with a payment model that doesn't rely on third-party payer reimbursements. This unique setup makes it particularly attractive to investors seeking opportunities outside the traditional pharmaceutical sector.

**2. RAPID INNOVATION**

The pace of innovation within the medical aesthetics field is relentless. This continuous drive for innovation has led to the introduction of new products, increased accessibility, and an ever-expanding consumer base, presenting enticing prospects for investors.

**3. NAVIGATING MACROECONOMIC CHALLENGES**

Investors are well aware of the influence of challenging macroeconomic factors, such as inflation, on consumer spending and how these dynamics can impact the performance of aesthetic products.

**4. INVESTOR PREFERENCE FOR CONSUMER-FACING COMPANIES**

Public investors tend to gravitate towards consumer-facing companies in the medical aesthetics domain. These companies are perceived as more sustainable and resilient, primarily because they are not subject to the uncertainties surrounding drug pricing or reimbursement that often haunt biopharmaceutical firms.



**5. MARKET PERFORMANCE & VALUATIONS**

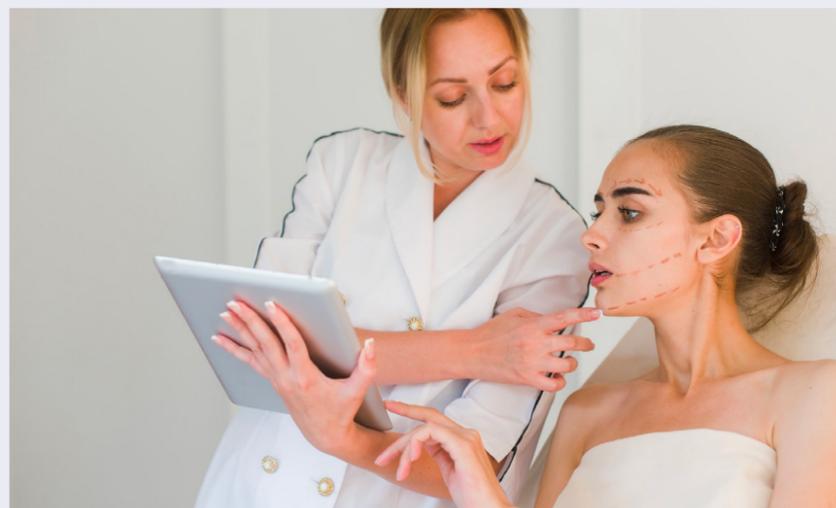
Consumer-focused enterprises in the aesthetics realm have a track record of outperforming broader market indices. What's more, they often command premium valuations compared to their biopharma counterparts, underlining investor confidence and preference for this particular segment.

**6. INVESTOR PERCEPTION OF FACIAL AESTHETICS**

Within the medical aesthetics market, the perception of products varies. Neuromodulators, exemplified by Botox®, are viewed as recession-resistant, whereas dermal fillers are approached with more nuance. This divergence in investor perception leads to different investment strategies and expectations within the sector.

**7. CONCERNS & FOCUS AREAS**

Investors harbor concerns about increasing market competition, potential pricing erosion, and the broader economic trends that could impact the medical aesthetics field. At the same time, they remain keenly interested in the expansion of product offerings, reaching a wider demographic audience, and the prospects for mergers and acquisitions (M&A) in the industry.



**8. EXPECTATIONS FOR THE FUTURE**

Despite potential near-term economic headwinds in 2023, the long-term outlook for the US medical aesthetics sector remains robust. Factors such as demographic expansion, ongoing innovation, and market recovery are anticipated to propel growth in this resilient industry.

In conclusion, Mr. Amsalem underscores the favorable view held by public investors towards the US medical aesthetics industry, even in the face of short-term economic challenges. The sector's unique blend of innovation and a consumer-focused business model continues to attract attention and investment, making it a compelling and promising area for potential growth and financial success.



In a roundtable discussion of distinguished executives and senior officers from leading companies, the future of the healthcare aesthetics industry is the center of attention. Their insights shed light on the trends and challenges that await on the horizon.

**The Vision Of Industry Leaders**

FROM THE GLOBAL MARKET SUMMIT DURING IMCAS WORLD CONGRESS 2023

3

### THE IMPACT OF ECONOMIC DOWNTURN ON THE HEALTHCARE AESTHETICS INDUSTRY

Acknowledging the recent hurdles presented by the pandemic, global conflicts, and inflation, these leaders chose to shine a light on the commendable resilience demonstrated by the cosmetic professional market. Brands with a medical-grade designation and those exclusively available through clinics have recorded substantial growth. This tenacity can be attributed to an interplay of factors, encompassing evolving consumer inclinations influenced by the sway of social media and a maturing population grappling with mounting pathologies.

The consensus among the panel was unmistakably optimistic: the healthcare aesthetics sector holds a bright future, contingent on the continued innovation and adaptability of cosmetic companies and professionals to cater to the evolving demands of their clientele.



### THE FUTURE OF THE ACTIVE SKINCARE COSMECEUTICAL MARKET

In the discourse surrounding the active skincare cosmeceutical market, the spotlight firmly rested on its potential for significant expansion, with a significant proportion of consumers yet to explore facial beauty treatments. This demand necessitates an increased number of injectors, paired with heightened competition among them to effectively serve this expanding consumer base.

The panelists underscored the dynamic growth witnessed in both the physician-dispensed and direct-to-consumer segments of the skincare market. They perceive a unique opportunity in merging energy-based devices with physician-dispensed skincare to enhance patient outcomes. An interesting tangent also emerged as they contemplated the growing significance of addressing skin health, not solely focusing on aesthetics, particularly for patients seeking remedies for dermatological conditions.

### THE FUTURE OF THE DEVICE MARKETPLACE AND ITS IMPACT ON PURCHASE METHODS

Executives delved deep into the evolving business paradigms governing the device marketplace. Their collective forecast painted a picture of perpetual innovation in these models, offering diverse avenues for accessing and utilizing medical devices. Concepts like leasing, rentals, per-use payment structures, and the potential involvement of intermediaries in facilitating these arrangements were probed and deliberated upon.

Notably, the predilection of private equity firms to keep capital equipment off their financial books was cited as a potent driver for innovation. The executives also introduced the notion of Centers

for Excellence and the elevated efficiency of device utilization as pivotal factors poised to shape the future of the device marketplace.

### THE FUTURE OF DERMAL FILLERS AND NEUROMODULATORS IN THE AESTHETIC MARKET

In the dialogue, the central focus pivoted around whether hyaluronic acid fillers would continue their dominion over the aesthetic market in the years ahead. The consensus stood in favor of hyaluronic acid's unwavering leadership. Its robust safety profile, innate presence in the dermal layers, and the presence of an antidote (hyaluronidase) to address potential complications render it a consummate choice.

Moreover, the executives placed a strong emphasis on the ongoing research and development efforts directed towards crafting specialized fillers tailored to distinct facial areas, underscoring the perpetual pursuit of innovation.

With regard to neuromodulators like botulinum toxin, the panelists articulated the necessity of maintaining elevated standards, investments in patient and physician education, and a steadfast avoidance of price-driven competition. They highlighted the pivotal role of innovation, patient education, and unwavering adherence to high standards as the bulwarks guarding against commoditization and price-centered rivalries.

In summation, the dialogue reinforced the indispensable need for sustained innovation in both device business models and aesthetic products to effectively cater to the evolving needs of the industry and its discerning clientele while upholding the gold standards of safety and efficacy. The future of healthcare aesthetics is a realm where adaptability, innovation, and unwavering commitment to excellence shall reign supreme.

Last but not least, meet the pioneering startups that are at the forefront of groundbreaking innovations, reshaping the practices of dermatology, plastic surgery, and aesthetic care. Within the realms of healthtech, medtech, and biotech, a multitude of startups are blazing a trail with their innovative solutions. Since 2018, the IMCAS World Congress has served as a global stage for startups in dermatology, plastic surgery, and aesthetics to introduce their cutting-edge products and concepts to an international audience. At the heart of this congress lies the "Innovation Tank," a thrilling competition that offers upcoming startups a unique opportunity to showcase their latest innovations before a distinguished jury of executives, investors, and medical professionals. Discover the exceptional winners of the coveted 'Innovation of the Year' Award and delve into their game-changing innovations.

# 4

## Pioneers Transforming The Industry

FROM THE GLOBAL MARKET SUMMIT DURING  
IMCAS WORLD CONGRESS 2023

# Winners of the “Innovation of the Year” Award

2018



**PB & B**

PB&B developed a novel technology for plastic surgeons to increase the volume of fat cells and fatty tissue, an effect allowing plastic surgeons to model the face and the body with an injection. This is done by increasing the volume of the fat cells that are already present with lipids. It makes the process not only non-surgical but also completely natural – it is the patient’s own tissues that provides the end result.

*“If you look at fillers in the market, you’re injecting biodegradable material which slowly breaks down or stimulates collagen.*

*None of these products – and actually, no other technology – has figured out the way to target the fat directly and enhance its volume. This is where we came in.*

*We’ve decided to use the body’s own system and all its molecules to enhance volume of fat cells in a targeted, localized way with an injection.”*

**ANTHONY AHO, CEO**

2019



**CHERRY IMAGING**

Cherry Imaging’s cutting-edge camera and technology brings long-awaited scientific data to the hands of physicians for accurate, objective, and traceable treatments on both face and body. This imaging platform combines a powerful, easy-to-use 3D camera with innovative Trace™ software that together can objectively measure changes in skin – from scars, fillers, and botox to skin rejuvenation and full body scans. The lightweight, handheld camera captures thousands of three-dimensional images from multiple field views and angles, all within a single, one-click scan. The images can be captured from wherever the physician is with the patient – no lighting adjustments or angling necessary for easy, portable scanning. Cherry Imaging provides doctors and patient with accurate feedback for comparable analyses over time. Whether the data is being used immediately or for traceability, doctors and their patients and the industry can now see pre- and post-treatment results with a purely objective lens.

2020



**BLOSSOM INNOVATIONS**

Blossom Innovations is bringing to the market a first-in-class safety innovation - “smart” sensing needle, or S3Inject, which alerts the user when the needle has entered a blood vessel. An ideal sensing system for targeted filler injections, it also has the potential to improve aspiration precision and avoidance of critical areas in a wide range of procedures.

With no retraining requirements and a modular design that can be fitted to a variety of needles or cannulas, this new injection targeting system promises to be a significant advancement for a variety of practitioners – and a competitive advantage for many injectable products.

2021



**HAIRSTETICS**

HAIRSTETICS technology is based on sterile cartridges, each preloaded with 25/12 synthetic hair implants, that are simultaneously implanted.

HAIRSTETICS implants have both the anatomical size and the appearance of the natural hairs, and are made of highly biocompatible materials (which are commonly used by surgeons and interventional cardiologists). HAIRSTETICS have already launched their product in Israel, and recently received a medical CE certification and started initial sales in Paris and France.

2022



**AVAVA**

AVAVA has developed an FDA approved, cutting-edge laser that delivers energy at any depth using focal point technology. This proprietary delivery system spares epidermis, unlocking safe and effective treatments for all skin tones. The AVAVA technology is pre-commercial.

*“We will continue with multiple clinical studies while preparing for commercial manufacturing. Starting late 2022 and into Q1 of 2023, we will manufacture devices for an initial limited launch in practices with diverse demographics.”*

**IRINA ERENBURG, CEO**

2023



**FASTOX PHARMA**

Fastox is a Swiss-based biotech created by seasoned experts in pharmaceutical development and in botulinum toxin (BoNT/A). In their current products, Fastox is combining BoNT/A toxin with a booster called POSI (Post Synaptic Inhibitor) to create a faster onset toxin effect for a longer duration.

*“Our research team discovered a unique way to enhance botulinum toxin’s activity with no effect on the fundamental properties of BoNT. We enable BoNT to enter the motoneuron in a quicker way, allowing more of the toxin to penetrate and to cleave SNAP 25. This preclinical work has validated the use of FTP-501 with the key BoNT products marketed worldwide.*

*We are currently preparing for a phase I/II clinical trial with FTP-501. Our proprietary formulation, when combined with botulinum toxin products (BoNT), demonstrated a faster onset effect and a longer duration of action.”*

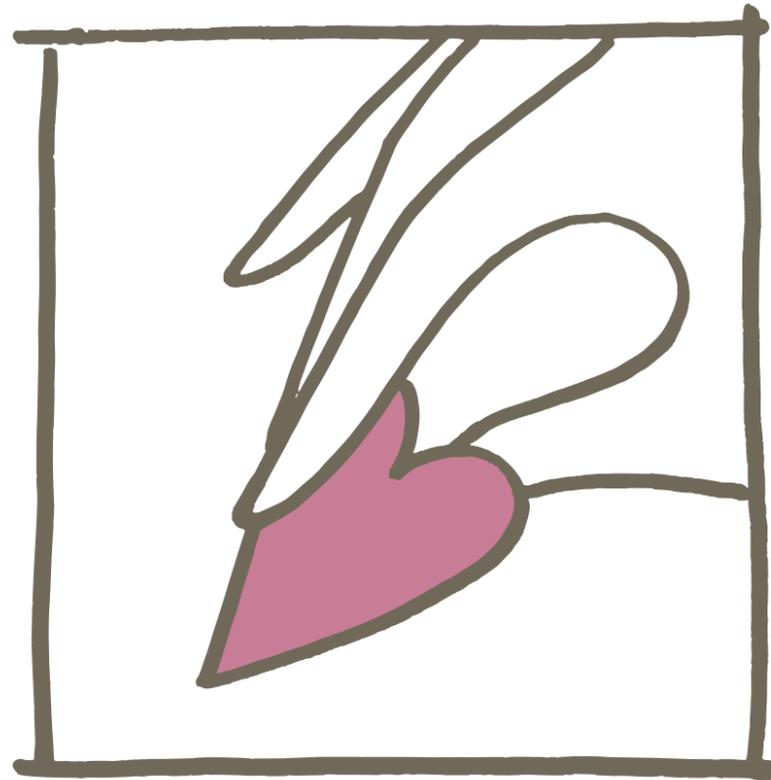
**NATALENE HOEPFFNER, VP OF BUSINESS DEVELOPMENT**

The Global Market Summits are full-day modules that take place during IMCAS World Congresses. The summit is comprised of two distinct chapters: La Tribune and the Innovation Tank. La Tribune Parts 1 and 2 feature sessions and panel discussions by executives of renowned companies and medical experts. They focus on the market trends and outline strategies for the forthcoming year. The Innovation Tank hosts a competition among cutting-edge startups, offering an exclusive glimpse into the emerging technologies. Access to the Innovation Tank session is restricted to physicians and to The Innovation Tank’s sponsoring companies only.

Discover the latest market strategies and revolutionary game changers of the year, all during the Global Market Summits at the next IMCAS World Congress! ■

*Sources: The Global Market Summit during IMCAS World Congress 2023, with additional interviews with the “Innovation of the Year Award” winners.*

# IMCAS **IMPACT** ✱



## Medicine is evolving and so are we, **sustainably.**

In an era characterized by ongoing expansion in aesthetic medicine, the need for conscientious change within specialty education has never been more important. IMCAS is proud to be a global leader of innovation and learning, offering the latest medical advancements in dermatology, plastic surgery, and aging science to promote educational longevity and lasting change.

Sustainability in specialty medicine represents a fundamental shift in the way we prepare the next generation of healthcare specialists and our consideration of future treatment methods. This shift, which integrates clinical ethics

and social responsibility into the very core of medical training, is a powerful response to the shared challenges facing both the aesthetic healthcare sector and specialty practitioners. At its core, IMCAS aims to be an educational institution that addresses this through the curation of relevant, research-based programs that are inclusive and responsive to the needs of practicing communities today and for years to come.

Each IMCAS event and platform is curated to make an IMPACT that is transparent and community oriented. Here's what we are doing to make this a reality.

## SCIENTIFIC IMPACT

We continue to offer top-tier educational content centered on medical ethics, longevity treatment, inter-specialty and inter-generational practice, safe methods, and complication management. We maintain all healthcare compliances under Ethical MedTech and the Council for Continuing Medical Education and encourage the exploration of sustainable topics.

## ECO IMPACT

For 2024, our team is promoting a more ecological gathering by working with local caterers and material suppliers to limit event waste, source more recyclable and digital products, track our carbon footprint, and encourage our logistic partners to do the same. We pledge to promote all reusable products by 2025!

## COMMUNITY IMPACT

The medical community is the lifeblood of the IMCAS organization. This year we hope to expand the efforts of our scientific unity by strengthening the opportunities of our global physician network. For 2024, we are launching the IMCAS Foundation to offer research visibility and grant funding to make innovation more accessible.

## OUR CORE MISSIONS ARE BASED ON 4 PRINCIPAL AREAS...



Through these objectives we hope to build a strong scientific institution that bridges the dermatology and plastic surgery specialties to inspire a better, stronger, and safer practicing climate. ■

# ADVICE FOR YOUNG PHYSICIANS

## The Path to Success:

### PEARLS OF WISDOM FOR EMERGING PRACTITIONERS

In the ever-evolving realm of aesthetics, experience and knowledge stand as invaluable assets beyond the grasp of textbooks alone.

Modern plastic surgery education has evolved to encompass a crucial fusion of both surgical and non-surgical techniques. Procedures such as filler and toxin injections, along with laser treatments, now constitute fundamental components of plastic surgery education<sup>1</sup>. Despite comprehensive training during residency, many graduates find themselves grappling with a lack of confidence when it comes to performing aesthetic procedures<sup>2</sup>.

For newcomers stepping into this field, the allure of numerous aesthetic classes, courses, and congresses is undeniable. However, it is crucial to assess if these opportunities truly align with the unique needs of young physicians, as emphasized by Dr. Sami Saad, a board-certified plastic surgeon and former President of the Lebanese Society of Plastic Surgery.

According to Dr. Saad, the aftermath of these significant events often witnesses a surge in complications, potentially stemming from a false sense of security instilled by the abundance of presentations, particularly for complex procedures. Dr. Saad wisely cautions against the assumption that watching a procedure once in a presentation equips one to perform it proficiently.

Amidst the overwhelming array of options in education and events, aspiring doctors must carefully discern whether a curriculum aligns with their specific needs. An essential criterion in this decision-making process is to assess the extent to which these educational platforms emphasize close interactions with experienced experts. Esteemed dermatologists and plastic surgeons, possessing a wealth of wisdom and experience, offer insights that can significantly impact the careers of budding doctors.

The NextGen modules at IMCAS Congresses address this concern precisely. These sessions, tailored for the next generation of dermatologists and plastic surgeons, cover the fundamentals of each discipline through interactive lectures led by top professors in their respective fields.



### MASTERING THE FOUNDATIONS

Dr. Foad Nahai, a world-renowned professor and a stalwart in the plastic surgery domain who has presided over prominent medical societies, observes a new generation of physicians characterized by their tech-savvy nature and a better work-life balance. However, he emphasizes that their eagerness for quick results, especially in terms of building a practice and career, should be tempered with the understanding that reputations and practices are not built swiftly. He advises young physicians to work diligently, emphasizing that success and practice growth are gradual processes.

Dr. Saad echoes this sentiment, urging young physicians to prioritize mastering the theoretical foundations of their practice. For those drawn to specific procedures, he suggests seeking guidance from specialized professors to learn in-depth before applying this knowledge to patient care.

### MENTAL AND PHYSICAL PREPARATION

Dr. Gene Tiongco, an accomplished plastic surgeon who wears countless hats, ranging from the president of the Philippine Association of Plastic Reconstructive and Aesthetic Surgeons (PAPRAS) to a passionate marathon and triathlon athlete, points to a parallel he sees between running and the necessities in plastic surgery. Emphasizing the importance of training, he says that if you neglect focusing on your training, you'll have dismal results. Thorough preparation is key in order to be ready for whatever may come, be it in the operating room or out in the world. With marathon and triathlon conditioning, you prepare yourself physically but also mentally, as it sharpens and toughens you. This same thinking can be applied to your work.

### FOCUS FOR EXCELLENCE

Interest and specialization emerge as key themes in the advice offered by experts. Dr. Steven Cohen, an internationally recognized board-certified plastic surgeon in San Diego, advocates passionately pursuing one's interests. In a world that values specialization, dedicating oneself to a specific area can significantly contribute to professional excellence.

Similarly, Dr. Alexander Aslani, a distinguished plastic surgeon known for his expertise in body surgery, particularly Brazilian Butt Lift (BBL), emphasizes the advantages of focusing on a specific area of expertise. He advises against attempting to master everything, suggesting that true proficiency comes from a passionate approach. According to Dr. Aslani, true proficiency and growth stem from a dedicated focus, ultimately leading to increased patient trust and caseload.

### DREAM ON

And to all students of the field, Dr. Patrick Treacy advises to persist in pursuing their dreams despite setbacks. Drawing from personal experiences, he highlights overcoming challenges like facing a HIV-positive needlestick in the days before any treatment, being a prisoner of Saddam Hussein, and funding medical school through unconventional means. His message is clear: in the face of the temptation to give up, double down on your dreams. Learn from failures, discover your ultimate purpose, and align decisions with that purpose. Live without regrets, finding lessons in every setback to connect with your life's purpose.

The journey towards becoming a proficient and respected physician is a holistic process. It involves not only gaining knowledge but aligning it with practical expertise, dedicating oneself to specialization, building patience for a reputable practice, and pursuing dreams with tenacity. By heeding the wisdom shared by seasoned practitioners, the next generation of practitioners can chart a course towards a fulfilling and impactful career in this dynamic field. ■

# The Curious Case OF A PAINLESS FOREHEAD LUMP

Explore this captivating case study on **IMCAS Alert\***, and discover the profound everyday impact IMCAS Alert can have on your practice.

In June 2022, a concerning case presented itself to Dr. A, a dermatologist practicing in Lithuania. A 52-year-old patient, a familiar face in the domain of Dr. A's clinic, sought a routine botulinum toxin injection targeted at her forehead. This patient had been had frequented Dr. A's practice for the past five or so years, receiving the toxin injection in the same site every half year. However, the usual injection procedure presented an unusual result. Six months after her habitual injection, the patient revisited Dr. A's office with a perplexing problem - a painless lump had appeared on the right frontier of her forehead, precisely where the toxin had been administered. The lump surfaced just days after the most recent injection.

The patient reported that, in general, the injection on the right forehead seemed to exhibit a later onset of action compared to its counterpart on the left. Despite the customary six-month interval since her latest procedure, the lump on the forehead had not dissipated. Upon examination of the area, Dr. A remarked that the frontalis muscle moved evenly. Subsequently, Dr. A performed an ultrasound which revealed a subcutaneous layer that was thicker in this zone, along with what looked like adipose tissue and gel-like fluid. It was a peculiar revelation, especially since neither Dr. A

nor any other practitioner had administered any fillers to this area. As a precautionary measure, tacrolimus ointment was prescribed, and a return visit was scheduled three months later. Dr. A considered a supplementary course of clarythromycin, but the patient remained pain-free, and the ultrasound findings offered no semblance of an abscess. For more insight into the matter, Dr. A turned to IMCAS Alert seeking advice from the physician community on the forum to decipher the cause, and what it could mean for future injections in the forehead for this patient.



“The lump surfaced just days after the most recent injection.”

Courtesy Image, IMCAS Alert Member

**Dr. Alain Michon (MD, Canada)**

I recommend a formal US or MRI. Likely a simple lipoma / cyst. If there are no signs of infections, antibiotics are unnecessary. If it is a benign lesion, future toxins should not be a problem.

**Dr Fadi Hamadani (Plastic surgeon, Palestine)**

Thanks for sharing dear colleague. Most commonly this is the result of the diluent more than the toxin.”

**Dr. Juliah Tbarani (MD, Ireland)**

Some patients can develop lumps and bumps after botulinum toxins injections, especially in those with very strong folds on the forehead. Also advise patient to update you if there's any new signs and symptoms

**Prof. Berthold Rzany (Dermatologist, Austria)**

“I agree a lipoma or cyst or an old hematoma (maybe she bumped her forehead?) - has nothing to do with the tox! - I would go for a biopsy if desired, otherwise just watch it.”

At 12:56 PM, Dr. A submitted a post on the forum concerning her case. The community rose to the call within minutes with sharing reassurances and similar experiences.

Reassured, Dr. A decided to monitor the suspected lipoma, allowing time for potential changes unless the patient reported any concerns. Within two months, the lump noticeably decreased in size. A follow-up ultrasound conducted by a radiologist showed promising results—there were no gel-like inclusions, and the subcutaneous tissue appeared normal, albeit slightly thicker on the side where the lump had been compared to the healthy side.

At the patient's request, Dr. A administered botulinum toxin to her forehead, being careful to avoid injecting directly into the area where the lump had previously been. Two weeks after the treatment, the patient returned and expressed satisfaction. The new injection had effectively relaxed the frontalis muscle, and the reduced lump was now barely visible.■

**\*What is IMCAS Alert?**

It's a forum on IMCAS Academy that is accessible for free for all physicians. Users can post a complication or clinical case, and receive advice within less than an hour from the Alert forum advisers comprised of renowned specialist experts, as well as the community of IMCAS Academy physicians. Head to [imcasacademy.com/alert](https://imcasacademy.com/alert) to discover the practical and powerful tool.



“Within two months, the lump noticeably decreased in size.”

Courtesy Image, IMCAS Alert Member

# SOCIAL MEDIA IN YOUR CLINIC

Dr. Cartier 🙋, do you think uses of social media in your clinical practice or with your patients is **compliant** with the Hippocratic oath?

## THEY ASK & HE ANSWERS!

DR. CARTIER CONSIDERS THE ETHICAL DILEMMAS FACING SPECIALTY CLINICIANS TODAY AND OFFERS HIS INSIGHTS WITH SOME OF OUR IMCAS EXPERTS

Dear Dr. Cartier

**Even though** it has no legal value, the Hippocratic Oath is considered one of the founding texts of medical ethics. It has and remains a guarantor of correct action. This cornerstone reminds us that all people, their autonomy, and their wishes must be respected without any discrimination according to their status or beliefs. However, respect does not mean acceding to all requests, especially in the world of aesthetics. This is especially important when considering the power of social media and how it can influence the eye of our patients.

We have already seen media influence increase tenfold with a variety of objectives outside individual respect and correct procedural outcomes. As physicians we must be mindful of this and increase our listening skills to understand the true needs of our patients. To maintain a modern-day compliance with the physician's oath, it is important to build a strong line of communication between the patient and the provider to ensure the delivery of accurate and inclusive information and optimal treatment satisfaction.



**DR HUGUES CARTIER**  
DERMATOLOGIST  
FRANCE

**The** Hippocratic Oath has remained "an expression of ideal conduct for the physician", but the world has changed much since its creation. Whether a plastic surgeon tweets, posts pictures and videos on Instagram, or keeps it original with Facebook, there's a strong possibility that social media has impacted the way that he/she practices medicine or interacts with patients. Social media posts offer the potential to promote individual and public health, as well as professional development and advancement, so I find that the ethical and legal duty to protect patient confidentiality applies more to the responsibility of the social media sites and platforms.

**I agree!** Social media continues to grow as a leading source of consumer medical information and is a strong marketing tool that savvy millennial and GenZ cosmetic patients use to discover new treatments, trends, and find an aesthetic physician. It is a great way to highlight treatments you are offering, show realistic before and after photos, and educate patients about procedures, including benefits, risks, downtime, and expectations.

It is a powerful tool which patients can use to educate themselves about cosmetic procedures. I know physicians wish to highlight their before and after treatment results, but I think it is important to not downplay the potential risks of elective, cosmetic procedures and to highlight the importance of seeing and talking with a physician who is board-certified and qualified to perform these cosmetic procedures.



**DR ARIS STERODIMAS**  
PLASTIC SURGEON  
GREECE

**Yes!** The use of social media in cosmetic dermatology aligns with the Hippocratic Oath when employed responsibly, ensuring patient privacy, maintaining professionalism, and providing evidence-based information. Social media is here to stay, so the reconsideration of modern-day treatment and patient care management is a must. However, social media has made significant changes in the dynamics of communication, educational approaches, and privacy concerns. Therefore, our new approach should address all these issues while upholding ethical standards to the best of our ability.



**DR BRIAN HIBLER**  
DERMATOLOGIST  
UNITED STATES



**DR. DIALA HAYKAL**  
COSMETIC DOCTOR  
FRANCE



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Courtesy of **Anil Rajani, MD**  
2 sessions - 6 weeks apart | Full face with 5 tubes | 9 to 10cc total volume  
AFTER photos: 15-month follow-up based on the last session

# INNOVATIONS IN MEDICAL AESTHETICS

## AELABS AND THE FUTURE OF NATURAL SKIN REJUVENATION

*The* medical aesthetics industry is projected to experience significant growth in the near future, primarily due to the increasing demand for natural skin rejuvenation treatments. In this dynamic landscape, Aesthetic Experts Laboratory (AELABS) stands at the forefront, offering innovative products that are set to revolutionize aesthetic practices.

As the industry embraces bio-stimulators and natural alternatives for volume replacement and skin rejuvenation, AELABS's commitment to delivering the best possible results to patients is more relevant than ever. AELABS's flagship product, ezGEL ([ezgel.net](http://ezgel.net)), has already made waves in the USA, and its ability to improve patient outcomes and expand market potential is set to reshape the field of medical aesthetics. In a world where patients are increasingly seeking safe, effective, and natural solutions for facial rejuvenation, AELABS's products stand out as

the premier choice for confident practitioners worldwide. With unparalleled European quality standards, AELABS is dedicated to advancing the field of medical aesthetics and addressing the unique needs of practitioners in this rapidly evolving landscape. Join us on a journey of innovation and excellence as we navigate the exciting trends shaping the future of medical aesthetics.

**Introducing ezGEL**, the groundbreaking 100% autologous regenerative and volumizing gel that offers infinite new possibilities in the use of blood concentrates!

After starting a revolution in the USA, ezGEL is making waves across the seas to become an international sensation! This revolutionary treatment uses the patient's own blood to stimulate collagen growth and improve skin texture and elasticity, providing natural-looking results. ezGEL provides a safe, effective, and natural solution for facial rejuvenation. It can treat volume loss, adjust symmetry, rejuvenate skin, stimulate collagen production, and reduce signs of aging like wrinkles, fine lines, and loose skin, as well as treat acne scars.

## OUR PRODUCT HAS BEEN WIDELY ACCLAIMED BY INDUSTRY EXPERTS! SEE WHAT THEY HAVE TO SAY ABOUT IT

"ezGEL System has been a fantastic addition to my practice. We not only use it with fillers and neuromodulators but have also combined it with microneedling and fractional resurfacing. It is easy to incorporate into our clinic protocols but best of all are the results we are seeing. It is now a top requested service and has replaced PRP."

DR. ANIL RAJANI, MD

"ezGEL System has been an amazing addition to our aesthetic practice! Our patients love that it is 100% natural with no additives. We love that it forms a gel and contains very high concentrations of platelets, fibrin, and white cells. We are routinely using it to boost our hyaluronic acid filler injections, during microneedling and after ablative laser resurfacing procedures. We have also implemented PRF into our hair stimulation program and have seen promising early results. I have even incorporated PRF in my surgical practice and have been using it after face and neck lifting procedures and rhinoplasties."

DR. KIAN KARIMI, MD, FACS

## MESOMEDICA: CE CLASS III INJECTABLE MESOTHERAPY COCKTAILS

**The MesoMedica line ([www.mesomedica.com](http://www.mesomedica.com)) has grown to become one of the leading aesthetic mesotherapy brands on the market with the highest European quality standards.**

Sold in over 50 countries worldwide, MesoMedica has been a trusted name in the field of aesthetic mesotherapy since its launch in 2004. AELABS recently launched a line of injectable CE Class III mesotherapy cocktails, designed with the practitioner's convenience in mind. With a focus on safety, efficacy, and ease of use, MesoMedica has become one of the leading brands in the market, trusted by thousands of medical practitioners worldwide.

## DERMASCULPT: THE REVOLUTIONARY BLUNT-TIP, FLEXIBLE MICROCANNULA THAT HAS TRANSFORMED THE AESTHETIC INDUSTRY!

**DermaSculpt ([www.dermasculpt.net](http://www.dermasculpt.net)) quickly became a significant topic in the non-invasive medical aesthetics industry.** Even with the emergence of competitors, DermaSculpt proudly remains the #1 microcannula in the US, trusted and preferred by a vast number of practitioners. Its unique design and technology allow for more precise, safer injections and less discomfort for patients,

resulting in a faster and more comfortable recovery period. With DermaSculpt, medical practitioners can provide their patients with the highest level of care while achieving optimal results. Join the thousands of satisfied practitioners worldwide who have chosen DermaSculpt as their go-to microcannula for dermal filler injections. ■



**Aesthetic Experts Labs**

<https://ae.expert>

As a leading manufacturer of cutting-edge medical devices, Aesthetic Experts Laboratory is dedicated to developing and marketing the most innovative products in the aesthetics field.

Our core mission at Aesthetic Experts Laboratory is to provide medical practitioners with clinically proven techniques that deliver the best possible results to patients. Our team of experts is committed to advancing the field of medical aesthetics and takes pride in offering a wide range of innovative solutions that address the unique needs of practitioners.

**Visit us at Booth # E142 during IMCAS Paris**



# Work-Life SYMMETRY

Behind the transformative work and pastimes of a Parisian plastic surgeon.

INSIGHTS FROM  
DR. GILBERT ZAKINE

Settling into its coldest season, the city of lights is muted to a monochromatic blend of wintry gray. The working winter blues add even more weight to anyone's busy schedule, making the need for a true work-life balancee is crucial. Tucked away in the overcast Parisian suburbs, a vibrant array of colors is nestled away in a stately family home. This exquisite display hosts an astounding selection of butterflies, cultivated from around the world, carefully stored and arranged in the heart of the home. A grand piano takes center stage amongst the delicate display, but who is its maestro? The esteemed plastic surgeon, Dr. Gilbert Zakine.

A lifelong collector, Dr. Zakine has always held an affinity for butterflies as he recalls catching them as a young child. Fascinated by their ability to transform and create beauty, he began collecting Papilionoidea in his late adolescence and, to this day still holds a profound appreciation. "I have always found them fascinating. It is incredible that we can find such beauty and perfection in nature, with such variety. There are more than 15,000 species of butterflies and more than 150,000 species of moths. So, it's totally incredible. It's the most diverse and complex family of any animal. I am always amazed at their complete transformation process, perhaps suiting my work as a plastic surgeon. Their transformative beauty is so unique both as a species and for each butterfly individually." His selection follows this fascination, as much of his energy is spent observing, cataloguing, and photographing the different varieties.

While the international collection is brimming with a variety of species from various geographical regions, many of the ones collected personally by Zakine come from French Guiana, where he travels regularly to treat patients for his renowned private clinic. During his regular travels to South America, Zakine unwinds after a long week of treatments by taking time to spend his Sunday in the local jungles to marvel at the native butterflies.

For butterflies intended for preservation, Zakine reveals there is a key step in the collection process to preserve the fragile specimens and ensure their colors remain pristine. "I have a net to catch them and sometimes I use a banana as a lure, which attracts them using the smell of fruit. For some species, including the beautiful Morpho butterflies, of which there are more than 80 species, you can use a lure that matches the same blue metallic color as their wings. These are the primary trapping methods, but again, I spend more of my time observing and capturing photos than the creatures themselves." Once caught, however, the butterfly display requires the delicate touch of a surgeon's hands. "To preserve it, the butterfly must be a little wet and you must be very cautious, given that they are quite fragile, and you absolutely cannot touch the wings. You lay them out symmetrically so that they preserve in a nice shape, again without touching the wings, and after several days of drying, they can be pinned in the display box."

ARTICLE CONTINUES



“

I think the secret to balancing proper work and an interesting life is passion.”

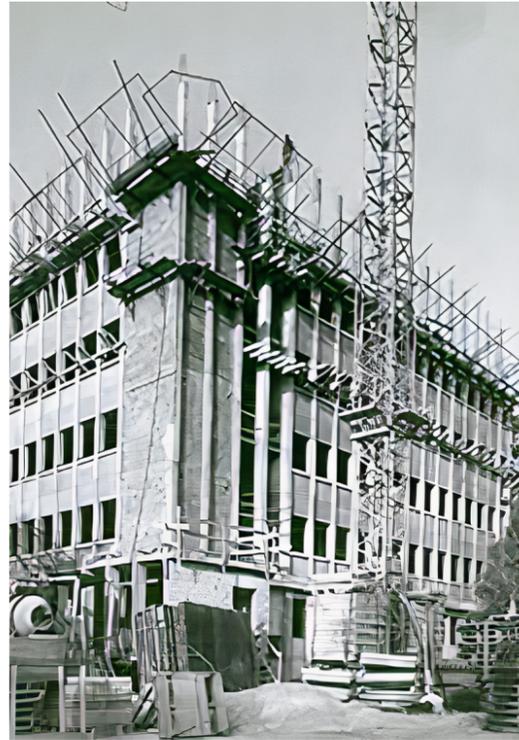


Zakine spends much of his time amongst his collection while practicing piano, another hobby that he takes great joy in each evening after his workday is done. A lifelong passion as well, he even admits that between the interpretation and technical points, “it can much more difficult than surgery.” He is also father to two active (and musical) teenagers, placing priority in being an involved parent in their home life as well as their plethora of activities.

His secret to managing it all? Passion. Passion in one’s life and for one’s work, sharing that, “During my workdays, I really sustain myself from the passion I have for my work and the joy it gives me to achieve the best procedural results. For me, this is enough to sustain my energy, as we often do procedures one after the other, so I rarely have time to [take a] break or have lunch in the middle of the day. I think the secret to balancing proper work and an interesting life is passion. If you are passionate, you can make

progress regardless of any obstacle. We must give meaning to our own lives; this is extremely important for long-term happiness and satisfaction. There is no meaning that is truly determined, because we can choose our meaning, so it’s important to take time in our everyday lives for this. I want to help others, to be generous, and to contribute good things to society, and build strong communities. From my patients to teaching to research, and all the work I do, it is all reliant on the way I choose to cultivate and experience my life; one is critical for the other. So, I really try to have the most balanced life that I can. With my schedule, I’m not sleeping a lot. But I’m glad to make progress in my work and my life, I’m very, very happy. And I think that’s it. Passion and pleasure. You can do anything with this.”

A transformative mentality for any busy schedule, and wise words for anyone seeking a bit more color and symmetry in their lives. ■



# The legacy of Fer à Moulin SCHOOL OF SURGERY

INSIGHTS FROM

DR. PHILLIPE KESTEMONT & PROF. RAPHAEL SINNA

## MEDICAL LEGACIES REVIEW

The illustrious **Fer à Moulin** School of Surgery, steeped in the rich history of Paris, serves as the prestigious venue for live dissections during IMCAS sessions. Collaborating with an institution so deeply intertwined with French history is both a **privilege** and an **honor**.

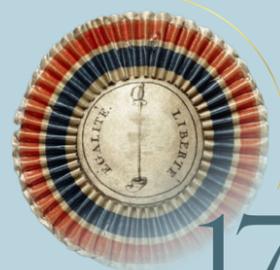


Courtesy Images, Image on Left: Fer à Moulin institute Website, <https://ifm-institute.org/en/fer-a-moulin-history>  
Image Above: IMCAS World Congress 2023 Anatomy and Cadaver Dissection



# 1672

The institution's history can be traced back to 1672 when the Hôtel-Dieu of Paris and the Trinité hospital jointly acquired a piece of land on the outskirts of Saint-Marcel. This land, which included three houses with gardens and outbuildings, was cleared to make way for the establishment of the Clamart Cemetery.



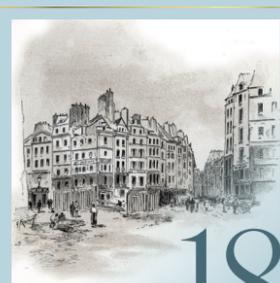
# 1789

The Clamart Cemetery became the final resting place for individuals who had passed away at the Hôtel-Dieu, as well as those from other hospitals and individuals sentenced to death, including those executed during the tumultuous years of the French Revolution.



# 1970

In 1970, the Anatomy amphitheater was transformed into the AP-HP Surgery School, and the contemporary building we see today was erected. The name "Rue du Fer-à-Moulin" has roots dating back to at least the 16th century, alluding to a metal component facilitating the rotation of an axle within a grinding mill ("moulin"). This name also carries heraldic significance, akin to coat of arms symbolism.

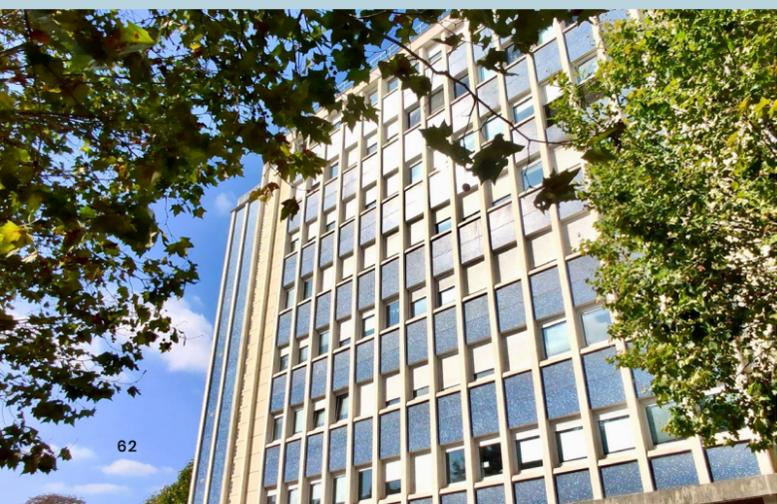


# 1849

To alleviate overcrowding at the faculty of medicine, the construction of special amphitheaters for student dissections on the same site was undertaken. However, these early structures were eventually replaced by the Anatomy amphitheater in 1832, which later became affiliated with the AP-HP in 1849.

# 2012

Since 2012, the Fer à Moulin School of Surgery opens its doors to IMCAS experts during the World Congresses, offering live cadaver dissections across two modules: the Anatomy on Cadaver Workshops with live cadaver dissections and live injection procedures, and the Live Augmented Surgery & Anatomical Dissections.



TO PROVIDE AN EXCLUSIVE BEHIND-THE-SCENES GLIMPSE INTO THE DISSECTION PREPARATIONS FOR THESE TWO ANATOMY WORKSHOPS AT THE FER À MOULIN SCHOOL OF SURGERY, THE TEAM SOUGHT INSIGHTS FROM DR. PHILIPPE KESTEMONT AND PROF. RAPHAEL SINNA.



“Before any application on living subjects, mastering techniques on anatomical specimens is essential. It sets the foundation for the responsibility of applying these skills to patients who entrust us with their care.”

- DR. PHILIPPE KESTEMONT



Could you walk us through the initial steps in preparing for cadaver dissections?

Dr. K: Certainly. The first crucial step involves a thorough examination of the scientific program and the participating panel. This helps us tailor our techniques to the specific subjects addressed and the expectations of the medical professionals involved. If the industry is a part of the session, we align our dissections with the products in use, such as botulinum toxin, fillers, threads, and more. On a technical level, we approach our dissections with the same precision as surgical preparations, ensuring an aesthetically pleasing visual to honor both donors and viewers.

Prof. S: To add to that, analyzing surgical videos filmed for the sessions is paramount. It helps determine the key steps of the video, guiding us on what aspects are crucial to showcase during the cadaver dissection.

What is the one thing you always strive to show participants during dissections?

Dr. K: The dissection instructor plays a pivotal role as both a theoretical and practical teacher. Before any application on living subjects, mastering techniques on anatomical specimens is essential. It sets the foundation for the responsibility of applying these skills to patients who entrust us with their care.

Prof. S: The dissectors provide a unique perspective by showing what happens beneath the skin. In procedures like injections or surgeries, the depth of anatomical layers remains unseen. The advantage of dissection lies in revealing these hidden intricacies, offering participants a firsthand view of anatomical processes otherwise obscured during live surgeries.

Why is the role of the dissector so significant in cadaver anatomy workshops?

Dr. K: Traditional anatomy education has often been theoretical and descriptive. Our courses embrace a modern, practical approach aligned with the techniques highlighted in the scientific program. Beyond fundamental knowledge, our goal is to provide participants with tips and tricks, fostering an understanding of high-risk anatomical areas and optimizing procedures to prevent potential complications.

Prof. S: Our aim is to show everything typically unseen during a surgical session. Whether it's the intricacies of an injection or the step-by-step anatomy of a surgery, our dissections bridge the gap, offering attendees a comprehensive understanding of each anatomical layer's role in the overall procedure. ■



“The dissectors provide a unique perspective by showing what happens beneath the skin. In procedures like injections or surgeries, the depth of anatomical layers remains unseen.”

- PROF. RAPHAEL SINNA

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# EXOSOMES

**The new kid on the block in medical aesthetics, exosomes appear to be the latest cure-all for a plethora of skin conditions. Emerging as a promising contender in the pursuit of more effective and personalized dermatological treatments, these tiny vesicles are gaining recognition for their unique ability to influence cellular communication, tissue regeneration, and overall skin health.**

## Carrying THE FUTURE?

Unlike more traditional skincare approaches, which often only target surface-level concerns, exosome-based treatments delve deeper into the intricacies of cellular interactions. Packed with bioactive molecules such as proteins, lipids, and genetic material, they play a pivotal role in cell signaling and regeneration. In dermatology, this translates to a potential breakthrough in addressing a myriad of skin conditions, from aging and wrinkles to scars and inflammatory disorders.

Researchers' and skincare professionals' interest in exploring the diverse applications of exosomes in dermatological treatments continues to rise. The versatility of exosomes opens doors to specialized solutions for individual skincare needs, promising a more nuanced and effective approach to addressing a variety of skin concerns. Moreover, the use of exosomes in dermatology aligns with the growing demand for minimally invasive and natural treatments. As holistic well-being continues to rise, patients are seeking alternatives that promote healing from within. Exosome-based therapies present a compelling option, harnessing the body's natural regenerative mechanisms to enhance skin health without resorting to more intrusive procedures.

In essence, what exactly are exosomes and how far can this apparent fountain of youth be used in current and future treatments? Researcher and dermatologist Dr. Todd Schlesinger shares his wealth of knowledge on just what are exosomes, his insights on its current uses, and a verdict on the future purpose of this biologic tool.

"Exosomes are carriers. They carry signals, they carry information from one cell to another, one tissue to another and act as a primary intercellular communication method for the body. To do so, exosomes are excreted through the cell membrane from one cell to another, meaning they are produced by almost every cell and that they can travel anywhere in the body. They are produced in all healthy tissues, but they are produced in diseased states as well (such as:

cardiovascular disease, sepsis, and whatnot). They are very different from stem cells, especially in size, ranging from 30 to 100 microns, which is multiple times smaller than cells and embryonic stem cells, which are usually between 12 and 13 µm.

"The key difference, however, between stem cells and exosomes is that stem cells are living, therefore making them much more difficult to transport. They produce information and exosomes carry it. So, stem cells can be difficult to maintain because they are really a living tissue, they can only be produced in small quantities, and therefore have limited therapeutic potential. Exosomes can be produced in much larger quantities, so they can be lyophilized, stored, transported, and then reconstituted on site before use. They can also be produced in different ways which allows them to be stored in large quantities and then used for a variety of applications.

"Currently exosomes are being used by lots of practitioners for topical use as a cosmetic, and we are seeing huge effects in the skin. We are seeing improvement for scar reduction, improvement for hypertrophic scars as well as keloids, and we are using them a lot in wound healing in post-procedure to improve outcomes, enhance results, and reduce downtime. They are also being used as a pre-procedure primary in place of topical antioxidants, growth factors, and retinoids. If you have a patient that comes in with a lot of sun damage or with skin that is unhealthy to an extent, you don't necessarily want to introduce a procedure that is going to be ablative and require a lot of wound healing. This is where we can consider exosomes to help prepare the skin to increase healing capacity."

But while there is great incentive in considering implementing exosomes pre- and post- procedure, Schlesinger cautions that the extraction process is key. As a precision treatment, this can prove difficult. Despite the variety of methods that exist for obtaining exosomes, sourcing remains a crucial step to consider, and depending on

the individual, certain methods can present as challenges during the extraction process: "Exosomes are derived from different tissues in the body, such as placental tissue, umbilical stem cells, bone marrow conditioned media, adipose tissue, and mesenchymal tissue to name just a few. Different companies are producing exosomes in different ways, and I think that as the science is refined, we'll find that exosomes will be able to be produced in a more selective way, meaning you will be able to better characterize their size and their contents and fine tune the contents to contain specific siRNAs, miRNAs, proteins, or lipids for clean, targeted delivery.

"For now, the extraction process comes mostly from natural tissue. By this we don't always get what we want, and we don't always know what is exactly in the exosomes we get. Mostly, we understand the effects we get and the outcomes we get, so there is still a lot we are learning.

"In a disease state, however, the tissue extraction process is much less effective. In a diabetic wound study (within the mouse model) if you treat a wound or injury with placebo and let the wound heal naturally, and then you comparatively treat with diabetic exosomes, you don't get good wound healing. This is primarily due to the effect of the disease state that also remains present in the exosomes extracted. But if you knockout certain miRNAs that are present in these exosomes of diabetic people, the miRNA knockout gene will remove the exosomes' inhibition to wound healing such as apoptosis or cellular affinity or cellular regeneration. Knocking out this gene, miR-15a-3p<sup>11</sup>, suddenly allows for those exosomes to heal the wounds faster again. So, it indicates there is something to the disease state exosome that can be corrected to produce accessible and healthy exosomes to enhance treatments."

Schlesinger emphasizes that due to the hyper-individual nature of this treatment, product quality and the methods of extraction are crucial, acknowledging that is up to the physician to be well-informed of the companies processing the exosomes of their clinic. "Read about the products themselves and what clinical studies have been done on each of the different products, and look at

how, if any, companies are using them. Also look for companies that have made a little bit more of an attempt to characterize their exosomes, that have a good reputation, and that are able to produce a pure product. You can see if scientifically they've tested a pure product (and therefore can produce a pure product) which indicates they are producing in a clean and certified factory. You want to be sure you are using high-quality, sterile exosomes."

When it comes to selecting the best sourcing, he suggests, "[Physicians should] look to the major players and examine all of them but look at their science to see which one you think you know works best for your treatment applications. We have a bit of an understanding about how different exosomes or different tissues may perform, such as adipose versus bone marrow versus umbilical, etc. Match this with what you know and what you think is a good extraction and sourcing option for you and your patients." While exosomes boast an unmatched potential, he is careful to note that there is still a lot still being studied about the long-term effects of exosome usage, especially with recent research indicating that over time they accumulate within various filter organs. "There are still a lot of variables that are unknown, but following the science will help lead the way." His overall verdict is curiosity, encouraging patients and clinicians who are interested to learn more about safety methods and effectiveness and potential effectiveness.

"I think the verdict on exosomes now is get out there and try what's on the market. What's on the market being used topically, generally the safety has been very good and the currently available products that are on the market really haven't seen any major issues, whatever source they may be from. The FDA is very careful of the use of human derived products, you know, but from what I've seen and from my own experience, there are not any major complications or big red flags occurring from using them topically, post procedure, and things like this.

I think that generally physicians can try them in their practice and see how they work for them and their patients. They can enhance the results and the science that we have so far

from different disease states and dermatology and models that we have are positive. As we continue to study their nature and potential uses, we will see more research coming out which will only improve products on the market. In my opinion, it is more or less safe to try the products that are being marketed."

For physicians who are new to exosomes and interested in considering their use in current treatment, your curiosity is just the beginning. His advice? "Get out there... get out there and learn the different products. Read about them and understand the science behind all the current and potential uses." Education on exosomes is the key is unlocking them as a promising futuristic tool that very well may carry the secret of where science meets beauty. ■

#### NOTE:

Druz A, Chen YC, Guha R, Betenbaugh M, Martin SE, Shiloach J. Large-scale screening identifies a novel microRNA, miR-15a-3p, which induces apoptosis in human cancer cell lines. *RNA Biol.* 2013 Feb;10(2):287-300. doi: 10.4161/rna.23339. Epub 2013 Jan 25. PMID: 23353574; PMCID: PMC3594287.



**Dr.** Todd Schlesinger is a researcher and dermatologist based in the southern United States, specializing in medical and cosmetic dermatology treatments. He studied at University at Buffalo in upstate New York and completed his dermatology training at Cleveland Clinic Foundation. He has studied and practiced Mohs surgery for over 20 years, with a recent focus in inflammatory dermatosis' potential biologic and cosmetic treatments, as well as the noninvasive treatment of various skin cancers. Dr. Schlesinger continues to be very involved as both an active medical speaker and an active member of American Academy of Dermatology.

## Investigating Structure Variations & Gender Morphologies as the Key to Genderless Treatment Trends

INTERVIEW WITH PLASTIC SURGEON & ANTHROPOLOGIST,

DR. LUIZ EDUARDO TOLEDO AVELAR

# Detective, MD

Dr. Luiz Eduardo Toledo Avelar is an established plastic surgeon and anthropologist currently based in Brazil. He is well-published in academic journals on reconstructive surgery, as well as his most recent work on the aging differentiation by human skulls (2017). In addition to his surgery practice, Dr. Toledo is also works as a medical examiner with the Brazilian Police Department and is highly skilled in the identification of human structures for both forensic identification and reconstructive procedures.

He shares his expertise on morphology structural differences by sex and how this plays a significant role in his ability to visualize surgery treatments and ongoing patient work - for both the living and the deceased.

*Based on your recent publication on the aging differentiation of human skulls by sex, what are some of the major morphology differences between male and female structures?*

Dr. TA : When it comes to the skulls, male and female structures are actually very different. We can observe significant dimorphisms within three separate regions of the face: the lower third, the mid phase, and the upper third. Specifically in the lower third, the mandible for man is higher, stronger, and much more robust than the female mandible characteristics. But, generally speaking, the male skull is much more angular whereas the female one tends to be more rounded off.

*In exploring male morphologies specifically, how does masculine structures and the understanding of these structures shed light to beauty and aesthetic outcome?*

Dr. TA : Well, the male has, for example, a forehead that is bleaker than the female one. We have a very important structure just above the cavity (the orbit) that is the supra orbital breast, and this area is much more pronounced in men than in women. The glabella, that is the base of the nose, is very pronounced in man, whereas the female one is just

settled, so it is much less apparent. And the midface has no interior projection in men, whereas for women it typically projects interiorly a little bit more.

When it comes to the lower face we see even more of a difference. The lateral mandible, or the chin, is absolutely different as it tends to be very high in men, bringing a disproportion in the male face. So, when working with male structures I know that by nature, the male face is disproportional because the lower third of the male face is much higher than the other two-thirds. And in standards or beauty, what would be considered a handsome man is a male facial structure that has much more projected and higher lower third.

**Knowing that physically you are working with different bone structures means that you can never ever treat different genders the same way.**

*Why is it important to study these morphological differences in surgical practice?*

Dr. TA : You must consider that these underlying structures are what contribute to final, outward appearances. So, if we have good bone and skull structure then this will absolutely change and influence the external outlook of the of the patient. This is how osteology, and the anthropological

progression of human anatomy can be so relevant for surgeons and physicians. Knowing that physically you are working with different bone structures means that you can never ever treat different genders the same way.

It is also incredibly insightful to the aging process itself, as aging is presented differently within different structures of the face. From our role, it is important to understand what is happening over the course of a human lifetime and how those structures are changing because as surgeons that is where we want to restore and that what we want to reduce.

Through an anthropological perspective, we can understand the bone structures present and the resorption or the bone remodeling that may be needed. This also applies to all the planes as

well, for example the muscular plane (that suffers from its own type of aging process), the fat, and the skin. One often interferes with the other. So, a very strong, male-morphic muscle will interfere with boundary modeling and we need to understand these underlying structures, the variations of these structures (especially in relation to gender variations), and the dynamic of their aging processes to fully see and understand procedural treatment.



*What kinds of procedures do you most often see and use your understanding of dimorphisms and morphology-specific traits?*

Dr. TA : Well, I love to treat people with different clinical needs, and male needs and preferences are different from female ones. So, I often see patients seeking facial treatments to reinforce male or female points (as the structures I previously mentioned) and then to restore the aging process that has occurred to those structures over the course of a lifetime.

For example, if we notice that the person is losing a lot of bone supporting the midface, we know per anatomical standards of beauty we may need to project it a little bit more. It is the same when it comes to the angle or shape of the chin. We are always changing and understanding the aging process and how it shifts our aesthetic conception of underlying bone and anatomy, makes the whole difference.

It is also important to acknowledge that today we are facing much more diversity. It is necessary to ask our patients what they really want, because it is becoming much more common in today's treatment for men who are seeking a female feature, and vice versa. This is something that as skilled aesthetic providers we need to be able to also offer them. Procedures are now becoming more and more genderless. We have different patients, different desires, and different treatment needs. Therefore, we also need to have new products and

techniques, but also a secure structural understanding to visualize and provide successful care for each patient.

*So as aesthetic and plastic surgery trends are becoming much more genderless, how do you think that procedure by morphology will continue to be relevant in the coming years?*

You know, this is becoming tremendously useful for all of us today. I have worked with several transgender patients that let's say had a very masculine structure and as they are changing gender, I need to make them more feminine. So, in this circumstance anthropology can really help.

To achieve the transition of a gendered appearance I know that overall, I just need to make the male face more rounded to make it more feminine. So as procedural providers, even understanding basic elements of structure can be incredibly useful.

*In addition to your medical work, you also do forensic work in Brazil surrounding facial recognition. Can you tell us a little bit more about this?*

Yes, I actually work for the Police Department in Brazil. I'm a medical examiner and I specialize in anthropology to assist and provide body identification. I often work and examine four major profile areas for this position: the ethnicity, age (which can be determined exactly based on the skull), gender, and also the height of the person, so that we can make it easier to identify them the individual in question.

*How do you find your work with the police pairs with your surgery background?*

To tell you the truth, they were supposed to be completely separate professions, but I find that they are often very connected. I have noticed this from the beginning of my work as a medical examiner when I began studying the most common types of deaths after surgery.

When I later went into anthropology, I started to understand the human bone structures in relation to evolution and the aging process and began applying this in my plastic surgery work. I'm always combining and pulling knowledge from both fields and find that this exchange really supports my knowledge for each specialty.■

#### SUGGESTED SCIENTIFIC READ

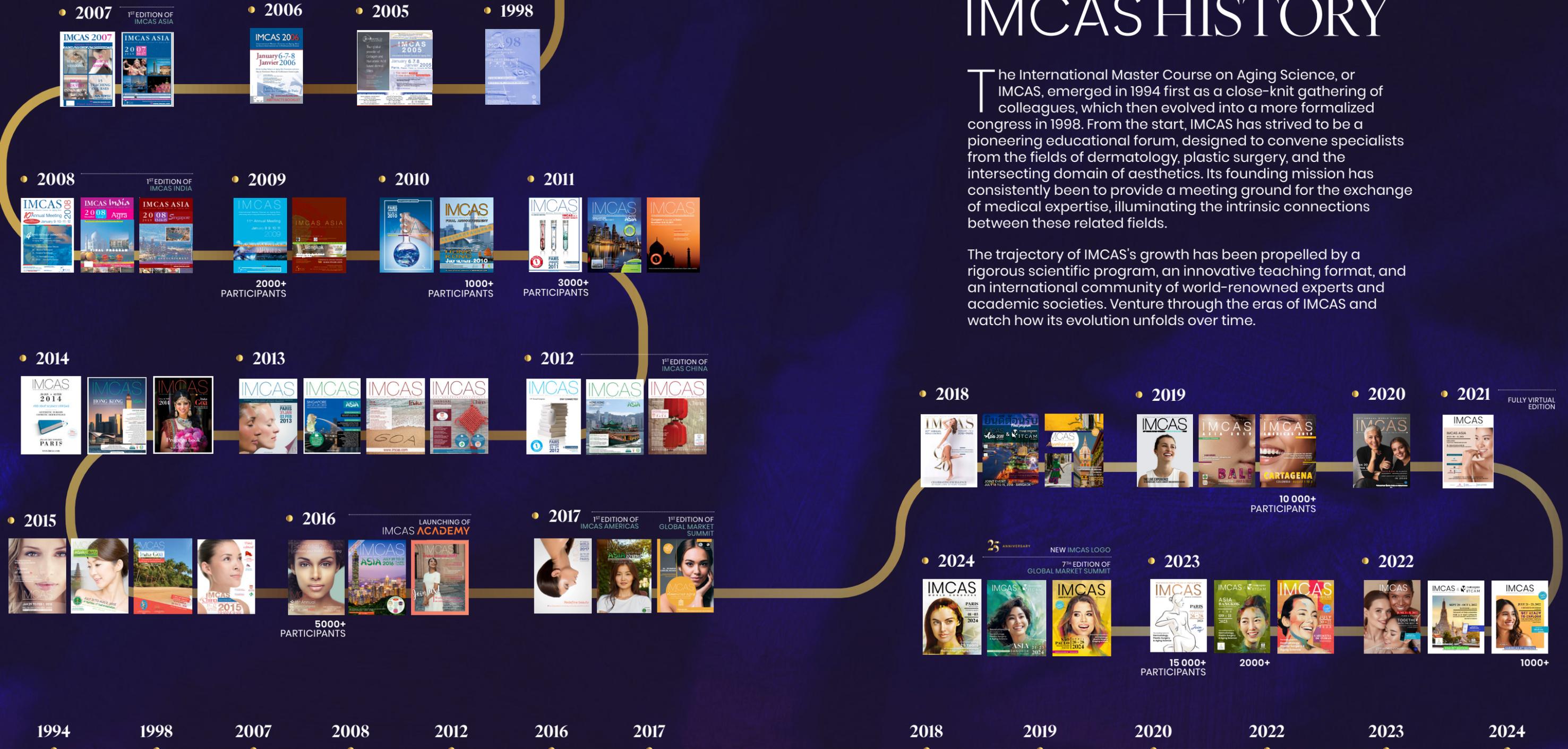
Catch Dr. Toledo's recent case report on "Sexual dimorphisms and hyaluronic acid treatments of male patients (2022)," where he explores the application of dimorphic variations in filler procedure.



# IMCAS HISTORY

The International Master Course on Aging Science, or IMCAS, emerged in 1994 first as a close-knit gathering of colleagues, which then evolved into a more formalized congress in 1998. From the start, IMCAS has strived to be a pioneering educational forum, designed to convene specialists from the fields of dermatology, plastic surgery, and the intersecting domain of aesthetics. Its founding mission has consistently been to provide a meeting ground for the exchange of medical expertise, illuminating the intrinsic connections between these related fields.

The trajectory of IMCAS's growth has been propelled by a rigorous scientific program, an innovative teaching format, and an international community of world-renowned experts and academic societies. Venture through the eras of IMCAS and watch how its evolution unfolds over time.



1994	1998	2007	2008	2012	2016	2017	2018	2019	2020	2022	2023	2024
<p>IMCAS was founded by Dr Benjamin Ascher to build a bridge between dermatology and plastic surgery</p>	<p>The first IMCAS World Congress is formally established and inaugurated</p>	<p>IMCAS "Industry Tribune" established                      Launching of IMCAS Asia held in Bangkok, Thailand</p>	<p>Launching of IMCAS India in Agra, India</p>	<p>IMCAS "Live Anatomy on Cadaver &amp; Injection Workshop" established                      Launching of IMCAS China in Shanghai                      Opening of IMCAS office in Hong Kong</p>	<p>Launching of IMCAS Academy, the e-learning platform</p>	<p>Launching of IMCAS Americas in Cancun, Mexico                      Launching of "IMCAS Alert" forum for complications on IMCAS Academy                      Established IMCAS "Global Market Summit"</p>	<p>IMCAS World Congress celebrates its 20th birthday by reaching the 10,000-participant milestone!</p>	<p>"Live Aesthetic Surgery Course" established</p>	<p>First 100% virtual conference</p>	<p>First hybrid conference</p>	<p>Record-breaking attendance: 15,700 participants at IMCAS World Congress</p>	<p>IMCAS World Congress celebrates its 25th Anniversary!                      First edition of IMCAS Americas in Brazil</p>

# Breaking

## BOUNDARIES

A CONVERSATION WITH **DR. ATCHIMA SUWANCHINDA**  
ON GENDER INCLUSIVITY AMONG PRACTITIONERS IN ASIA

In the ever-evolving landscape of specialty medicine, gender inclusivity has emerged as a pivotal and transformative theme, challenging traditional norms and fostering a more diverse and inclusive approach to beauty and wellness. Today, gender neutral treatment is gaining ground as a new methodology in the pursuit of more natural results. This trend is following suit within the dermatology specialty itself, as the practicing gender gaps continues to close, and women are more represented in specialty medicine. In this exclusive interview, we sit down with Dr. Atchima Suwanchinda, a prominent trailblazing practitioner at the forefront of dermatology in Asia and a central figure of this paradigm shift. With her unique insights and experience, Dr. ASuwanchinda sheds light on the changing dynamics within the field and the crucial role gender inclusivity plays in shaping the future of dermatological and aesthetic treatments. Join us as we delve into her journey, philosophy, and commitment to creating a space where everyone—regardless of gender—feels seen, heard, and empowered in the pursuit of self-expression and confidence.

**H**ow do you find that your work influences your patients, their personal objectives, and/or their overall success?

Dr. AS: I don't think that anyone can deny that the influence of aesthetic medicine is substantial. It can be huge. And I would say that the understanding of the powerful relationship between personal appearance and is self-esteem is very, very important. When the patient feels better about themselves, it enhances their confidence, self-worth, and helps them have a positive self-image. And it is this confidence that significantly influences their overall success in various aspects of their life, like their marriage, their personal relationships, professional careers, and social interactions. This goes to really influencing their overall well-being. So, it affects various aspects of their life in overall quality. Working with patients, I often get to witness this transformation. In my aesthetic and cosmetic work, I am committed to creating innovative and natural results,

and most importantly I want to deliver safe procedural opportunities for the patient. I want to improve lives by merging science and art.

*Do you think that rejuvenative treatments empower men and women as they age?*

Dr. AS: Absolutely. I often observe that the underlying purpose of these treatments is really to restore a renewed sense of self and confidence for the patient. People want to feel that they can age gracefully which only supports positive self-image, and I see today that both men and women are seeking this.

*What do you think is the role of aesthetics in working environments today?*

Dr. AS: Wow, I think it's important. It really has a profound impact on employees to drive to work for you. And self-confidence can stimulate a lot of productivity and a positive atmosphere. Positive energy also stimulates creativity, it can improve focus, it can contribute to better work satisfaction. So, it has a huge return for success and work activities.

*From your personal experience, then what is the medical work environment like for women in Thailand and in Asia?*

Dr. AS: In Thailand and Asia, the medical world is changing for women, increasing female present in various specialty, which is very positive. But there are still some challenges as women still have to much work harder to achieve leadership roles. I think it is still like this everywhere. Even though it's getting better, we still need to keep supporting both men and women in medicine equally, to make it a fair and equal place for everyone. Thailand specifically has seen a huge movement towards breaking down the barriers encouraging gender disparities, and many institutions and organizations recognize the valuable input from women in STEM roles and have stepped in to create more inclusive work environments and initiatives that aim to support people regardless of gender. But we still need to take more initiative to acknowledge the presence of woman in medicine, to challenge stereotypes,

and reinspire new role models for future generations. This is important. Having mentorship programs and organizing conferences to support young people and young women in their professional career can really make an impact on the present platform for women to share their experiences and promote positive change

*Have there ever been challenges that you personally have faced because you are a woman or because of your gender? And if so, how did you overcome them?*

Dr. AS: It's been almost 30 years since I tried to go into plastic surgery, and at that time, they did not allow women to become surgeons. To specialize in plastic surgery, you have to pass as a general surgeon, and they told me that this was not possible as I was a woman. Not because they didn't like me, or because of my skills, but because I am a woman. So I didn't get accepted in the surgery program, but thankfully of course, things have now changed to be much more inclusive.

I continued searching for what I like and through this I've become dermatologist and cosmetic surgeon and am very happy with it. So I think to overcome an obstacle like this, it really required a combination of perseverance and openness. You must be open to learning and still seek the opportunities that are there. And most importantly, you must continue to demonstrate your expertise and the knowledge that you have.

Yes, there will always be challenges and stereotypes, but you must continue to give and consistently deliver high-quality work and foster strong support networks.

*Have there ever been things that you've considered as advantages? And if so, what were they?*

Dr. AS: Well in all honesty, I really enjoy being a woman in my work, for whatever disparity, because this allows me to form a deeper connection with others. If you're talking about patients, being a woman has helped me to facilitate clear and open communications with each individual I work with. This can contribute to a more comfortable environment that allows us to discuss any concerns, so I can give them personalized and more effective care. It is this trust that allows me to truly understand the underlying needs of my patients.

For me, it is fulfilling to connect with patients on a personal level and understand their needs and concerns. You can make such a positive impact on their life, you get to meet people, and really watch the outcomes boost their confidence, solve personal challenges, and assist with their professional development. It brings me such a sense of accomplishment because a lot of times the small work we do can be life changing. Having a positive outlook on life and a positive way of thinking, really cultivates positive things, you—and your patient—just have to believe it.

*As an active mentor within the medical community, what advice would you impart to young men and women entering into aesthetics or dermatology today?*

Dr. AS: Have passion... Have patience, and then in everything you do, have perseverance. Pursue mentorships and growth and commit to ongoing learning because the work we do is constantly changing and developing. Engage with your community, both in practice and in mentorship, and to give people a platform.■



# Enzymatic mesotherapy

## CURRENT TISSUE REMODELLING



Nowadays, there is a widespread concern about aesthetics including reduction of no localized adipose tissue, flaccidity, or cellulitis. This concern is not only for aesthetic reasons, but also for health purposes. Therefore, Mesosystem presents a unique combination of three enzymes: lipase, collagenase, and hyaluronidase (recombinant DNA obtained enzymes), both in liquid and lyophilized forms, clinically tested with brilliant results. When combined and administered simultaneously, these enzymes produce a synergistic effect which reduce adipose tissue, flaccidity, and cellulitis.

Mesotherapy has emerged as an effective alternative to surgical aesthetic treatments, with quick and proven results. This technique is based on the application of intradermal micro-injections of different products, depending on the aesthetic goal. In the aesthetic field, mesotherapy is used with great success to fight skin ageing and fatigue signs of the skin, to treat alopecia and to reduce cellulitis and localized fat. The application through mesotherapy of a unique formulation developed by the research and development department of Mesosystem S.A., demonstrates that CHL lipase® through a combination of recombinant lipase, collagenase, and hyaluronidase (HYAL) enzymes shows exceptional and synergistic results in reducing adipose tissue, flaccidity and cellulitis located in different areas of the body.

### ENZYMES OF AESTHETIC RELEVANCE

The use of enzymes such as Lipase and Collagenase has already been widely used in mesotherapy. In addition, enzymes such as Hyaluronidase has also been employed for tissue remodeling for local fat reduction. In the case of lipase, there is not much literature which describe its use in mesotherapy.



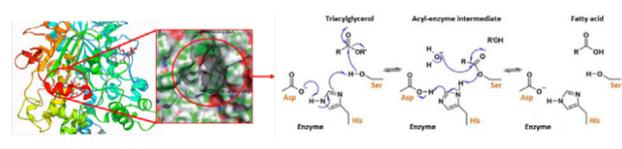
Product presentation: CLH Lipase cocktail – vials of 10ml; and CLH Lipase 1500 U.I. – vials of 1500 UI.

In animal models such as tissue biopsy studies on porcine subcutaneous adipose tissue, lipase was proven to decrease fat tissue without any sign of inflammation or loss of cell architecture. Regarding hyaluronidase and collagenase, much more scientific knowledge about their application in mesotherapy has been reported in the literature.

### ENZYMES MECHANISM OF ACTION

#### • LIPASE

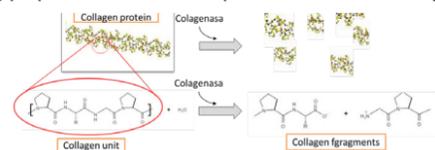
Lipases belong to the acyl hydrolases, which cleave long-chain triglycerides into polar lipids. As a result of this enzymatic hydrolysis, lipids are separated in two components: an acid (e.g., fatty acid) and an alcohol (e.g., glycerol). In Figure 2 a representation of the lipid hydrolysis by lipase is shown where the ester of the lipid (a triacylglycerol), is broken in three steps catalyzed process by the lipase active site (red circle) until the completion of the hydrolysis reaction and the alcohol subproducts.



Lipase and its active site/pocket; On the right, the lipase mechanism of action.

#### • COLLAGENASE

Collagenases belong to a group of zinc-dependent endopeptidases, called metalloproteinases (MMPs), which exert their activity in the extracellular matrix by cleaving peptide bonds from proteins. This activity is called

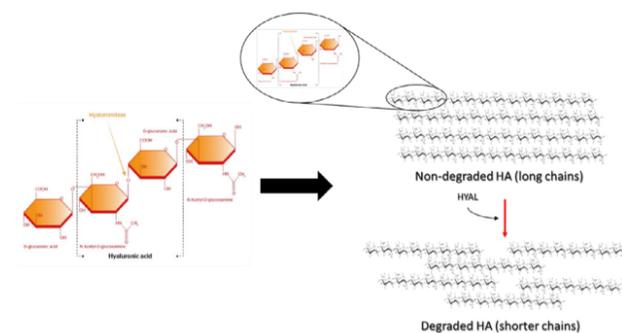


Collagenase mechanism of action. The fragments from collagen (substrate) produced after collagen hydrolysis at the site of cleavage are shown.

peptidolytic activity where proteins are hydrolyzed into small peptide fragments from the native collagen.

#### • HYALURONIDASE

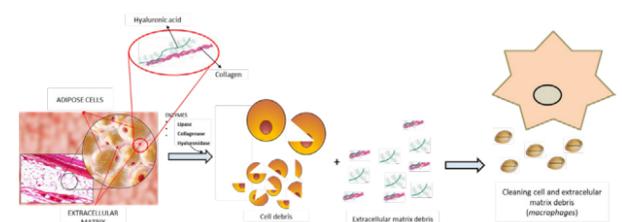
Hyaluronidases belong to the endoglycosidase group of enzymes which catalyze the cleavage of a β (1→4) O-glycosidic bond between two saccharide units from hyaluronic acid (HA), the N-acetyl-glucosamine and D-glucuronic acid, depolymerizing the HA (Figure 4). Hyaluronidases source vary from human to bacterial origin. HYAL is widely applied in mesotherapy for correcting the adverse events (e.g., vascular occlusion, nodules, unacceptable cosmetic outcomes) following HA dermal fillers injection.



Hyaluronidase mechanism of action.

### THE SCIENCE BEHIND MESOSYSTEM MESOTHERAPY

Knowing the substrates nature for each of these enzymes, in Figure 5, the effect of the combined enzymatic treatment is summarized. Firstly, the tissue lost its integrity by degrading the extracellular matrix (hyaluronidase and collagenase). Secondly, lipase breaks the cellular integrity by degrading the plasma membranes of adipocytes. Subsequently, all cellular and extracellular matrix debris are metabolized by the body and cleared by macrophages activity.



Combined effect of Lipase, Collagenase and Hyaluronidase activity in the adipocyte tissue.

### CLINICAL EVIDENCE

The next figures show different mesotherapy treatment case reports when applying product, both in its liquid and lyophilized forms.



Reduction of localized cellulitis on thighs and legs. Application protocol: Number of sessions: 8; Frequency: 1 by week; Dose: 20cc.

Reduction of the double chin. Application protocol: Number of sessions: 4; Frequency: 1 by week; Dose: 10cc.



Reduction of deep scars. Application protocol: Number of sessions: 1; Dose: 5cc.



Reduction of dark circles under the eyes. Application protocol: Number of sessions: 3; Frequency: every 15 days; Dose: 10cc.

### CONCLUSION

The combination of the three enzymes, lipase, collagenase, and hyaluronidase obtained by recombinant DNA technology, in a single cocktail or lyophilized, administered by mesotherapy technique produces visible effects and a reduction in fatty tissue and localized cellulitis from the very first administration session. The combination of these three enzymes in the same cocktail and in the same application produces a synergistic effect with remarkable results. ■

**Hugo Almeida**, Pharmacist, MSc in Quality Control, PhD in Pharmaceutical Sciences



He has more than 18 years of experience in Pharmaceutical, Medical Device and Cosmetic industry. Currently, he is production manager at Mesosystem, SA.

**Javier Fidalgo**, Biologist, MSc in Biotechnology Engineering & PhD in Organic Chemistry. He is currently focused on the design and development of new products, their production, validation and quality processes. He is currently managing the R&D Department at Mesosystem, SA, where it leads de design and development projects of new cosmetic, injectable and other products, as well as their validation and transference to production and quality Departments.



# Anatomist's Vision SAFE TREATMENT & AESTHETIC EDUCATION SYSTEMS

INSIGHTS FROM

PROF. DR. SEBASTIAN COTOFANA

**Prof. Dr. Sebastian Cotofana** is a widely known anatomist in the world of regenerative medicine. He holds two academic Ph.D.'s in Medical Science (from Ludwig-Maximilians-University) and Anatomy (from Paracelsus Medical University) and is an active educator in anatomy and facial embryology. He has published more than 100 peer-reviewed scientific articles and has worked as an Associate Professor with the Department of Clinical Anatomy at Mayo Clinic in Rochester, MN. He offers his thoughts on some of our IMCAS America's topics, the importance of safe practice, and the future of aesthetic research and education systems.

*As a highlight for the IMCAS Americas ANATOMY ON CADAVER WORKSHOP, what are your thoughts on the importance of hand injection?*

**Prof. SC:** I love the hands. Not only because I've published in that field, but I also think that hands are important, important to be treated and important to be understood. So this year, we will of course cover the face, and also the neck and hands.

If hands are not treated accordingly, and age-related changes of the hands are not addressed, they can unmask all the efforts that have been done to the face. Treatments need to focus on the face, neck, and the hands equally. If you focus just on one area and disregard all the other areas, then you can see how much was done in one area and how much the other areas were neglected. So, treatment should be holistic and cover all areas of the human body.

*In the light of anatomy and procedural safety, how would you recommend physicians proceed when testing new toxins, dosages, or new points of injection?*

**Prof. SC:** The first point is to always follow the FDA—or the regulatory institutions'—approved dosages and injection patterns. Because this is how studies have been conducted and this is how it should be done in all initial treatment. There was a recent study, which shows that most adverse events happen when products are being used off label.

Once more security and knowledge with the respective product is obtained, on the own responsibility of the injector, standard applications can sometimes be changed. But when implementing any new type of product independent of toxin or that is filler-based, you should always follow the company label.

*Do you have any thoughts on modern US technology and how it can be used within procedures?*

**Prof. SC:** I think US is a great tool and it should be a standard of care for every physician in a minimally invasive field. A lot of physicians stay away from using ultrasound because they don't know how to read the images, the device might be expensive, and it's time consuming to use. With a busy practice, adding ultrasound can mean losing 1 to 3 patients per day, so it's understandable why some decide not to use it. But in the long-term, ultrasound devices, and the understanding and applications of ultrasound, are improving treatment. It's a steep but quick learning curve.

In addition, ultrasound can also be used as a verification of one's own injection technique. Like, you test yourself and you verify yourself to know, did I really treat the muscle I wanted to or the layer that I needed to achieve. So, it goes hand in hand with treatments, and increasing its clinical use will increase treatment safety overall.

**“The first maxim of all treatment should always be safety.”**

*What is your take on understanding anti-aging through a lens of holistic medicine? Do you believe treatment extends beyond the clinic and plays a role in overall wellness?*

**Prof. SC:** Oh, totally. The external appearance of our body and our face is only one part in human well-being. There are many, many aspects of health and if you follow the WHO definition they even acknowledge, “health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

*As someone who has been in research and physician education for some time now, what is your opinion on aesthetics and ethics, particularly in the realm of accreditation and access to quality educational information?*

**Prof. SC:** What I see now, when it comes to education and when it comes to understanding and accepting science, is a change in the way that science is presented and the way that research and knowledge is generated. Because normally in the medical field, research, science, and knowledge are only accepted following the specific methods through which they are generated. They are completely based on evidence. However, in the aesthetic fields, unfortunately there are many procedural areas that are not evidence-based but eminence-based; meaning knowledge is often gathered and obtained through personal opinions (evidence level 5). In aesthetic treatments, higher levels of research are missing, which it is starting to improve, but at the moment is still missing.

I see a good trend to move from eminence-based to evidence-based practices. A lot of new research and new methods are surfacing, all of which are evidence-based. But we are still behind any other medical field and there's still a long way to go.

At the end of the day, everything starts with our individual ethics, the techniques we choose, and the methods we use. Because we shouldn't do harm in the first place. The first maxim of all treatment should always be safety. So many techniques and injection algorithms prioritize the first maxim to be the aesthetic outcome and safety falls only second, but we should never trade safety for aesthetic outcome. ■



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# BEHIND THE SCENES OF THE DAZZLING GALA DINNERS



AS IMCAS regulars will know, amidst the intensity of the three-day congress, there's always one glitzy evening reserved for relaxing and letting your hair down amongst your peers. For almost the entirety of IMCAS' existence, a spectacular event consisting of dining and dancing is held, with part of the event's proceeds going to deserving charities. What once began as a smaller event in an intimate setting has expanded into more extraordinary and spacious venues, such as the opulent Opéra Garnier in 2023, and the Piscine Molitor in 2024. While it's easy to be swept away in the tide of glittering tables set for a night of exquisite dining and the sound of uncorking champagne bottles amidst excited chatter, IMCAS looks back at its past galas to see where it all started.



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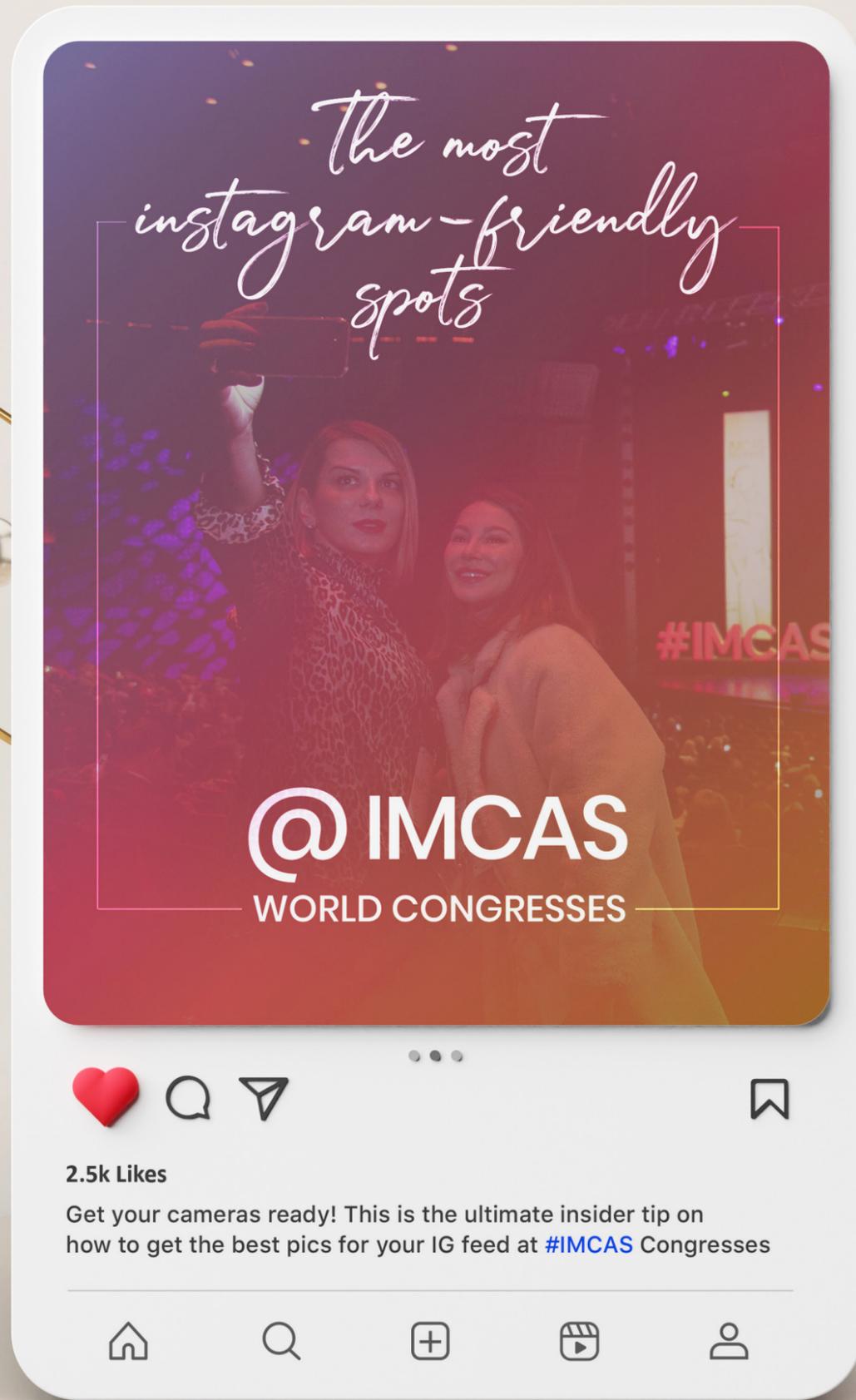
Diving into the IMCAS archives, the first gala mentioned in the congress program was in 2006, held at the iconic Pavilion Ledoyen, rich in both history and gastronomy. At the time, the IMCAS gala was known by a different name, La Nuit des IMCAS Awards, or the IMCAS Awards Evening. As time went on and IMCAS grew, a larger venue was required, leading the event to be held at the Pavilion Cambon Capucines, where it would be held for several years. Here, in the impressive former Crédit Foncier de France headquarters, captivating themes such as Old Hollywood Glamour (1950s), Great Gatsby (1920s), and even a hotel, complete with check-in and room keys, whisked attendees away for a night of whimsy and delight.

Among the attending IMCAS participants, nominees for the coveted IMCAS Awards also take part in the festivities, harboring hopes of being the jury's chosen winners. Over the years, the jury has been composed of celebrated icons such as Dr. Bernard Mole, Dr. Steven Cohen, Dr. Foad Nahai, and Dr. Susan Weinkle—to name a few! With so many stars present, the event is consistently black tie, and each year brings fresh, thrilling entertainment with dancing, singing, and more.

Each year, the IMCAS gala donates a portion of the proceeds to charity, notably for breast cancer. For example, in 2015 the gala proceeds were able to fund the creation of an IT platform that shows patients the different reconstruction techniques after breast cancer, providing patients with more involvement in their procedure as well as a clearer expectation in terms of results. In 2016, the funds raised were given to CEW, or Les Centres de Beauté, and the president of CEW France, Madame Françoise Montenay, attended on the global network's behalf to accept the donation.

What began as an intimately exclusive dinner has grown in not only size but significance. The IMCAS galas have proven to be a fundamental part of the ongoing conference, providing a dazzling venue rich in opportunities to meet and connect with other major players in the dermatological and plastic surgery scene, as well as to take a moment to appreciate individual accomplishments that have propelled the industry to where it is today. ■





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Some of the disadvantages of other filler brands are their wait time to see substantial results. This is something you don't have to worry about with INFINI PREMIUM FILLER LODOCAINE<sup>+</sup> as patients can see nearly instant improvement following treatment.

### Results last longer than other brands

As well as quick-acting results, INFINI PREMIUM FILLER LODOCAINE<sup>+</sup> is one of the few brands that offer long-lasting results. This will save you constant top-ups to maintain results. The solution itself is made using the naturally-occurring substance, Hyaluronic Acid, or HA. As our bodies already produce this chemical, it allows the filler to take a more natural look and shape for injectable treatments. The high volumes of hyaluronic acid provide these lengthy

If you've recently been considering an injectable treatment, chances are you've probably come across a few options in your research. As time goes by, more and more filler brands appear in the market.

One brand in particular we're sure you've come across, and arguably the best injectable filler available: **INFINI PREMIUM FILLER LODOCAINE<sup>+</sup>**

### What makes INFINI PREMIUM FILLER LODOCAINE<sup>+</sup> the best choice as your injectable filler?

INFINI PREMIUM FILLER LODOCAINE<sup>+</sup> is a range of preparations based on hyaluronic acid with exceptional plasticity and outstanding corrective properties.

INFINI PREMIUM FILLER LODOCAINE<sup>+</sup> is the leading choice of physicians for dermal filler treatments, in over 59 countries around the globe, offering natural-looking and long-lasting effects. It is a high-quality hyaluronic acid-based filler, with treatment cocktails which are the answer to constantly growing needs of aesthetic medicine specialists all over the world.

### What makes INFINI PREMIUM FILLER LODOCAINE<sup>+</sup> the best injectable filler?

The gel solution used in this filler has an extremely smooth consistency. The difference between PREMIUM FILLER LODOCAINE<sup>+</sup> and other hyaluronic acid-containing fillers is that others use a much more granular gel. INFINI PREMIUM

results, allowing your body to naturally process the chemical over time more than other filler types. With other filler types, you can expect to see results from 6-8 months at best.

### Revolutionary & non-allergenic

As the filler uses high amounts of hyaluronic acid, which is naturally occurring, it removes the risk of an allergic reaction. As our bodies already produce this substance to lubricate the eyes, joints and other tissues, you can rest assured that this is one of the safest filler options.

### REVERSIBLE AND BIODEGRADABLE

Finally, if you decide you want to undo the results you see, this solution is totally dissolvable. The procedure is just as pain-free as the initial injections and is completely safe and effective.

Another significant advantage of this treatment is that it's completely reversible. If a client is not satisfied with his or her results, they can go back to their previous appearance. Today's hyaluronic acid-based fillers are fully biodegradable, which means the gel gradually breaks down and eventually disappears.

The filler market is so diverse, and it is not easy to understand the changes in the product's components and novelties even for experienced physicians.

Before you rush into choosing a filler, let's review some of the most effective dermal filler subtypes of PREMIUM FILLER LODOCAINE<sup>+</sup> and what they can do.

### Filler of choice: INFINI® SOFT LIPS<sup>+</sup>

How this filler contours this area: Not only can we use INFINI® SOFT LIPS<sup>+</sup> LODOCAINE to achieve natural-looking volume in the lips, it smoothens the vertical lip lines and can be used to treat perioral lines, or those wrinkles that form around the lips. INFINI® SOFT LIPS<sup>+</sup> is a versatile formula for personalizing results for each lip augmentation patient, according to patient requests and needs.

### Filler of choice: INFINI® S<sup>+</sup> LODOCAINE

It is approved for restoring the eye area or tear troughs, reducing dark circles due to shadowing to give patients a refreshed, less tired look. It can also be used to camouflage mild under eye bags. The lower concentration of HA in this filler makes it perfect for the lower eyelid area.

### Filler of choice: INFINI® M<sup>+</sup> LODOCAINE

While neurotoxins are our go-to for injectable brow lifts, certain cases of mild skin laxity in the brow area respond well to filler. In the brow, filler plumps and offers a subtle lift that helps to smooth wrinkles. We like INFINI® M<sup>+</sup> LODOCAINE's cohesive, gravity-defying formula in the brows.

### Filler of choice: INFINI® L<sup>+</sup> LODOCAINE

Thinning skin in the temples, much like the hands, shows our age faster than other areas—and, like the hands, should not be neglected. Fillers in this area can restore youthful volume and redirect attention to your eyes. The thick formula of which can create a more structured-looking cheekbone, as well as add plumpness to your skin for a more youthful contour in the mid-face.

### Filler of choice: INFINI® XL<sup>+</sup> LODOCAINE

How this filler contours this area: Adding definition to your chin with INFINI® can create a balanced appearance for patients with a "weak" chin. Many patients are surprised to see how much more youthful they look after chin filler; others find their face seems elongated and their profile more defined. Artfully placed injections can also create

“INFINI PREMIUM FILLER LODOCAINE<sup>+</sup> stands out for its exceptionally smooth gel consistency, providing natural and instant results unlike other fillers on the market.”

the illusion of a slimmer chin, as well as fill in lines or wrinkles in this area. How this filler contours this area: The highly cohesive formula of INFINI® can be applied along the bony jawline area, mimicking the appearance of bone and strengthening the natural visual contour.

### Let's wrap it up!

INFINI PREMIUM FILLER LODOCAINE<sup>+</sup> has pharmaceutical qualities and state-of-the-art technologies that provide exceptional viscoelasticity and lasting product resorption confirmed by clinical data. The safety of use is also confirmed by multiple certificates CE, ISO. It has maximum skin tolerance and biocompatibility using hyaluronic acid of nonanimal origin, not requiring skin testing. INFINI Lasting effects of 6-10 months has also been confirmed by clinical data. It has an easy and precise implantation, resulting from its high plasticity and smoothness. It offers immediate and exquisite volumetric effects with minimal application amount of product. The wide range of fillers allows physicians and patients to obtain satisfactory results based on individual skin needs.■

**Dr. Nathalie Domloj**, Lebanese, with over 15 years of experience in the Middle East and Gulf Region, Advanced International Injectables Trainer for Doctors for Threads and Fillers for Face & Body. Currently residing in Dubai, practicing in Highness Clinics, and known internationally for her unique facial transformations and combination therapies.



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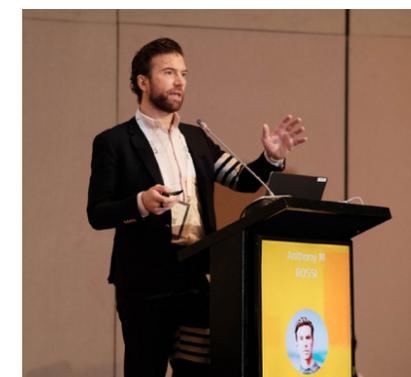


### IMCAS AMERICAS SCIENCE UNDER THE SUN

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In 2024, IMCAS Americas ventures to São Paulo for the first time to bring an unforgettable learning experience to Brazil.



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The 2024 edition highlights the regenerative medicine module and the exploration of holistic treatments for rejuvenation, providing a distinctive window into Asian techniques and patient expectations. Beyond education, attendees are treated to the rich food and culture of the host city—an opportunity not to be missed.■



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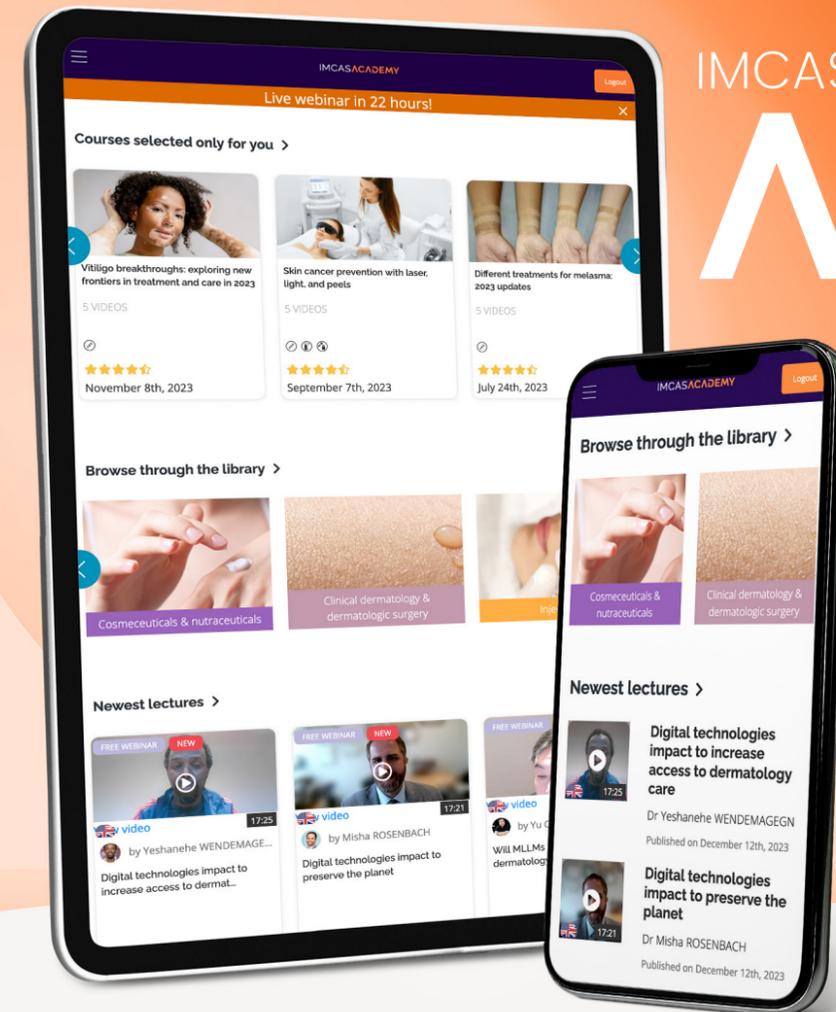
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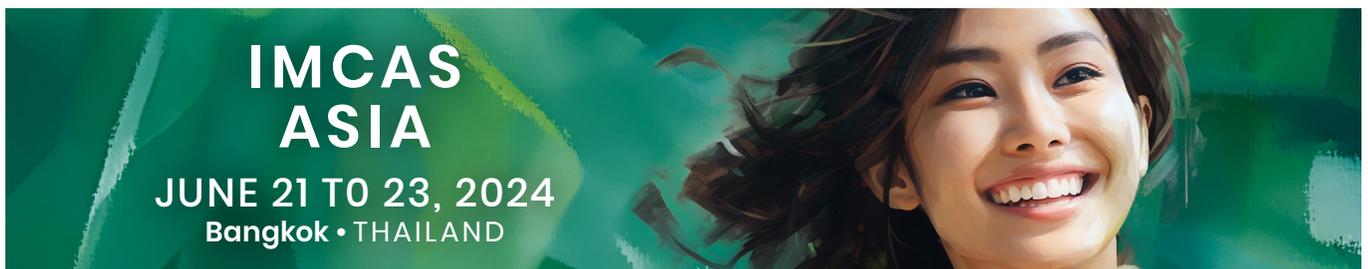
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